Appendix C
Data Usability Assessment Report
(On CD)

Appendix C
Data Usability Assessment Report

The purposes of this data usability and assessment report (DUAR) are to 1) summarize the data validation performed on the data sets for the Historic Site Assessment (HSA) Subarea 5A samples collected, and 2) determine whether the sample results meet the Data Quality Objectives (DQOs) outlined in the *Master Work Plan/Field Sampling and Anlaysis Plan, Co-Located Chemical Sampling at Area IV, Santa Susana Field Laboratory, Ventura County, California (CDM Federal Programs Corporation* [CDM Smith] 2011a) (WP/FSAP) and *Addendum No. 2 to Master Work Plan/Field Sampling and Analysis Plan, Co-Located Chemical Sampling at Area IV, Santa Susana Field Laboratory, Ventura County, California, EPA Subarea 5A Soil Sampling* (CDM Smith 2011b) (Addendum to the WP/FSAP).

A total of 300 soil samples including 27 drainage locations, 94 surface locations, and 138 soil boring location samples, were collected and analyzed.

C.1 Usability Summary

For this data usability assessment, 77 data sets were reviewed. A data set consists of 20 or fewer samples grouped together by analytical method for analyses depending on the time and date of when the samples were received by the laboratory. A data set is called a sample delivery group, or SDG. The analyses performed are discussed in Section 2.5 of the Subarea 5A Technical Memorandum (TM).

Samples were collected and analyzed in accordance with the WP/FSAP (CDM 2011a and 2011b). Deviations were encountered during the field investigation for the 5A Subarea sampling activities and are discussed in detail in Section 2.7 of the Subarea 5A TM.

The data generated for the Subarea 5A samples together with the added data validation qualifiers are usable as reported, with the exception of 79 individual analyte results (0.13 percent of all analytes) that were rejected (35 herbicide results; five mercury results, one metal result, four perchlorate results, two energetic results; nine PCB results; 19 pesticide results and four semivolatile results). These rejected data do not impact the overall achievement of project objectives and goals. Specific details are provided in the validation reports in this Appendix and below in Section C.8.

C.2 Data Validation Procedures

Data were validated by the independent data validation firm Laboratory Data Consultants, Inc. All data validation was conducted in accordance with *U.S. Environmental Protection Agency (EPA) Contract Laboratory Program National Functional Guidelines for Inorganic Data Review* (EPA 2004), *EPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review* (EPA 2008),

and *EPA Contract Laboratory Program National Functional Guidelines for Chlorinated Dioxin/Furan Data Review* (EPA 2005).

The data validation strategy employed was to validate 10 percent of the data according to EPA Level IV protocols (all QC parameters and raw data) and the remaining 90 percent according to EPA Level III (all QC parameters except calibrations and raw data) protocols.

Table C-1 shows all SDGs that include Subarea 5A samples and which SDGs were validated as Level III or Level IV. Some SDGs contain samples from other subareas[1] but all samples in an SDG were validated together.

In order to evaluate the quality of the laboratory and the validation firm, CDM Smith chemists reviewed 10 percent of the Subarea 5A sample SDGs. The purpose of the review was to identify any quality control issues with the laboratory not identified by the validation firm or any discrepancies in validation procedures by the validation firm. No additional qualifiers were applied to the data based on CDM Smith's review.

C.3 Quality Assurance Objectives

Quality assurance (QA) objectives for measurement data are expressed in terms of precision, accuracy, representativeness, comparability, completeness, and sensitivity (PARCCS). The QA objectives provide a mechanism for evaluating and measuring data quality.

A review of the collected data is necessary to determine if data quality objectives established in the WP/FSAP (CDM 2011a and 2011b) have been met. The following data measurement tasks were evaluated:

- Specification and adherence to analytical method and reporting detection limit requirements
- Identification of the appropriate laboratory analytical QC requirements and verification of whether these QC requirements were met
- Verification that measurement performance criteria (representativeness and completeness) for the data have been met
- Verification that field procedures were followed, deviations were documented, and determination of impact on data quality from these deviations

The data validation review determines if the collected data are of sufficient quality (except for the rejected results) to support their intended use.

[1] During sampling in Subarea 5A, EPA transitioned sampling into other subareas. Thus some sample delivery groups may contain results for sample from multiple Subareas.

C.4 Summary of Field and Laboratory QA Activities

CDM Smith completed sampling activities in Subarea 5A in accordance with the approved WP/FSAP (CDM 2011a and 2011b). A total of 300 soil samples were collected and analyzed from 27 drainage locations, 94 surface locations, and 138 soil boring location samples. Tables 2-1 and 2-2 in the Subarea 5A TM provides a summary of the samples collected and the laboratory analyses requested.

Table C-1 in this report presents the SDGs and validation level for the HSA Subarea 5A sample data. An index of samples associated with each SDG is presented at the beginning of the data validation reports presented in this appendix. The WP/FSAP (CDM 2011a and 2011b) defined the procedures to be followed and the data quality requirements for the field sampling events.

C.5 Field Quality QA/QC

Field QC samples, such as matrix spike/matrix spike duplicates (MS/MSDs) and field duplicates, were to be collected at a frequency of 1 per 20 samples (5 percent) for MS/MSDs and field duplicates. Seven duplicate samples and MS/MSD samples were collected in association with the surface samples and analyzed for primary analytes, two of these samples were also analyzed for VOCs and 1,4-dioxane, and one sample was also analyzed for the secondary analytes. For the subsurface samples, nine duplicate samples and MS/MSD samples were collected for the primary analyses, and seven of these duplicate and MS/MSD samples were also analyzed for VOCs and 1,4-dioxane. Six of the nine subsurface duplicate/MS/MSD samples were collected for the secondary analyses. MS/MSD and field duplicate samples met the frequency requirements detailed in the WP/FSAP (CDM 2011a and 2011b).

Five equipment rinsate blank samples were collected in association with the surface soil sampling and analyzed for primary analytes. Seven equipment rinsate blank samples were collected in association with the subsurface soil sampling and analyzed for the primary analytes and VOCs/1,4-dioxane. Two of these seven blanks were also analyzed for secondary analytes. Three equipment rinsate blanks were collected for secondary analyses only. The equipment rinsate blank results are presented in Table C-2.

No field blank samples were collected in conjunction with soil sampling in Subarea 5A.

Forty-six trip blank samples were collected with the Subarea 5A Area IV samples. The results for these samples are presented in Table C-3. Data qualifications based on blank detections are discussed in Section C.7.3 and in the Appendix C validation reports.

Temperature blanks were included with each shipment of samples.

The number of field QC samples collected satisfies the minimum requirements for the Subarea 5A sampling event specified in the WP/FSAP (CDM 2011a and 2011b). Field

QA/QC objectives were accomplished through the use of appropriate sampling techniques and collection of the required QC samples at the required frequencies.

C.6 Laboratory Quality QA/QC

Analytical QA/QC was assessed by laboratory QC checks, method blanks, sample custody tracking, sample preservation, adherence to holding times, laboratory control samples (LCSs), MSs, calibration recoveries, surrogates, tuning criteria, second column confirmations, internal standards, serial dilutions, laboratory duplicates, and interference check standards. The majority of the laboratory QC sample criteria met project requirements as indicated in the data validation reports in this appendix with the appropriate qualifiers applied. Seventy-nine individual analyte results (0.13 percent of all the analytes) were rejected as discussed below and in the validation reports presented in this appendix.

C.7 Data Quality Indicators

This section summarizes the validation performed. Individual SDG validation reports with specific sample detail are provided in this appendix.

Achievement of the DQOs was determined in part by the use of data quality indicators (DQIs) as described in the WP/FSAP (CDM 2011a and 2011b). These DQIs for measurement data are expressed in terms of PARCCS. The DQIs provide a mechanism for ongoing control to evaluate and measure data quality throughout the project. These criteria are defined in the sections below.

C.7.1 Precision

Precision is a quantitative term that estimates the reproducibility of a set of replicate measurements under a given set of conditions. It is defined as a measurement of mutual agreement between measurements of the same property and is expressed in terms of relative percent difference (RPD) between duplicate determinations.

RPD is calculated as follows:

$$\text{RPD} = \text{absolute value } [(C1-C2)/\{(C1+C2)/2)\}] \times 100\%$$

Where:

C1 = concentration of primary sample
C2 = concentration of duplicate sample

Field and analytical precision were determined from the review of the field duplicate results. The sample results were compared by calculating their RPDs. The field duplicate samples were collected in the same manner as the original samples but were collected in separate, individual containers, given separate sample identifiers, and treated as individual samples by the laboratory.

Laboratory duplicate RPD control limits are presented in the WP/FSAP (CDM 2011a and 2011b) or are laboratory specific. For laboratory duplicates, if one or both of the sample results were less than two times the RL, a control limit of the absolute difference equal to the RL value was used for comparison.

The field duplicate RPD criterion is 50 percent. Field duplicates for this project were validated using the following: If one result is non-detect and the other result is above the RL, the RPD result is shown as 200 percent and the field duplicate sample and parent sample results are qualified as estimated "J" or "UJ." If the field duplicate RPD was above the 50 percent criterion (and both sample results were above the RL), the field duplicate and parent sample results for that analyte were qualified as estimated "J."

Qualifiers were applied to applicable sample analyte results during the validation process based on laboratory and field duplicate precision results. Details are discussed in the laboratory validation reports in this appendix. Table C-4 shows the field duplicate pairs and RPD results. RPD results outside of criteria are highlighted.

The following individual analyte results were qualified as estimated "J/UJ" based on precision criteria:

- 16 dioxin results, three PCB results and nine herbicide results were qualified as estimated based on second column RPD results

- Four dioxin results; three NDMA results; two fluoride/nitrate results; 1,226 metal analyte results; one alcohol/terphenyl result; one TPH/glycol result; two pesticide results; one PCB result; two VOC analyte results; six SVOC analyte results; six SVOC SIM analyte results; and two energetic results were qualified as estimated based on laboratory precision criteria

- 144 dioxin results; two NDMA results; one fluoride/nitrate results; 32 metal results; six hexavalent chromium results; nine mercury results; one alcohol/terphenyl result; eight TPH/glycol results; eight pesticide results; 14 PCB results; five herbicide results; 15 VOC results; eight SVOC results; 79 SVOC SIM results and one formaldehyde result were qualified based on field duplicate criteria

The following individual analyte results were rejected "R" based on precision criteria:

- one antimony result and one SVOC (benzidine) result based on laboratory precision criteria

There was no discernable pattern or reason for the laboratory and field sample RPD exceedances identified. No field sampling issues were identified from the RPD results that were outside of criteria and the exceedances are reasonable for this type of sampling activity. Sample results that have been qualified as estimated "J/UJ" due to precision criteria are usable for project decisions. The one antimony and benzidine results that were rejected are not usable.

C.7.2 Accuracy

Accuracy is the degree of agreement between a measurement and the accepted reference or true value and is a measure of the bias in a system. Accuracy of the data was assessed by comparing LCS recovery, MS recovery, calibration recovery, Inductively Coupled Plasma (ICP) interferences, and by performing serial dilution checks during metals analyses. Accuracy is expressed as percent recovery (%R), which is calculated by:

$$\text{Percent Recovery} = \frac{(\text{Total Analyte Found} - \text{Analyte Originally Present})}{\text{Analyte Added}} \times 100$$

Analytical accuracy for the entire data collection activity is difficult to assess because several sources of error exist. Errors can be introduced by any of the following:

- Sampling procedure
- Field contamination
- Sample preservation and handling
- Sample matrix
- Sample preparation
- Analytical techniques

Accuracy is maintained to the extent possible by adhering to the EPA method and approved field and analytical standard operating procedures.

Qualifiers were applied to applicable sample analyte results during the validation process based on laboratory accuracy results and are discussed in detail in the laboratory validation reports in Appendix C.

The following individual analyte results were qualified as nondetect "U" or nondetect estimated "UJ" based on accuracy criteria:

- 1,296 metal analyte results were qualified as estimated based on inductively coupled plasma serial dilution results

- 12 TPH/glycol results; 84 pesticide results; 17 PCB results; 66 VOC results; 40 SVOC results and 18 SVOC SIM results were qualified as estimated based on calibration criteria

- Six dioxin results were qualified as estimated based on internal standard criteria

- 23 TPH/glycol results; 16 pesticide results; 191 PCB results; 40 herbicide results; 12 VOC results; 276 SVOC results; 27 SVOC SIM; and two energetics results were qualified as estimated based on LCS percent recovery criteria

- 13 dioxin results; 2 NDMA results; 218 fluoride/nitrate results; six perchlorate results; 2,107 metal analyte results; one hexavalent chromium result; 12 mercury results; nine alcohol/terphenyl results; 10 TPH/glycol results; nine pesticide

results; two PCB results; 12 herbicide results; 29 VOC results; 48 SVOC results; 17 SVOC SIM results; and six energetic results were qualified as estimated based on MS percent recovery criteria

- Three alcohol/terphenyl results; six TPH/glycol results; 134 pesticide results; 109 PCB results; and one SVOC result were qualified as estimated based on surrogate recovery criteria

The following individual analyte results were rejected "R" based on accuracy criteria:

- Four perchlorate results based on matrix spike accuracy
- One antimony result based on matrix spike accuracy
- Five mercury results based on matrix spike accuracy
- 19 pesticide results based on matrix spike accuracy criteria and surrogate recoveries
- Nine PCB results based on surrogate recoveries
- 35 individual herbicide analyte results based on laboratory control sample accuracy criteria and matrix spike accuracy criteria
- Four individual SVOC analyte results based on matrix spike accuracy criteria
- Two energetic results based on laboratory control sample accuracy criteria

Sample preservation, handling, and holding times are additional measures of accuracy of the data. All sample preservation and handling criteria were met.

Sample results that have been qualified as estimated "J/UJ" due to accuracy criteria are usable for project decisions. Results that have been rejected are not usable.

C.7.3 Blank Contamination

Field blanks (e.g., equipment and trip) and laboratory method blanks are analyzed to identify possible sources of contamination. Contamination of a sample can be introduced by field sample collection methods, sample handling, preparation, and/or analysis. The laboratory validation reports in this appendix and summarized below discuss the results qualified based on field and laboratory blank contamination.

The following individual analyte results were qualified as estimated "J/UJ" based on blank contamination:

- 2,564 dioxin results (50%); 10 NDMA results (10%); 467 metal results (5%); 11 hexavalent chromium results (3.6%); 11 mercury results (3.6%); 1 alcohol/terphenyl result (0.17%); 28 TPH/glycol result (3.2%); six herbicide results

(0.5%); 161 VOC results (1.5%); 11 SVOC results (0.07%); and 53 SVOC SIM results (0.76%) were qualified as non-detect due to blank contamination criteria

The percentage of results qualified as non-detect based on laboratory blank contamination was less than or equal to 10% for all these analyses except for dioxins as shown above.

Estimated detection limits (EDLs) for the dioxins are calculated for each sample. The EDLs for this analysis are very low, reported in ng/kg or parts per trillion, resulting in numerous results qualified as estimated "J" values because they are below the RL. Many of these estimated values have been subsequently qualified as nondetect "U" because the compound was detected in related laboratory blanks. Low level detections of dioxin analytes are somewhat inevitable because of the nature and universal extent of the compounds. The dioxin levels found in the blanks were well below site-related action levels. Therefore, the resulting qualification of associated sample results as not detected or "U" qualified data do not falsely diminish identification of site-related contaminants.

Tables C-2 and C-3 provide a summary of chemicals observed in the equipment and trip blank samples. The validators applied appropriate qualifiers to samples associated with the blanks. Specific details are provided in the data validation reports in this appendix.

The reported sample results were judged to be usable after validation. In general, all detected concentrations were below the RL indicating field sample collection and equipment decontamination activities were adequately performed.

C.7.4 Representativeness, Comparability, and Sensitivity

Representativeness, comparability, and sensitivity are achieved by using EPA-approved sampling procedures and analytical methodologies. By following the procedures described in the WP/FSAP (CDM 2011a and 2011b) for this sampling event and future sampling events, sample analysis should yield results representative of environmental conditions at the time of sampling. Similarly, reasonable comparability of analytical results for this and future sampling events can be achieved if approved EPA analytical methods and standardized reporting units are employed.

C.7.4.1 Representativeness

Representativeness is a qualitative term that expresses the degree to which the sample data accurately and precisely represent the environmental conditions corresponding to the location and depth interval of sample collection. Requirements and procedures for sample collection are designed to maximize sample representativeness.

Representativeness also can be monitored by reviewing field documentation and/or by performing field audits. For this report, a detailed review was performed on the COC forms, field data collection forms, laboratory sample confirmation logs, and data validation packages. Laboratory QA/QC requirements were included in the

WP/FSAP (CDM 2011a and 2011b) and laboratory statements of work (SOWs) to ensure that the laboratory analytical results were representative of true field conditions.

Field sampling accuracy was attained through strict adherence to the approved WP/FSAP (CDM 2011a and 2011b) and by using approved standard operating procedures for field data collection. Based on this, the data should represent as near as possible the actual field conditions at the time of sampling.

Representativeness has been achieved by the performed field work and laboratory analyses. The analytical data generated, that have not been rejected, are viewed to be a representative characterization of the project area.

C.7.4.2 Comparability

Comparability is a qualitative term that expresses the confidence with which a data set can be compared with another. Strict adherence to standard sample collection procedures, analytical detection limits, and analytical methods assures that data from like samples and sample conditions are comparable. This comparability is independent of laboratory personnel, data reviewers, or sampling personnel. Comparability criteria are met for the project if, based on data review, the sample collection and analytical procedures are determined to have been followed, or defined to show that variations did not affect the values reported.

To ensure comparability of data generated for the site, standard sample collection procedures and Department of Toxic Substances Control (DTSC)-approved analytical methods were utilized by CDM Smith. The sample analyses were performed by LLI in Lancaster, Pennsylvania. Utilizing such procedures and methods enables the current data to be comparable with previous and future data sets generated with similar methods.

C.7.4.3 Sensitivity

Sensitivity is related to the ability to compare analytical results with project-specific levels of interest, such as risk-based screening levels or action levels. Analytical detection limits for the various sample analytes should be below the level of interest to allow an effective comparison.

Detection Limits

Each analytical method used during the sampling events was selected because it had potential to achieve RLs established for this project. RLs were established for each analyte in consultation with the laboratory to achieve analytical results at or below regulatory comparison criteria.

The method detection limit (MDL) is defined as the concentration of an analyte that produces a signal with a 99 percent confidence that the concentration is above that of a blank but that that concentration cannot be accurately quantified. A blank is a sample that does not contain measurable concentrations of the analyte of concern.

Tested by statistical performance, calibration samples, and LCSs, MDLs represent the best fundamental measurement of instrument sensitivity and the basis for establishing RLs.

The laboratory RL is typically about 3 to 5 times higher than the MDL and is a laboratory-specific number. The actual sample RL is variable based on the sample matrix, moisture content, and other sample-specific factors. When a sample has to be diluted before analysis, either because of matrix problems or to bring the instrument response within the linear dynamic range, the RL is raised by a factor corresponding to the dilution factor.

In reporting environmental sample results, laboratories follow protocols that help ensure that the result reported is at the lowest level and is defensible, taking into account the ability of the instrument to differentiate a signal generated by the analyte from the background instrument noise, imprecision added to the detection capabilities of the analyte due to the sample processing manipulations (MDLs) and sample matrix affects, and adjustments made to the detection limits based on difficulties encountered in analyzing the sample (dilution factors, etc.).

The result for an analyte is flagged with a "U" if that analyte was not detected, or qualified with a "J" flag if blank or other QC results fall outside the appropriate tolerance limits. If an analyte is present at a concentration between the MDL and the RL, the analytical result is flagged with a "J," indicating an estimated quantity. Qualifying the result as an estimated concentration reflects increased uncertainty in the reported value.

The following analyses and individual analyte sample results were qualified as estimated "J" due to the sample results being reported as detected below the RL:

- Method 1613B (Dioxins)
  - 3,982 individual analyte results
- Method 1625C (NDMA)
  - 18 individual analyte results
- Method 300 (Fluoride/Nitrate)
  - 44 individual analyte results
- Method 314 (Perchlorate)
  - 2 individual analyte results
- Methods 6010B/6020 (Metals)
  - 1,573 individual analyte results
- Method 7199 (Hexavalent Chromium)
  - 192 individual analyte results

- Method 7471A (Mercury)
  - 142 individual analyte results

- Method 8015B (Alcohols and terphenyls)
  - 4 individual analyte results

- Method 8015M (TPHs and glycols)
  - 86 individual analyte results

- Method 8081A (Pesticides)
  - 171 individual analyte results

- Method 8082 (PCBs)
  - 118 individual analyte results

- Method 8151A (Herbicides)
  - 54 individual analyte results

- Method 8260B (VOCs)
  - 232 individual analyte results

- Method 8270C (SVOCs)
  - 255 individual analyte results

- Method 8270C SIM (SVOCs)
  - 787 individual analyte results

- Method 8315A (Formaldehyde)
  - 2 individual analyte results

- Method 8330A (Energetics)
  - 2 individual analyte results

As discussed in Section C.7.3, the EDLs for the dioxins are calculated for each sample and are very low resulting in numerous results qualified as estimated "J" values because they are below the RL as indicated above. The qualification of the dioxins results as estimated “J” based on RL criteria does not falsely diminish identification of site-related contaminants.

In general, for the data validated in this report, detection limits for the sample results were low enough to compare to the action levels stated in the WP/FSAP (CDM 2011a and 2011b). The detection limits for this project are lower than "normal" environmental data analyses. Analytical laboratory methods were modified in order to achieve the lowest practicable RL. Current laboratory instrumentation technology cannot achieve all of these low project RLs, and thus some of the RLs were above project criteria. These results are still considered usable for project decisions.

C.8 Review of Selected Validation Reports

CDM Smith performed a review of 10 percent of the validation reports identified in Table C-1. This review involved comparing the validation report results against the laboratory data packages as well as the validation guidance documents. All validation report results that were reviewed were verified against the laboratory data packages and determined that validation documents were followed as required.

C.9 Data Completeness

Completeness of the data collection program is defined as the percentage of samples planned for collection as listed in the WP/FSAP (CDM 2011a and 2011b) versus the actual number of samples collected during the field program (see equation A).

Completeness for acceptable data is defined as the percentage of acceptable data obtained judged to be valid versus the total quantity of data generated (see equation B). Acceptable data include both data that pass all the QC criteria (unqualified data) and data that may not pass all the QC criteria but had appropriate corrective actions taken (qualified but usable data).

A. $$\%\text{Completeness} = C \times \frac{100}{n}$$

Where:

C = actual number of samples collected
n = total number of samples planned

B. $$\%\text{Completeness} = V \times \frac{100}{n'}$$

Where:

V = number of measurements judged valid
n' = total number of measurements made

The overall completeness goal for these sampling events was 90 percent for all project data.

A total of 317 Subarea 5A soil samples including the field duplicates were collected and analyzed. As discussed in Section 2.7 of the TM, nine locations were not sampled due to the reasons cited in Table 2.1 of the TM and Section 2.7. These sampling deviations do not impact completeness objectives for this sampling event. As the sampling program progresses, it may be determined during the Phase III Data Gap Investigation that sample locations not affected by archeological findings and not able to be collected during this sampling event, may be resampled. Ninety-six percent of the samples identified in the Addendum to the WP/FSAP (CDM 2011a and 2011b) were collected, therefore meeting the completeness goal for the number of samples collected versus number of samples planned.

The completeness goal for acceptable data achieved was 98.3 percent of the number of measurements judged to be valid versus the total number of measurements made for all sample analyses for the Subarea 5A samples. Table C-5, Completeness Calculation Summary, shows a summary of the results that were estimated or rejected.

The following individual analyte results were rejected per analyses:

- Method 8151 A
  - 35 herbicide results out of 1,200 results (2.91 percent)

- Method 7471A
  - 5 mercury results out of 299 results (1.67 percent)

- Method 6020
  - 1 antimony result out of 4,784 results (0.02 percent)

- Method 314
  - 4 perchlorate results out of 299 results (1.3 percent)

- Method 8330A
  - 2 energetic results out of 1,710 results (0.11 percent)

- Method 8082
  - 9 PCB results out of 3,588 results (0.25 percent)

- Method 8081A
  - 19 pesticide results out of 2,520 results (0.75 percent)

- Method 8027C
  - 4 SVOC results out of 14,611 results (0.03 percent)

The completeness goals for both the number of samples collected and the number of measurements judged to be valid were met.

Sampling deviations from that described in the WP/FSAP (CDM Smith 2011a and 2011b) are discussed in Section 2.7 of the TM. Deviations did not impact DQOs for this sampling event. The data reported, and not rejected, are suitable for their intended use for characterization of Area IV of SSFL. The DQIs identified in the WP/FSAP (CDM 2011a and 2011b) met appropriate criteria. The achievement of the completeness goals for the data indicates a sufficient amount of usable data has been generated on which to base project decisions.

C.10 Assessment of Data Usability and Reconciliation with WP/FSAP Goals

Over 98 percent of the data validated and reported are suitable for their intended use for site characterization. Sample results that were rejected are not suitable for project

use. The rejected analyte results do not impact achievement of the overall project objectives. The detection limits reported generally met the expected limits proposed by the analytical laboratory in their contract agreement with CDM Smith.

Sample results that were qualified as estimated are usable for project decisions. Numerous dioxin results were qualified as estimated and/or non-detect due to the low detection limits. This data is considered usable.

Field duplicate precision also met criteria a majority of the time. RPDs were outside criteria predominantly when the sample results were close to the RL and/or below the project required action limits. Decisions based on results close to the RL should be made with a degree of caution. The achievement of the completeness goals for number of samples collected, and the number of sample results acceptable for use provides sufficient quality data to support project decisions.

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Table C-1 Sample Delivery Groups and Validation Levels for Subarea 5A

Sample Delivery Group	Level of Validation Performed	CDM Review
DE077	Level III	
DE083	Level III	
DE084	Level III	
DE086	Level III	Yes
DE087	Level III	
DE088	Level III	
DE089	Level III	
DE090	Level III	
DE091	Level III	
DE092	Level III	
DE093	Level III	
DE094	Level III	
DE095	Level IV	Yes
DE096	Level III	
DE097	Level III	
DE098	Level III	
DE099	Level III	
DE100	Level III	
DE102	Level III	
DE103	Level IV	
DE104	Level III	
DE105	Level III	
DE106	Level III	Yes
DE107	Level III	
DE108	Level III	
DE109	Level III	
DE110	Level III	
DE111	Level III	
DE112	Level IV	
DE113	Level III	
DE114	Level III	
DE115	Level III	
DE116	Level III	Yes
DE117	Level III	
DE118	Level III	
DE119	Level III	
DE120	Level III	
DE121	Level III	
DE122	Level III	
DE123	Level III	
DE125	Level IV	
DE126	Level III	
DE128	Level III	
DE129	Level III	
DE130	Level IV	Yes
DE131	Level III	
DE133	Level III	
DE135	Level III	
DE151	Level III	
DE152	Level III	
DX048	Level III	
DX051	Level III	
DX052	Level III	Yes

Table C-1 Sample Delivery Groups and Validation Levels for Subarea 5A

Sample Delivery Group	Level of Validation Performed	CDM Review
DX053	Level III	
DX054	Level III	
DX055	Level III	
DX056	Level III	
DX057	Level III	
DX058	Level III	
DX059	Level III	
DX060	Level IV	Yes
DX061	Level III	
DX062	Level III	
DX063	Level III	
DX064	Level III	
DX065	Level III	
DX066	Level III	
DX067	Level III	
DX069	Level III	
DX070	Level III	
DX071	Level III	Yes
DX072	Level IV	
DX073	Level III	
DX075	Level III	
DX077	Level III	
DX081	Level III	
DX082	Level III	

Table C-2 - Subarea 5A Equipment Rinsate Blank Results

Sample Name:		EB01-SA5A-022311		EB02-SA5A-022811		EB03-SA5A-022811		EB04-SA5A-030111		EB05-SA5A-030211		EB06-SA5A-030311		EB07-SA5A-031511		EB08-SA5A-032211		EB09-SA5A-032311		EB10-SA5A-032911	
Sample Date:		02/23/2011		02/28/2011		02/28/2011		03/01/2011		03/02/2011		03/03/2011		03/15/2011		03/22/2011		03/23/2011		03/29/2011	
Sample Type		Equipment Blank		Equipment Blank		Equipment Blank		Equipment Blank		Equipment Blank		Equipment Blank		Equipment Blank		Equipment Blank		Equipment Blank		Equipment Blank	
Analyte	**Units**	**Concentration**	**Final Qualifer**	**Concentration**	**Final Qualifer**	**Concentration**	**Final Qualifer**	**Concentration**	**Final Qualifer**	**Concentration**	**Final Qualifer**	**Concentration**	**Final Qualifer**	**Concentration**	**Final Qualifer**	**Concentration**	**Final Qualifer**	**Concentration**	**Final Qualifer**	**Concentration**	**Final Qualifer**
1,1,1,2-Tetrachloroethane	ug/l											5	U	5	U	5	U			5	U
1,1,1-TRICHLOROETHANE	ug/l											5	U	5	U	5	U			5	U
1,1,2,2-TETRACHLOROETHANE	ug/l											5	U	5	U	5	U			5	U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l											10	U	10	U	10	U			10	U
1,1,2-TRICHLOROETHANE	ug/l											5	U	5	U	5	U			5	U
1,1-DICHLOROETHANE	ug/l											5	U	5	U	5	U			5	U
1,1-DICHLOROETHENE	ug/l											5	U	5	U	5	U			5	U
1,1-DICHLOROPROPENE	ug/l											5	U	5	U	5	U			5	U
1,2,3,4,6,7,8-HPCDD	pg/l	10.6	U	10.6	U	9.53	U	10.4	U	9.50	U	9.97	U	10.1	U	10.1	U			10.2	U
1,2,3,4,6,7,8-HPCDF	pg/l	10.6	U	10.6	U	9.53	U	10.4	U	9.50	U	9.97	UJ	10.1	UJ	10.1	U			10.2	U
1,2,3,4,7,8,9-HPCDF	pg/l	10.6	U	10.6	U	9.53	U	10.4	U	9.50	U	9.97	U	10.1	U	10.1	U			10.2	U
1,2,3,4,7,8-HxCDD	pg/l	10.6	U	10.6	U	9.53	U	10.4	U	9.50	U	9.97	U	10.1	U	10.1	U			10.2	U
1,2,3,4,7,8-HXCDF	pg/l	10.6	U	10.6	U	9.53	U	10.4	U	9.50	U	9.97	UJ	10.1	UJ	10.1	U			10.2	U
1,2,3,6,7,8-HXCDD	pg/l	10.6	U	10.6	U	9.53	U	10.4	U	9.50	U	9.97	U	10.1	U	10.1	U			10.2	U
1,2,3,6,7,8-HXCDF	pg/l	10.6	U	10.6	U	9.53	U	10.4	U	9.50	U	9.97	U	10.1	U	10.1	U			10.2	U
1,2,3,7,8,9-HXCDD	pg/l	10.6	U	10.6	U	9.53	U	10.4	U	9.50	U	9.97	U	10.1	U	10.1	U			10.2	U
1,2,3,7,8,9-HXCDF	pg/l	10.6	U	10.6	U	9.53	U	10.4	U	9.50	U	9.97	U	10.1	U	10.1	U			10.2	U
1,2,3,7,8-PECDD	pg/l	10.6	U	10.6	U	9.53	U	10.4	U	9.50	U	9.97	U	10.1	U	10.1	U			10.2	U
1,2,3,7,8-PECDF	pg/l	10.6	U	10.6	U	9.53	U	10.4	U	9.50	U	9.97	U	10.1	U	10.1	U			10.2	U
1,2,3-TRICHLOROBENZENE	ug/l											5	U	5	U	5	U			5	U
1,2,3-TRICHLOROPROPANE	ug/l											5	U	5	U	5	U			5	U
1,2,4-TRICHLOROBENZENE(a)	ug/l	5	U	6	U	5	U	5	U	5	U	5	U	5	U	5	U			5	U
												5	U	5	U	5	U			10	U
1,2,4-TRIMETHYLBENZENE	ug/l											5	U	5	U	5	U			5	U
1,2-DIBROMO-3-CHLOROPROPANE	ug/l											5	U	5	U	5	U			5	U
1,2-Dibromoethane (EDB)	ug/l											5	U	5	U	5	U			5	U
1,2-DICHLOROBENZENE	ug/l	5	U	6	U	5	U	5	U	5	U	5	U	5	U	5	U			5	U
												5	U	5	U	5	U			10	U
1,2-DICHLOROETHANE	ug/l											5	U	5	U	5	U			5	U
1,2-DICHLOROPROPANE	ug/l											5	U	5	U	5	U			5	U
1,2-Diphenylhydrazine/Azobenzene	ug/l	5	U	6	U	5	U	5	U	5	U	5	U	5	U	5	U			10	U
1,3,5-TRIMETHYLBENZENE	ug/l											5	U	5	U	5	U			5	U
1,3,5-TRINITROBENZENE	ug/l													0.60	U			0.60	U	0.60	U
1,3-DICHLOROBENZENE	ug/l	5	U	6	U	5	U	5	U	5	U	5	U	5	U	5	U			5	U
												5	U	5	U	5	U			10	U
1,3-DICHLOROPROPANE	ug/l											5	U	5	U	5	U			5	U
1,3-DINITROBENZENE	ug/l													0.60	U			0.60	U	0.60	U
1,4-DICHLOROBENZENE	ug/l	5	U	6	U	5	U	5	U	5	U	5	U	5	U	5	U			5	U
												5	U	5	U	5	U			10	U
1,4-DIOXANE	ug/l											2.0	U	2.0	U	2.0	U			2.0	U
1-METHYLNAPHTHALENE	ug/l	0.052	U	0.054	U	0.053	U	0.052	U	0.053	U	0.050	U	0.048	U	0.049	U			0.053	U
2,2-DICHLOROPROPANE	ug/l											5	U	5	U	5	U			5	U
2,3,4,6,7,8-HXCDF	pg/l	10.6	U	10.6	U	9.53	U	10.4	U	9.50	U	9.97	U	10.1	U	10.1	U			10.2	U
2,3,4,7,8-PECDF	pg/l	10.6	U	10.6	U	9.53	U	10.4	U	9.50	U	9.97	U	10.1	U	10.1	U			10.2	U
2,3,7,8-TCDD	pg/l	0.107	J	2.13	U	1.91	U	2.08	U	1.90	U	1.99	U	0.439	J	0.238	J			2.03	U
2,3,7,8-TCDF	pg/l	2.11	U	2.13	U	1.91	U	2.08	U	1.90	U	1.99	U	2.03	U	2.01	U			2.03	U
2,4,5-T	ug/l	0.052	U	0.053	U	0.052	U	0.050	U	0.054	U										
2,4,5-TP (Silvex)	ug/l	0.052	U	0.053	U	0.052	U	0.050	U	0.054	U										
2,4,5-TRICHLOROPHENOL	ug/l	5	U	6	U	5	U	5	U	5	U	5	U	5	U	5	U			10	U
2,4,6-TRICHLOROPHENOL	ug/l	5	U	6	U	5	U	5	U	5	U	5	U	5	U	5	U			10	U
2,4,6-TRINITROTOLUENE	ug/l													0.60	U			0.60	U	0.60	U
2,4-D	ug/l	0.52	U	0.53	U	0.52	U	0.50	U	0.54	U										
2,4-DB	ug/l	1.0	U	1.1	U	1.0	U	1.0	U	1.1	U										
2,4-DIAMINO-6-NITROTOLUENE	ug/l													0.60	U			0.60	U	0.60	U
2,4-DICHLOROPHENOL	ug/l	5	U	6	U	5	U	5	U	5	U	5	U	5	U	5	U			10	U
2,4-DIMETHYLPHENOL	ug/l	11	U	11	U	11	U	10	U	11	U	10	U	10	U	10	U			20	U
2,4-DINITROPHENOL	ug/l	32	U	34	U	32	U	31	U	32	U	30	U	29	U	30	U			60	U
2,4-DINITROTOLUENE	ug/l	5	U	6	U	5	U	5	U	5	U	5	U	5	UJ	5	U	0.60	U	10	U
														0.60	U					0.60	U
2,6-Diamino-4-nitrotoluene	ug/l													0.60	U			0.60	U	0.60	U
2,6-DINITROTOLUENE	ug/l	5	U	6	U	5	U	5	U	5	U	5	U	5	UJ	5	U	0.60	U	10	U
														0.60	U					0.60	U
2-AMINO-4,6-DINITROTOLUENE	ug/l													0.60	U			0.60	U	0.60	U
2-BUTANONE (MEK)	ug/l											10	U	10	U	10	U			10	U
2-Chloro-1,1,1-trifluoroethane	ug/l											5	U	5	U	5	U			5	U
2-CHLOROETHYL VINYL ETHER	ug/l											10	U	10	U	10	U			10	U
2-CHLORONAPHTHALENE	ug/l	5	U	6	U	5	U	5	U	5	U	5	U	5	U	5	U			10	U
2-CHLOROPHENOL	ug/l	5	U	6	U	5	U	5	U	5	U	5	U	5	U	5	U			10	U
2-CHLOROTOLUENE	ug/l											5	U	5	U	5	U			5	U
2-HEXANONE	ug/l											10	U	10	U	10	U			10	U
2-METHYLNAPHTHALENE	ug/l	0.052	U	0.054	U	0.053	U	0.052	U	0.053	U	0.050	U	0.048	U	0.049	U			0.053	U
2-METHYLPHENOL	ug/l	5	U	6	U	5	U	5	U	5	U	5	U	5	U	5	U			10	U
2-NITROANILINE	ug/l	5	U	6	U	5	U	5	U	5	U	5	U	5	UJ	5	U			10	U
2-NITROPHENOL	ug/l	5	U	6	U	5	U	5	U	5	U	5	U	5	UJ	5	U			10	U
2-NITROTOLUENE	ug/l													0.60	U			0.60	U	0.60	U
3,3'-DICHLOROBENZIDINE	ug/l	5	U	6	U	5	U	5	U	5	U	5	UJ	5	U	5	U			10	U
3,5-Dimethylphenol	ug/l	11	U	11	U	11	U	10	U	11	U	10	U	10	U	10	U			20	U
3-NITROANILINE	ug/l	5	U	6	U	5	U	5	U	5	U	5	U	5	U	5	U			10	U
3-NITROTOLUENE	ug/l													1.2	U			1.2	U	1.2	U
4,4'-DDD	ug/l	0.021	U	0.022	U	0.021	U	0.021	U	0.020	U										
4,4'-DDE	ug/l	0.021	U	0.022	U	0.021	U	0.021	U	0.020	U										

Table C-2 - Subarea 5A Equipment Rinsate Blank Results

Sample Name:		EB01-SA5A-022311		EB02-SA5A-022811		EB03-SA5A-022811		EB04-SA5A-030111		EB05-SA5A-030211		EB06-SA5A-030311		EB07-SA5A-031511		EB08-SA5A-032211		EB09-SA5A-032311		EB10-SA5A-032911	
Sample Date:		02/23/2011		02/28/2011		02/28/2011		03/01/2011		03/02/2011		03/03/2011		03/15/2011		03/22/2011		03/23/2011		03/29/2011	
Sample Type		Equipment Blank		Equipment Blank		Equipment Blank		Equipment Blank		Equipment Blank		Equipment Blank		Equipment Blank		Equipment Blank		Equipment Blank		Equipment Blank	
Analyte	**Units**	**Concentration**	**Final Qualifer**	**Concentration**	**Final Qualifer**	**Concentration**	**Final Qualifer**	**Concentration**	**Final Qualifer**	**Concentration**	**Final Qualifer**	**Concentration**	**Final Qualifer**	**Concentration**	**Final Qualifer**	**Concentration**	**Final Qualifer**	**Concentration**	**Final Qualifer**	**Concentration**	**Final Qualifer**
4,4'-DDT	ug/l	0.021	U	0.022	U	0.021	U	0.021	U	0.020	U										
4,6-DINITRO-2-METHYLPHENOL	ug/l	16	U	17	U	16	U	16	U	16	U	15	U	15	UJ	15	U			30	U
4-AMINO-2,6-DINITROTOLUENE	ug/l													0.60	U			0.60	U	0.60	U
4-BROMOPHENYL-PHENYLETHER	ug/l	5	U	6	U	5	U	5	U	5	U	5	U	5	U	5	U			10	U
4-CHLORO-3-METHYLPHENOL	ug/l	5	U	6	U	5	U	5	U	5	U	5	U	5	U	5	U			10	U
4-CHLOROANILINE	ug/l	5	U	6	U	5	U	5	U	5	UJ	5	U	5	U	5	U			10	U
4-CHLOROPHENYL-PHENYLETHER	ug/l	5	U	6	U	5	U	5	U	5	U	5	U	5	U	5	U			10	U
4-CHLOROTOLUENE	ug/l											5	U	5	U	5	U			5	U
4-METHYL-2-PENTANONE (MIBK)	ug/l											10	U	10	U	10	U			10	U
4-METHYLPHENOL	ug/l	5	U	6	U	5	U	5	U	5	U	5	U	5	U	5	U			10	U
4-NITROANILINE	ug/l	5	U	6	U	5	U	5	U	5	U	5	U	5	U	5	U			10	U
4-NITROPHENOL	ug/l	32	U	34	U	32	U	31	U	32	U	30	U	29	U	30	U			60	U
4-NITROTOLUENE	ug/l													1.2	U			1.2	U	1.2	U
ACENAPHTHENE	ug/l	0.052	U	0.054	U	0.053	U	0.052	U	0.053	U	0.050	U	0.048	U	0.049	U			0.053	U
ACENAPHTHYLENE	ug/l	0.052	U	0.054	U	0.053	U	0.052	U	0.053	U	0.050	U	0.048	U	0.049	U			0.053	U
ACETONE	ug/l											20	U	20	U	20	U			20	U
ALDRIN	ug/l	0.011	U	0.011	U	0.010	U	0.010	U	0.010	U										
ALPHA-BHC	ug/l	0.011	U	0.011	U	0.010	U	0.010	U	0.010	U										
ALUMINUM	mg/l	0.200	U	0.200	U	0.200	U	0.200	U	0.200	U	0.200	U	0.200	U	0.200	U			0.200	U
ANILINE	ug/l	5	U	6	U	5	U	5	U	5	U	5	U	5	U	5	U			10	U
ANTHRACENE	ug/l	0.052	U	0.054	U	0.053	U	0.052	U	0.053	U	0.050	U	0.048	U	0.049	U			0.053	U
ANTIMONY	mg/l	0.0010	U	0.0010	U	0.0010	U	0.0010	U	0.0010	U	0.0010	U	0.0010	U	0.0010	U			0.0010	U
Aroclor 1016	ug/l	0.53	UJ	0.56	U	0.52	U	0.52	U	0.51	U	0.49	U	0.49	U	0.49	U			0.50	U
Aroclor 1221	ug/l	0.53	UJ	0.56	U	0.52	U	0.52	U	0.51	U	0.49	U	0.49	U	0.49	U			0.50	U
Aroclor 1232	ug/l	0.53	UJ	0.56	U	0.52	U	0.52	U	0.51	U	0.49	U	0.49	U	0.49	U			0.50	U
Aroclor 1242	ug/l	0.53	UJ	0.56	U	0.52	U	0.52	U	0.51	U	0.49	U	0.49	U	0.49	U			0.50	U
Aroclor 1248	ug/l	0.53	UJ	0.56	U	0.52	U	0.52	U	0.51	U	0.49	U	0.49	U	0.49	U			0.50	U
Aroclor 1254	ug/l	0.53	UJ	0.56	U	0.52	U	0.52	U	0.51	U	0.49	U	0.49	U	0.49	U			0.50	U
Aroclor 1260	ug/l	0.53	UJ	0.56	U	0.52	U	0.52	U	0.51	U	0.49	U	0.49	U	0.49	U			0.50	U
Aroclor 1262	ug/l	0.53	UJ	0.56	U	0.52	U	0.52	U	0.51	U	0.49	U	0.49	U	0.49	U			0.50	U
Aroclor 1268	ug/l	0.53	UJ	0.56	U	0.52	U	0.52	U	0.51	U	0.49	U	0.49	U	0.49	U			0.50	U
Aroclor 5432	ug/l	0.53	UJ	0.56	U	0.52	U	0.52	U	0.51	U	0.49	U	0.49	U	0.49	U			0.50	U
Aroclor 5442	ug/l	0.53	UJ	0.56	U	0.52	U	0.52	U	0.51	U	0.49	U	0.49	U	0.49	U			0.50	U
Aroclor 5460	ug/l	0.53	UJ	0.56	U	0.52	U	0.52	U	0.51	U	0.49	U	0.49	U	0.49	U			0.50	U
Arsenic	mg/l	0.0020	U	0.0020	U	0.0020	U	0.0020	U	0.0020	U	0.0020	U	0.0020	U	0.0020	U			0.0020	U
BARIUM	mg/l	0.0020	U	0.0020	U	0.0020	U	0.0020	U	0.0020	U	0.0020	U	0.0020	U	0.0020	U			0.0020	U
BENZENE	ug/l											5	U	5	U	5	U			5	U
BENZIDINE	ug/l	64	U	67	U	65	U	63	U	64	UJ	60	U	59	U	60	U			120	U
BENZO(A)ANTHRACENE	ug/l	0.052	U	0.054	U	0.053	U	0.052	U	0.053	U	0.050	U	0.048	U	0.049	U			0.053	U
BENZO(A)PYRENE	ug/l	0.052	U	0.054	U	0.053	U	0.052	U	0.053	U	0.050	U	0.048	U	0.049	U			0.053	U
BENZO(B)FLUORANTHENE	ug/l	0.052	U	0.054	U	0.053	U	0.052	U	0.053	U	0.050	U	0.048	U	0.049	U			0.053	U
BENZO(G,H,I)PERYLENE	ug/l	0.052	U	0.054	U	0.053	U	0.052	U	0.053	U	0.050	U	0.048	U	0.049	U			0.053	U
BENZO(K)FLUORANTHENE	ug/l	0.052	U	0.054	U	0.053	U	0.052	U	0.053	U	0.050	U	0.048	U	0.049	U			0.053	U
BENZOIC ACID	ug/l	16	U	17	U	16	U	16	U	16	U	15	UJ	15	U	15	U			30	U
BENZYL ALCOHOL	ug/l	16	UJ	17	U	16	U	16	U	16	U	15	U	15	UJ	15	U			30	U
BERYLLIUM	mg/l	0.00050	U	0.00050	U	0.00050	U	0.00050	U	0.00050	U	0.00050	U	0.00050	U	0.00050	U			0.00050	U
BETA-BHC	ug/l	0.011	U	0.011	U	0.010	U	0.010	U	0.010	U										
BIS(2-CHLOROETHOXY)METHANE	ug/l	5	U	6	U	5	U	5	U	5	U	5	U	5	U	5	U			10	U
BIS(2-CHLOROETHYL) ETHER	ug/l	5	UJ	6	U	5	U	5	U	5	U	5	U	5	U	5	U			10	U
BIS(2-CHLOROISOPROPYL) ETHER	ug/l	5	U	6	U	5	U	5	U	5	U	5	U	5	U	5	U			10	U
BIS(2-ETHYLHEXYL)PHTHALATE	ug/l	1.0	U	1.1	U	1.1	U	1.0	U	1.1	U	0.99	U	0.96	U	0.22	J			1.1	U
BORON	mg/l	0.0500	U	0.0500	U	0.0500	U	0.0500	U	0.0500	U	0.0500	U	0.0500	U	0.0500	U			0.0500	U
BROMOBENZENE	ug/l											5	U	5	U	5	U			5	U
BROMOCHLOROMETHANE	ug/l											5	U	5	U	5	U			5	U
BROMODICHLOROMETHANE	ug/l											5	U	5	U	5	U			5	U
BROMOFORM	ug/l											5	U	5	U	5	U			5	U
BROMOMETHANE	ug/l											5	U	5	U	5	U			5	U
Butylbenzylphthalate	ug/l	1.0	U	1.1	U	1.1	U	0.071	J	1.1	U	5	U	0.96	U	0.99	U			1.1	U
CADMIUM	mg/l	0.00050	U	0.00050	U	0.00050	U	0.00050	U	0.00050	U	0.00050	U	0.00050	U	0.00050	U			0.00050	U
CALCIUM	mg/l	0.200	U	0.200	U	0.200	U	0.200	U	0.200	U	0.200	U	0.200	U	0.200	U			0.200	U
CARBAZOLE	ug/l	5	U	6	U	5	U	5	U	5	U	5	U	5	U	5	U			10	U
CARBON TETRACHLORIDE	ug/l											5	U	5	U	5	U			5	U
Chlordane	ug/l	0.53	U	0.56	U	0.52	U	0.52	U	0.51	U										
Chlorobenzene	ug/l											5	U	5	U	5	U			5	U
Chloroethane	ug/l											5	U	5	U	5	U			5	U
CHLOROFORM	ug/l											5	U	5	U	5	U			5	U
CHLOROMETHANE	ug/l											5	U	5	U	5	U			5	U
Chlorotrifluoroethylene	ug/l											5	U	5	U	5	U			5	U
CHROMIUM	mg/l	0.0020	U	0.0020	U	0.0020	U	0.0020	U	0.0020	U	0.0020	U	0.0020	U	0.0020	U			0.0020	U
CHRYSENE	ug/l	0.052	U	0.083		0.053	U	0.025	J	0.053	U	0.050	U	0.048	U	0.049	U			0.053	U
CIS-1,2-DICHLOROETHENE	ug/l											5	U	5	U	5	U			5	U
CIS-1,3-DICHLOROPROPENE	ug/l											5	U	5	U	5	U			5	U
COBALT	mg/l	0.00050	U	0.00050	U	0.00050	U	0.00050	U	0.00050	U	0.00050	U	0.00050	U	0.00050	U			0.00050	U
COPPER	mg/l	0.0020	U	0.0020	U	0.0020	U	0.0020	U	0.0020	U	0.0020	U	0.0020	U	0.0020	U			0.0020	U
CYANIDE	mg/l													0.010	U			0.010	U	0.010	U
DALAPON	ug/l	1.3	U	1.3	U	1.3	U	1.3	U	1.4	U										
DELTA-BHC	ug/l	0.011	U	0.011	U	0.010	U	0.010	U	0.010	U										
DIBENZO(A,H)ANTHRACENE	ug/l	0.052	U	0.054	U	0.053	U	0.052	U	0.053	U	0.050	U	0.048	U	0.049	U			0.053	U
DIBENZOFURAN	ug/l	5	U	6	U	5	U	5	U	5	U	5	U	5	U	5	U			10	U
DIBROMOCHLOROMETHANE	ug/l											5	U	5	U	5	U			5	U
DIBROMOMETHANE	ug/l											5	U	5	U	5	U			5	U

Table C-2 - Subarea 5A Equipment Rinsate Blank Results

Sample Name:		EB01-SA5A-022311		EB02-SA5A-022811		EB03-SA5A-022811		EB04-SA5A-030111		EB05-SA5A-030211		EB06-SA5A-030311		EB07-SA5A-031511		EB08-SA5A-032211		EB09-SA5A-032311		EB10-SA5A-032911	
Sample Date:		02/23/2011		02/28/2011		02/28/2011		03/01/2011		03/02/2011		03/03/2011		03/15/2011		03/22/2011		03/23/2011		03/29/2011	
Sample Type		Equipment Blank		Equipment Blank		Equipment Blank		Equipment Blank		Equipment Blank		Equipment Blank		Equipment Blank		Equipment Blank		Equipment Blank		Equipment Blank	
Analyte	**Units**	**Concentration**	**Final Qualifer**	**Concentration**	**Final Qualifer**	**Concentration**	**Final Qualifer**	**Concentration**	**Final Qualifer**	**Concentration**	**Final Qualifer**	**Concentration**	**Final Qualifer**	**Concentration**	**Final Qualifer**	**Concentration**	**Final Qualifer**	**Concentration**	**Final Qualifer**	**Concentration**	**Final Qualifer**
DICAMBA	ug/l	0.31	U	0.32	U	0.31	U	0.30	U	0.33	U										
DICHLORODIFLUOROMETHANE	ug/l											5	U	5	U	5	U			5	U
DICHLOROPROP	ug/l	0.52	U	0.53	U	0.52	U	0.50	U	0.54	U										
DIELDRIN	ug/l	0.021	U	0.022	U	0.021	U	0.021	U	0.020	UJ										
DIETHYLENE GLYCOL	mg/l													100	UJ			10	J	100	U
Diethylphthalate	ug/l	1.0	U	1.1	U	1.1	U	1.0	U	1.1	U	5	U	0.067	J	0.071	J			0.091	J
Dimethylphthalate	ug/l	1.0	UJ	1.1	U	1.1	U	1.0	U	1.1	U	5	U	0.96	U	0.99	U			1.1	U
Di-n-butylphthalate	ug/l	1.0	U	0.39	J	1.1	U	1.0	U	1.1	U	0.43	J	0.44	J	0.99	U			1.1	U
Di-n-octylphthalate	ug/l	0.22	J	1.1	U	1.1	U	1.0	U	1.1	U	0.99	U	0.96	U	0.99	U			0.12	J
DINOSEB	ug/l	0.52	U	0.53	U	0.52	U	0.50	U	0.54	U										
EFH (C12-C14)	mg/l													0.58	U			0.58	U	0.60	U
EFH (C15-C20)	mg/l													0.58	U			0.58	U	0.60	U
EFH (C21-C30)	mg/l													0.58	U			0.58	U	0.60	U
EFH (C30-C40)	mg/l													0.58	U			0.58	U	0.60	U
EFH (C8-C11)	mg/l													0.58	U			0.58	U	0.60	U
ENDOSULFAN I	ug/l	0.011	U	0.011	U	0.010	U	0.010	U	0.010	U										
ENDOSULFAN II	ug/l	0.021	U	0.022	U	0.021	U	0.021	U	0.020	U										
ENDOSULFAN SULFATE	ug/l	0.021	U	0.022	U	0.021	U	0.021	U	0.020	U										
ENDRIN	ug/l	0.021	U	0.022	U	0.021	U	0.021	U	0.020	U										
ENDRIN ALDEHYDE	ug/l	0.11	U	0.11	U	0.10	U	0.10	U	0.10	U										
ENDRIN KETONE	ug/l	0.021	U	0.022	U	0.021	U	0.021	U	0.020	U										
ETHANOL	ug/l													1000	U			1000	U	1000	U
ETHYLBENZENE	ug/l											5	U	5	U	5	U			5	U
ETHYLENE GLYCOL	mg/l													100	UJ			14	J	100	U
FLUORANTHENE	ug/l	0.052	U	0.054	U	0.053	U	0.052	U	0.053	U	0.050	U	0.048	U	0.049	U			0.053	U
FLUORENE	ug/l	0.052	U	0.054	U	0.053	U	0.052	U	0.053	U	0.050	U	0.048	U	0.049	U			0.053	U
FLUORIDE	mg/l	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U			0.10	U
FORMALDEHYDE	ug/l													50	U			50	U	50	U
gamma-BHC (Lindane)	ug/l	0.011	U	0.011	U	0.010	U	0.010	U	0.010	U										
GASOLINE RANGE ORGANICS (C5-C12)	ug/l													50	U			50	U	50	U
HEPTACHLOR	ug/l	0.011	U	0.011	U	0.010	U	0.010	U	0.010	U										
HEPTACHLOR EPOXIDE	ug/l	0.011	U	0.011	U	0.010	U	0.010	U	0.010	U										
HEXACHLOROBENZENE	ug/l	5	U	6	U	5	U	5	U	5	U	5	U	5	U	5	U			10	U
HEXACHLOROBUTADIENE	ug/l	5	U	6	U	5	U	5	U	5	U	5	U	5	U	5	U			5	U
												5	U	5	U	5	U			10	U
HEXACHLOROCYCLOPENTADIENE	ug/l	16	U	17	U	16	U	16	U	16	U	15	U	15	U	15	U			30	U
HEXACHLOROETHANE	ug/l	5	U	6	U	5	U	5	U	5	U	5	U	5	U	5	U			10	U
HEXAVALENT CHROMIUM	ug/l	10.0	U	10.0	U	10.0	U	10.0	UJ	10.0	UJ	10.0	U	10.0	UJ	10.0	U			10.0	UJ
HMX	ug/l													2.0	U			2.0	U	2.0	U
INDENO(1,2,3-CD)PYRENE	ug/l	0.052	U	0.054	U	0.053	U	0.052	U	0.053	U	0.050	U	0.048	U	0.049	U			0.053	U
IRON	mg/l	0.200	U	0.200	U	0.0665	J	0.200	U	0.200	U	0.200	U	0.200	U	0.200	U			0.200	U
ISOPHORONE	ug/l	5	U	6	U	5	U	5	U	5	U	5	U	5	U	5	U			10	U
Isopropanol	ug/l													1000	U			1000	U	1000	U
ISOPROPYLBENZENE	ug/l											5	U	5	U	5	U			5	U
LEAD	mg/l	0.0010	U	0.0010	U	0.000066	J	0.0010	U	0.0010	U	0.0010	U	0.0010	U	0.0010	U			0.0010	U
LITHIUM	mg/l	0.0200	U	0.0200	U	0.0200	U	0.0200	U	0.0200	U	0.0200	U	0.0200	U	0.0200	U			0.0200	U
m,p-Xylene	ug/l											5	U	5	U	5	U			5	U
MAGNESIUM	mg/l	0.100	U	0.100	U	0.100	U	0.100	U	0.100	U	0.100	U	0.100	U	0.100	U			0.100	U
MANGANESE	mg/l	0.0050	U	0.0050	U	0.00088	J	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U			0.0050	U
MCPA	ug/l	1000	U	1100	U	1000	U	1000	U	1100	U										
MCPP	ug/l	210	U	210	U	210	U	200	U	220	U										
Mercury	mg/l	0.00020	U	0.00020	U	0.00020	U	0.00020	U	0.00020	U	0.00020	U	0.00020	U	0.00020	U			0.00020	U
METHANOL	ug/l													1000	U			1000	U	1000	U
METHOXYCHLOR	ug/l	0.11	U	0.11	U	0.10	U	0.10	U	0.10	U										
METHYL TERT-BUTYL ETHER (MTBE)	ug/l											5	U	5	U	5	U			5	U
METHYLENE CHLORIDE	ug/l											5	U	5	U	5	U			5	U
MIREX	ug/l	0.27	U	0.28	U	0.26	U	0.26	U	0.25	U										
MOLYBDENUM	mg/l	0.00050	U	0.00050	U	0.00050	U	0.00050	U	0.00050	U	0.00050	U	0.00050	U	0.00050	U			0.00050	U
m-Terphenyl	mg/l													0.25	UJ			0.47	U	0.25	U
NAPHTHALENE	ug/l	0.029	J	0.035	J	0.035	J	0.033	J	0.053	U	0.031	J	0.029	J	0.049	U			0.053	U
N-BUTYLBENZENE	ug/l											5	U	5	U	5	U			5	U
NICKEL	mg/l	0.0020	U	0.0020	U	0.0020	U	0.0020	U	0.0020	U	0.0020	U	0.0020	U	0.0020	U			0.0020	U
Nitrate-NO3	mg/l													0.10	U			0.10	U	0.10	U
NITROBENZENE	ug/l	5	U	6	U	5	U	5	U	5	U	5	U	5	UJ	5	UJ	0.60	U	10	U
														0.60	U					0.60	U
Nitroglycerin	ug/l													15	U			15	U	15	U
N-NITROSODIMETHYLAMINE	ng/l													0.982	U			0.993	U	1.01	U
N-NITROSODIMETHYLAMINE	ug/l	0.052	U	0.054	U	0.053	U	0.052	U	0.053	U	0.050	U	0.048	U	0.049	U			0.053	U
N-NITROSO-DI-N-PROPYLAMINE	ug/l	5	U	6	U	5	U	5	U	5	U	5	U	5	U	5	U			10	U
N-NITROSODIPHENYLAMINE	ug/l	5	U	6	U	5	U	5	U	5	U	5	U	5	U	5	U			10	U
N-PROPYLBENZENE	ug/l											5	U	5	U	5	U			5	U
OCDD	pg/l	21.1	U	21.3	U	19.1	U	20.8	U	19.0	U	19.9	U	20.3	U	20.1	U			20.3	U
OCDF	pg/l	21.1	U	21.3	U	19.1	U	20.8	U	19.0	U	19.9	U	20.3	U	20.1	U			20.3	U
O-TERPHENYL	mg/l													0.25	UJ			0.47	U	0.25	U
O-XYLENE	ug/l											5	U	5	U	5	U			5	U
PENTACHLOROPHENOL	ug/l	16	U	17	U	16	U	16	U	16	U	15	U	15	U	15	U			30	U
PERCHLORATE	ug/l	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U			2.0	U
PETN	ug/l													18	U			18	U	18	U
PH	pH unit													5.7		5.9	J			5.5	
PHENANTHRENE	ug/l	0.052	U	0.020	J	0.053	U	0.052	U	0.053	U	0.041	J	0.048	U	0.049	U			0.053	U
PHENOL	ug/l	5	U	6	U	5	U	5	U	5	U	5	U	5	U	5	U			10	U

Table C-2 - Subarea 5A Equipment Rinsate Blank Results

	Sample Name:	EB01-SA5A-022311		EB02-SA5A-022811		EB03-SA5A-022811		EB04-SA5A-030111		EB05-SA5A-030211		EB06-SA5A-030311		EB07-SA5A-031511		EB08-SA5A-032211		EB09-SA5A-032311		EB10-SA5A-032911	
	Sample Date:	02/23/2011		02/28/2011		02/28/2011		03/01/2011		03/02/2011		03/03/2011		03/15/2011		03/22/2011		03/23/2011		03/29/2011	
	Sample Type	Equipment Blank		Equipment Blank		Equipment Blank		Equipment Blank		Equipment Blank		Equipment Blank		Equipment Blank		Equipment Blank		Equipment Blank		Equipment Blank	
Analyte	**Units**	**Concentration**	**Final Qualifer**	**Concentration**	**Final Qualifer**	**Concentration**	**Final Qualifer**	**Concentration**	**Final Qualifer**	**Concentration**	**Final Qualifer**	**Concentration**	**Final Qualifer**	**Concentration**	**Final Qualifer**	**Concentration**	**Final Qualifer**	**Concentration**	**Final Qualifer**	**Concentration**	**Final Qualifer**
PHOSPHORUS	mg/l	0.100	U	0.100	U	0.100	U	0.100	U	0.100	U	0.100	U	0.100	U	0.100	U			0.100	U
P-ISOPROPYLTOLUENE	ug/l											5	U	5	U	5	U			5	U
POTASSIUM	mg/l	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U			0.500	U
Propylene glycol	mg/l													100	U			100	U	100	U
p-Terphenyl	mg/l													0.25	UJ			0.47	U	0.25	U
PYRENE	ug/l	0.052	U	0.054	U	0.053	U	0.052	U	0.053	U	0.050	U	0.048	U	0.049	U			0.053	U
RDX	ug/l													0.60	U			0.60	U	0.60	U
SEC-BUTYLBENZENE	ug/l											5	U	5	U	5	U			5	U
SELENIUM	mg/l	0.0020	U	0.0020	U	0.0020	U	0.0020	U	0.0020	U	0.0020	U	0.0020	U	0.0020	U			0.0020	U
SILVER	mg/l	0.00050	U	0.00050	U	0.00050	U	0.00050	U	0.00050	U	0.00050	U	0.00050	U	0.00050	U			0.00050	U
SODIUM	mg/l	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U			1.00	U
STRONTIUM	mg/l	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U			0.0050	U
STYRENE	ug/l											5	U	5	U	5	U			5	U
TERT-BUTYLBENZENE	ug/l											5	U	5	U	5	U			5	U
TETRACHLOROETHENE	ug/l											5	U	5	U	5	U			5	U
Tetryl	ug/l													0.60	U			0.60	U	0.60	U
THALLIUM	mg/l	0.00050	U	0.00050	U	0.00050	U	0.00050	U	0.00050	U	0.00050	U	0.00050	U	0.00050	U			0.00050	U
TIN	mg/l	0.0200	U	0.0200	U	0.0200	U	0.0200	U	0.0200	U	0.0200	U	0.0200	U	0.0200	U			0.0200	U
TITANIUM	mg/l	0.0100	U	0.0100	U	0.0100	U	0.0100	U	0.0100	U	0.0100	U	0.0100	U	0.0100	U			0.0100	U
TOLUENE	ug/l											5	U	5	U	5	U			5	U
TOXAPHENE	ug/l	3.2	U	3.4	U	3.1	U	3.1	U	3.0	U										
TRANS-1,2-DICHLOROETHENE	ug/l											5	U	5	U	5	U			5	U
TRANS-1,3-DICHLOROPROPENE	ug/l											5	U	5	U	5	U			5	U
TRICHLOROETHENE	ug/l											5	U	5	U	5	U			5	U
TRICHLOROFLUOROMETHANE	ug/l											5	U	5	U	5	U			5	U
VANADIUM	mg/l	0.00050	U	0.00050	U	0.00050	U	0.00050	U	0.00050	U	0.00050	U	0.00050	U	0.00050	U			0.00050	U
VINYL CHLORIDE	ug/l											5	U	5	U	5	U			5	U
ZINC	mg/l	0.0150	U	0.0150	U	0.0150	U	0.0150	U	0.0150	U	0.0150	U	0.0150	U	0.0150	U			0.0150	U
Zirconium	mg/l	0.0500	U	0.0500	U	0.0500	U	0.0500	U	0.0500	U	0.0500	U	0.0500	U	0.0500	U			0.0500	U

ug/L - microgram per liter
mg/L - milligram per liter
ng/L - nanogram per liter
pg/L - picogram per liter
U - Compound not detected above the reporting limit

(a) Some SVOC results had two values - one for SVOC and one for SVOC SIM. The validators used the value with the lowest detection limit for validation purposes

Table C-2 - Subarea 5A Equipment Rinsate Blank Results

Sample Name:		EB11-SA5A-SB-040511		EB12-SA5A-SB-040611		EB13-SA5A-SB-041811		EB14-SA5A-SB-041911		EB15-SA5A-SB-051611	
Sample Date:		04/05/2011		04/06/2011		04/18/2011		04/19/2011		05/16/2011	
Sample Type		Equipment Blank		Equipment Blank		Equipment Blank		Equipment Blank		Equipment Blank	
Analyte	**Units**	**Concentration**	**Final Qualifer**	**Concentration**	**Final Qualifer**	**Concentration**	**Final Qualifer**	**Concentration**	**Final Qualifer**	**Concentration**	**Final Qualifer**
1,1,1,2-Tetrachloroethane	ug/l	5	U			5	U			5	U
1,1,1-TRICHLOROETHANE	ug/l	5	U			5	U			5	U
1,1,2,2-TETRACHLOROETHANE	ug/l	5	U			5	U			5	U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	10	U			10	U			10	U
1,1,2-TRICHLOROETHANE	ug/l	5	U			5	U			5	U
1,1-DICHLOROETHANE	ug/l	5	U			5	U			5	U
1,1-DICHLOROETHENE	ug/l	5	U			5	U			5	U
1,1-DICHLOROPROPENE	ug/l	5	U			5	U			5	U
1,2,3,4,6,7,8-HPCDD	pg/l	10.5	U			9.91	U			10.7	U
1,2,3,4,6,7,8-HPCDF	pg/l	10.5	U			9.91	U			10.7	U
1,2,3,4,7,8,9-HPCDF	pg/l	10.5	U			9.91	U			10.7	U
1,2,3,4,7,8-HxCDD	pg/l	10.5	U			9.91	U			10.7	U
1,2,3,4,7,8-HXCDF	pg/l	10.5	U			9.91	U			10.7	U
1,2,3,6,7,8-HXCDD	pg/l	10.5	U			9.91	U			10.7	U
1,2,3,6,7,8-HXCDF	pg/l	10.5	U			9.91	U			10.7	U
1,2,3,7,8,9-HXCDD	pg/l	10.5	U			9.91	U			10.7	U
1,2,3,7,8,9-HXCDF	pg/l	10.5	U			9.91	U			10.7	U
1,2,3,7,8-PECDD	pg/l	10.5	U			9.91	U			10.7	U
1,2,3,7,8-PECDF	pg/l	10.5	U			9.91	U			0.168	J
1,2,3-TRICHLOROBENZENE	ug/l	5	U			5	U			5	U
1,2,3-TRICHLOROPROPANE	ug/l	5	U			5	U			5	U
1,2,4-TRICHLOROBENZENE(a)	ug/l	5	U			5	U			5	U
		5	U			5	U			6	U
1,2,4-TRIMETHYLBENZENE	ug/l	5	U			5	U			5	U
1,2-DIBROMO-3-CHLOROPROPANE	ug/l	5	U			5	U			5	U
1,2-Dibromoethane (EDB)	ug/l	5	U			5	U			5	U
1,2-DICHLOROBENZENE	ug/l	5	U			5	U			5	U
		5	U			5	U			6	U
1,2-DICHLOROETHANE	ug/l	5	U			5	UJ			5	U
1,2-DICHLOROPROPANE	ug/l	5	U			5	U			5	U
1,2-Diphenylhydrazine/Azobenzene	ug/l	5	U			5	U			6	U
1,3,5-TRIMETHYLBENZENE	ug/l	5	U			5	U			5	U
1,3,5-TRINITROBENZENE	ug/l			0.60	U			0.60	U		
1,3-DICHLOROBENZENE	ug/l	5	U			5	U			5	U
		5	U			5	U			6	U
1,3-DICHLOROPROPANE	ug/l	5	U			5	U			5	U
1,3-DINITROBENZENE	ug/l			0.60	U			0.60	U		
1,4-DICHLOROBENZENE	ug/l	5	U			5	U			5	U
		5	U			5	U			6	U
1,4-DIOXANE	ug/l	2.0	U			2.0	U			2.0	U
1-METHYLNAPHTHALENE	ug/l	0.055	U			0.050	U			0.031	J
2,2-DICHLOROPROPANE	ug/l	5	U			5	U			5	U
2,3,4,6,7,8-HXCDF	pg/l	10.5	U			9.91	U			10.7	U
2,3,4,7,8-PECDF	pg/l	10.5	U			9.91	U			10.7	U
2,3,7,8-TCDD	pg/l	2.11	U			1.98	U			2.14	U
2,3,7,8-TCDF	pg/l	2.11	U			0.269	J			2.14	U
2,4,5-T	ug/l										
2,4,5-TP (Silvex)	ug/l										
2,4,5-TRICHLOROPHENOL	ug/l	5	U			5	U			6	U
2,4,6-TRICHLOROPHENOL	ug/l	5	U			5	U			6	U
2,4,6-TRINITROTOLUENE	ug/l			0.60	U			0.60	U		
2,4-D	ug/l										
2,4-DB	ug/l										
2,4-DIAMINO-6-NITROTOLUENE	ug/l			0.60	U			0.60	U		
2,4-DICHLOROPHENOL	ug/l	5	U			5	U			6	U
2,4-DIMETHYLPHENOL	ug/l	10	U			10	U			11	U
2,4-DINITROPHENOL	ug/l	31	U			30	U			33	U
2,4-DINITROTOLUENE	ug/l	5	U	0.60	U	5	U	0.60	U	6	U
2,6-Diamino-4-nitrotoluene	ug/l			0.60	U			0.60	U		
2,6-DINITROTOLUENE	ug/l	5	U	0.60	U	5	U	0.60	U	6	U
2-AMINO-4,6-DINITROTOLUENE	ug/l			0.60	U			0.60	U		
2-BUTANONE (MEK)	ug/l	10	U			10	U			10	U
2-Chloro-1,1,1-trifluoroethane	ug/l	5	U			5	U			5	U
2-CHLOROETHYL VINYL ETHER	ug/l	10	U			10	U			10	U
2-CHLORONAPHTHALENE	ug/l	5	U			5	U			6	U
2-CHLOROPHENOL	ug/l	5	U			5	U			6	U
2-CHLOROTOLUENE	ug/l	5	U			5	U			5	U
2-HEXANONE	ug/l	10	U			10	U			10	U
2-METHYLNAPHTHALENE	ug/l	0.055	U			0.050	U			0.033	J
2-METHYLPHENOL	ug/l	5	U			5	U			6	U
2-NITROANILINE	ug/l	5	U			5	U			6	U
2-NITROPHENOL	ug/l	5	U			5	U			6	U
2-NITROTOLUENE	ug/l			0.60	U			0.60	U		
3,3'-DICHLOROBENZIDINE	ug/l	5	U			5	U			6	U
3,5-Dimethylphenol	ug/l	10	U			10	U			11	U
3-NITROANILINE	ug/l	5	U			5	U			6	U
3-NITROTOLUENE	ug/l			1.2	U			1.2	U		
4,4'-DDD	ug/l										
4,4'-DDE	ug/l										

Table C-2 - Subarea 5A Equipment Rinsate Blank Results

Sample Name:		EB11-SA5A-SB-040511		EB12-SA5A-SB-040611		EB13-SA5A-SB-041811		EB14-SA5A-SB-041911		EB15-SA5A-SB-051611	
Sample Date:		04/05/2011		04/06/2011		04/18/2011		04/19/2011		05/16/2011	
Sample Type		Equipment Blank		Equipment Blank		Equipment Blank		Equipment Blank		Equipment Blank	
Analyte	**Units**	**Concentration**	**Final Qualifer**	**Concentration**	**Final Qualifer**	**Concentration**	**Final Qualifer**	**Concentration**	**Final Qualifer**	**Concentration**	**Final Qualifer**
4,4'-DDT	ug/l										
4,6-DINITRO-2-METHYLPHENOL	ug/l	16	U			15	U			17	U
4-AMINO-2,6-DINITROTOLUENE	ug/l			0.60	U			0.60	U		
4-BROMOPHENYL-PHENYLETHER	ug/l	5	U			5	U			6	U
4-CHLORO-3-METHYLPHENOL	ug/l	5	U			5	U			6	U
4-CHLOROANILINE	ug/l	5	U			5	U			6	U
4-CHLOROPHENYL-PHENYLETHER	ug/l	5	U			5	U			6	U
4-CHLOROTOLUENE	ug/l	5	U			5	U			5	U
4-METHYL-2-PENTANONE (MIBK)	ug/l	10	U			10	U			10	U
4-METHYLPHENOL	ug/l	5	U			5	U			6	UJ
4-NITROANILINE	ug/l	5	U			5	U			6	U
4-NITROPHENOL	ug/l	31	U			30	U			33	U
4-NITROTOLUENE	ug/l			1.2	U			1.2	U		
ACENAPHTHENE	ug/l	0.055	U			0.050	U			0.054	U
ACENAPHTHYLENE	ug/l	0.055	U			0.050	U			0.054	U
ACETONE	ug/l	20	U			20	UJ			20	U
ALDRIN	ug/l										
ALPHA-BHC	ug/l										
ALUMINUM	mg/l	0.200	U			0.200	U			0.200	U
ANILINE	ug/l	5	U			5	U			6	U
ANTHRACENE	ug/l	0.055	U			0.050	U			0.054	U
ANTIMONY	mg/l	0.0010	U			0.0010	U			0.0010	U
Aroclor 1016	ug/l	0.51	U			0.48	U			0.52	U
Aroclor 1221	ug/l	0.51	U			0.48	U			0.52	U
Aroclor 1232	ug/l	0.51	U			0.48	U			0.52	U
Aroclor 1242	ug/l	0.51	U			0.48	U			0.52	U
Aroclor 1248	ug/l	0.51	U			0.48	U			0.52	U
Aroclor 1254	ug/l	0.51	U			0.48	U			0.52	U
Aroclor 1260	ug/l	0.51	U			0.48	U			0.52	U
Aroclor 1262	ug/l	0.51	U			0.48	U			0.52	U
Aroclor 1268	ug/l	0.51	U			0.48	U			0.52	U
Aroclor 5432	ug/l	0.51	U			0.48	UJ			0.52	U
Aroclor 5442	ug/l	0.51	U			0.48	U			0.52	U
Aroclor 5460	ug/l	0.51	U			0.48	U			0.52	U
Arsenic	mg/l	0.0020	U			0.0020	U			0.0020	U
BARIUM	mg/l	0.0020	U			0.0020	U			0.0020	U
BENZENE	ug/l	5	U			5	U			5	U
BENZIDINE	ug/l	62	U			59	U			67	U
BENZO(A)ANTHRACENE	ug/l	0.055	U			0.050	U			0.054	U
BENZO(A)PYRENE	ug/l	0.055	U			0.050	U			0.054	U
BENZO(B)FLUORANTHENE	ug/l	0.055	U			0.050	UJ			0.054	U
BENZO(G,H,I)PERYLENE	ug/l	0.055	U			0.050	U			0.054	U
BENZO(K)FLUORANTHENE	ug/l	0.055	U			0.050	U			0.054	U
BENZOIC ACID	ug/l	16	U			15	UJ			17	UJ
BENZYL ALCOHOL	ug/l	16	U			15	U			17	U
BERYLLIUM	mg/l	0.00050	U			0.00050	U			0.00050	U
BETA-BHC	ug/l										
BIS(2-CHLOROETHOXY)METHANE	ug/l	5	U			5	U			6	U
BIS(2-CHLOROETHYL) ETHER	ug/l	5	U			5	U			6	U
BIS(2-CHLOROISOPROPYL) ETHER	ug/l	5	U			5	U			6	U
BIS(2-ETHYLHEXYL)PHTHALATE	ug/l	0.098	J			0.30	J			1.1	U
BORON	mg/l	0.0500	U			0.0500	U			0.0500	U
BROMOBENZENE	ug/l	5	U			5	U			5	U
BROMOCHLOROMETHANE	ug/l	5	U			5	U			5	U
BROMODICHLOROMETHANE	ug/l	5	U			5	U			5	U
BROMOFORM	ug/l	5	U			5	U			5	U
BROMOMETHANE	ug/l	5	U			5	U			5	U
Butylbenzylphthalate	ug/l	1.1	U			1.0	U			1.1	U
CADMIUM	mg/l	0.00050	U			0.00050	U			0.00050	U
CALCIUM	mg/l	0.200	U			0.200	U			0.200	U
CARBAZOLE	ug/l	5	U			5	U			6	U
CARBON TETRACHLORIDE	ug/l	5	U			5	UJ			5	U
Chlordane	ug/l										
Chlorobenzene	ug/l	5	U			5	U			5	U
Chloroethane	ug/l	5	U			5	U			5	U
CHLOROFORM	ug/l	5	U			5	U			5	U
CHLOROMETHANE	ug/l	5	U			5	U			5	U
Chlorotrifluoroethylene	ug/l	5	U			5	U			5	U
CHROMIUM	mg/l	0.0020	U			0.0020	U			0.0020	U
CHRYSENE	ug/l	0.055	U			0.050	U			0.054	U
CIS-1,2-DICHLOROETHENE	ug/l	5	U			5	U			5	U
CIS-1,3-DICHLOROPROPENE	ug/l	5	U			5	U			5	U
COBALT	mg/l	0.00050	U			0.00050	U			0.00050	U
COPPER	mg/l	0.0020	U			0.0020	U			0.0020	U
CYANIDE	mg/l			0.010	U			0.010	U		
DALAPON	ug/l										
DELTA-BHC	ug/l										
DIBENZO(A,H)ANTHRACENE	ug/l	0.055	U			0.050	U			0.054	U
DIBENZOFURAN	ug/l	5	U			5	U			6	U
DIBROMOCHLOROMETHANE	ug/l	5	U			5	U			5	U
DIBROMOMETHANE	ug/l	5	U			5	U			5	U

Table C-2 - Subarea 5A Equipment Rinsate Blank Results

Sample Name:		EB11-SA5A-SB-040511		EB12-SA5A-SB-040611		EB13-SA5A-SB-041811		EB14-SA5A-SB-041911		EB15-SA5A-SB-051611	
Sample Date:		04/05/2011		04/06/2011		04/18/2011		04/19/2011		05/16/2011	
Sample Type		Equipment Blank		Equipment Blank		Equipment Blank		Equipment Blank		Equipment Blank	
Analyte	**Units**	**Concentration**	**Final Qualifer**	**Concentration**	**Final Qualifer**	**Concentration**	**Final Qualifer**	**Concentration**	**Final Qualifer**	**Concentration**	**Final Qualifer**
DICAMBA	ug/l										
DICHLORODIFLUOROMETHANE	ug/l	5	U			5	UJ			5	U
DICHLOROPROP	ug/l										
DIELDRIN	ug/l										
DIETHYLENE GLYCOL	mg/l			100	U			100	U		
Diethylphthalate	ug/l	0.066	J			1.0	U			1.1	U
Dimethylphthalate	ug/l	1.1	U			1.0	U			1.1	U
Di-n-butylphthalate	ug/l	0.62	J			0.32	J			1.1	U
Di-n-octylphthalate	ug/l	1.1	U			0.27	J			1.1	U
DINOSEB	ug/l										
EFH (C12-C14)	mg/l			0.62	U			0.62	U		
EFH (C15-C20)	mg/l			0.62	U			0.62	U		
EFH (C21-C30)	mg/l			0.62	U			0.62	U		
EFH (C30-C40)	mg/l			0.62	U			0.62	U		
EFH (C8-C11)	mg/l			0.62	U			0.62	U		
ENDOSULFAN I	ug/l										
ENDOSULFAN II	ug/l										
ENDOSULFAN SULFATE	ug/l										
ENDRIN	ug/l										
ENDRIN ALDEHYDE	ug/l										
ENDRIN KETONE	ug/l										
ETHANOL	ug/l			1000	U			1000	U		
ETHYLBENZENE	ug/l	5	U			5	U			5	U
ETHYLENE GLYCOL	mg/l			100	U			100	U		
FLUORANTHENE	ug/l	0.055	U			0.050	U			0.054	U
FLUORENE	ug/l	0.055	U			0.050	U			0.054	U
FLUORIDE	mg/l	0.10	U			0.10	U			0.10	U
FORMALDEHYDE	ug/l			50	U			50	U		
gamma-BHC (Lindane)	ug/l										
GASOLINE RANGE ORGANICS (C5-C12)	ug/l			50	U			50	U		
HEPTACHLOR	ug/l										
HEPTACHLOR EPOXIDE	ug/l										
HEXACHLOROBENZENE	ug/l	5	U			5	U			6	U
HEXACHLOROBUTADIENE	ug/l	5	U			5	U			5	U
		5	U			5	U			6	U
HEXACHLOROCYCLOPENTADIENE	ug/l	16	U			15	U			17	U
HEXACHLOROETHANE	ug/l	5	U			5	U			6	U
HEXAVALENT CHROMIUM	ug/l	10.0	UJ			10.0	U			10.0	U
HMX	ug/l			2.0	U			2.0	U		
INDENO(1,2,3-CD)PYRENE	ug/l	0.055	U			0.050	U			0.054	U
IRON	mg/l	0.200	U			0.200	U			0.200	U
ISOPHORONE	ug/l	5	U			5	U			6	U
Isopropanol	ug/l			1000	U			1000	U		
ISOPROPYLBENZENE	ug/l	5	U			5	U			5	U
LEAD	mg/l	0.0010	U			0.0010	U			0.0010	U
LITHIUM	mg/l	0.0200	U			0.0200	U			0.0200	U
m,p-Xylene	ug/l	5	U			5	U			5	U
MAGNESIUM	mg/l	0.0305	J			0.100	U			0.100	U
MANGANESE	mg/l	0.0050	U			0.0050	U			0.0050	U
MCPA	ug/l										
MCPP	ug/l										
Mercury	mg/l	0.00020	U			0.00020	U			0.00020	U
METHANOL	ug/l			1000	U			1000	U		
METHOXYCHLOR	ug/l										
METHYL TERT-BUTYL ETHER (MTBE)	ug/l	5	U			5	U			5	U
METHYLENE CHLORIDE	ug/l	5	U			5	U			5	U
MIREX	ug/l										
MOLYBDENUM	mg/l	0.00050	U			0.00050	U			0.00050	U
m-Terphenyl	mg/l			0.27	UJ			0.27	U		
NAPHTHALENE	ug/l	0.036	J			0.031	J			0.22	
N-BUTYLBENZENE	ug/l	5	U			5	U			5	U
NICKEL	mg/l	0.0020	U			0.0020	U			0.0020	U
Nitrate-NO3	mg/l			0.10	U			0.10	U		
NITROBENZENE	ug/l	5	U	0.60	U	5	U	0.60	U	6	U
Nitroglycerin	ug/l			15	U			15	U		
N-NITROSODIMETHYLAMINE	ng/l			0.730	J			0.808	J		
N-NITROSODIMETHYLAMINE	ug/l	0.055	U			0.050	U			0.030	J
N-NITROSO-DI-N-PROPYLAMINE	ug/l	5	U			5	U			6	U
N-NITROSODIPHENYLAMINE	ug/l	5	U			5	U			6	U
N-PROPYLBENZENE	ug/l	5	U			5	U			5	U
OCDD	pg/l	21.1	U			19.8	U			21.4	U
OCDF	pg/l	21.1	U			19.8	U			21.4	U
O-TERPHENYL	mg/l			0.27	UJ			0.27	U		
O-XYLENE	ug/l	5	U			5	U			5	U
PENTACHLOROPHENOL	ug/l	16	U			15	U			17	U
PERCHLORATE	ug/l	2.0	U			2.0	U			2.0	U
PETN	ug/l			18	U			18	U		
PH	pH unit					5.6				5.6	
PHENANTHRENE	ug/l	0.055	U			0.050	U			0.054	U
PHENOL	ug/l	5	U			5	U			6	U

Table C-2 - Subarea 5A Equipment Rinsate Blank Results

Sample Name:		EB11-SA5A-SB-040511		EB12-SA5A-SB-040611		EB13-SA5A-SB-041811		EB14-SA5A-SB-041911		EB15-SA5A-SB-051611	
Sample Date:		04/05/2011		04/06/2011		04/18/2011		04/19/2011		05/16/2011	
Sample Type		Equipment Blank		Equipment Blank		Equipment Blank		Equipment Blank		Equipment Blank	
Analyte	**Units**	**Concentration**	**Final Qualifer**	**Concentration**	**Final Qualifer**	**Concentration**	**Final Qualifer**	**Concentration**	**Final Qualifer**	**Concentration**	**Final Qualifer**
PHOSPHORUS	mg/l	0.100	U			0.100	U			0.100	U
P-ISOPROPYLTOLUENE	ug/l	5	U			5	U			5	U
POTASSIUM	mg/l	0.500	U			0.500	U			0.500	U
Propylene glycol	mg/l			100	U			100	U		
p-Terphenyl	mg/l			0.27	UJ			0.27	U		
PYRENE	ug/l	0.055	U			0.050	U			0.054	U
RDX	ug/l			0.63	U			0.60	U		
SEC-BUTYLBENZENE	ug/l	5	U			5	U			5	U
SELENIUM	mg/l	0.0020	U			0.0020	U			0.0020	U
SILVER	mg/l	0.00050	U			0.00050	U			0.00050	U
SODIUM	mg/l	1.00	U			1.00	U			1.00	U
STRONTIUM	mg/l	0.0050	U			0.0050	U			0.0050	U
STYRENE	ug/l	5	U			5	U			5	U
TERT-BUTYLBENZENE	ug/l	5	U			5	U			5	U
TETRACHLOROETHENE	ug/l	5	U			5	U			5	U
Tetryl	ug/l			0.60	U			0.60	U		
THALLIUM	mg/l	0.00050	U			0.00050	U			0.00050	U
TIN	mg/l	0.0200	U			0.0200	U			0.0200	U
TITANIUM	mg/l	0.0100	U			0.0100	U			0.0100	U
TOLUENE	ug/l	5	U			5	U			5	U
TOXAPHENE	ug/l										
TRANS-1,2-DICHLOROETHENE	ug/l	5	U			5	U			5	U
TRANS-1,3-DICHLOROPROPENE	ug/l	5	U			5	U			5	U
TRICHLOROETHENE	ug/l	5	U			5	U			5	U
TRICHLOROFLUOROMETHANE	ug/l	5	U			5	UJ			5	U
VANADIUM	mg/l	0.00050	U			0.00050	U			0.00050	U
VINYL CHLORIDE	ug/l	5	U			5	U			5	U
ZINC	mg/l	0.0150	U			0.0150	U			0.0150	U
Zirconium	mg/l	0.0500	U			0.0500	U			0.0500	U

ug/L - microgram per liter
mg/L - milligram per liter
ng/L - nanogram per liter
pg/L - picogram per liter
U - Compound not detected above the reporting limit

(a) Some SVOC results had two values - one for SVOC and one for SVOC SIM. The validators used the value with the lowest detection limit for validation purposes

Table C-3 - Subarea 5A Trip Blanks Results

Sample Name:		TB-020711		TB-021611		TB-021711		TB-022111		TB-022211		TB-022311		TB-022411		TB-022511		TB-022811	
Sample Date:		02/07/2011		02/16/2011		02/17/2011		02/21/2011		02/22/2011		02/23/2011		02/24/2011		02/25/2011		02/28/2011	
Sample Type		Trip Blank		Trip Blank		Trip Blank		Trip Blank		Trip Blank		Trip Blank		Trip Blank		Trip Blank		Trip Blank	
Analyte	**Units**	**Concentration**	**Final Qualifer**	**Concentration**	**Final Qualifer**	**Concentration**	**Final Qualifer**	**Concentration**	**Final Qualifer**	**Concentration**	**Final Qualifer**	**Concentration**	**Final Qualifer**	**Concentration**	**Final Qualifer**	**Concentration**	**Final Qualifer**	**Concentration**	**Final Qualifer**
1,1,1,2-Tetrachloroethane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,1,1-TRICHLOROETHANE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,1,2,2-TETRACHLOROETHANE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
1,1,2-TRICHLOROETHANE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,1-DICHLOROETHANE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,1-DICHLOROETHENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,1-DICHLOROPROPENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,2,3-TRICHLOROBENZENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,2,3-TRICHLOROPROPANE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,2,4-TRICHLOROBENZENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,2,4-TRIMETHYLBENZENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,2-DIBROMO-3-CHLOROPROPANE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,2-Dibromoethane (EDB)	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,2-DICHLOROBENZENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,2-DICHLOROETHANE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,2-DICHLOROPROPANE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,3,5-TRIMETHYLBENZENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,3-DICHLOROBENZENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,3-DICHLOROPROPANE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,4-DICHLOROBENZENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,4-DIOXANE	ug/l	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
2,2-DICHLOROPROPANE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2-BUTANONE (MEK)	ug/l	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
2-Chloro-1,1,1-trifluoroethane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2-CHLOROETHYL VINYL ETHER	ug/l	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
2-CHLOROTOLUENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2-HEXANONE	ug/l	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
4-CHLOROTOLUENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
4-METHYL-2-PENTANONE (MIBK)	ug/l	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
ACETONE	ug/l	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U
BENZENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
BROMOBENZENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
BROMOCHLOROMETHANE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
BROMODICHLOROMETHANE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
BROMOFORM	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
BROMOMETHANE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
CARBON TETRACHLORIDE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Chlorobenzene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Chloroethane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
CHLOROFORM	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
CHLOROMETHANE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Chlorotrifluoroethylene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
CIS-1,2-DICHLOROETHENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
CIS-1,3-DICHLOROPROPENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
DIBROMOCHLOROMETHANE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
DIBROMOMETHANE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
DICHLORODIFLUOROMETHANE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
ETHYLBENZENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
GASOLINE RANGE ORGANICS (C5-C12)	ug/l			50	U	50	U	50	U	50	U	50	U						
HEXACHLOROBUTADIENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
ISOPROPYLBENZENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
m,p-Xylene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
METHYL TERT-BUTYL ETHER (MTBE)	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
METHYLENE CHLORIDE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
N-BUTYLBENZENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
N-PROPYLBENZENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
O-XYLENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
P-ISOPROPYLTOLUENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
SEC-BUTYLBENZENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
STYRENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
TERT-BUTYLBENZENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
TETRACHLOROETHENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
TOLUENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
TRANS-1,2-DICHLOROETHENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
TRANS-1,3-DICHLOROPROPENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
TRICHLOROETHENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
TRICHLOROFLUOROMETHANE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
VINYL CHLORIDE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U

ug/L - microgram per liter

U - Compound not detected above the reporting limit

Table C-3 - Subarea 5A Trip Blanks Results

Sample Name:		TB-030111		TB-030211		TB-030311		TB-030411		TB-030711		TB-030811		TB-031011		TB-031111		TB-031411	
Sample Date:		03/01/2011		03/02/2011		03/03/2011		03/04/2011		03/07/2011		03/08/2011		03/10/2011		03/11/2011		03/14/2011	
Sample Type		Trip Blank		Trip Blank		Trip Blank		Trip Blank		Trip Blank		Trip Blank		Trip Blank		Trip Blank		Trip Blank	
Analyte	**Units**	**Concentration**	**Final Qualifer**	**Concentration**	**Final Qualifer**	**Concentration**	**Final Qualifer**	**Concentration**	**Final Qualifer**	**Concentration**	**Final Qualifer**	**Concentration**	**Final Qualifer**	**Concentration**	**Final Qualifer**	**Concentration**	**Final Qualifer**	**Concentration**	**Final Qualifer**
1,1,1,2-Tetrachloroethane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,1,1-TRICHLOROETHANE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,1,2,2-TETRACHLOROETHANE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
1,1,2-TRICHLOROETHANE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,1-DICHLOROETHANE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,1-DICHLOROETHENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,1-DICHLOROPROPENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,2,3-TRICHLOROBENZENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,2,3-TRICHLOROPROPANE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,2,4-TRICHLOROBENZENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,2,4-TRIMETHYLBENZENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,2-DIBROMO-3-CHLOROPROPANE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,2-Dibromoethane (EDB)	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,2-DICHLOROBENZENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,2-DICHLOROETHANE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,2-DICHLOROPROPANE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,3,5-TRIMETHYLBENZENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,3-DICHLOROBENZENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,3-DICHLOROPROPANE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,4-DICHLOROBENZENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,4-DIOXANE	ug/l	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
2,2-DICHLOROPROPANE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2-BUTANONE (MEK)	ug/l	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
2-Chloro-1,1,1-trifluoroethane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2-CHLOROETHYL VINYL ETHER	ug/l	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
2-CHLOROTOLUENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2-HEXANONE	ug/l	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
4-CHLOROTOLUENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
4-METHYL-2-PENTANONE (MIBK)	ug/l	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
ACETONE	ug/l	20	U	20	U	20	U	20	U	20	U	20	U	20	UJ	20	U	20	U
BENZENE	ug/l	0.5	J	0.6	J	5	U	5	U	5	U	5	U	5	U	5	U	5	U
BROMOBENZENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
BROMOCHLOROMETHANE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
BROMODICHLOROMETHANE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
BROMOFORM	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
BROMOMETHANE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
CARBON TETRACHLORIDE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Chlorobenzene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Chloroethane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
CHLOROFORM	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
CHLOROMETHANE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Chlorotrifluoroethylene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
CIS-1,2-DICHLOROETHENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
CIS-1,3-DICHLOROPROPENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
DIBROMOCHLOROMETHANE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
DIBROMOMETHANE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
DICHLORODIFLUOROMETHANE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	UJ	5	U	5	U
ETHYLBENZENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
GASOLINE RANGE ORGANICS (C5-C12)	ug/l					50	U			50	U	50	U	50	U	50	U	50	U
HEXACHLOROBUTADIENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
ISOPROPYLBENZENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
m,p-Xylene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
METHYL TERT-BUTYL ETHER (MTBE)	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
METHYLENE CHLORIDE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
N-BUTYLBENZENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
N-PROPYLBENZENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
O-XYLENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
P-ISOPROPYLTOLUENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
SEC-BUTYLBENZENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
STYRENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
TERT-BUTYLBENZENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
TETRACHLOROETHENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
TOLUENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
TRANS-1,2-DICHLOROETHENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
TRANS-1,3-DICHLOROPROPENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
TRICHLOROETHENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
TRICHLOROFLUOROMETHANE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
VINYL CHLORIDE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U

ug/L - microgram per liter

U - Compound not detected above the reporting limit

Table C-3 - Subarea 5A Trip Blanks Results

Sample Name:		TB-031511		TB-031611		TB-031711		TB-031811		TB-032111		TB-032211		TB-032311		TB-032411		TB-032511	
Sample Date:		03/15/2011		03/16/2011		03/17/2011		03/18/2011		03/21/2011		03/22/2011		03/23/2011		03/24/2011		03/25/2011	
Sample Type		Trip Blank		Trip Blank		Trip Blank		Trip Blank		Trip Blank		Trip Blank		Trip Blank		Trip Blank		Trip Blank	
Analyte	**Units**	**Concentration**	**Final Qualifer**	**Concentration**	**Final Qualifer**	**Concentration**	**Final Qualifer**	**Concentration**	**Final Qualifer**	**Concentration**	**Final Qualifer**	**Concentration**	**Final Qualifer**	**Concentration**	**Final Qualifer**	**Concentration**	**Final Qualifer**	**Concentration**	**Final Qualifer**
1,1,1,2-Tetrachloroethane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,1,1-TRICHLOROETHANE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,1,2,2-TETRACHLOROETHANE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
1,1,2-TRICHLOROETHANE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,1-DICHLOROETHANE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,1-DICHLOROETHENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,1-DICHLOROPROPENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,2,3-TRICHLOROBENZENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,2,3-TRICHLOROPROPANE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,2,4-TRICHLOROBENZENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,2,4-TRIMETHYLBENZENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,2-DIBROMO-3-CHLOROPROPANE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,2-Dibromoethane (EDB)	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,2-DICHLOROBENZENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,2-DICHLOROETHANE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,2-DICHLOROPROPANE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,3,5-TRIMETHYLBENZENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,3-DICHLOROBENZENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,3-DICHLOROPROPANE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,4-DICHLOROBENZENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,4-DIOXANE	ug/l	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
2,2-DICHLOROPROPANE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2-BUTANONE (MEK)	ug/l	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
2-Chloro-1,1,1-trifluoroethane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2-CHLOROETHYL VINYL ETHER	ug/l	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	UJ	10	U
2-CHLOROTOLUENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2-HEXANONE	ug/l	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
4-CHLOROTOLUENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
4-METHYL-2-PENTANONE (MIBK)	ug/l	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
ACETONE	ug/l	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	UJ	20	U
BENZENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
BROMOBENZENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
BROMOCHLOROMETHANE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
BROMODICHLOROMETHANE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
BROMOFORM	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
BROMOMETHANE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
CARBON TETRACHLORIDE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Chlorobenzene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Chloroethane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
CHLOROFORM	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
CHLOROMETHANE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Chlorotrifluoroethylene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
CIS-1,2-DICHLOROETHENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
CIS-1,3-DICHLOROPROPENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
DIBROMOCHLOROMETHANE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
DIBROMOMETHANE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
DICHLORODIFLUOROMETHANE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	UJ	5	U
ETHYLBENZENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
GASOLINE RANGE ORGANICS (C5-C12)	ug/l	50	U	50	U	50	U	50	U	50	U	50	U			50	U	50	U
HEXACHLOROBUTADIENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
ISOPROPYLBENZENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
m,p-Xylene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
METHYL TERT-BUTYL ETHER (MTBE)	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
METHYLENE CHLORIDE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
N-BUTYLBENZENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
N-PROPYLBENZENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
O-XYLENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
P-ISOPROPYLTOLUENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
SEC-BUTYLBENZENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
STYRENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
TERT-BUTYLBENZENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
TETRACHLOROETHENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
TOLUENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
TRANS-1,2-DICHLOROETHENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
TRANS-1,3-DICHLOROPROPENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
TRICHLOROETHENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
TRICHLOROFLUOROMETHANE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	UJ	5	U
VINYL CHLORIDE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U

ug/L - microgram per liter

U - Compound not detected above the reporting limit

Table C-3 - Subarea 5A Trip Blanks Results

Sample Name:		TB-032811		TB-032911		TB-033011		TB-033111		TB-040111		TB-040411		TB-040511		TB-040611		TB-040711	
Sample Date:		03/28/2011		03/29/2011		03/30/2011		03/31/2011		04/01/2011		04/04/2011		04/05/2011		04/06/2011		04/07/2011	
Sample Type		Trip Blank		Trip Blank		Trip Blank		Trip Blank		Trip Blank		Trip Blank		Trip Blank		Trip Blank		Trip Blank	
Analyte	**Units**	**Concentration**	**Final Qualifer**	**Concentration**	**Final Qualifer**	**Concentration**	**Final Qualifer**	**Concentration**	**Final Qualifer**	**Concentration**	**Final Qualifer**	**Concentration**	**Final Qualifer**	**Concentration**	**Final Qualifer**	**Concentration**	**Final Qualifer**	**Concentration**	**Final Qualifer**
1,1,1,2-Tetrachloroethane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,1,1-TRICHLOROETHANE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,1,2,2-TETRACHLOROETHANE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
1,1,2-TRICHLOROETHANE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,1-DICHLOROETHANE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,1-DICHLOROETHENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,1-DICHLOROPROPENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,2,3-TRICHLOROBENZENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,2,3-TRICHLOROPROPANE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,2,4-TRICHLOROBENZENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,2,4-TRIMETHYLBENZENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,2-DIBROMO-3-CHLOROPROPANE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,2-Dibromoethane (EDB)	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,2-DICHLOROBENZENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,2-DICHLOROETHANE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,2-DICHLOROPROPANE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,3,5-TRIMETHYLBENZENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,3-DICHLOROBENZENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,3-DICHLOROPROPANE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,4-DICHLOROBENZENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,4-DIOXANE	ug/l	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
2,2-DICHLOROPROPANE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2-BUTANONE (MEK)	ug/l	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
2-Chloro-1,1,1-trifluoroethane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2-CHLOROETHYL VINYL ETHER	ug/l	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
2-CHLOROTOLUENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2-HEXANONE	ug/l	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
4-CHLOROTOLUENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
4-METHYL-2-PENTANONE (MIBK)	ug/l	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
ACETONE	ug/l	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U
BENZENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
BROMOBENZENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
BROMOCHLOROMETHANE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
BROMODICHLOROMETHANE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
BROMOFORM	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
BROMOMETHANE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
CARBON TETRACHLORIDE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Chlorobenzene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Chloroethane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
CHLOROFORM	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
CHLOROMETHANE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Chlorotrifluoroethylene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
CIS-1,2-DICHLOROETHENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
CIS-1,3-DICHLOROPROPENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
DIBROMOCHLOROMETHANE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
DIBROMOMETHANE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
DICHLORODIFLUOROMETHANE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
ETHYLBENZENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
GASOLINE RANGE ORGANICS (C5-C12)	ug/l	50	U	50	U	50	U	50	U	50	U			50	U	50	U	50	U
HEXACHLOROBUTADIENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
ISOPROPYLBENZENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
m,p-Xylene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
METHYL TERT-BUTYL ETHER (MTBE)	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
METHYLENE CHLORIDE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
N-BUTYLBENZENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
N-PROPYLBENZENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
O-XYLENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
P-ISOPROPYLTOLUENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
SEC-BUTYLBENZENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
STYRENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
TERT-BUTYLBENZENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
TETRACHLOROETHENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
TOLUENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
TRANS-1,2-DICHLOROETHENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
TRANS-1,3-DICHLOROPROPENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
TRICHLOROETHENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
TRICHLOROFLUOROMETHANE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
VINYL CHLORIDE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U

ug/L - microgram per liter

U - Compound not detected above the reporting limit

Table C-3 - Subarea 5A Trip Blanks Results

Sample Name:		TB-041111		TB-041211		TB-041311		TB-041411		TB-041511		TB-041811		TB-041911		TB-042011		TB-042211	
Sample Date:		04/11/2011		04/12/2011		04/13/2011		04/14/2011		04/15/2011		04/18/2011		04/19/2011		04/20/2011		04/22/2011	
Sample Type		Trip Blank		Trip Blank		Trip Blank		Trip Blank		Trip Blank		Trip Blank		Trip Blank		Trip Blank		Trip Blank	
Analyte	**Units**	**Concentration**	**Final Qualifer**	**Concentration**	**Final Qualifer**	**Concentration**	**Final Qualifer**	**Concentration**	**Final Qualifer**	**Concentration**	**Final Qualifer**	**Concentration**	**Final Qualifer**	**Concentration**	**Final Qualifer**	**Concentration**	**Final Qualifer**	**Concentration**	**Final Qualifer**
1,1,1,2-Tetrachloroethane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,1,1-TRICHLOROETHANE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,1,2,2-TETRACHLOROETHANE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
1,1,2-TRICHLOROETHANE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,1-DICHLOROETHANE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,1-DICHLOROETHENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,1-DICHLOROPROPENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,2,3-TRICHLOROBENZENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,2,3-TRICHLOROPROPANE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,2,4-TRICHLOROBENZENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,2,4-TRIMETHYLBENZENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,2-DIBROMO-3-CHLOROPROPANE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,2-Dibromoethane (EDB)	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,2-DICHLOROBENZENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,2-DICHLOROETHANE	ug/l	5	U	5	U	5	U	5	U	5	U	5	UJ	5	U	5	U	5	U
1,2-DICHLOROPROPANE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,3,5-TRIMETHYLBENZENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,3-DICHLOROBENZENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,3-DICHLOROPROPANE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,4-DICHLOROBENZENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,4-DIOXANE	ug/l	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
2,2-DICHLOROPROPANE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2-BUTANONE (MEK)	ug/l	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
2-Chloro-1,1,1-trifluoroethane	ug/l	5	U	5	UJ	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2-CHLOROETHYL VINYL ETHER	ug/l	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
2-CHLOROTOLUENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2-HEXANONE	ug/l	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
4-CHLOROTOLUENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
4-METHYL-2-PENTANONE (MIBK)	ug/l	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
ACETONE	ug/l	20	U	20	UJ	20	U	20	U	20	U	20	UJ	20	U	20	U	20	U
BENZENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
BROMOBENZENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
BROMOCHLOROMETHANE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
BROMODICHLOROMETHANE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
BROMOFORM	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
BROMOMETHANE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
CARBON TETRACHLORIDE	ug/l	5	U	5	U	5	U	5	U	5	U	5	UJ	5	U	5	U	5	U
Chlorobenzene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Chloroethane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
CHLOROFORM	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
CHLOROMETHANE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Chlorotrifluoroethylene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
CIS-1,2-DICHLOROETHENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
CIS-1,3-DICHLOROPROPENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
DIBROMOCHLOROMETHANE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
DIBROMOMETHANE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
DICHLORODIFLUOROMETHANE	ug/l	5	U	5	UJ	5	U	5	U	5	U	5	UJ	5	U	5	U	5	U
ETHYLBENZENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
GASOLINE RANGE ORGANICS (C5-C12)	ug/l	50	U			50	U	50	U	50	U	50	U			50	U	50	U
HEXACHLOROBUTADIENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
ISOPROPYLBENZENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
m,p-Xylene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
METHYL TERT-BUTYL ETHER (MTBE)	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
METHYLENE CHLORIDE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
N-BUTYLBENZENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
N-PROPYLBENZENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
O-XYLENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
P-ISOPROPYLTOLUENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
SEC-BUTYLBENZENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
STYRENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
TERT-BUTYLBENZENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
TETRACHLOROETHENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
TOLUENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
TRANS-1,2-DICHLOROETHENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
TRANS-1,3-DICHLOROPROPENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
TRICHLOROETHENE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
TRICHLOROFLUOROMETHANE	ug/l	5	U	5	UJ	5	U	5	U	5	U	5	UJ	5	U	5	U	5	U
VINYL CHLORIDE	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U

ug/L - microgram per liter

U - Compound not detected above the reporting limit

Table C-3 - Subarea 5A Trip Blanks Results

Sample Name:		TB-051611	
Sample Date:		05/16/2011	
Sample Type		Trip Blank	
Analyte	**Units**	**Concentration**	**Final Qualifer**
1,1,1,2-Tetrachloroethane	ug/l	5	U
1,1,1-TRICHLOROETHANE	ug/l	5	U
1,1,2,2-TETRACHLOROETHANE	ug/l	5	U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	10	U
1,1,2-TRICHLOROETHANE	ug/l	5	U
1,1-DICHLOROETHANE	ug/l	5	U
1,1-DICHLOROETHENE	ug/l	5	U
1,1-DICHLOROPROPENE	ug/l	5	U
1,2,3-TRICHLOROBENZENE	ug/l	5	U
1,2,3-TRICHLOROPROPANE	ug/l	5	U
1,2,4-TRICHLOROBENZENE	ug/l	5	U
1,2,4-TRIMETHYLBENZENE	ug/l	5	U
1,2-DIBROMO-3-CHLOROPROPANE	ug/l	5	U
1,2-Dibromoethane (EDB)	ug/l	5	U
1,2-DICHLOROBENZENE	ug/l	5	U
1,2-DICHLOROETHANE	ug/l	5	U
1,2-DICHLOROPROPANE	ug/l	5	U
1,3,5-TRIMETHYLBENZENE	ug/l	5	U
1,3-DICHLOROBENZENE	ug/l	5	U
1,3-DICHLOROPROPANE	ug/l	5	U
1,4-DICHLOROBENZENE	ug/l	5	U
1,4-DIOXANE	ug/l	2.0	U
2,2-DICHLOROPROPANE	ug/l	5	U
2-BUTANONE (MEK)	ug/l	10	U
2-Chloro-1,1,1-trifluoroethane	ug/l	5	U
2-CHLOROETHYL VINYL ETHER	ug/l	10	U
2-CHLOROTOLUENE	ug/l	5	U
2-HEXANONE	ug/l	10	U
4-CHLOROTOLUENE	ug/l	5	U
4-METHYL-2-PENTANONE (MIBK)	ug/l	10	U
ACETONE	ug/l	20	U
BENZENE	ug/l	5	U
BROMOBENZENE	ug/l	5	U
BROMOCHLOROMETHANE	ug/l	5	U
BROMODICHLOROMETHANE	ug/l	5	U
BROMOFORM	ug/l	5	U
BROMOMETHANE	ug/l	5	U
CARBON TETRACHLORIDE	ug/l	5	U
Chlorobenzene	ug/l	5	U
Chloroethane	ug/l	5	U
CHLOROFORM	ug/l	5	U
CHLOROMETHANE	ug/l	5	U
Chlorotrifluoroethylene	ug/l	5	U
CIS-1,2-DICHLOROETHENE	ug/l	5	U
CIS-1,3-DICHLOROPROPENE	ug/l	5	U
DIBROMOCHLOROMETHANE	ug/l	5	U
DIBROMOMETHANE	ug/l	5	U
DICHLORODIFLUOROMETHANE	ug/l	5	U
ETHYLBENZENE	ug/l	5	U
GASOLINE RANGE ORGANICS (C5-C12)	ug/l	50	U
HEXACHLOROBUTADIENE	ug/l	5	U
ISOPROPYLBENZENE	ug/l	5	U
m,p-Xylene	ug/l	5	U
METHYL TERT-BUTYL ETHER (MTBE)	ug/l	5	U
METHYLENE CHLORIDE	ug/l	5	U
N-BUTYLBENZENE	ug/l	5	U
N-PROPYLBENZENE	ug/l	5	U
O-XYLENE	ug/l	5	U
P-ISOPROPYLTOLUENE	ug/l	5	U
SEC-BUTYLBENZENE	ug/l	5	U
STYRENE	ug/l	5	U
TERT-BUTYLBENZENE	ug/l	5	U
TETRACHLOROETHENE	ug/l	5	U
TOLUENE	ug/l	5	U
TRANS-1,2-DICHLOROETHENE	ug/l	5	U
TRANS-1,3-DICHLOROPROPENE	ug/l	5	U
TRICHLOROETHENE	ug/l	5	U
TRICHLOROFLUOROMETHANE	ug/l	5	U
VINYL CHLORIDE	ug/l	5	U

ug/L - microgram per liter

U - Compound not detected above the reporting limit

Table C-4 - Subarea 5A Field Duplicate Results

		Location	SL-004-SA5A		SL-004-SA5A		RPD	SL-036-SA5A		SL-036-SA5A		RPD
		Sample Name:	DUP-04-SA5A-QC-022311		SL-004-SA5A-SS-0.0-0.5			DUP-03-SA5A-QC-022311		SL-036-SA5A-SB-4.0-5.0		
		Sample Date	02/23/2011		02/23/2011			02/23/2011		02/23/2011		
		Start Depth:	0		0			4		4		
		End Depth:	0.5		0.5			5		5		
		Area:	5A		5A			5A		5A		
		Matrix:	SO		SO			SO		SO		
		Sample Type:	FD		N			FD		N		
Chemical Name:	Lab Method:	Result Unit										
Aluminum	6010B	mg/kg	14100		14700		-4.17	21900		19600		11.08
Antimony	6020	mg/kg	0.133	J	0.178	J	-28.94	0.240	J	0.154	J	43.65
Arsenic	6020	mg/kg	3.88		4.15		-6.72	8.51	J	5.54	J	42.28
Barium	6020	mg/kg	99.6	J	109	J	-9.01	121	J	93.4	J	25.75
Beryllium	6020	mg/kg	0.499		0.549		-9.54	0.855	J	0.629	J	30.46
Boron	6010B	mg/kg	3.26	J	3.61	J	-10.19	1.35	J	1.74	J	-25.24
Cadmium	6020	mg/kg	0.204		0.217		-6.18	0.102	UJ	0.107	UJ	--
Calcium	6010B	mg/kg	3280	J	3370	J	-2.71	2180		1950		11.14
Chromium	6020	mg/kg	15.9	J	17.0	J	-6.69	31.7	J	23.9	J	28.06
Chromium VI	7199	mg/kg	0.31	J	0.33	J	-6.25	0.37	J	0.45	J	-19.51
Cobalt	6020	mg/kg	5.15	J	5.10	J	0.98	5.96	J	4.68	J	24.06
Copper	6020	mg/kg	7.36	J	7.78	J	-5.55	7.89		7.76		1.66
Cyanide	9012B	mg/kg						0.52	U	0.53	U	--
Fluoride	300.0	mg/kg	1.2		1.0	J	18.18	2.2	J	1.4	J	44.44
Iron	6010B	mg/kg	19600		21300		-8.31	27000		22700		17.30
Lead	6020	mg/kg	8.66	J	7.09	J	19.94	8.57	J	6.40	J	28.99
Lithium	6010B	mg/kg	22.5		24.3		-7.69	22.2		21.2		4.61
Magnesium	6010B	mg/kg	4410		4690		-6.15	4430		4470		-0.90
Manganese	6010B	mg/kg	282		325		-14.17	129	J	178	J	-31.92
Mercury	7471A	mg/kg	0.0379	J	0.0398	J	-4.89	0.103	U	0.106	U	--
Molybdenum	6020	mg/kg	0.408		0.397		2.73	0.875	J	0.566	J	42.89
Nickel	6020	mg/kg	9.57		10.8		-12.08	16.2	J	11.8	J	31.43
Nitrate	300.0	mg/kg						1.2	J	1.3	J	-8.00
Percent Moisture	160.3M	%	9.7		10.6		-8.87	5.3		6.2		-15.65
Perchlorate	314.0	ug/kg	33.2	U	33.6	U	-1.20	31.7	U	32.0	U	--
Perchlorate	6850	ug/kg										
pH	9045M	pH unit	8.04		7.95		1.13	6.29		6.74		-6.91
Phosphorus	6010B	mg/kg	389		460		-16.73	126		139		-9.81
Potassium	6010B	mg/kg	3130	J	3280	J	-4.68	1230	J	1740	J	-34.34
Selenium	6020	mg/kg	0.107	J	0.0750	J	35.16	0.164	J	0.192	J	-15.73
Silver	6020	mg/kg	0.0302	J	0.0318	J	-5.16	0.0276	J	0.0264	J	4.44
Sodium	6010B	mg/kg	86.1	J	91.4	J	-5.97	324		199		47.80
Strontium	6010B	mg/kg	17.4		19.1		-9.32	19.9		19.6		1.52
Thallium	6020	mg/kg	0.237		0.255		-7.32	0.337	J	0.253	J	28.47
Tin	6010B	mg/kg	10.6	U	11.0	U	--	10.2	U	10.4	U	--
Titanium	6010B	mg/kg	1190		1240		-4.12	1130		1280		-12.45
Vanadium	6020	mg/kg	27.7		33.0		-17.46	59.6	J	43.4	J	31.46
Zinc	6020	mg/kg	82.8	J	86.1	J	-3.91	71.6		48.6		38.27
Zirconium	6010B	mg/kg	2.36	J	1.96	J	18.52	1.33	J	1.46	J	-9.32
1,3,5-Trinitrobenzene	8330A	ug/kg						130	U	130	U	--
2,4,6-Trinitrotoluene	8330A	ug/kg						130	U	130	U	--
2,4-Diamino-6-nitrotoluene	8330A	ug/kg						250	U	260	U	--
2,4-Dinitrotoluene	8330A	ug/kg						130	U	130	U	--
2,6-Diamino-4-nitrotoluene	8330A	ug/kg						250	U	260	U	--
2,6-Dinitrotoluene	8330A	ug/kg						130	U	130	U	--
2-Amino-4,6-Dinitrotoluene	8330A	ug/kg						130	U	130	U	--
2-Nitrotoluene	8330A	ug/kg						130	U	130	U	--
2-Propanol	8015B	ug/kg						530	U	530	U	--
3-Nitrotoluene	8330A	ug/kg						130	U	130	U	--
4-Amino-2,6-Dinitrotoluene	8330A	ug/kg						130	U	130	U	--
4-Nitrotoluene	8330A	ug/kg						130	U	130	U	--
Diethylene Glycol	8015M	mg/kg						13	U	13	U	--
Ethanol	8015B	ug/kg						530	U	530	U	--
Ethylene Glycol	8015M	mg/kg						13	U	13	U	--
Formaldehyde	8315A	ug/kg						1600	U	1600	U	--
HMX	8330A	ug/kg						320	U	320	U	--
m-Dinitrobenzene	8330A	ug/kg						130	U	130	U	--
Methanol	8015B	ug/kg						530	U	530	U	--
m-Terphenyl	8015B	mg/kg						3.7	U	3.7	U	--
Nitrobenzene	8330A	ug/kg						130	U	130	U	--
Nitroglycerin	8330A	ug/kg						2500	U	2600	U	--
o-Terphenyl	8015B	mg/kg						3.7	U	3.7	U	--
PETN	8330A	ug/kg						2500	U	2600	U	--
Propylene glycol	8015M	mg/kg						13	U	13	U	--
p-Terphenyl	8015B	mg/kg						3.7	U	3.7	U	--
RDX	8330A	ug/kg						130	U	130	U	--
Tetryl	8330A	ug/kg						130	U	130	U	--
1,2,3,4,6,7,8-HpCDD	1613B	ng/kg	37.1	J	164	J	-126.21	5.28	U	5.33	U	--
1,2,3,4,6,7,8-HpCDF	1613B	ng/kg	4.87	J	10.7	J	-74.89	5.28	U	5.33	U	--
1,2,3,4,7,8,9-HpCDF	1613B	ng/kg	0.359	J	0.780	J	-73.92	5.28	U	5.33	U	--
1,2,3,4,7,8-HxCDD	1613B	ng/kg	0.141	J	0.328	J	-79.74	5.28	UJ	5.33	UJ	--
1,2,3,4,7,8-HxCDF	1613B	ng/kg	1.01	J	1.37	J	-30.25	5.28	U	5.33	U	--
1,2,3,6,7,8-HxCDD	1613B	ng/kg	1.19	J	4.46	J	-115.75	5.28	U	5.33	U	--
1,2,3,6,7,8-HxCDF	1613B	ng/kg	0.262	J	0.552	J	-71.25	5.28	U	5.33	U	--
1,2,3,7,8,9-HxCDD	1613B	ng/kg	0.455	J	1.46	J	-104.96	5.28	U	5.33	U	--
1,2,3,7,8,9-HxCDF	1613B	ng/kg	0.191	J	0.227	J	-17.22	5.28	U	5.33	U	--
1,2,3,7,8-PeCDD	1613B	ng/kg	0.0738	J	0.223	J	-100.54	5.28	U	5.33	U	--
1,2,3,7,8-PeCDF	1613B	ng/kg	0.0659	J	0.0814	J	-21.05	5.28	U	5.33	U	--
2,3,4,6,7,8-HxCDF	1613B	ng/kg	0.280	J	0.577	J	-69.31	5.28	U	5.33	U	--
2,3,4,7,8-PeCDF	1613B	ng/kg	0.403	J	0.517	J	-24.78	5.28	U	5.33	U	--
2,3,7,8-TCDD	1613B	ng/kg	1.11	UJ	0.0403	J	200*	1.06	UJ	1.07	UJ	--
2,3,7,8-TCDF	1613B	ng/kg	0.118	J	0.309	J	-89.46	1.06	UJ	1.07	UJ	--
Aroclor 1016	8082	ug/kg	9.4	U	1.9	U	--	1.8	U	1.8	U	--
Aroclor 1221	8082	ug/kg	9.4	U	1.9	U	--	1.8	U	1.8	U	--
Aroclor 1232	8082	ug/kg	9.4	U	1.9	U	--	1.8	U	1.8	U	--
Aroclor 1242	8082	ug/kg	9.4	U	1.9	U	--	1.8	U	1.8	U	--
Aroclor 1248	8082	ug/kg	9.4	U	1.9	U	--	1.8	U	1.8	U	--
Aroclor 1254	8082	ug/kg	45	J	12	J	115.79	1.8	U	1.8	U	--
Aroclor 1260	8082	ug/kg	9.4	U	1.9	U	--	1.8	U	1.8	U	--
Aroclor 1262	8082	ug/kg	9.4	U	1.9	U	--	1.8	U	1.8	U	--
Aroclor 1268	8082	ug/kg	47	J	7.8	J	143.07	1.8	U	1.8	U	--
Aroclor 5432	8082	ug/kg	18	U	3.7	U	--	3.5	UJ	3.5	UJ	--
Aroclor 5442	8082	ug/kg	18	U	3.7	U	--	3.5	UJ	3.5	UJ	--
Aroclor 5460	8082	ug/kg	51	J	8.2	J	144.59	3.5	UJ	3.5	UJ	--
OCDD	1613B	ng/kg	388	J	1410	J	-113.68	10.6	U	10.7	U	--
OCDF	1613B	ng/kg	12.4	J	25.0	J	-67.38	10.6	U	10.7	U	--
2,2-Dichlor-Propionic Acid	8151A	ug/kg	10	U	10	U	--					
2,4 DB	8151A	ug/kg	1.9	U	1.9	U	--					
2,4,5-T	8151A	ug/kg	0.19	UJ	0.19	UJ	--					
2,4,5-TP	8151A	ug/kg	0.19	U	0.19	U	--					
2,4-D	8151A	ug/kg	4.0	U	4.0	U	--					
4,4'-DDD	8081A	ug/kg	0.37	UJ	0.38	U	--					
4,4'-DDE	8081A	ug/kg	0.37	UJ	0.38	U	--					
4,4'-DDT	8081A	ug/kg	0.61	UJ	1.5	J	200.00					
Aldrin	8081A	ug/kg	0.18	UJ	0.18	R	--					
Alpha-BHC	8081A	ug/kg	0.18	UJ	0.18	U	--					
Beta-BHC	8081A	ug/kg	0.18	UJ	0.18	U	--					
Chlordane	8081A	ug/kg	3.7	UJ	3.8	U	--					
Delta-BHC	8081A	ug/kg	0.18	UJ	0.18	U	--					
Dicamba	8151A	ug/kg	1.3	U	1.3	U	--					
Dichlorprop	8151A	ug/kg	1.9	U	1.9	U	--					
Dieldrin	8081A	ug/kg	0.37	UJ	0.38	U	--					
Dinitrobutyl Phenol	8151A	ug/kg	2.7	R	2.7	R	--					
Endosulfan I	8081A	ug/kg	0.18	UJ	0.18	U	--					
Endosulfan II	8081A	ug/kg	0.37	UJ	0.38	U	--					
Endosulfan Sulfate	8081A	ug/kg	0.37	UJ	0.38	U	--					
Endrin	8081A	ug/kg	0.37	UJ	0.38	U	--					
Endrin Aldehyde	8081A	ug/kg	0.37	UJ	0.38	U	--					

Table C-4 - Subarea 5A Field Duplicate Results

		Location	SL-004-SA5A		SL-004-SA5A		RPD	SL-036-SA5A		SL-036-SA5A		RPD
		Sample Name:	DUP-04-SA5A-QC-022311		SL-004-SA5A-SS-0.0-0.5			DUP-03-SA5A-QC-022311		SL-036-SA5A-SB-4.0-5.0		
		Sample Date	02/23/2011		02/23/2011			02/23/2011		02/23/2011		
		Start Depth:	0		0			4		4		
		End Depth:	0.5		0.5			5		5		
		Area:	5A		5A			5A		5A		
		Matrix:	SO		SO			SO		SO		
		Sample Type:	FD		N			FD		N		
Endrin Ketone	8081A	ug/kg	0.37	UJ	0.38	R	--					
Gamma-BHC (Lindane)	8081A	ug/kg	0.18	UJ	0.052	J	--					
Heptachlor	8081A	ug/kg	0.18	UJ	0.18	U	--					
Heptachlor Epoxide	8081A	ug/kg	0.18	UJ	0.18	U	--					
MCPA	8151A	ug/kg	260	J	280	UJ	200.00					
MCPP	8151A	ug/kg	280	U	280	U	--					
Methoxychlor	8081A	ug/kg	1.8	UJ	1.8	U	--					
Mirex	8081A	ug/kg	0.37	UJ	0.38	U	--					
Toxaphene	8081A	ug/kg	7.3	UJ	7.3	U	--					
1,2,4-Trichlorobenzene	8270C	ug/kg	180	U	190	U	--	180	UJ	180	UJ	--
1,2-Dichlorobenzene	8270C	ug/kg	180	U	190	U	--	180	UJ	180	UJ	--
1,2-Diphenylhydrazine	8270C	ug/kg	180	U	190	U	--	180	UJ	180	UJ	--
1,3-Dichlorobenzene	8270C	ug/kg	180	U	190	U	--	180	UJ	180	UJ	--
1,4-Dichlorobenzene	8270C	ug/kg	180	U	190	U	--	180	UJ	180	UJ	--
1-Methylnaphthalene	8270C SIM	ug/kg	1.8	U	1.8	U	--	1.8	U	1.8	U	--
2,4,5-Trichlorophenol	8270C	ug/kg	180	U	190	U	--	180	UJ	180	UJ	--
2,4,6-Trichlorophenol	8270C	ug/kg	180	U	190	U	--	180	UJ	180	UJ	--
2,4-Dichlorophenol	8270C	ug/kg	180	U	190	U	--	180	UJ	180	UJ	--
2,4-Dimethylphenol	8270C	ug/kg	180	U	190	U	--	180	UJ	180	UJ	--
2,4-Dinitrophenol	8270C	ug/kg	1100	U	1100	U	--	1100	U	1100	U	--
2,4-Dinitrotoluene	8270C	ug/kg	180	U	190	U	--	180	UJ	180	UJ	--
2,6-Dinitrotoluene	8270C	ug/kg	180	U	190	U	--	180	UJ	180	UJ	--
2-Chloronaphthalene	8270C	ug/kg	180	U	190	U	--	180	UJ	180	UJ	--
2-Chlorophenol	8270C	ug/kg	180	U	190	U	--	180	UJ	180	UJ	--
2-Methylnaphthalene	8270C SIM	ug/kg	1.8	U	1.8	U	--	1.8	U	1.8	U	--
2-Methylphenol	8270C	ug/kg	180	U	190	U	--	180	UJ	180	UJ	--
2-Nitroaniline	8270C	ug/kg	180	U	190	U	--	180	UJ	180	UJ	--
2-Nitrophenol	8270C	ug/kg	180	U	190	U	--	180	UJ	180	UJ	--
3,3`-Dichlorobenzidine	8270C	ug/kg	370	U	370	U	--	350	U	350	U	--
3,5-Dimethylphenol	8270C	ug/kg	180	U	190	U	--	180	UJ	180	UJ	--
3-Nitroaniline	8270C	ug/kg	180	U	190	U	--	180	UJ	180	UJ	--
4,6-Dinitro-2-Methylphenol	8270C	ug/kg	550	U	560	U	--	530	UJ	530	UJ	--
4-Bromophenyl Phenyl Ether	8270C	ug/kg	180	U	190	U	--	180	UJ	180	UJ	--
4-Chloro-3-Methylphenol	8270C	ug/kg	180	U	190	U	--	180	UJ	180	UJ	--
4-Chloroaniline	8270C	ug/kg	180	U	190	U	--	180	U	180	U	--
4-Chlorophenyl Phenylether	8270C	ug/kg	180	U	190	U	--	180	UJ	180	UJ	--
4-Methylphenol	8270C	ug/kg	180	U	190	U	--	180	UJ	180	UJ	--
4-Nitroaniline	8270C	ug/kg	180	U	190	U	--	180	UJ	180	UJ	--
4-Nitrophenol	8270C	ug/kg	550	U	560	U	--	530	UJ	530	UJ	--
Acenaphthene	8270C SIM	ug/kg	1.8	U	1.8	U	--	1.8	U	1.8	U	--
Acenaphthylene	8270C SIM	ug/kg	1.8	U	1.8	U	--	1.8	U	1.8	U	--
Aniline	8270C	ug/kg	550	U	560	U	--	530	U	530	U	--
Anthracene	8270C SIM	ug/kg	1.8	U	1.8	U	--	1.8	U	1.8	U	--
Benzidine	8270C	ug/kg	3700	U	3700	U	--	3500	U	3500	R	--
Benzo(a)anthracene	8270C	ug/kg										
Benzo(a)anthracene	8270C SIM	ug/kg	1.9		1.5	J	23.53	1.8	U	1.8	U	--
Benzo(a)pyrene	8270C	ug/kg										
Benzo(a)pyrene	8270C SIM	ug/kg	7.5	J	3.3	J	77.78	1.8	U	1.8	U	--
Benzo(b)fluoranthene	8270C	ug/kg										
Benzo(b)fluoranthene	8270C SIM	ug/kg	6.5	J	2.6	J	85.71	1.8	U	1.8	U	--
Benzo(g,h,i)perylene	8270C	ug/kg										
Benzo(g,h,i)perylene	8270C SIM	ug/kg	5.0	J	2.6	J	63.16	1.8	U	1.8	U	--
Benzo(k)fluoranthene	8270C	ug/kg										
Benzo(k)fluoranthene	8270C SIM	ug/kg	1.8	UJ	1.4	J	200.00	1.8	U	1.8	U	--
Benzoic Acid	8270C	ug/kg	550	U	560	U	--	530	U	530	U	--
Benzyl Alcohol	8270C	ug/kg	550	U	560	U	--	530	UJ	530	UJ	--
Bis(2-Chloroethoxy) methane	8270C	ug/kg	180	U	190	U	--	180	UJ	180	UJ	--
Bis(2-Chloroethyl) ether	8270C	ug/kg	180	U	190	U	--	180	UJ	180	UJ	--
bis(2-Chloroisopropyl) ether	8270C	ug/kg	180	U	190	U	--	180	UJ	180	UJ	--
Bis(2-Ethylhexyl) phthalate	8270C	ug/kg						350	UJ	23	J	200.00
Bis(2-Ethylhexyl) phthalate	8270C SIM	ug/kg	20	U	20	UJ	--					
Butylbenzylphthalate	8270C	ug/kg	180	U	190	U	--					
Butylbenzylphthalate	8270C SIM	ug/kg						19	U	19	U	--
Carbazole	8270C	ug/kg	180	U	190	U	--	180	UJ	180	UJ	--
Chrysene	8270C	ug/kg										
Chrysene	8270C SIM	ug/kg	4.6	J	2.6	J	55.56	1.8	U	1.8	U	--
Dibenzo(a,h)anthracene	8270C	ug/kg										
Dibenzo(a,h)anthracene	8270C SIM	ug/kg	1.9	J	1.8	UJ	200.00	1.8	U	1.8	U	--
Dibenzofuran	8270C	ug/kg	180	U	190	U	--	180	UJ	180	UJ	--
Diethylphthalate	8270C	ug/kg										
Diethylphthalate	8270C SIM	ug/kg	20	U	20	U	--	19	U	19	U	--
Dimethylphthalate	8270C	ug/kg										
Dimethylphthalate	8270C SIM	ug/kg	20	U	20	U	--	19	U	19	U	--
Di-n-Butylphthalate	8270C	ug/kg	180	U	190	U	--	180	UJ	180	UJ	--
Di-n-Butylphthalate	8270C SIM	ug/kg										
Di-N-Octyl Phthalate	8270C	ug/kg										
Di-N-Octyl Phthalate	8270C SIM	ug/kg	20	UJ	20	UJ	--	19	U	19	U	--
Fluoranthene	8270C	ug/kg										
Fluoranthene	8270C SIM	ug/kg	1.3	J	1.7	J	-26.67	1.8	U	1.8	U	--
Fluorene	8270C SIM	ug/kg	1.8	U	1.8	U	--	1.8	U	1.8	U	--
Hexachlorobenzene	8270C	ug/kg	180	U	190	U	--	180	UJ	180	UJ	--
Hexachlorobutadiene	8270C	ug/kg	180	U	190	U	--	180	UJ	180	UJ	--
Hexachlorocyclopentadiene	8270C	ug/kg	550	U	560	U	--	530	U	530	U	--
Hexachloroethane	8270C	ug/kg	180	U	190	U	--	180	UJ	180	UJ	--
Indeno(1,2,3-Cd)Pyrene	8270C	ug/kg										
Indeno(1,2,3-Cd)Pyrene	8270C SIM	ug/kg	2.5	J	1.0	J	85.71	1.8	U	1.8	U	--
Isophorone	8270C	ug/kg	180	U	190	U	--	180	UJ	180	UJ	--
Naphthalene	8270C	ug/kg										
Naphthalene	8270C SIM	ug/kg	1.8	U	1.8	U	--	1.8	U	1.8	U	--
Nitrobenzene	8270C	ug/kg	180	U	190	U	--	180	UJ	180	UJ	--
N-Nitrosodimethylamine	1625C	ng/kg						34.6	U	35.5	U	--
N-Nitrosodimethylamine	8270C SIM	ug/kg	1.8	U	1.8	U	--	1.8	U	1.8	U	--
N-Nitroso-Di-N-Propylamine	8270C	ug/kg	180	U	190	U	--	180	UJ	180	UJ	--
N-Nitrosodiphenylamine	8270C	ug/kg	180	U	190	U	--	180	UJ	180	UJ	--
Pentachlorophenol	8270C	ug/kg	550	U	560	U	--	530	U	530	U	--
Phenanthrene	8270C	ug/kg										
Phenanthrene	8270C SIM	ug/kg	1.8	UJ	0.98	J	200.00	1.8	U	1.8	U	--
Phenol	8270C	ug/kg	180	U	190	U	--	180	UJ	180	UJ	--
Pyrene	8270C	ug/kg										
Pyrene	8270C SIM	ug/kg	1.9		1.7	J	11.11	1.8	U	1.8	U	--
1,1,1,2-Tetrachloroethane	8260B	ug/kg						4.4	U	4.8	U	--
1,1,1-Trichloroethane	8260B	ug/kg						4.4	U	4.8	U	--
1,1,2,2-Tetrachloroethane	8260B	ug/kg						4.4	U	4.8	U	--
1,1,2-Trichloroethane	8260B	ug/kg						4.4	U	4.8	U	--
1,1-Dichloroethane	8260B	ug/kg						4.4	U	4.8	U	--
1,1-Dichloroethene	8260B	ug/kg						4.4	U	4.8	U	--
1,1-Dichloropropene	8260B	ug/kg						4.4	U	4.8	U	--
1,2,3-Trichlorobenzene	8260B	ug/kg						4.4	U	4.8	U	--
1,2,3-Trichloropropane	8260B	ug/kg						4.4	U	4.8	U	--
1,2,4-Trichlorobenzene	8260B	ug/kg						4.4	U	4.8	U	--
1,2,4-Trimethylbenzene	8260B	ug/kg						4.4	U	4.8	U	--
1,2-Dibromo-3-chloropropane	8260B	ug/kg						4.4	U	4.8	U	--
1,2-Dibromoethane	8260B	ug/kg						4.4	U	4.8	U	--
1,2-Dichlorobenzene	8260B	ug/kg						4.4	U	4.8	U	--
1,2-Dichloroethane	8260B	ug/kg						4.4	U	4.8	U	--
1,2-Dichloropropane	8260B	ug/kg						4.4	U	4.8	U	--
1,3,5-Trimethylbenzene	8260B	ug/kg						4.4	U	4.8	U	--
1,3-Dichlorobenzene	8260B	ug/kg						4.4	U	4.8	U	--
1,3-Dichloropropane	8260B	ug/kg						4.4	U	4.8	U	--

Table C-4 - Subarea 5A Field Duplicate Results

		Location	SL-004-SA5A		SL-004-SA5A		RPD	SL-036-SA5A		SL-036-SA5A		RPD
		Sample Name:	DUP-04-SA5A-QC-022311		SL-004-SA5A-SS-0.0-0.5			DUP-03-SA5A-QC-022311		SL-036-SA5A-SB-4.0-5.0		
		Sample Date	02/23/2011		02/23/2011			02/23/2011		02/23/2011		
		Start Depth:	0		0			4		4		
		End Depth:	0.5		0.5			5		5		
		Area:	5A		5A			5A		5A		
		Matrix:	SO		SO			SO		SO		
		Sample Type:	FD		N			FD		N		
1,4-Dichlorobenzene	8260B	ug/kg						4.4	U	4.8	U	--
1,4-Dioxane	8260B SIM	ug/kg						18	U	17	U	--
2,2-Dichloropropane	8260B	ug/kg						4.4	U	4.8	U	--
2-Butanone	8260B	ug/kg						8.9	U	9.7	U	--
2-Chloroethyl Vinyl Ether	8260B	ug/kg						4.4	U	4.8	U	--
2-Chlorotoluene	8260B	ug/kg						4.4	U	4.8	U	--
2-Hexanone	8260B	ug/kg						8.9	U	9.7	U	--
4-Chlorotoluene	8260B	ug/kg						4.4	U	4.8	U	--
4-Methyl-2-Pentanone	8260B	ug/kg						8.9	U	9.7	U	--
Acetone	8260B	ug/kg						8.9	U	9.7	U	--
Benzene	8260B	ug/kg						4.4	U	4.8	U	--
Bromobenzene	8260B	ug/kg						4.4	U	4.8	U	--
Bromochloromethane	8260B	ug/kg						4.4	U	4.8	U	--
Bromodichloromethane	8260B	ug/kg						4.4	U	4.8	U	--
Bromoform	8260B	ug/kg						4.4	U	4.8	U	--
Bromomethane	8260B	ug/kg						4.4	U	4.8	U	--
Carbon tetrachloride	8260B	ug/kg						4.4	U	4.8	U	--
Chlorobenzene	8260B	ug/kg						4.4	U	4.8	U	--
Chloroethane	8260B	ug/kg						4.4	U	4.8	U	--
Chloroform	8260B	ug/kg						4.4	U	4.8	U	--
Chloromethane	8260B	ug/kg						4.4	U	4.8	U	--
Chlorotrifluoroethene	8260B	ug/kg						5.5	U	6.0	U	--
cis-1,2-Dichloroethene	8260B	ug/kg						4.4	U	4.8	U	--
cis-1,3-Dichloropropene	8260B	ug/kg						4.4	U	4.8	U	--
Dibromochloromethane	8260B	ug/kg						4.4	U	4.8	U	--
Dibromomethane	8260B	ug/kg						4.4	U	4.8	U	--
Dichlorodifluoromethane	8260B	ug/kg						4.4	U	4.8	U	--
EFH (C15-C20)	8015M	mg/kg						1.3	U	1.3	U	--
EFH (C21-C30)	8015M	mg/kg						1.3	U	1.3	U	--
EFH (C30-C40)	8015M	mg/kg						1.3	U	1.3	U	--
EFH (C8-C11)	8015M	mg/kg						1.3	U	1.3	U	--
Ethylbenzene	8260B	ug/kg						4.4	UJ	0.12	J	200.00
Freon 113	8260B	ug/kg						4.4	U	4.8	U	--
Freon 113a	8260B	ug/kg						5.5	U	6.0	U	--
GRO (C5-C12)	8015M	mg/kg						1.1	U	1.2	U	--
Hexachlorobutadiene	8260B	ug/kg						4.4	U	4.8	U	--
Isopropylbenzene	8260B	ug/kg						4.4	U	4.8	U	--
Isopropyltoluene	8260B	ug/kg						4.4	U	4.8	U	--
m,p-Xylene	8260B	ug/kg						4.4	UJ	0.39	J	200.00
Methyl tert-Butyl Ether	8260B	ug/kg						4.4	U	4.8	U	--
Methylene chloride	8260B	ug/kg						4.4	U	4.8	U	--
N-Butylbenzene	8260B	ug/kg						4.4	U	4.8	U	--
N-Propylbenzene	8260B	ug/kg						4.4	U	4.8	U	--
o-Xylene	8260B	ug/kg						4.4	U	4.8	U	--
sec-Butylbenzene	8260B	ug/kg						4.4	U	4.8	U	--
Styrene	8260B	ug/kg						4.4	U	4.8	U	--
tert-Butylbenzene	8260B	ug/kg						4.4	U	4.8	U	--
Tetrachloroethene	8260B	ug/kg						4.4	U	4.8	U	--
Toluene	8260B	ug/kg						4.4	U	4.8	U	--
trans-1,2-Dichloroethene	8260B	ug/kg						4.4	U	4.8	U	--
trans-1,3-Dichloropropene	8260B	ug/kg						4.4	U	4.8	U	--
Trichloroethene	8260B	ug/kg						4.4	U	4.8	U	--
Trichlorofluoromethane	8260B	ug/kg						4.4	U	4.8	U	--
Vinyl Chloride	8260B	ug/kg						4.4	U	4.8	U	--

Notes:
ug/kg - microgram per kilogram
mg/kg - milligram per kilogram
ng/g - nanogram per kilogram
FD - field duplicate sample
N - normal sample
RPD - relative percent difference
SO - soil
-- - RPD not calculated when both field duplicate and normal samples were nondetect or only one sample result is reported

200* - When one result is nondetect a 200% RPD is given and sample results are qualified as estimated "J" or "UJ" in the field duplicate samples only

Limit - 50% - If RPD is above 50% detected field duplicate results only were estimated "J"

Table C-4 - Subarea 5A Field Duplicate Results

		Location	SL-042-SA5A		SL-042-SA5A		RPD	SL-048-SA5A		SL-048-SA5A		RPD
		Sample Name:	DUP-17-SA5A-QC-051611		SL-042-SA5A-SB-3.5-4.5			DUP-07-SA5A-QC-030211		SL-048-SA5A-SS-0.0-0.5		
		Sample Date	05/16/2011		05/16/2011			03/02/2011		03/02/2011		
		Start Depth:	3.5		3.5			0		0		
		End Depth:	4.5		4.5			0.5		0.5		
		Area:	5A		5A			5A		5A		
		Matrix:	SO		SO			SO		SO		
		Sample Type:	FD		N			FD		N		
Chemical Name:	Lab Method:	Result Unit										
Aluminum	6010B	mg/kg	29600		33800		-13.25	17100		17600		-2.88
Antimony	6020	mg/kg	0.250	J	0.312	J	-22.06	0.141	J	0.167	J	-16.88
Arsenic	6020	mg/kg	6.91	J	9.05	J	-26.82	5.35	J	7.30	J	-30.83
Barium	6020	mg/kg	114	J	120	J	-5.13	140	J	165	J	-16.39
Beryllium	6020	mg/kg	0.849	J	1.11	J	-26.65	0.632	J	0.853	J	-29.76
Boron	6010B	mg/kg	5.51	U	5.48	U	--	3.16	J	3.38	J	-6.73
Cadmium	6020	mg/kg	0.0742	J	0.0923	J	-21.74	0.258	J	0.259	J	-0.39
Calcium	6010B	mg/kg	2780		3050		-9.26	3000		3150		-4.88
Chromium	6020	mg/kg	20.9	J	28.3	J	-30.08	23.3	J	29.1	J	-22.14
Chromium VI	7199	mg/kg	0.40	J	0.58	J	-36.73	1.1	U	1.1	U	--
Cobalt	6020	mg/kg	8.87	J	9.21	J	-3.76	6.86	J	7.73	J	-11.93
Copper	6020	mg/kg	8.59	J	11.1	J	-25.50	11.5	J	11.3	J	1.75
Cyanide	9012B	mg/kg										
Fluoride	300.0	mg/kg	1.1	UJ	1.1	UJ	--	1.6	J	1.5	J	6.45
Iron	6010B	mg/kg	26800		28200		-5.09	23500		23600		-0.42
Lead	6020	mg/kg	6.44	J	8.57	J	-28.38	11.3	J	14.9	J	-27.48
Lithium	6010B	mg/kg	32.4		32.1		0.93	27.1		27.6		-1.83
Magnesium	6010B	mg/kg	5650		5730		-1.41	5460		5550		-1.63
Manganese	6010B	mg/kg	304	J	252	J	18.71	367		370		-0.81
Mercury	7471A	mg/kg	0.112	U	0.110	U	--	0.0448	J	0.0040	J	167.21
Molybdenum	6020	mg/kg	0.918	J	1.50	J	-48.14	0.717	J	1.04	J	-36.77
Nickel	6020	mg/kg	15.2	J	18.9	J	-21.70	16.2	J	18.8	J	-14.86
Nitrate	300.0	mg/kg										
Percent Moisture	160.3M	%	11.9		12.2		-2.49	12.6		12.5		0.80
Perchlorate	314.0	ug/kg	34.1	U	34.2	U	--	34.3	U	34.3	U	--
Perchlorate	6850	ug/kg										
pH	9045M	pH unit	6.43		6.53		-1.54	6.20		6.33		-2.08
Phosphorus	6010B	mg/kg	322		322		0.00	664		696		-4.71
Potassium	6010B	mg/kg	2180	J	1810	J	18.55	4420		4460		-0.90
Selenium	6020	mg/kg	0.207	J	0.248	J	-18.02	0.162	J	0.554	J	-109.50
Silver	6020	mg/kg	0.391	J	0.833	J	-72.22	0.114	J	0.180	J	-44.90
Sodium	6010B	mg/kg	108	J	112		-3.64	81.6	J	81.4	J	0.25
Strontium	6010B	mg/kg	21.9		22.9		-4.46	19.7		20.3		-3.00
Thallium	6020	mg/kg	0.306		0.295		3.66	0.304		0.379		-21.96
Tin	6010B	mg/kg	11.0	U	11.0	U	--	11.3	U	11.1	U	--
Titanium	6010B	mg/kg	1520		1450		4.71	1270		1290		-1.56
Vanadium	6020	mg/kg	43.0		55.1		-24.67	43.1	J	52.1	J	-18.91
Zinc	6020	mg/kg	54.4		52.4		3.75	80.9	J	92.2	J	-13.06
Zirconium	6010B	mg/kg	4.56	J	5.24	J	-13.88	5.66	U	5.55	U	--
1,3,5-Trinitrobenzene	8330A	ug/kg										
2,4,6-Trinitrotoluene	8330A	ug/kg										
2,4-Diamino-6-nitrotoluene	8330A	ug/kg										
2,4-Dinitrotoluene	8330A	ug/kg										
2,6-Diamino-4-nitrotoluene	8330A	ug/kg										
2,6-Dinitrotoluene	8330A	ug/kg										
2-Amino-4,6-Dinitrotoluene	8330A	ug/kg										
2-Nitrotoluene	8330A	ug/kg										
2-Propanol	8015B	ug/kg										
3-Nitrotoluene	8330A	ug/kg										
4-Amino-2,6-Dinitrotoluene	8330A	ug/kg										
4-Nitrotoluene	8330A	ug/kg										
Diethylene Glycol	8015M	mg/kg										
Ethanol	8015B	ug/kg										
Ethylene Glycol	8015M	mg/kg										
Formaldehyde	8315A	ug/kg										
HMX	8330A	ug/kg										
m-Dinitrobenzene	8330A	ug/kg										
Methanol	8015B	ug/kg										
m-Terphenyl	8015B	mg/kg										
Nitrobenzene	8330A	ug/kg										
Nitroglycerin	8330A	ug/kg										
o-Terphenyl	8015B	mg/kg										
PETN	8330A	ug/kg										
Propylene glycol	8015M	mg/kg										
p-Terphenyl	8015B	mg/kg										
RDX	8330A	ug/kg										
Tetryl	8330A	ug/kg										
1,2,3,4,6,7,8-HpCDD	1613B	ng/kg	24.2	J	12.6	J	63.04	26.0		21.2		20.34
1,2,3,4,6,7,8-HpCDF	1613B	ng/kg	4.92	J	2.06	J	81.95	4.83	J	3.56	J	30.27
1,2,3,4,7,8,9-HpCDF	1613B	ng/kg	1.11	J	5.45	UJ	200.00	0.448	J	0.388	J	14.35
1,2,3,4,7,8-HxCDD	1613B	ng/kg	0.421	J	0.178	J	81.14	0.402	J	0.338	J	17.30
1,2,3,4,7,8-HxCDF	1613B	ng/kg	0.543	J	5.45	UJ	200.00	0.387	J	5.71	UJ	200.00
1,2,3,6,7,8-HxCDD	1613B	ng/kg	1.42	J	0.579	J	84.14	1.10	J	0.908	J	19.12
1,2,3,6,7,8-HxCDF	1613B	ng/kg	0.512	J	5.45	UJ	200.00	0.275	J	5.71	U	200.00
1,2,3,7,8,9-HxCDD	1613B	ng/kg	0.701	J	5.45	UJ	200.00	1.02	J	1.05	J	-2.90
1,2,3,7,8,9-HxCDF	1613B	ng/kg	0.403	J	5.45	UJ	200.00	5.72	U	0.364	J	176.07
1,2,3,7,8-PeCDD	1613B	ng/kg	5.54	UJ	5.45	UJ	--	0.295	J	0.253	J	15.33
1,2,3,7,8-PeCDF	1613B	ng/kg	5.54	UJ	5.45	UJ	--	0.322	J	5.71	UJ	200.00
2,3,4,6,7,8-HxCDF	1613B	ng/kg	0.773	J	0.292	J	90.33	0.361	J	5.71	U	200.00
2,3,4,7,8-PeCDF	1613B	ng/kg	5.54	UJ	5.45	UJ	--	5.72	U	5.71	U	--
2,3,7,8-TCDD	1613B	ng/kg	1.11	UJ	1.09	UJ	--	1.14	U	1.14	U	--
2,3,7,8-TCDF	1613B	ng/kg	0.102	J	0.0432	J	80.99	0.207	J	0.199	J	3.94
Aroclor 1016	8082	ug/kg	1.9	U	1.9	U	--	1.9	U	1.9	U	--
Aroclor 1221	8082	ug/kg	1.9	U	1.9	U	--	1.9	U	1.9	U	--
Aroclor 1232	8082	ug/kg	1.9	U	1.9	U	--	1.9	U	1.9	U	--
Aroclor 1242	8082	ug/kg	1.9	U	1.9	U	--	1.9	U	1.9	U	--
Aroclor 1248	8082	ug/kg	1.9	U	1.9	U	--	1.9	U	1.9	U	--
Aroclor 1254	8082	ug/kg	1.7	J	3.2	J	-61.22	0.98	J	1.9	UJ	200.00
Aroclor 1260	8082	ug/kg	1.9	J	1.9	UJ	200.00	0.65	J	0.88	J	-30.07
Aroclor 1262	8082	ug/kg	1.9	U	1.9	U	--	1.9	U	1.9	U	--
Aroclor 1268	8082	ug/kg	1.9	U	1.9	U	--	1.9	U	1.9	U	--
Aroclor 5432	8082	ug/kg	3.7	U	3.7	U	--	3.8	U	3.8	U	--
Aroclor 5442	8082	ug/kg	3.7	U	3.7	U	--	3.8	U	3.8	U	--
Aroclor 5460	8082	ug/kg	1.3	J	1.5	J	-14.29	2.1	J	1.3	J	47.06
OCDD	1613B	ng/kg	247		150	J	48.87	429		314		30.96
OCDF	1613B	ng/kg	10.9	J	4.68	J	79.85	16.2		11.5		33.94
2,2-Dichlor-Propionic Acid	8151A	ug/kg						10	U	10	U	--
2,4 DB	8151A	ug/kg						6.1	U	6.7	U	--
2,4,5-T	8151A	ug/kg						0.19	U	0.19	U	--
2,4,5-TP	8151A	ug/kg						0.19	U	0.19	U	--
2,4-D	8151A	ug/kg						4.1	U	4.1	U	--
4,4'-DDD	8081A	ug/kg						0.39	U	0.39	U	--
4,4'-DDE	8081A	ug/kg						0.39	U	0.39	U	--
4,4'-DDT	8081A	ug/kg						0.39	U	0.39	U	--
Aldrin	8081A	ug/kg						0.19	U	0.19	U	--
Alpha-BHC	8081A	ug/kg						0.19	U	0.19	U	--
Beta-BHC	8081A	ug/kg						0.19	U	0.19	U	--
Chlordane	8081A	ug/kg						3.9	U	3.9	U	--
Delta-BHC	8081A	ug/kg						0.19	U	0.19	U	--
Dicamba	8151A	ug/kg						1.4	U	1.4	U	--
Dichlorprop	8151A	ug/kg						1.9	U	1.9	U	--
Dieldrin	8081A	ug/kg						0.39	U	0.39	U	--
Dinitrobutyl Phenol	8151A	ug/kg						2.7	U	2.7	U	--
Endosulfan I	8081A	ug/kg						0.19	U	0.19	U	--
Endosulfan II	8081A	ug/kg						0.39	U	0.39	U	--
Endosulfan Sulfate	8081A	ug/kg						0.39	U	0.39	U	--
Endrin	8081A	ug/kg						0.39	U	0.39	U	--
Endrin Aldehyde	8081A	ug/kg						0.39	U	0.39	U	--

Table C-4 - Subarea 5A Field Duplicate Results

		Location	SL-042-SA5A		SL-042-SA5A		RPD	SL-048-SA5A		SL-048-SA5A		RPD
		Sample Name:	DUP-17-SA5A-QC-051611		SL-042-SA5A-SB-3.5-4.5			DUP-07-SA5A-QC-030211		SL-048-SA5A-SS-0.0-0.5		
		Sample Date	05/16/2011		05/16/2011			03/02/2011		03/02/2011		
		Start Depth:	3.5		3.5			0		0		
		End Depth:	4.5		4.5			0.5		0.5		
		Area:	5A		5A			5A		5A		
		Matrix:	SO		SO			SO		SO		
		Sample Type:	FD		N			FD		N		
Endrin Ketone	8081A	ug/kg						0.39	U	0.39	U	--
Gamma-BHC (Lindane)	8081A	ug/kg						0.19	U	0.19	U	--
Heptachlor	8081A	ug/kg						0.19	U	0.19	U	--
Heptachlor Epoxide	8081A	ug/kg						0.19	U	0.19	U	--
MCPA	8151A	ug/kg						290	U	290	U	--
MCPP	8151A	ug/kg						290	U	290	U	--
Methoxychlor	8081A	ug/kg						1.9	U	1.9	U	--
Mirex	8081A	ug/kg						0.39	U	0.39	U	--
Toxaphene	8081A	ug/kg						7.5	U	7.5	U	--
1,2,4-Trichlorobenzene	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--
1,2-Dichlorobenzene	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--
1,2-Diphenylhydrazine	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--
1,3-Dichlorobenzene	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--
1,4-Dichlorobenzene	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--
1-Methylnaphthalene	8270C SIM	ug/kg	1.9	U	1.9	U	--	1.9	U	1.9	U	--
2,4,5-Trichlorophenol	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--
2,4,6-Trichlorophenol	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--
2,4-Dichlorophenol	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--
2,4-Dimethylphenol	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--
2,4-Dinitrophenol	8270C	ug/kg	1100	UJ	1100	UJ	--	1100	U	1100	U	--
2,4-Dinitrotoluene	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--
2,6-Dinitrotoluene	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--
2-Chloronaphthalene	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--
2-Chlorophenol	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--
2-Methylnaphthalene	8270C SIM	ug/kg	1.9	U	1.9	U	--	1.9	U	1.9	U	--
2-Methylphenol	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--
2-Nitroaniline	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--
2-Nitrophenol	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--
3,3`-Dichlorobenzidine	8270C	ug/kg	370	U	380	U	--	380	U	380	U	--
3,5-Dimethylphenol	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--
3-Nitroaniline	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--
4,6-Dinitro-2-Methylphenol	8270C	ug/kg	560	UJ	560	UJ	--	570	U	570	U	--
4-Bromophenyl Phenyl Ether	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--
4-Chloro-3-Methylphenol	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--
4-Chloroaniline	8270C	ug/kg	190	U	190	U	--	190	UJ	190	UJ	--
4-Chlorophenyl Phenylether	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--
4-Methylphenol	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--
4-Nitroaniline	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--
4-Nitrophenol	8270C	ug/kg	560	U	560	U	--	570	U	570	U	--
Acenaphthene	8270C SIM	ug/kg	1.9	U	1.9	U	--	1.9	U	1.9	U	--
Acenaphthylene	8270C SIM	ug/kg	1.9	U	1.9	U	--	1.9	U	1.9	U	--
Aniline	8270C	ug/kg	560	U	560	U	--	570	UJ	570	UJ	--
Anthracene	8270C SIM	ug/kg	1.9	U	1.9	U	--	1.9	U	1.9	U	--
Benzidine	8270C	ug/kg	3700	U	3800	UJ	--	3800	UJ	3800	UJ	--
Benzo(a)anthracene	8270C	ug/kg										
Benzo(a)anthracene	8270C SIM	ug/kg	1.9	U	1.9	U	--	1.9	U	1.9	U	--
Benzo(a)pyrene	8270C	ug/kg										
Benzo(a)pyrene	8270C SIM	ug/kg	1.9	U	1.9	U	--	0.94	J	1.9	UJ	200.00
Benzo(b)fluoranthene	8270C	ug/kg										
Benzo(b)fluoranthene	8270C SIM	ug/kg	1.9	U	1.9	U	--	5.3	J	2.9	J	58.54
Benzo(g,h,i)perylene	8270C	ug/kg										
Benzo(g,h,i)perylene	8270C SIM	ug/kg	1.9	U	1.9	U	--	1.9	U	1.9	U	--
Benzo(k)fluoranthene	8270C	ug/kg										
Benzo(k)fluoranthene	8270C SIM	ug/kg	1.9	U	1.9	U	--	1.9	U	1.9	U	--
Benzoic Acid	8270C	ug/kg	560	U	560	U	--	570	U	570	U	--
Benzyl Alcohol	8270C	ug/kg	560	U	560	U	--	570	U	570	U	--
Bis(2-Chloroethoxy) methane	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--
Bis(2-Chloroethyl) ether	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--
bis(2-Chloroisopropyl) ether	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--
Bis(2-Ethylhexyl) phthalate	8270C	ug/kg										
Bis(2-Ethylhexyl) phthalate	8270C SIM	ug/kg	20	U	20	U	--	7.6	J	21	UJ	200.00
Butylbenzylphthalate	8270C	ug/kg										
Butylbenzylphthalate	8270C SIM	ug/kg	20	U	20	U	--	21	U	21	U	--
Carbazole	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--
Chrysene	8270C	ug/kg										
Chrysene	8270C SIM	ug/kg	1.9	U	1.9	U	--	1.6	J	0.90	J	56.00
Dibenzo(a,h)anthracene	8270C	ug/kg										
Dibenzo(a,h)anthracene	8270C SIM	ug/kg	1.9	U	1.9	U	--	1.9	U	1.9	U	--
Dibenzofuran	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--
Diethylphthalate	8270C	ug/kg										
Diethylphthalate	8270C SIM	ug/kg	20	U	20	U	--	21	U	21	U	--
Dimethylphthalate	8270C	ug/kg										
Dimethylphthalate	8270C SIM	ug/kg	20	U	20	U	--	21	U	21	U	--
Di-n-Butylphthalate	8270C	ug/kg										
Di-n-Butylphthalate	8270C SIM	ug/kg	20	U	20	U	--	13	J	12	J	8.00
Di-N-Octyl Phthalate	8270C	ug/kg										
Di-N-Octyl Phthalate	8270C SIM	ug/kg	20	U	20	U	--	12	J	12	J	0.00
Fluoranthene	8270C	ug/kg										
Fluoranthene	8270C SIM	ug/kg	1.9	U	1.9	U	--	2.5	J	0.94	J	90.70
Fluorene	8270C SIM	ug/kg	1.9	U	1.9	U	--	1.9	U	1.9	U	--
Hexachlorobenzene	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--
Hexachlorobutadiene	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--
Hexachlorocyclopentadiene	8270C	ug/kg	560	U	560	U	--	570	U	570	U	--
Hexachloroethane	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--
Indeno(1,2,3-Cd)Pyrene	8270C	ug/kg										
Indeno(1,2,3-Cd)Pyrene	8270C SIM	ug/kg	1.9	U	1.9	U	--	1.9	U	1.9	U	--
Isophorone	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--
Naphthalene	8270C	ug/kg										
Naphthalene	8270C SIM	ug/kg	1.9	U	1.9	U	--	1.9	U	1.9	U	--
Nitrobenzene	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--
N-Nitrosodimethylamine	1625C	ng/kg										
N-Nitrosodimethylamine	8270C SIM	ug/kg	1.9	U	1.9	U	--	1.9	U	1.9	U	--
N-Nitroso-Di-N-Propylamine	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--
N-Nitrosodiphenylamine	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--
Pentachlorophenol	8270C	ug/kg	560	U	560	U	--	570	U	570	U	--
Phenanthrene	8270C	ug/kg										
Phenanthrene	8270C SIM	ug/kg	1.9	U	1.9	U	--	1.1	J	1.9	UJ	200.00
Phenol	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--
Pyrene	8270C	ug/kg										
Pyrene	8270C SIM	ug/kg	1.9	U	1.9	U	--	1.9	J	1.9	UJ	200.00
1,1,1,2-Tetrachloroethane	8260B	ug/kg	4.4	U	4.3	U	--					
1,1,1-Trichloroethane	8260B	ug/kg	4.4	U	4.3	U	--					
1,1,2,2-Tetrachloroethane	8260B	ug/kg	4.4	U	4.3	U	--					
1,1,2-Trichloroethane	8260B	ug/kg	4.4	U	4.3	U	--					
1,1-Dichloroethane	8260B	ug/kg	4.4	U	4.3	U	--					
1,1-Dichloroethene	8260B	ug/kg	4.4	U	4.3	U	--					
1,1-Dichloropropene	8260B	ug/kg	4.4	U	4.3	U	--					
1,2,3-Trichlorobenzene	8260B	ug/kg	4.4	U	4.3	U	--					
1,2,3-Trichloropropane	8260B	ug/kg	4.4	U	4.3	U	--					
1,2,4-Trichlorobenzene	8260B	ug/kg	4.4	U	4.3	U	--					
1,2,4-Trimethylbenzene	8260B	ug/kg	4.4	U	4.3	U	--					
1,2-Dibromo-3-chloropropane	8260B	ug/kg	4.4	U	4.3	U	--					
1,2-Dibromoethane	8260B	ug/kg	4.4	U	4.3	U	--					
1,2-Dichlorobenzene	8260B	ug/kg	4.4	U	4.3	U	--					
1,2-Dichloroethane	8260B	ug/kg	4.4	U	4.3	U	--					
1,2-Dichloropropane	8260B	ug/kg	4.4	U	4.3	U	--					
1,3,5-Trimethylbenzene	8260B	ug/kg	4.4	U	4.3	U	--					
1,3-Dichlorobenzene	8260B	ug/kg	4.4	U	4.3	U	--					
1,3-Dichloropropane	8260B	ug/kg	4.4	U	4.3	U	--					

Table C-4 - Subarea 5A Field Duplicate Results

		Location	SL-042-SA5A		SL-042-SA5A		RPD	SL-048-SA5A		SL-048-SA5A		RPD
		Sample Name:	DUP-17-SA5A-QC-051611		SL-042-SA5A-SB-3.5-4.5			DUP-07-SA5A-QC-030211		SL-048-SA5A-SS-0.0-0.5		
		Sample Date	05/16/2011		05/16/2011			03/02/2011		03/02/2011		
		Start Depth:	3.5		3.5			0		0		
		End Depth:	4.5		4.5			0.5		0.5		
		Area:	5A		5A			5A		5A		
		Matrix:	SO		SO			SO		SO		
		Sample Type:	FD		N			FD		N		
1,4-Dichlorobenzene	8260B	ug/kg	4.4	U	4.3	U	--					
1,4-Dioxane	8260B SIM	ug/kg	18	U	15	U	--					
2,2-Dichloropropane	8260B	ug/kg	4.4	U	4.3	U	--					
2-Butanone	8260B	ug/kg	8.8	U	8.5	U	--					
2-Chloroethyl Vinyl Ether	8260B	ug/kg	4.4	U	4.3	U	--					
2-Chlorotoluene	8260B	ug/kg	4.4	U	4.3	U	--					
2-Hexanone	8260B	ug/kg	8.8	U	8.5	U	--					
4-Chlorotoluene	8260B	ug/kg	4.4	U	4.3	U	--					
4-Methyl-2-Pentanone	8260B	ug/kg	8.8	U	8.5	U	--					
Acetone	8260B	ug/kg	8.8	UJ	7.4	J	200.00					
Benzene	8260B	ug/kg	4.4	U	4.3	U	--					
Bromobenzene	8260B	ug/kg	4.4	U	4.3	U	--					
Bromochloromethane	8260B	ug/kg	4.4	U	4.3	U	--					
Bromodichloromethane	8260B	ug/kg	4.4	U	4.3	U	--					
Bromoform	8260B	ug/kg	4.4	U	4.3	U	--					
Bromomethane	8260B	ug/kg	4.4	U	4.3	U	--					
Carbon tetrachloride	8260B	ug/kg	4.4	U	4.3	U	--					
Chlorobenzene	8260B	ug/kg	4.4	U	4.3	U	--					
Chloroethane	8260B	ug/kg	4.4	U	4.3	U	--					
Chloroform	8260B	ug/kg	4.4	U	4.3	U	--					
Chloromethane	8260B	ug/kg	4.4	U	4.3	U	--					
Chlorotrifluoroethene	8260B	ug/kg	5.5	U	5.3	U	--					
cis-1,2-Dichloroethene	8260B	ug/kg	4.4	U	4.3	U	--					
cis-1,3-Dichloropropene	8260B	ug/kg	4.4	U	4.3	U	--					
Dibromochloromethane	8260B	ug/kg	4.4	U	4.3	U	--					
Dibromomethane	8260B	ug/kg	4.4	U	4.3	U	--					
Dichlorodifluoromethane	8260B	ug/kg	4.4	U	4.3	U	--					
EFH (C15-C20)	8015M	mg/kg										
EFH (C21-C30)	8015M	mg/kg										
EFH (C30-C40)	8015M	mg/kg										
EFH (C8-C11)	8015M	mg/kg										
Ethylbenzene	8260B	ug/kg	4.4	U	4.3	U	--					
Freon 113	8260B	ug/kg	4.4	U	4.3	U	--					
Freon 113a	8260B	ug/kg	5.5	U	5.3	U	--					
GRO (C5-C12)	8015M	mg/kg										
Hexachlorobutadiene	8260B	ug/kg	4.4	U	4.3	U	--					
Isopropylbenzene	8260B	ug/kg	4.4	U	4.3	U	--					
Isopropyltoluene	8260B	ug/kg	4.4	U	4.3	U	--					
m,p-Xylene	8260B	ug/kg	4.4	U	4.3	U	--					
Methyl tert-Butyl Ether	8260B	ug/kg	4.4	U	4.3	U	--					
Methylene chloride	8260B	ug/kg	4.1	J	3.7	J	10.26					
N-Butylbenzene	8260B	ug/kg	4.4	U	4.3	U	--					
N-Propylbenzene	8260B	ug/kg	4.4	U	4.3	U	--					
o-Xylene	8260B	ug/kg	4.4	U	4.3	U	--					
sec-Butylbenzene	8260B	ug/kg	4.4	U	4.3	U	--					
Styrene	8260B	ug/kg	4.4	U	4.3	U	--					
tert-Butylbenzene	8260B	ug/kg	4.4	U	4.3	U	--					
Tetrachloroethene	8260B	ug/kg	4.4	U	4.3	U	--					
Toluene	8260B	ug/kg	0.17	J	0.12	J	34.48					
trans-1,2-Dichloroethene	8260B	ug/kg	4.4	U	4.3	U	--					
trans-1,3-Dichloropropene	8260B	ug/kg	4.4	U	4.3	U	--					
Trichloroethene	8260B	ug/kg	4.4	U	4.3	U	--					
Trichlorofluoromethane	8260B	ug/kg	4.4	U	4.3	U	--					
Vinyl Chloride	8260B	ug/kg	4.4	U	4.3	U	--					

Notes:
ug/kg - microgram per kilogram
mg/kg - milligram per kilogram
ng/g - nanogram per kilogram
FD - field duplicate sample
N - normal sample
RPD - relative percent difference
SO - soil
-- - RPD not calculated when both field duplicate and normal samples were nondetect or only one sample result is reported

200* - When one result is nondetect a 200% RPD is given and sample results are qualified as estimated "J" or "UJ" in the field duplicate samples only

Limit - 50% - If RPD is above 50% detected field duplicate results only were estimated "J"

Table C-4 - Subarea 5A Field Duplicate Results

		Location	SL-058-SA5A		SL-058-SA5A		RPD	SL-064-SA5A		SL-064-SA5A		RPD
		Sample Name:	DUP14-SA5A-QC-041411		SL-058-SA5A-SB-3.0-4.0			DUP16-SA5A-QC-042211		SL-064-SA5A-SB-3.0-4.0		
		Sample Date	04/14/2011		04/14/2011			04/22/2011		04/22/2011		
		Start Depth:	3		3			3		3		
		End Depth:	4		4			4		4		
		Area:	5A		5A			5A		5A		
		Matrix:	SO		SO			SO		SO		
		Sample Type:	FD		N			FD		N		
Chemical Name:	Lab Method:	Result Unit										
Aluminum	6010B	mg/kg	15900	J	15600	J	1.90	23700		21900		7.89
Antimony	6020	mg/kg	0.217	UJ	0.0723	J	200.00	0.221	UJ	0.220	UJ	--
Arsenic	6020	mg/kg	8.17	J	5.46	J	39.77	8.02	J	7.42	J	7.77
Barium	6020	mg/kg	87.0	J	99.0	J	-12.90	113	J	102	J	10.23
Beryllium	6020	mg/kg	0.769	J	0.661	J	15.10	0.952	J	0.865	J	9.58
Boron	6010B	mg/kg	1.17	J	2.40	J	-68.91	7.87		8.23		-4.47
Cadmium	6020	mg/kg	0.0684	J	0.102	J	-39.44	0.112	J	0.0937	J	17.79
Calcium	6010B	mg/kg	3090	J	2350	J	27.21	2990		2920		2.37
Chromium	6020	mg/kg	21.3	J	21.1	J	0.94	25.9	J	23.6	J	9.29
Chromium VI	7199	mg/kg	0.40	J	0.52	J	-26.09	0.29	J	1.1	UJ	200.00
Cobalt	6020	mg/kg	10.9		7.02		43.30	8.70	J	8.10	J	7.14
Copper	6020	mg/kg	12.5	J	12.5	J	0.00	14.5	J	11.4	J	23.94
Cyanide	9012B	mg/kg										
Fluoride	300.0	mg/kg	1.4	J	1.1	J	24.00	3.0	J	2.3	J	26.42
Iron	6010B	mg/kg	25600	J	21100	J	19.27	26600		24900		6.60
Lead	6020	mg/kg	6.85	J	6.18	J	10.28	8.33	J	7.52	J	10.22
Lithium	6010B	mg/kg	33.8	J	25.5	J	27.99	36.7		32.8		11.22
Magnesium	6010B	mg/kg	5820	J	4690	J	21.50	5980		5460		9.09
Manganese	6010B	mg/kg	334		261		24.54	296		292		1.36
Mercury	7471A	mg/kg	0.107	U	0.103	U	--	0.110	UJ	0.107	UJ	--
Molybdenum	6020	mg/kg	0.530		0.469		12.21	0.575	J	0.532	J	7.77
Nickel	6020	mg/kg	19.2	J	16.2	J	16.95	20.2	J	18.5	J	8.79
Nitrate	300.0	mg/kg										
Percent Moisture	160.3M	%	8.6		9.0		-4.55	10.6		10.8		-1.87
Perchlorate	314.0	ug/kg	32.8	U	33.0	U	--	33.6	U	33.6	U	--
Perchlorate	6850	ug/kg										
pH	9045M	pH unit	6.46		6.47		-0.15	7.08		6.86		3.16
Phosphorus	6010B	mg/kg	503	J	368	J	31.00	297		309		-3.96
Potassium	6010B	mg/kg	2680	J	2980	J	-10.60	2490	J	2660	J	-6.60
Selenium	6020	mg/kg	0.166	J	0.152	J	8.81	0.170	J	0.134	J	23.68
Silver	6020	mg/kg	0.0147	J	0.0289	J	-65.14	0.0405	J	0.0404	J	0.25
Sodium	6010B	mg/kg	111		79.9	J	32.58	102	J	93.2	J	9.02
Strontium	6010B	mg/kg	18.1		17.8		1.67	19.6		18.3		6.86
Thallium	6020	mg/kg	0.359	J	0.263	J	30.87	0.353		0.316		11.06
Tin	6010B	mg/kg	10.7	U	10.8	U	--	11.1	U	11.1	U	--
Titanium	6010B	mg/kg	1200		1010		17.19	1190		1170		1.69
Vanadium	6020	mg/kg	39.8	J	36.4	J	8.92	46.5	J	41.7	J	10.88
Zinc	6020	mg/kg	74.5	J	58.7	J	23.72	69.4	J	63.8	J	8.41
Zirconium	6010B	mg/kg	1.12	J	1.28	J	-13.33	5.54	U	5.55	U	--
1,3,5-Trinitrobenzene	8330A	ug/kg										
2,4,6-Trinitrotoluene	8330A	ug/kg										
2,4-Diamino-6-nitrotoluene	8330A	ug/kg										
2,4-Dinitrotoluene	8330A	ug/kg										
2,6-Diamino-4-nitrotoluene	8330A	ug/kg										
2,6-Dinitrotoluene	8330A	ug/kg										
2-Amino-4,6-Dinitrotoluene	8330A	ug/kg										
2-Nitrotoluene	8330A	ug/kg										
2-Propanol	8015B	ug/kg										
3-Nitrotoluene	8330A	ug/kg										
4-Amino-2,6-Dinitrotoluene	8330A	ug/kg										
4-Nitrotoluene	8330A	ug/kg										
Diethylene Glycol	8015M	mg/kg										
Ethanol	8015B	ug/kg										
Ethylene Glycol	8015M	mg/kg										
Formaldehyde	8315A	ug/kg										
HMX	8330A	ug/kg										
m-Dinitrobenzene	8330A	ug/kg										
Methanol	8015B	ug/kg										
m-Terphenyl	8015B	mg/kg										
Nitrobenzene	8330A	ug/kg										
Nitroglycerin	8330A	ug/kg										
o-Terphenyl	8015B	mg/kg										
PETN	8330A	ug/kg										
Propylene glycol	8015M	mg/kg										
p-Terphenyl	8015B	mg/kg										
RDX	8330A	ug/kg										
Tetryl	8330A	ug/kg										
1,2,3,4,6,7,8-HpCDD	1613B	ng/kg	5.46	UJ	5.43	UJ	--	5.48	U	5.44	U	--
1,2,3,4,6,7,8-HpCDF	1613B	ng/kg	5.46	UJ	5.43	UJ	--	5.48	UJ	5.44	UJ	--
1,2,3,4,7,8,9-HpCDF	1613B	ng/kg	5.46	UJ	5.43	UJ	--	5.48	UJ	5.44	UJ	--
1,2,3,4,7,8-HxCDD	1613B	ng/kg	0.197	J	5.43	UJ	200.00	5.48	UJ	0.119	J	200.00
1,2,3,4,7,8-HxCDF	1613B	ng/kg	5.46	UJ	5.43	UJ	--	5.48	UJ	5.44	UJ	--
1,2,3,6,7,8-HxCDD	1613B	ng/kg	0.256	J	5.43	UJ	200.00	5.48	UJ	5.44	UJ	--
1,2,3,6,7,8-HxCDF	1613B	ng/kg	5.46	UJ	5.43	UJ	--	5.48	UJ	5.44	UJ	--
1,2,3,7,8,9-HxCDD	1613B	ng/kg	5.46	U	0.257	J	200.00	5.48	UJ	5.44	UJ	--
1,2,3,7,8,9-HxCDF	1613B	ng/kg	5.46	UJ	5.43	UJ	--	5.48	UJ	5.44	UJ	--
1,2,3,7,8-PeCDD	1613B	ng/kg	0.270	J	5.43	UJ	200.00	5.48	UJ	0.238	J	200.00
1,2,3,7,8-PeCDF	1613B	ng/kg	0.317	J	5.43	UJ	200.00	5.48	UJ	0.234	J	200.00
2,3,4,6,7,8-HxCDF	1613B	ng/kg	5.46	UJ	5.43	UJ	--	5.48	UJ	5.44	UJ	--
2,3,4,7,8-PeCDF	1613B	ng/kg	5.46	UJ	5.43	UJ	--	5.48	UJ	5.44	UJ	--
2,3,7,8-TCDD	1613B	ng/kg	1.09	UJ	1.09	UJ	--	1.10	UJ	1.09	UJ	--
2,3,7,8-TCDF	1613B	ng/kg	0.240	J	1.09	UJ	200.00	1.10	UJ	0.0441	J	200.00
Aroclor 1016	8082	ug/kg	1.9	U	1.9	U	--	1.9	U	1.9	U	--
Aroclor 1221	8082	ug/kg	1.9	U	1.9	U	--	1.9	U	1.9	U	--
Aroclor 1232	8082	ug/kg	1.9	U	1.9	U	--	1.9	U	1.9	U	--
Aroclor 1242	8082	ug/kg	1.9	U	1.9	U	--	1.9	U	1.9	U	--
Aroclor 1248	8082	ug/kg	1.9	U	1.9	U	--	1.9	U	1.9	U	--
Aroclor 1254	8082	ug/kg	1.9	U	1.9	U	--	1.9	U	1.9	U	--
Aroclor 1260	8082	ug/kg	1.9	U	1.9	U	--	1.9	U	1.9	U	--
Aroclor 1262	8082	ug/kg	1.9	U	1.9	U	--	1.9	U	1.9	U	--
Aroclor 1268	8082	ug/kg	1.9	U	1.9	U	--	1.9	U	1.9	U	--
Aroclor 5432	8082	ug/kg	3.6	U	3.6	U	--	3.7	U	3.7	U	--
Aroclor 5442	8082	ug/kg	3.6	U	3.6	U	--	3.7	U	3.7	U	--
Aroclor 5460	8082	ug/kg	3.6	U	3.6	U	--	3.7	U	3.7	U	--
OCDD	1613B	ng/kg	10.9	UJ	12.1	J	200.00	2.65	J	3.90	J	-38.17
OCDF	1613B	ng/kg	10.9	UJ	10.9	UJ	--	11.0	U	10.9	U	--
2,2-Dichlor-Propionic Acid	8151A	ug/kg										
2,4 DB	8151A	ug/kg										
2,4,5-T	8151A	ug/kg										
2,4,5-TP	8151A	ug/kg										
2,4-D	8151A	ug/kg										
4,4'-DDD	8081A	ug/kg										
4,4'-DDE	8081A	ug/kg										
4,4'-DDT	8081A	ug/kg										
Aldrin	8081A	ug/kg										
Alpha-BHC	8081A	ug/kg										
Beta-BHC	8081A	ug/kg										
Chlordane	8081A	ug/kg										
Delta-BHC	8081A	ug/kg										
Dicamba	8151A	ug/kg										
Dichlorprop	8151A	ug/kg										
Dieldrin	8081A	ug/kg										
Dinitrobutyl Phenol	8151A	ug/kg										
Endosulfan I	8081A	ug/kg										
Endosulfan II	8081A	ug/kg										
Endosulfan Sulfate	8081A	ug/kg										
Endrin	8081A	ug/kg										
Endrin Aldehyde	8081A	ug/kg										

Table C-4 - Subarea 5A Field Duplicate Results

		Location	SL-058-SA5A		SL-058-SA5A		RPD	SL-064-SA5A		SL-064-SA5A		RPD
		Sample Name:	DUP14-SA5A-QC-041411		SL-058-SA5A-SB-3.0-4.0			DUP16-SA5A-QC-042211		SL-064-SA5A-SB-3.0-4.0		
		Sample Date	04/14/2011		04/14/2011			04/22/2011		04/22/2011		
		Start Depth:	3		3			3		3		
		End Depth:	4		4			4		4		
		Area:	5A		5A			5A		5A		
		Matrix:	SO		SO			SO		SO		
		Sample Type:	FD		N			FD		N		
Endrin Ketone	8081A	ug/kg										
Gamma-BHC (Lindane)	8081A	ug/kg										
Heptachlor	8081A	ug/kg										
Heptachlor Epoxide	8081A	ug/kg										
MCPA	8151A	ug/kg										
MCPP	8151A	ug/kg										
Methoxychlor	8081A	ug/kg										
Mirex	8081A	ug/kg										
Toxaphene	8081A	ug/kg										
1,2,4-Trichlorobenzene	8270C	ug/kg	180	U	180	U	--	190	U	190	U	--
1,2-Dichlorobenzene	8270C	ug/kg	180	U	180	U	--	190	U	190	U	--
1,2-Diphenylhydrazine	8270C	ug/kg	180	U	180	U	--	190	U	190	U	--
1,3-Dichlorobenzene	8270C	ug/kg	180	U	180	U	--	190	U	190	U	--
1,4-Dichlorobenzene	8270C	ug/kg	180	U	180	U	--	190	U	190	U	--
1-Methylnaphthalene	8270C SIM	ug/kg	1.8	U	1.8	U	--	1.9	U	1.8	U	--
2,4,5-Trichlorophenol	8270C	ug/kg	180	U	180	U	--	190	U	190	U	--
2,4,6-Trichlorophenol	8270C	ug/kg	180	U	180	U	--	190	U	190	U	--
2,4-Dichlorophenol	8270C	ug/kg	180	U	180	U	--	190	U	190	U	--
2,4-Dimethylphenol	8270C	ug/kg	180	U	180	U	--	190	U	190	U	--
2,4-Dinitrophenol	8270C	ug/kg	1100	U	1100	U	--	1100	U	1100	U	--
2,4-Dinitrotoluene	8270C	ug/kg	180	U	180	U	--	190	U	190	U	--
2,6-Dinitrotoluene	8270C	ug/kg	180	U	180	U	--	190	U	190	U	--
2-Chloronaphthalene	8270C	ug/kg	180	U	180	U	--	190	U	190	U	--
2-Chlorophenol	8270C	ug/kg	180	U	180	U	--	190	U	190	U	--
2-Methylnaphthalene	8270C SIM	ug/kg	1.8	U	1.8	U	--	1.9	U	1.8	U	--
2-Methylphenol	8270C	ug/kg	180	U	180	U	--	190	U	190	U	--
2-Nitroaniline	8270C	ug/kg	180	U	180	U	--	190	U	190	U	--
2-Nitrophenol	8270C	ug/kg	180	U	180	U	--	190	U	190	U	--
3,3`-Dichlorobenzidine	8270C	ug/kg	360	U	370	U	--	370	U	370	U	--
3,5-Dimethylphenol	8270C	ug/kg	180	U	180	U	--	190	U	190	U	--
3-Nitroaniline	8270C	ug/kg	180	U	180	U	--	190	U	190	U	--
4,6-Dinitro-2-Methylphenol	8270C	ug/kg	550	U	550	U	--	560	U	560	U	--
4-Bromophenyl Phenyl Ether	8270C	ug/kg	180	U	180	U	--	190	U	190	U	--
4-Chloro-3-Methylphenol	8270C	ug/kg	180	U	180	U	--	190	U	190	U	--
4-Chloroaniline	8270C	ug/kg	180	U	180	U	--	190	U	190	U	--
4-Chlorophenyl Phenylether	8270C	ug/kg	180	U	180	U	--	190	U	190	U	--
4-Methylphenol	8270C	ug/kg	180	U	180	U	--	190	U	190	U	--
4-Nitroaniline	8270C	ug/kg	180	U	180	U	--	190	U	190	U	--
4-Nitrophenol	8270C	ug/kg	550	U	550	U	--	560	U	560	U	--
Acenaphthene	8270C SIM	ug/kg	1.8	U	1.8	U	--	1.9	U	1.8	U	--
Acenaphthylene	8270C SIM	ug/kg	1.8	U	1.8	U	--	1.9	U	1.8	U	--
Aniline	8270C	ug/kg	550	U	550	U	--	560	U	560	U	--
Anthracene	8270C SIM	ug/kg	1.8	U	1.8	U	--	1.9	U	1.8	U	--
Benzidine	8270C	ug/kg	3600	U	3700	UJ	--	3700	U	3700	UJ	--
Benzo(a)anthracene	8270C	ug/kg										
Benzo(a)anthracene	8270C SIM	ug/kg	1.8	U	1.8	U	--	1.9	U	1.8	U	--
Benzo(a)pyrene	8270C	ug/kg										
Benzo(a)pyrene	8270C SIM	ug/kg	1.8	U	1.8	U	--	1.9	U	1.8	U	--
Benzo(b)fluoranthene	8270C	ug/kg										
Benzo(b)fluoranthene	8270C SIM	ug/kg	1.8	U	1.8	U	--	1.9	U	1.8	U	--
Benzo(g,h,i)perylene	8270C	ug/kg										
Benzo(g,h,i)perylene	8270C SIM	ug/kg	1.8	U	1.8	U	--	1.9	U	1.8	U	--
Benzo(k)fluoranthene	8270C	ug/kg										
Benzo(k)fluoranthene	8270C SIM	ug/kg	1.8	U	1.8	U	--	1.9	U	1.8	U	--
Benzoic Acid	8270C	ug/kg	550	U	550	U	--	560	U	560	U	--
Benzyl Alcohol	8270C	ug/kg	550	U	550	U	--	560	U	560	U	--
Bis(2-Chloroethoxy) methane	8270C	ug/kg	180	U	180	U	--	190	U	190	U	--
Bis(2-Chloroethyl) ether	8270C	ug/kg	180	U	180	U	--	190	U	190	U	--
bis(2-Chloroisopropyl) ether	8270C	ug/kg	180	U	180	U	--	190	U	190	U	--
Bis(2-Ethylhexyl) phthalate	8270C	ug/kg										
Bis(2-Ethylhexyl) phthalate	8270C SIM	ug/kg	20	U	20	U	--	20	U	20	U	--
Butylbenzylphthalate	8270C	ug/kg										
Butylbenzylphthalate	8270C SIM	ug/kg	20	U	20	U	--	20	U	20	U	--
Carbazole	8270C	ug/kg	180	U	180	U	--	190	U	190	U	--
Chrysene	8270C	ug/kg										
Chrysene	8270C SIM	ug/kg	1.8	U	1.8	U	--	1.9	U	1.8	U	--
Dibenzo(a,h)anthracene	8270C	ug/kg										
Dibenzo(a,h)anthracene	8270C SIM	ug/kg	1.8	U	1.8	U	--	1.9	U	1.8	U	--
Dibenzofuran	8270C	ug/kg	180	U	180	U	--	190	U	190	U	--
Diethylphthalate	8270C	ug/kg										
Diethylphthalate	8270C SIM	ug/kg	20	U	20	U	--	7.0	J	20	UJ	200.00
Dimethylphthalate	8270C	ug/kg										
Dimethylphthalate	8270C SIM	ug/kg	20	U	20	U	--	20	U	20	U	--
Di-n-Butylphthalate	8270C	ug/kg										
Di-n-Butylphthalate	8270C SIM	ug/kg	20	U	20	U	--	14	J	20	UJ	200.00
Di-N-Octyl Phthalate	8270C	ug/kg										
Di-N-Octyl Phthalate	8270C SIM	ug/kg	20	U	20	U	--	20	U	20	U	--
Fluoranthene	8270C	ug/kg										
Fluoranthene	8270C SIM	ug/kg	1.8	U	1.8	U	--	0.97	J	1.8	UJ	200.00
Fluorene	8270C SIM	ug/kg	1.8	U	1.8	U	--	1.9	U	1.8	U	--
Hexachlorobenzene	8270C	ug/kg	180	U	180	U	--	190	U	190	U	--
Hexachlorobutadiene	8270C	ug/kg	180	U	180	U	--	190	U	190	U	--
Hexachlorocyclopentadiene	8270C	ug/kg	550	U	550	U	--	560	U	560	U	--
Hexachloroethane	8270C	ug/kg	180	U	180	U	--	190	U	190	U	--
Indeno(1,2,3-Cd)Pyrene	8270C	ug/kg										
Indeno(1,2,3-Cd)Pyrene	8270C SIM	ug/kg	1.8	U	1.8	U	--	1.9	U	1.8	U	--
Isophorone	8270C	ug/kg	180	U	180	U	--	190	U	190	U	--
Naphthalene	8270C	ug/kg										
Naphthalene	8270C SIM	ug/kg	1.8	UJ	0.81	J	200.00	1.9	U	1.8	U	--
Nitrobenzene	8270C	ug/kg	180	U	180	U	--	190	U	190	U	--
N-Nitrosodimethylamine	1625C	ng/kg										
N-Nitrosodimethylamine	8270C SIM	ug/kg	1.8	U	1.8	U	--	1.9	U	1.8	U	--
N-Nitroso-Di-N-Propylamine	8270C	ug/kg	180	U	180	U	--	190	U	190	U	--
N-Nitrosodiphenylamine	8270C	ug/kg	180	U	180	U	--	190	U	190	U	--
Pentachlorophenol	8270C	ug/kg	550	U	550	U	--	560	U	560	U	--
Phenanthrene	8270C	ug/kg										
Phenanthrene	8270C SIM	ug/kg	1.8	U	1.8	U	--	1.9	U	1.8	U	--
Phenol	8270C	ug/kg	180	U	180	U	--	190	U	190	U	--
Pyrene	8270C	ug/kg										
Pyrene	8270C SIM	ug/kg	1.8	U	1.8	U	--	1.9	U	1.8	U	--
1,1,1,2-Tetrachloroethane	8260B	ug/kg	4.4	U	4.2	U	--	4.0	U	3.7	U	--
1,1,1-Trichloroethane	8260B	ug/kg	4.4	U	4.2	U	--	4.0	U	3.7	U	--
1,1,2,2-Tetrachloroethane	8260B	ug/kg	4.4	U	4.2	U	--	4.0	U	3.7	U	--
1,1,2-Trichloroethane	8260B	ug/kg	4.4	U	4.2	U	--	4.0	U	3.7	U	--
1,1-Dichloroethane	8260B	ug/kg	4.4	U	4.2	U	--	4.0	U	3.7	U	--
1,1-Dichloroethene	8260B	ug/kg	4.4	U	4.2	U	--	4.0	U	3.7	U	--
1,1-Dichloropropene	8260B	ug/kg	4.4	U	4.2	U	--	4.0	U	3.7	U	--
1,2,3-Trichlorobenzene	8260B	ug/kg	4.4	U	4.2	U	--	4.0	U	3.7	U	--
1,2,3-Trichloropropane	8260B	ug/kg	4.4	U	4.2	U	--	4.0	U	3.7	U	--
1,2,4-Trichlorobenzene	8260B	ug/kg	4.4	U	4.2	U	--	4.0	U	3.7	U	--
1,2,4-Trimethylbenzene	8260B	ug/kg	4.4	U	4.2	U	--	4.0	U	3.7	U	--
1,2-Dibromo-3-chloropropane	8260B	ug/kg	4.4	U	4.2	U	--	4.0	U	3.7	U	--
1,2-Dibromoethane	8260B	ug/kg	4.4	U	4.2	U	--	4.0	U	3.7	U	--
1,2-Dichlorobenzene	8260B	ug/kg	4.4	U	4.2	U	--	4.0	U	3.7	U	--
1,2-Dichloroethane	8260B	ug/kg	4.4	U	4.2	U	--	4.0	U	3.7	U	--
1,2-Dichloropropane	8260B	ug/kg	4.4	U	4.2	U	--	4.0	U	3.7	U	--
1,3,5-Trimethylbenzene	8260B	ug/kg	4.4	U	4.2	U	--	4.0	U	3.7	U	--
1,3-Dichlorobenzene	8260B	ug/kg	4.4	U	4.2	U	--	4.0	U	3.7	U	--
1,3-Dichloropropane	8260B	ug/kg	4.4	U	4.2	U	--	4.0	U	3.7	U	--

Table C-4 - Subarea 5A Field Duplicate Results

		Location	SL-058-SA5A		SL-058-SA5A		RPD	SL-064-SA5A		SL-064-SA5A		RPD
		Sample Name:	DUP14-SA5A-QC-041411		SL-058-SA5A-SB-3.0-4.0			DUP16-SA5A-QC-042211		SL-064-SA5A-SB-3.0-4.0		
		Sample Date	04/14/2011		04/14/2011			04/22/2011		04/22/2011		
		Start Depth:	3		3			3		3		
		End Depth:	4		4			4		4		
		Area:	5A		5A			5A		5A		
		Matrix:	SO		SO			SO		SO		
		Sample Type:	FD		N			FD		N		
1,4-Dichlorobenzene	8260B	ug/kg	4.4	U	4.2	U	--	4.0	U	3.7	U	--
1,4-Dioxane	8260B SIM	ug/kg	16	U	16	U	--	13	U	14	U	--
2,2-Dichloropropane	8260B	ug/kg	4.4	U	4.2	U	--	4.0	U	3.7	U	--
2-Butanone	8260B	ug/kg	8.9	U	8.4	U	--	7.9	U	7.5	U	--
2-Chloroethyl Vinyl Ether	8260B	ug/kg	4.4	U	4.2	U	--	4.0	U	3.7	U	--
2-Chlorotoluene	8260B	ug/kg	4.4	U	4.2	U	--	4.0	U	3.7	U	--
2-Hexanone	8260B	ug/kg	8.9	U	8.4	U	--	7.9	U	7.5	U	--
4-Chlorotoluene	8260B	ug/kg	4.4	U	4.2	U	--	4.0	U	3.7	U	--
4-Methyl-2-Pentanone	8260B	ug/kg	8.9	U	8.4	U	--	7.9	U	7.5	U	--
Acetone	8260B	ug/kg	8.9	U	8.4	U	--	7.9	U	7.5	U	--
Benzene	8260B	ug/kg	4.4	U	4.2	U	--	4.0	U	3.7	U	--
Bromobenzene	8260B	ug/kg	4.4	U	4.2	U	--	4.0	U	3.7	U	--
Bromochloromethane	8260B	ug/kg	4.4	U	4.2	U	--	4.0	U	3.7	U	--
Bromodichloromethane	8260B	ug/kg	4.4	U	4.2	U	--	4.0	U	3.7	U	--
Bromoform	8260B	ug/kg	4.4	U	4.2	U	--	4.0	U	3.7	U	--
Bromomethane	8260B	ug/kg	4.4	U	4.2	U	--	4.0	U	3.7	U	--
Carbon tetrachloride	8260B	ug/kg	4.4	U	4.2	U	--	4.0	U	3.7	U	--
Chlorobenzene	8260B	ug/kg	4.4	U	4.2	U	--	4.0	U	3.7	U	--
Chloroethane	8260B	ug/kg	4.4	U	4.2	U	--	4.0	U	3.7	U	--
Chloroform	8260B	ug/kg	4.4	U	4.2	U	--	4.0	U	3.7	U	--
Chloromethane	8260B	ug/kg	4.4	U	4.2	U	--	4.0	U	3.7	U	--
Chlorotrifluoroethene	8260B	ug/kg	5.5	U	5.2	U	--	5.0	U	4.7	U	--
cis-1,2-Dichloroethene	8260B	ug/kg	4.4	U	4.2	U	--	4.0	U	3.7	U	--
cis-1,3-Dichloropropene	8260B	ug/kg	4.4	U	4.2	U	--	4.0	U	3.7	U	--
Dibromochloromethane	8260B	ug/kg	4.4	U	4.2	U	--	4.0	U	3.7	U	--
Dibromomethane	8260B	ug/kg	4.4	U	4.2	U	--	4.0	U	3.7	U	--
Dichlorodifluoromethane	8260B	ug/kg	4.4	U	4.2	U	--	4.0	U	3.7	U	--
EFH (C15-C20)	8015M	mg/kg										
EFH (C21-C30)	8015M	mg/kg										
EFH (C30-C40)	8015M	mg/kg										
EFH (C8-C11)	8015M	mg/kg										
Ethylbenzene	8260B	ug/kg	4.4	U	4.2	U	--	4.0	U	3.7	U	--
Freon 113	8260B	ug/kg	4.4	U	4.2	U	--	4.0	U	3.7	U	--
Freon 113a	8260B	ug/kg	5.5	U	5.2	U	--	5.0	U	4.7	U	--
GRO (C5-C12)	8015M	mg/kg										
Hexachlorobutadiene	8260B	ug/kg	4.4	U	4.2	U	--	4.0	U	3.7	U	--
Isopropylbenzene	8260B	ug/kg	4.4	U	4.2	U	--	4.0	U	3.7	U	--
Isopropyltoluene	8260B	ug/kg	4.4	U	4.2	U	--	4.0	U	3.7	U	--
m,p-Xylene	8260B	ug/kg	4.4	U	4.2	U	--	4.0	U	3.7	U	--
Methyl tert-Butyl Ether	8260B	ug/kg	4.4	U	4.2	U	--	4.0	U	3.7	U	--
Methylene chloride	8260B	ug/kg	4.4	UJ	4.2	UJ	--	4.0	U	3.7	U	--
N-Butylbenzene	8260B	ug/kg	4.4	U	4.2	U	--	4.0	U	3.7	U	--
N-Propylbenzene	8260B	ug/kg	4.4	U	4.2	U	--	4.0	U	3.7	U	--
o-Xylene	8260B	ug/kg	4.4	U	4.2	U	--	4.0	U	3.7	U	--
sec-Butylbenzene	8260B	ug/kg	4.4	U	4.2	U	--	4.0	U	3.7	U	--
Styrene	8260B	ug/kg	4.4	U	4.2	U	--	4.0	U	3.7	U	--
tert-Butylbenzene	8260B	ug/kg	4.4	U	4.2	U	--	4.0	U	3.7	U	--
Tetrachloroethene	8260B	ug/kg	4.4	U	4.2	U	--	4.0	U	3.7	U	--
Toluene	8260B	ug/kg	4.4	U	4.2	U	--	4.0	U	3.7	U	--
trans-1,2-Dichloroethene	8260B	ug/kg	4.4	U	4.2	U	--	4.0	U	3.7	U	--
trans-1,3-Dichloropropene	8260B	ug/kg	4.4	U	4.2	U	--	4.0	U	3.7	U	--
Trichloroethene	8260B	ug/kg	4.4	U	4.2	U	--	4.0	U	3.7	U	--
Trichlorofluoromethane	8260B	ug/kg	4.4	U	4.2	U	--	4.0	U	3.7	U	--
Vinyl Chloride	8260B	ug/kg	4.4	U	4.2	U	--	4.0	U	3.7	U	--

Notes:
ug/kg - microgram per kilogram
mg/kg - milligram per kilogram
ng/g - nanogram per kilogram
FD - field duplicate sample
N - normal sample
RPD - relative percent difference
SO - soil
-- - RPD not calculated when both field duplicate and normal samples were nondetect or only one sample result is reported

200* - When one result is nondetect a 200% RPD is given and sample results are qualified as estimated "J" or "UJ" in the field duplicate samples only

Limit - 50% - If RPD is above 50% detected field duplicate results only were estimated "J"

Table C-4 - Subarea 5A Field Duplicate Results

		Location	SL-087-SA5A		SL-087-SA5A		RPD	SL-090-SA5A		SL-090-SA5A		RPD
		Sample Name:	DUP-05-SA5A-QC-022811		SL-087-SA5A-SS-0.0-0.5			DUP-12-SA5A-QC-033011		SL-090-SA5A-SB-4.0-5.0		
		Sample Date	02/28/2011		02/28/2011			03/30/2011		03/30/2011		
		Start Depth:	0		0			4		4		
		End Depth:	0.5		0.5			5		5		
		Area:	5A		5A			5A		5A		
		Matrix:	SO		SO			SO		SO		
		Sample Type:	FD		N			FD		N		
Chemical Name:	Lab Method:	Result Unit										
Aluminum	6010B	mg/kg	17500		18900		-7.69	12600		12000		4.88
Antimony	6020	mg/kg	0.236	J	0.259	J	-9.29	0.190	J	0.212	J	-10.95
Arsenic	6020	mg/kg	7.71	J	7.16	J	7.40	4.09	J	5.19	J	-23.71
Barium	6020	mg/kg	146		142		2.78	77.6		101		-26.20
Beryllium	6020	mg/kg	0.937	J	0.922	J	1.61	0.463		0.564		-19.67
Boron	6010B	mg/kg	6.79		7.26		-6.69	4.01	J	3.32	J	18.83
Cadmium	6020	mg/kg	0.243	J	0.186	J	26.57	0.150		0.219		-37.40
Calcium	6010B	mg/kg	2650		2750		-3.70	3290	J	4050	J	-20.71
Chromium	6020	mg/kg	30.3	J	29.6	J	2.34	15.1	J	16.5	J	-8.86
Chromium VI	7199	mg/kg	0.74	J	0.64	J	14.49	1.1	U	1.1	U	--
Cobalt	6020	mg/kg	7.72	J	7.59	J	1.70	5.06		6.20		-20.25
Copper	6020	mg/kg	11.6	J	9.40	J	20.95	10.7	J	9.72	J	9.60
Cyanide	9012B	mg/kg								0.53	U	
Fluoride	300.0	mg/kg	1.5	J	1.8	J	-18.18	1.9		2.1		-10.00
Iron	6010B	mg/kg	22800		23900		-4.71	20600		19800		3.96
Lead	6020	mg/kg	14.4	J	13.3	J	7.94	6.69		8.70		-26.12
Lithium	6010B	mg/kg	25.0		26.3		-5.07	23.9		24.5		-2.48
Magnesium	6010B	mg/kg	4930		5010		-1.61	4730		4630		2.14
Manganese	6010B	mg/kg	306		304		0.66	283	J	300	J	-5.83
Mercury	7471A	mg/kg	0.0082	J	0.0155	J	-61.60	0.0197	J	0.0556	J	-95.35
Molybdenum	6020	mg/kg	1.07	J	0.738	J	36.73	0.436	J	0.548	J	-22.76
Nickel	6020	mg/kg	18.6	J	17.2	J	7.82	9.30		10.7		-14.00
Nitrate	300.0	mg/kg								1.2	J	--
Percent Moisture	160.3M	%	15.9		14.7		7.84	11.0		9.8		11.54
Perchlorate	314.0	ug/kg	35.7	U	35.2	U	--	33.7	U	33.3	U	--
Perchlorate	6850	ug/kg						5.6	U			--
pH	9045M	pH unit	6.28		6.42		-2.20	8.26		8.26		0.00
Phosphorus	6010B	mg/kg	418		399		4.65	403		371		8.27
Potassium	6010B	mg/kg	3400	J	3310	J	2.68	3280		2910		11.95
Selenium	6020	mg/kg	0.226	J	0.200	J	12.21	0.0916	J	0.108	J	-16.43
Silver	6020	mg/kg	0.0525	J	0.0838	J	-45.93	0.0262	J	0.0322	J	-20.55
Sodium	6010B	mg/kg	67.9	J	76.1	J	-11.39	97.4	J	77.1	J	23.27
Strontium	6010B	mg/kg	19.1		20.1		-5.10	16.8		16.1		4.26
Thallium	6020	mg/kg	0.412	J	0.316	J	26.37	0.220		0.263		-17.81
Tin	6010B	mg/kg	11.7	U	11.4	U	--	11.1	UJ	10.9	UJ	--
Titanium	6010B	mg/kg	1230		1260		-2.41	1280		1180		8.13
Vanadium	6020	mg/kg	56.7		54.8		3.41	33.7	J	33.8	J	-0.30
Zinc	6020	mg/kg	82.8		74.2		10.96	64.2		81.3		-23.51
Zirconium	6010B	mg/kg	1.18	J	1.12	J	5.22	3.25	J	3.74	J	-14.02
1,3,5-Trinitrobenzene	8330A	ug/kg								130	U	--
2,4,6-Trinitrotoluene	8330A	ug/kg								130	U	--
2,4-Diamino-6-nitrotoluene	8330A	ug/kg								260	U	--
2,4-Dinitrotoluene	8330A	ug/kg								130	U	--
2,6-Diamino-4-nitrotoluene	8330A	ug/kg								260	U	--
2,6-Dinitrotoluene	8330A	ug/kg								130	U	--
2-Amino-4,6-Dinitrotoluene	8330A	ug/kg								130	U	--
2-Nitrotoluene	8330A	ug/kg								130	U	--
2-Propanol	8015B	ug/kg								550	U	--
3-Nitrotoluene	8330A	ug/kg								130	U	--
4-Amino-2,6-Dinitrotoluene	8330A	ug/kg								130	U	--
4-Nitrotoluene	8330A	ug/kg								130	U	--
Diethylene Glycol	8015M	mg/kg								14	U	--
Ethanol	8015B	ug/kg								550	U	--
Ethylene Glycol	8015M	mg/kg								14	U	--
Formaldehyde	8315A	ug/kg								1700	U	--
HMX	8330A	ug/kg								330	U	--
m-Dinitrobenzene	8330A	ug/kg								130	U	--
Methanol	8015B	ug/kg								550	U	--
m-Terphenyl	8015B	mg/kg								3.9	U	--
Nitrobenzene	8330A	ug/kg								130	U	--
Nitroglycerin	8330A	ug/kg								2600	U	--
o-Terphenyl	8015B	mg/kg								3.9	U	--
PETN	8330A	ug/kg								2600	U	--
Propylene glycol	8015M	mg/kg								14	U	--
p-Terphenyl	8015B	mg/kg								3.9	U	--
RDX	8330A	ug/kg								130	U	--
Tetryl	8330A	ug/kg								130	U	--
1,2,3,4,6,7,8-HpCDD	1613B	ng/kg	15.8		11.6		30.66	8.87		12.1		-30.81
1,2,3,4,6,7,8-HpCDF	1613B	ng/kg	2.02	J	1.95	J	3.53	2.76	J	2.39	J	14.37
1,2,3,4,7,8,9-HpCDF	1613B	ng/kg	0.195	J	0.184	J	5.80	5.53	U	5.52	U	--
1,2,3,4,7,8-HxCDD	1613B	ng/kg	0.232	J	0.164	J	34.34	5.53	U	5.52	U	--
1,2,3,4,7,8-HxCDF	1613B	ng/kg	0.447	J	0.420	J	6.23	1.02	J	5.52	U	200.00
1,2,3,6,7,8-HxCDD	1613B	ng/kg	0.762	J	0.591	J	25.28	1.04	J	0.868	J	18.03
1,2,3,6,7,8-HxCDF	1613B	ng/kg	0.184	J	0.192	J	-4.26	0.690	J	5.52	U	200.00
1,2,3,7,8,9-HxCDD	1613B	ng/kg	0.697	J	0.596	J	15.62	0.780	J	5.52	U	200.00
1,2,3,7,8,9-HxCDF	1613B	ng/kg	5.95	U	0.209	J	186.43	5.53	U	5.52	U	--
1,2,3,7,8-PeCDD	1613B	ng/kg	0.169	J	0.184	J	-8.50	5.53	UJ	5.52	UJ	--
1,2,3,7,8-PeCDF	1613B	ng/kg	0.331	J	0.383	J	-14.57	5.53	U	5.52	U	--
2,3,4,6,7,8-HxCDF	1613B	ng/kg	0.249	J	5.86	U	200.00	0.694	J	0.551	J	22.97
2,3,4,7,8-PeCDF	1613B	ng/kg	0.480	J	0.422	J	12.86	5.53	U	5.52	U	--
2,3,7,8-TCDD	1613B	ng/kg	1.19	UJ	0.0510	J	200.00	0.0526	J	0.0541	J	-2.81
2,3,7,8-TCDF	1613B	ng/kg	0.378	J	0.331	J	13.26	1.11	U	0.210	J	200.00
Aroclor 1016	8082	ug/kg	2.0	U	2.0	U	--	1.9	U	1.9	U	--
Aroclor 1221	8082	ug/kg	2.0	U	2.0	U	--	1.9	U	1.9	U	--
Aroclor 1232	8082	ug/kg	2.0	U	2.0	U	--	1.9	U	1.9	U	--
Aroclor 1242	8082	ug/kg	2.0	U	2.0	U	--	1.9	U	1.9	U	--
Aroclor 1248	8082	ug/kg	2.0	U	2.0	U	--	1.9	U	1.9	U	--
Aroclor 1254	8082	ug/kg	2.0	U	2.0	U	--	1.7	J	1.9	UJ	200.00
Aroclor 1260	8082	ug/kg	2.0	UJ	0.68	J	200.00	1.9		1.2	J	45.16
Aroclor 1262	8082	ug/kg	2.0	U	2.0	U	--	1.9	U	1.9	U	--
Aroclor 1268	8082	ug/kg	2.0	U	2.0	U	--	1.9	U	1.9	U	--
Aroclor 5432	8082	ug/kg	3.9	U	3.9	U	--	3.7	U	3.6	U	--
Aroclor 5442	8082	ug/kg	3.9	U	3.9	U	--	3.7	U	3.6	U	--
Aroclor 5460	8082	ug/kg	3.9	UJ	1.2	J	200.00	1.7	J	2.2	J	-25.64
OCDD	1613B	ng/kg	291	J	162	J	56.95	55.1		78.4		-34.91
OCDF	1613B	ng/kg	5.44	J	5.94	J	-8.79	2.83	J	3.79	J	-29.00
2,2-Dichlor-Propionic Acid	8151A	ug/kg	11	U	11	U	--					
2,4 DB	8151A	ug/kg	20	J	39	UJ	200.00					
2,4,5-T	8151A	ug/kg	0.20	U	0.20	U	--					
2,4,5-TP	8151A	ug/kg	0.20	U	0.20	U	--					
2,4-D	8151A	ug/kg	4.3	U	4.2	U	--					
4,4'-DDD	8081A	ug/kg	0.40	U	0.40	U	--					
4,4'-DDE	8081A	ug/kg	0.30	J	0.40	UJ	200.00					
4,4'-DDT	8081A	ug/kg	0.40	J	0.40	UJ	200.00					
Aldrin	8081A	ug/kg	0.20	U	0.19	U	--					
Alpha-BHC	8081A	ug/kg	0.20	U	0.19	U	--					
Beta-BHC	8081A	ug/kg	0.20	U	0.19	U	--					
Chlordane	8081A	ug/kg	4.0	U	4.0	U	--					
Delta-BHC	8081A	ug/kg	0.20	U	0.19	U	--					
Dicamba	8151A	ug/kg	1.4	U	1.4	U	--					
Dichlorprop	8151A	ug/kg	1.4	J	3.4	J	-83.33					
Dieldrin	8081A	ug/kg	0.40	U	0.40	U	--					
Dinitrobutyl Phenol	8151A	ug/kg	2.9	U	2.8	UJ	--					
Endosulfan I	8081A	ug/kg	0.20	U	0.19	U	--					
Endosulfan II	8081A	ug/kg	0.40	U	0.40	U	--					
Endosulfan Sulfate	8081A	ug/kg	0.40	U	0.40	U	--					
Endrin	8081A	ug/kg	0.40	U	0.40	U	--					
Endrin Aldehyde	8081A	ug/kg	0.40	U	0.40	U	--					

Table C-4 - Subarea 5A Field Duplicate Results

		Location	SL-087-SA5A		SL-087-SA5A		RPD	SL-090-SA5A		SL-090-SA5A		RPD
		Sample Name:	DUP-05-SA5A-QC-022811		SL-087-SA5A-SS-0.0-0.5			DUP-12-SA5A-QC-033011		SL-090-SA5A-SB-4.0-5.0		
		Sample Date	02/28/2011		02/28/2011			03/30/2011		03/30/2011		
		Start Depth:	0		0			4		4		
		End Depth:	0.5		0.5			5		5		
		Area:	5A		5A			5A		5A		
		Matrix:	SO		SO			SO		SO		
		Sample Type:	FD		N			FD		N		
Endrin Ketone	8081A	ug/kg	0.40	U	0.40	U	--					
Gamma-BHC (Lindane)	8081A	ug/kg	0.20	U	0.19	U	--					
Heptachlor	8081A	ug/kg	0.20	U	0.19	U	--					
Heptachlor Epoxide	8081A	ug/kg	0.20	U	0.19	U	--					
MCPA	8151A	ug/kg	300	U	520	U	--					
MCPP	8151A	ug/kg	300	U	290	U	--					
Methoxychlor	8081A	ug/kg	2.0	U	1.9	U	--					
Mirex	8081A	ug/kg	0.40	U	0.40	U	--					
Toxaphene	8081A	ug/kg	7.8	U	7.7	U	--					
1,2,4-Trichlorobenzene	8270C	ug/kg	200	U	200	U	--	190	U	180	U	--
1,2-Dichlorobenzene	8270C	ug/kg	200	U	200	U	--	190	U	180	U	--
1,2-Diphenylhydrazine	8270C	ug/kg	200	U	200	U	--	190	U	180	U	--
1,3-Dichlorobenzene	8270C	ug/kg	200	U	200	U	--	190	U	180	U	--
1,4-Dichlorobenzene	8270C	ug/kg	200	U	200	U	--	190	U	180	U	--
1-Methylnaphthalene	8270C SIM	ug/kg	2.0	U	1.9	U	--	1.8	U	1.8	U	--
2,4,5-Trichlorophenol	8270C	ug/kg	200	U	200	U	--	190	U	180	U	--
2,4,6-Trichlorophenol	8270C	ug/kg	200	U	200	U	--	190	U	180	U	--
2,4-Dichlorophenol	8270C	ug/kg	200	U	200	U	--	190	U	180	U	--
2,4-Dimethylphenol	8270C	ug/kg	200	U	200	U	--	190	U	180	U	--
2,4-Dinitrophenol	8270C	ug/kg	1200	U	1200	U	--	1100	U	1100	U	--
2,4-Dinitrotoluene	8270C	ug/kg	200	U	200	U	--	190	U	180	U	--
2,6-Dinitrotoluene	8270C	ug/kg	200	U	200	U	--	190	U	180	U	--
2-Chloronaphthalene	8270C	ug/kg	200	U	200	U	--	190	U	180	U	--
2-Chlorophenol	8270C	ug/kg	200	U	200	U	--	190	U	180	U	--
2-Methylnaphthalene	8270C SIM	ug/kg	2.0	U	1.9	U	--	1.8	U	1.8	U	--
2-Methylphenol	8270C	ug/kg	200	U	200	U	--	190	U	180	U	--
2-Nitroaniline	8270C	ug/kg	200	U	200	U	--	190	U	180	U	--
2-Nitrophenol	8270C	ug/kg	200	U	200	U	--	190	U	180	U	--
3,3`-Dichlorobenzidine	8270C	ug/kg	400	U	390	U	--	370	U	360	U	--
3,5-Dimethylphenol	8270C	ug/kg	200	U	200	U	--	190	U	180	U	--
3-Nitroaniline	8270C	ug/kg	200	U	200	U	--	190	U	180	U	--
4,6-Dinitro-2-Methylphenol	8270C	ug/kg	590	U	590	U	--	560	U	550	U	--
4-Bromophenyl Phenyl Ether	8270C	ug/kg	200	U	200	U	--	190	U	180	U	--
4-Chloro-3-Methylphenol	8270C	ug/kg	200	U	200	U	--	190	U	180	U	--
4-Chloroaniline	8270C	ug/kg	200	U	200	U	--	190	U	180	U	--
4-Chlorophenyl Phenylether	8270C	ug/kg	200	U	200	U	--	190	U	180	U	--
4-Methylphenol	8270C	ug/kg	200	U	200	U	--	190	U	180	U	--
4-Nitroaniline	8270C	ug/kg	200	U	200	U	--	190	U	180	U	--
4-Nitrophenol	8270C	ug/kg	590	U	590	U	--	560	U	550	U	--
Acenaphthene	8270C SIM	ug/kg	2.0	UJ	0.78	J	200.00	1.8	U	1.8	U	--
Acenaphthylene	8270C SIM	ug/kg	2.0	UJ	0.67	J	200.00	1.8	U	1.8	U	--
Aniline	8270C	ug/kg	590	U	590	U	--	560	U	550	U	--
Anthracene	8270C SIM	ug/kg	2.0	UJ	1.6	J	200.00	1.8	UJ	1.9	J	200.00
Benzidine	8270C	ug/kg	4000	U	3900	UJ	--	3700	U	3600	U	--
Benzo(a)anthracene	8270C	ug/kg										
Benzo(a)anthracene	8270C SIM	ug/kg	2.0	UJ	2.8	J	200.00	1.8	UJ	2.1	J	200.00
Benzo(a)pyrene	8270C	ug/kg										
Benzo(a)pyrene	8270C SIM	ug/kg	2.0	UJ	3.3	J	200.00	1.8	UJ	1.7	J	200.00
Benzo(b)fluoranthene	8270C	ug/kg										
Benzo(b)fluoranthene	8270C SIM	ug/kg	1.5	J	12	J	-155.56	1.8	UJ	2.0	J	200.00
Benzo(g,h,i)perylene	8270C	ug/kg										
Benzo(g,h,i)perylene	8270C SIM	ug/kg	2.0	UJ	1.4	J	200.00	1.8	UJ	1.4	J	200.00
Benzo(k)fluoranthene	8270C	ug/kg										
Benzo(k)fluoranthene	8270C SIM	ug/kg	2.0	UJ	3.1	J	200.00	1.8	UJ	1.8	J	200.00
Benzoic Acid	8270C	ug/kg	590	U	590	U	--	560	U	550	U	--
Benzyl Alcohol	8270C	ug/kg	590	U	590	U	--	560	U	550	U	--
Bis(2-Chloroethoxy) methane	8270C	ug/kg	200	U	200	U	--	190	U	180	U	--
Bis(2-Chloroethyl) ether	8270C	ug/kg	200	U	200	U	--	190	U	180	U	--
bis(2-Chloroisopropyl) ether	8270C	ug/kg	200	U	200	U	--	190	U	180	U	--
Bis(2-Ethylhexyl) phthalate	8270C	ug/kg						370	U			--
Bis(2-Ethylhexyl) phthalate	8270C SIM	ug/kg	21	UJ	16	J	200.00			11	J	--
Butylbenzylphthalate	8270C	ug/kg										
Butylbenzylphthalate	8270C SIM	ug/kg	21	U	21	U	--	20	U	20	U	--
Carbazole	8270C	ug/kg	200	U	200	U	--	190	U	180	U	--
Chrysene	8270C	ug/kg										
Chrysene	8270C SIM	ug/kg	0.53	J	4.4	J	-157.00	1.8	UJ	2.1	J	200.00
Dibenzo(a,h)anthracene	8270C	ug/kg										
Dibenzo(a,h)anthracene	8270C SIM	ug/kg	2.0	UJ	0.94	J	200.00	1.8	UJ	1.2	J	200.00
Dibenzofuran	8270C	ug/kg	200	U	200	U	--	190	U	180	U	--
Diethylphthalate	8270C	ug/kg										
Diethylphthalate	8270C SIM	ug/kg	21	U	21	U	--	20	U	20	U	--
Dimethylphthalate	8270C	ug/kg										
Dimethylphthalate	8270C SIM	ug/kg	21	U	21	U	--	20	U	20	U	--
Di-n-Butylphthalate	8270C	ug/kg						190	U	180	U	--
Di-n-Butylphthalate	8270C SIM	ug/kg	21	U	21	U	--					
Di-N-Octyl Phthalate	8270C	ug/kg										
Di-N-Octyl Phthalate	8270C SIM	ug/kg	21	UJ	14	J	200.00	20	UJ	25	J	200.00
Fluoranthene	8270C	ug/kg										
Fluoranthene	8270C SIM	ug/kg	2.0	UJ	7.0	J	200.00	1.8	UJ	2.8	J	200.00
Fluorene	8270C SIM	ug/kg	2.0	UJ	1.4	J	200.00	1.8	UJ	1.1	J	200.00
Hexachlorobenzene	8270C	ug/kg	200	U	200	U	--	190	U	180	U	--
Hexachlorobutadiene	8270C	ug/kg	200	U	200	U	--	190	U	180	U	--
Hexachlorocyclopentadiene	8270C	ug/kg	590	U	590	U	--	560	U	550	U	--
Hexachloroethane	8270C	ug/kg	200	U	200	U	--	190	U	180	U	--
Indeno(1,2,3-Cd)Pyrene	8270C	ug/kg										
Indeno(1,2,3-Cd)Pyrene	8270C SIM	ug/kg	2.0	UJ	1.5	J	200.00	1.8	UJ	1.2	J	200.00
Isophorone	8270C	ug/kg	200	U	200	U	--	190	U	180	U	--
Naphthalene	8270C	ug/kg										
Naphthalene	8270C SIM	ug/kg	2.0	U	1.9	U	--	1.8	U	1.8	U	--
Nitrobenzene	8270C	ug/kg	200	U	200	U	--	190	U	180	U	--
N-Nitrosodimethylamine	1625C	ng/kg								366	U	--
N-Nitrosodimethylamine	8270C SIM	ug/kg	2.0	U	1.9	U	--	1.8	U	1.8	U	--
N-Nitroso-Di-N-Propylamine	8270C	ug/kg	200	U	200	U	--	190	U	180	U	--
N-Nitrosodiphenylamine	8270C	ug/kg	200	U	200	U	--	190	U	180	U	--
Pentachlorophenol	8270C	ug/kg	590	U	590	U	--	560	U	550	U	--
Phenanthrene	8270C	ug/kg										
Phenanthrene	8270C SIM	ug/kg	2.0	UJ	3.6	J	200.00	1.8	UJ	2.3	J	200.00
Phenol	8270C	ug/kg	200	U	200	U	--	190	U	180	U	--
Pyrene	8270C	ug/kg										
Pyrene	8270C SIM	ug/kg	2.0	UJ	6.6	J	200.00	1.8	UJ	2.1	J	200.00
1,1,1,2-Tetrachloroethane	8260B	ug/kg						4.4	U	4.0	U	--
1,1,1-Trichloroethane	8260B	ug/kg						4.4	U	4.0	U	--
1,1,2,2-Tetrachloroethane	8260B	ug/kg						4.4	U	4.0	U	--
1,1,2-Trichloroethane	8260B	ug/kg						4.4	U	4.0	U	--
1,1-Dichloroethane	8260B	ug/kg						4.4	U	4.0	U	--
1,1-Dichloroethene	8260B	ug/kg						4.4	U	4.0	U	--
1,1-Dichloropropene	8260B	ug/kg						4.4	U	4.0	U	--
1,2,3-Trichlorobenzene	8260B	ug/kg						4.4	U	4.0	U	--
1,2,3-Trichloropropane	8260B	ug/kg						4.4	U	4.0	U	--
1,2,4-Trichlorobenzene	8260B	ug/kg						4.4	U	4.0	U	--
1,2,4-Trimethylbenzene	8260B	ug/kg						4.4	U	4.0	U	--
1,2-Dibromo-3-chloropropane	8260B	ug/kg						4.4	U	4.0	U	--
1,2-Dibromoethane	8260B	ug/kg						4.4	U	4.0	U	--
1,2-Dichlorobenzene	8260B	ug/kg						4.4	U	4.0	U	--
1,2-Dichloroethane	8260B	ug/kg						4.4	U	4.0	U	--
1,2-Dichloropropane	8260B	ug/kg						4.4	U	4.0	U	--
1,3,5-Trimethylbenzene	8260B	ug/kg						4.4	U	4.0	U	--
1,3-Dichlorobenzene	8260B	ug/kg						4.4	U	4.0	U	--
1,3-Dichloropropane	8260B	ug/kg						4.4	U	4.0	U	--

Table C-4 - Subarea 5A Field Duplicate Results

		Location	SL-087-SA5A		SL-087-SA5A		RPD	SL-090-SA5A		SL-090-SA5A		RPD
		Sample Name:	DUP-05-SA5A-QC-022811		SL-087-SA5A-SS-0.0-0.5			DUP-12-SA5A-QC-033011		SL-090-SA5A-SB-4.0-5.0		
		Sample Date	02/28/2011		02/28/2011			03/30/2011		03/30/2011		
		Start Depth:	0		0			4		4		
		End Depth:	0.5		0.5			5		5		
		Area:	5A		5A			5A		5A		
		Matrix:	SO		SO			SO		SO		
		Sample Type:	FD		N			FD		N		
1,4-Dichlorobenzene	8260B	ug/kg						4.4	U	4.0	U	--
1,4-Dioxane	8260B SIM	ug/kg						14	U	15	U	--
2,2-Dichloropropane	8260B	ug/kg						4.4	U	4.0	U	--
2-Butanone	8260B	ug/kg						8.8	U	7.9	U	--
2-Chloroethyl Vinyl Ether	8260B	ug/kg						4.4	U	4.0	U	--
2-Chlorotoluene	8260B	ug/kg						4.4	U	4.0	U	--
2-Hexanone	8260B	ug/kg						8.8	U	7.9	U	--
4-Chlorotoluene	8260B	ug/kg						4.4	U	4.0	U	--
4-Methyl-2-Pentanone	8260B	ug/kg						8.8	U	7.9	U	--
Acetone	8260B	ug/kg						8.8	U	7.9	U	--
Benzene	8260B	ug/kg						4.4	U	4.0	U	--
Bromobenzene	8260B	ug/kg						4.4	U	4.0	U	--
Bromochloromethane	8260B	ug/kg						4.4	U	4.0	U	--
Bromodichloromethane	8260B	ug/kg						4.4	U	4.0	U	--
Bromoform	8260B	ug/kg						4.4	U	4.0	U	--
Bromomethane	8260B	ug/kg						4.4	U	4.0	U	--
Carbon tetrachloride	8260B	ug/kg						4.4	U	4.0	U	--
Chlorobenzene	8260B	ug/kg						4.4	U	4.0	U	--
Chloroethane	8260B	ug/kg						4.4	U	4.0	U	--
Chloroform	8260B	ug/kg						4.4	U	4.0	U	--
Chloromethane	8260B	ug/kg						4.4	U	4.0	U	--
Chlorotrifluoroethene	8260B	ug/kg						5.5	U	5.0	U	--
cis-1,2-Dichloroethene	8260B	ug/kg						4.4	U	4.0	U	--
cis-1,3-Dichloropropene	8260B	ug/kg						4.4	U	4.0	U	--
Dibromochloromethane	8260B	ug/kg						4.4	U	4.0	U	--
Dibromomethane	8260B	ug/kg						4.4	U	4.0	U	--
Dichlorodifluoromethane	8260B	ug/kg						4.4	U	4.0	U	--
EFH (C15-C20)	8015M	mg/kg								1.3	U	--
EFH (C21-C30)	8015M	mg/kg								5.9		--
EFH (C30-C40)	8015M	mg/kg								29		--
EFH (C8-C11)	8015M	mg/kg								1.3	U	--
Ethylbenzene	8260B	ug/kg						4.4	U	4.0	U	--
Freon 113	8260B	ug/kg						4.4	U	4.0	U	--
Freon 113a	8260B	ug/kg						5.5	U	5.0	U	--
GRO (C5-C12)	8015M	mg/kg								1	U	--
Hexachlorobutadiene	8260B	ug/kg						4.4	U	4.0	U	--
Isopropylbenzene	8260B	ug/kg						4.4	U	4.0	U	--
Isopropyltoluene	8260B	ug/kg						4.4	U	4.0	U	--
m,p-Xylene	8260B	ug/kg						4.4	U	4.0	U	--
Methyl tert-Butyl Ether	8260B	ug/kg						4.4	U	4.0	U	--
Methylene chloride	8260B	ug/kg						4.4	U	4.0	U	--
N-Butylbenzene	8260B	ug/kg						4.4	U	4.0	U	--
N-Propylbenzene	8260B	ug/kg						4.4	U	4.0	U	--
o-Xylene	8260B	ug/kg						4.4	U	4.0	U	--
sec-Butylbenzene	8260B	ug/kg						4.4	U	4.0	U	--
Styrene	8260B	ug/kg						4.4	U	4.0	U	--
tert-Butylbenzene	8260B	ug/kg						4.4	U	4.0	U	--
Tetrachloroethene	8260B	ug/kg						4.4	U	4.0	U	--
Toluene	8260B	ug/kg						4.4	U	4.0	U	--
trans-1,2-Dichloroethene	8260B	ug/kg						4.4	U	4.0	U	--
trans-1,3-Dichloropropene	8260B	ug/kg						4.4	U	4.0	U	--
Trichloroethene	8260B	ug/kg						4.4	U	4.0	U	--
Trichlorofluoromethane	8260B	ug/kg						4.4	U	4.0	U	--
Vinyl Chloride	8260B	ug/kg						4.4	U	4.0	U	--

Notes:
ug/kg - microgram per kilogram
mg/kg - milligram per kilogram
ng/g - nanogram per kilogram
FD - field duplicate sample
N - normal sample
RPD - relative percent difference
SO - soil
-- - RPD not calculated when both field duplicate and normal samples were nondetect or only one sample result is reported

200* - When one result is nondetect a 200% RPD is given and sample results are qualified as estimated "J" or "UJ" in the field duplicate samples only

Limit - 50% - If RPD is above 50% detected field duplicate results only were estimated "J"

Table C-4 - Subarea 5A Field Duplicate Results

		Location	SL-099-SA5A		SL-099-SA5A		RPD	SL-114-SA5A		SL-114-SA5A		RPD
		Sample Name:	DUP01-SA5A-QC-021811		SL-099-SA5A-SS-0.0-0.5			DUP09-SA5A-QC-031111		SL-114-SA5A-SB-4.0-5.0		
		Sample Date	02/18/2011		02/18/2011			03/11/2011		03/11/2011		
		Start Depth:	0		0			4		4		
		End Depth:	0.5		0.5			5		5		
		Area:	5A		5A			5A		5A		
		Matrix:	SO		SO			SO		SO		
		Sample Type:	FD		N			FD		N		
Chemical Name:	Lab Method:	Result Unit										
Aluminum	6010B	mg/kg	17700		16300		8.24	35100		37200		-5.81
Antimony	6020	mg/kg	0.222	UJ	0.212	UJ	--	0.227		0.290		-24.37
Arsenic	6020	mg/kg	7.14	J	6.17	J	14.58	8.98		9.31		-3.61
Barium	6020	mg/kg	142		126		11.94	160		152		5.13
Beryllium	6020	mg/kg	0.942	J	0.774	J	19.58	1.08		0.126	U	200.00
Boron	6010B	mg/kg	2.61	J	2.57	J	1.54	12.4		13.8	J	-10.69
Cadmium	6020	mg/kg	0.220		0.189		15.16	0.383		0.445		-14.98
Calcium	6010B	mg/kg	2460		2300		6.72	18500		35900		-63.97
Chromium	6020	mg/kg	26.9	J	23.1	J	15.20	39.2		44.3		-12.22
Chromium VI	7199	mg/kg	0.27	J	0.58	J	-72.94	0.29		1.3	U	-127.04
Cobalt	6020	mg/kg	10.4	J	17.4	J	-50.36	12.3		10.3		17.70
Copper	6020	mg/kg	11.5	J	10.2	J	11.98	17.7		17.7		0.00
Cyanide	9012B	mg/kg						0.60	U	0.64	U	--
Fluoride	300.0	mg/kg	1.5	J	1.6	J	-6.45	5.2		6.6		-23.73
Iron	6010B	mg/kg	22100		20200		8.98	34500		34200		0.87
Lead	6020	mg/kg	13.9		12.9		7.46	13.2		13.3		-0.75
Lithium	6010B	mg/kg	23.6		21.8		7.93	29.6		33.0	J	-10.86
Magnesium	6010B	mg/kg	4090		3870		5.53	8330		8320	J	0.12
Manganese	6010B	mg/kg	312		298		4.59	388		454		-15.68
Mercury	7471A	mg/kg	0.105	UJ	0.0031	J	200.00	0.0083		0.0091		-9.20
Molybdenum	6020	mg/kg	0.881	J	0.782	J	11.91	0.458		0.350		26.73
Nickel	6020	mg/kg	18.6	J	16.7	J	10.76	29.7		27.7		6.97
Nitrate	300.0	mg/kg						2.0	J	2.2	J	-9.52
Percent Moisture	160.3M	%	9.9		9.4		5.18	17.7	J	22.8		-25.19
Perchlorate	314.0	ug/kg	33.3	U	33.1	U	--	36.5	U	38.9	UJ	--
Perchlorate	6850	ug/kg			5.5	U	--					
pH	9045M	pH unit	6.56		6.93		-5.49	11.5		8.06		35.17
Phosphorus	6010B	mg/kg	341		333		2.37	313		246		23.97
Potassium	6010B	mg/kg	3260	J	3150	J	3.43	3920		3430	J	13.33
Selenium	6020	mg/kg	0.444	U	0.425	U	--	0.162		0.162		0.00
Silver	6020	mg/kg	0.111	UJ	0.106	UJ	--	0.0505		0.0781		-42.92
Sodium	6010B	mg/kg	80.0	J	77.2	J	3.56	211		284	J	-29.49
Strontium	6010B	mg/kg	19.9		18.8		5.68	56.2		67.4	J	-18.12
Thallium	6020	mg/kg	0.111	UJ	0.106	UJ	--	0.441		0.419		5.12
Tin	6010B	mg/kg	11.1	U	10.8	U	--	3.01		3.11	J	-3.27
Titanium	6010B	mg/kg	1070		988		7.97	1530		1570		-2.58
Vanadium	6020	mg/kg	50.7	J	42.5	J	17.60	75.8		82.1		-7.98
Zinc	6020	mg/kg	54.1		54.7		-1.10	89.9		82.1		9.07
Zirconium	6010B	mg/kg	3.40	J	3.42	J	-0.59	5.35		5.57		-4.03
1,3,5-Trinitrobenzene	8330A	ug/kg						140	U	150	U	--
2,4,6-Trinitrotoluene	8330A	ug/kg						140	U	150	U	--
2,4-Diamino-6-nitrotoluene	8330A	ug/kg						290	U	300	U	--
2,4-Dinitrotoluene	8330A	ug/kg						140	U	150	U	--
2,6-Diamino-4-nitrotoluene	8330A	ug/kg						290	UJ	300	U	--
2,6-Dinitrotoluene	8330A	ug/kg						140	U	150	U	--
2-Amino-4,6-Dinitrotoluene	8330A	ug/kg						140	U	150	U	--
2-Nitrotoluene	8330A	ug/kg						140	U	150	U	--
2-Propanol	8015B	ug/kg						610	U	650	U	--
3-Nitrotoluene	8330A	ug/kg						140	U	150	U	--
4-Amino-2,6-Dinitrotoluene	8330A	ug/kg						140	U	150	U	--
4-Nitrotoluene	8330A	ug/kg						140	U	150	U	--
Diethylene Glycol	8015M	mg/kg						15	U	16	U	--
Ethanol	8015B	ug/kg						610	U	650	U	--
Ethylene Glycol	8015M	mg/kg						15	U	16	U	--
Formaldehyde	8315A	ug/kg						1800	U	1900	U	--
HMX	8330A	ug/kg						360	U	380	U	--
m-Dinitrobenzene	8330A	ug/kg						140	U	150	U	--
Methanol	8015B	ug/kg						610	U	650	U	--
m-Terphenyl	8015B	mg/kg						4.3	U	4.5	U	--
Nitrobenzene	8330A	ug/kg						140	U	150	U	--
Nitroglycerin	8330A	ug/kg						2900	UJ	3000	U	--
o-Terphenyl	8015B	mg/kg						4.3	U	4.5	U	--
PETN	8330A	ug/kg						2900	U	3000	U	--
Propylene glycol	8015M	mg/kg						15	U	16	U	--
p-Terphenyl	8015B	mg/kg						4.3	U	4.5	U	--
RDX	8330A	ug/kg						140	U	150	U	--
Tetryl	8330A	ug/kg						140	UJ	150	U	--
1,2,3,4,6,7,8-HpCDD	1613B	ng/kg	112		93.5	J	18.00	6.08	UJ	6.48	UJ	--
1,2,3,4,6,7,8-HpCDF	1613B	ng/kg	25.9		23.4		10.14	6.08	UJ	6.48	UJ	--
1,2,3,4,7,8,9-HpCDF	1613B	ng/kg	2.50	J	2.14	J	15.52	6.08	UJ	6.48	UJ	--
1,2,3,4,7,8-HxCDD	1613B	ng/kg	1.46	J	1.36	J	7.09	0.0675	J	6.48	UJ	200.00
1,2,3,4,7,8-HxCDF	1613B	ng/kg	1.03	J	0.900	J	13.47	6.08	UJ	6.48	UJ	--
1,2,3,6,7,8-HxCDD	1613B	ng/kg	3.09	J	2.82	J	9.14	6.08	UJ	6.48	UJ	--
1,2,3,6,7,8-HxCDF	1613B	ng/kg	0.653	J	0.630	J	3.59	6.08	UJ	6.48	UJ	--
1,2,3,7,8,9-HxCDD	1613B	ng/kg	3.23	J	2.82	J	13.55	6.08	UJ	6.48	UJ	--
1,2,3,7,8,9-HxCDF	1613B	ng/kg	0.222	J	0.268	J	-18.78	6.08	UJ	6.48	UJ	--
1,2,3,7,8-PeCDD	1613B	ng/kg	0.790	J	0.779	J	1.40	6.08	UJ	0.0233	J	200.00
1,2,3,7,8-PeCDF	1613B	ng/kg	0.111	J	0.139	J	-22.40	6.08	UJ	6.48	UJ	--
2,3,4,6,7,8-HxCDF	1613B	ng/kg	1.02	J	0.964	J	5.65	6.08	UJ	6.48	UJ	--
2,3,4,7,8-PeCDF	1613B	ng/kg	0.357	J	0.375	J	-4.92	6.08	UJ	6.48	UJ	--
2,3,7,8-TCDD	1613B	ng/kg	0.121	J	0.121	J	0.00	0.0380	J	0.0178	J	72.40
2,3,7,8-TCDF	1613B	ng/kg	0.162	J	0.188	J	-14.86	1.22	UJ	1.30	UJ	--
Aroclor 1016	8082	ug/kg	1.9	U	1.9	U	--	2.1	U	2.2	U	--
Aroclor 1221	8082	ug/kg	1.9	U	1.9	U	--	2.1	U	2.2	U	--
Aroclor 1232	8082	ug/kg	1.9	U	1.9	U	--	2.1	U	2.2	U	--
Aroclor 1242	8082	ug/kg	1.9	U	1.9	U	--	2.1	U	2.2	U	--
Aroclor 1248	8082	ug/kg	1.9	U	1.9	U	--	2.1	U	2.2	U	--
Aroclor 1254	8082	ug/kg	0.78	J	0.75	J	3.92	2.1	U	2.2	U	--
Aroclor 1260	8082	ug/kg	0.56	J	0.93	J	-49.66	2.1	U	2.2	U	--
Aroclor 1262	8082	ug/kg	1.9	U	1.9	U	--	2.1	UJ	2.2	U	--
Aroclor 1268	8082	ug/kg	1.9	U	1.9	U	--	2.1	U	2.2	U	--
Aroclor 5432	8082	ug/kg	3.7	UJ	3.6	UJ	--	4.0	UJ	4.3	U	--
Aroclor 5442	8082	ug/kg	3.7	UJ	3.6	UJ	--	4.0	U	4.3	U	--
Aroclor 5460	8082	ug/kg	1.6	J	2.0	J	-22.22	4.0	U	4.3	U	--
OCDD	1613B	ng/kg	1540		1130		30.71	12.2	U	2.23	J	200.00
OCDF	1613B	ng/kg	119		94.6		22.85	12.2	UJ	13.0	UJ	--
2,2-Dichlor-Propionic Acid	8151A	ug/kg	10	U	9.9	U	--					
2,4 DB	8151A	ug/kg	2.9	U	4.0	U	--					
2,4,5-T	8151A	ug/kg	0.19	U	0.19	U	--					
2,4,5-TP	8151A	ug/kg	0.19	U	0.57	U	--					
2,4-D	8151A	ug/kg	4.0	U	4.0	U	--					
4,4'-DDD	8081A	ug/kg	0.38	U	0.37	U	--					
4,4'-DDE	8081A	ug/kg	0.14	J	0.081	J	53.39					
4,4'-DDT	8081A	ug/kg	0.42		0.31	J	30.14					
Aldrin	8081A	ug/kg	0.18	U	0.18	U	--					
Alpha-BHC	8081A	ug/kg	0.18	U	0.18	U	--					
Beta-BHC	8081A	ug/kg	0.18	U	0.18	U	--					
Chlordane	8081A	ug/kg	3.8	U	3.7	U	--					
Delta-BHC	8081A	ug/kg	0.18	U	0.18	U	--					
Dicamba	8151A	ug/kg	1.3	U	1.3	U	--					
Dichlorprop	8151A	ug/kg	1.9	U	1.9	U	--					
Dieldrin	8081A	ug/kg	0.38	U	0.37	U	--					
Dinitrobutyl Phenol	8151A	ug/kg	2.7	U	2.6	U	--					
Endosulfan I	8081A	ug/kg	0.18	U	0.18	U	--					
Endosulfan II	8081A	ug/kg	0.38	U	0.37	U	--					
Endosulfan Sulfate	8081A	ug/kg	0.38	U	0.37	U	--					
Endrin	8081A	ug/kg	0.38	U	0.37	U	--					
Endrin Aldehyde	8081A	ug/kg	0.11	J	0.37	UJ	200.00					

Table C-4 - Subarea 5A Field Duplicate Results

		Location	SL-099-SA5A		SL-099-SA5A		RPD	SL-114-SA5A		SL-114-SA5A		RPD
		Sample Name:	DUP01-SA5A-QC-021811		SL-099-SA5A-SS-0.0-0.5			DUP09-SA5A-QC-031111		SL-114-SA5A-SB-4.0-5.0		
		Sample Date	02/18/2011		02/18/2011			03/11/2011		03/11/2011		
		Start Depth:	0		0			4		4		
		End Depth:	0.5		0.5			5		5		
		Area:	5A		5A			5A		5A		
		Matrix:	SO		SO			SO		SO		
		Sample Type:	FD		N			FD		N		
Endrin Ketone	8081A	ug/kg	0.13	J	0.37	UJ	200.00					
Gamma-BHC (Lindane)	8081A	ug/kg	0.18	U	0.18	U	--					
Heptachlor	8081A	ug/kg	0.18	U	0.18	U	--					
Heptachlor Epoxide	8081A	ug/kg	0.18	U	0.18	U	--					
MCPA	8151A	ug/kg	280	UJ	550	J	200.00					
MCPP	8151A	ug/kg	280	U	280	U	--					
Methoxychlor	8081A	ug/kg	1.8	U	1.8	U	--					
Mirex	8081A	ug/kg	0.38	U	0.37	U	--					
Toxaphene	8081A	ug/kg	7.3	U	7.3	U	--					
1,2,4-Trichlorobenzene	8270C	ug/kg	180	U	180	U	--	200	UJ	220	U	--
1,2-Dichlorobenzene	8270C	ug/kg	180	U	180	U	--	200	U	220	U	--
1,2-Diphenylhydrazine	8270C	ug/kg	180	U	180	U	--	200	U	220	U	--
1,3-Dichlorobenzene	8270C	ug/kg	180	U	180	U	--	200	U	220	U	--
1,4-Dichlorobenzene	8270C	ug/kg	180	U	180	U	--	200	U	220	UJ	--
1-Methylnaphthalene	8270C SIM	ug/kg	1.8	U	1.8	U	--	2.0	U	2.2	U	--
2,4,5-Trichlorophenol	8270C	ug/kg	180	U	180	U	--	200	U	220	U	--
2,4,6-Trichlorophenol	8270C	ug/kg	180	U	180	U	--	200	U	220	U	--
2,4-Dichlorophenol	8270C	ug/kg	180	U	180	U	--	200	U	220	U	--
2,4-Dimethylphenol	8270C	ug/kg	180	U	180	U	--	200	U	220	U	--
2,4-Dinitrophenol	8270C	ug/kg	1100	U	1100	U	--	1200	U	1300	U	--
2,4-Dinitrotoluene	8270C	ug/kg	180	U	180	U	--	200	U	220	U	--
2,6-Dinitrotoluene	8270C	ug/kg	180	U	180	U	--	200	U	220	U	--
2-Chloronaphthalene	8270C	ug/kg	180	U	180	U	--	200	U	220	UJ	--
2-Chlorophenol	8270C	ug/kg	180	U	180	U	--	200	U	220	U	--
2-Methylnaphthalene	8270C SIM	ug/kg	1.8	U	1.8	U	--	2.0	U	2.2	U	--
2-Methylphenol	8270C	ug/kg	180	U	180	U	--	200	U	220	U	--
2-Nitroaniline	8270C	ug/kg	180	U	180	U	--	200	U	220	U	--
2-Nitrophenol	8270C	ug/kg	180	U	180	U	--	200	U	220	U	--
3,3`-Dichlorobenzidine	8270C	ug/kg	370	U	360	U	--	410	U	430	U	--
3,5-Dimethylphenol	8270C	ug/kg	180	U	180	U	--	200	U	220	U	--
3-Nitroaniline	8270C	ug/kg	180	U	180	U	--	200	U	220	U	--
4,6-Dinitro-2-Methylphenol	8270C	ug/kg	550	U	540	U	--	610	U	650	U	--
4-Bromophenyl Phenyl Ether	8270C	ug/kg	180	U	180	U	--	200	U	220	U	--
4-Chloro-3-Methylphenol	8270C	ug/kg	180	U	180	U	--	200	U	220	U	--
4-Chloroaniline	8270C	ug/kg	180	U	180	U	--	200	U	220	UJ	--
4-Chlorophenyl Phenylether	8270C	ug/kg	180	U	180	U	--	200	U	220	U	--
4-Methylphenol	8270C	ug/kg	180	U	180	U	--	200	U	220	U	--
4-Nitroaniline	8270C	ug/kg	180	U	180	U	--	200	U	220	U	--
4-Nitrophenol	8270C	ug/kg	550	U	540	U	--	610	U	650	U	--
Acenaphthene	8270C SIM	ug/kg	1.8	U	1.8	U	--	2.0	U	2.2	U	--
Acenaphthylene	8270C SIM	ug/kg	1.8	U	1.8	U	--	2.0	U	2.2	U	--
Aniline	8270C	ug/kg	550	U	540	U	--	610	U	650	U	--
Anthracene	8270C SIM	ug/kg	1.8	U	1.8	U	--	2.0	U	2.2	U	--
Benzidine	8270C	ug/kg	3700	U	3600	R	--	4100	U	4300	U	--
Benzo(a)anthracene	8270C	ug/kg										
Benzo(a)anthracene	8270C SIM	ug/kg	1.8	U	1.8	U	--	2.0	U	2.2	U	--
Benzo(a)pyrene	8270C	ug/kg										
Benzo(a)pyrene	8270C SIM	ug/kg	1.8	U	1.8	U	--	2.0	UJ	2.2	U	--
Benzo(b)fluoranthene	8270C	ug/kg										
Benzo(b)fluoranthene	8270C SIM	ug/kg	1.1	J	0.92	J	17.82	2.0	U	2.2	U	--
Benzo(g,h,i)perylene	8270C	ug/kg										
Benzo(g,h,i)perylene	8270C SIM	ug/kg	0.79	J	0.92	J	-15.20	2.0	U	2.2	U	--
Benzo(k)fluoranthene	8270C	ug/kg										
Benzo(k)fluoranthene	8270C SIM	ug/kg	1.8	U	1.8	U	--	2.0	U	2.2	U	--
Benzoic Acid	8270C	ug/kg	550	U	540	U	--	610	U	650	U	--
Benzyl Alcohol	8270C	ug/kg	550	U	540	U	--	610	U	650	U	--
Bis(2-Chloroethoxy) methane	8270C	ug/kg	180	U	180	U	--	200	U	220	U	--
Bis(2-Chloroethyl) ether	8270C	ug/kg	180	U	180	U	--	200	U	220	U	--
bis(2-Chloroisopropyl) ether	8270C	ug/kg	180	U	180	U	--	200	U	220	U	--
Bis(2-Ethylhexyl) phthalate	8270C	ug/kg										
Bis(2-Ethylhexyl) phthalate	8270C SIM	ug/kg	13	J	350	J	-185.67	22	U	23	U	--
Butylbenzylphthalate	8270C	ug/kg										
Butylbenzylphthalate	8270C SIM	ug/kg	9.9	J	20	UJ	200.00	22	UJ	23	U	--
Carbazole	8270C	ug/kg	180	U	180	U	--	200	U	220	U	--
Chrysene	8270C	ug/kg										
Chrysene	8270C SIM	ug/kg	1.1	J	1.0	J	9.52	2.0	U	2.2	U	--
Dibenzo(a,h)anthracene	8270C	ug/kg										
Dibenzo(a,h)anthracene	8270C SIM	ug/kg	1.8	U	1.8	U	--	2.0	U	2.2	U	--
Dibenzofuran	8270C	ug/kg	180	U	180	U	--	200	U	220	UJ	--
Diethylphthalate	8270C	ug/kg										
Diethylphthalate	8270C SIM	ug/kg	20	U	20	U	--	22	U	23	U	--
Dimethylphthalate	8270C	ug/kg										
Dimethylphthalate	8270C SIM	ug/kg	20	U	20	U	--	22	U	23	U	--
Di-n-Butylphthalate	8270C	ug/kg	180	U			--	200	U	220	U	--
Di-n-Butylphthalate	8270C SIM	ug/kg			20	U	--					
Di-N-Octyl Phthalate	8270C	ug/kg						200	U			--
Di-N-Octyl Phthalate	8270C SIM	ug/kg	20	U	20	U	--			23	U	--
Fluoranthene	8270C	ug/kg										
Fluoranthene	8270C SIM	ug/kg	1.2	J	0.74	J	47.42	2.0	U	2.2	U	--
Fluorene	8270C SIM	ug/kg	1.8	U	1.8	U	--	2.0	UJ	2.2	U	--
Hexachlorobenzene	8270C	ug/kg	180	U	180	U	--	200	U	220	U	--
Hexachlorobutadiene	8270C	ug/kg	180	U	180	U	--	200	U	220	U	--
Hexachlorocyclopentadiene	8270C	ug/kg	550	U	540	U	--	610	U	650	UJ	--
Hexachloroethane	8270C	ug/kg	180	U	180	U	--	200	U	220	U	--
Indeno(1,2,3-Cd)Pyrene	8270C	ug/kg										
Indeno(1,2,3-Cd)Pyrene	8270C SIM	ug/kg	1.8	U	1.8	U	--	2.0	U	2.2	U	--
Isophorone	8270C	ug/kg	180	U	180	U	--	200	U	220	U	--
Naphthalene	8270C	ug/kg			180	U	--					
Naphthalene	8270C SIM	ug/kg	1.8	U			--	2.0	U	2.2	U	--
Nitrobenzene	8270C	ug/kg	180	U	180	U	--	200	U	220	U	--
N-Nitrosodimethylamine	1625C	ng/kg						405	U	432	UJ	--
N-Nitrosodimethylamine	8270C SIM	ug/kg	1.8	U	1.8	U	--	2.0	U	2.2	U	--
N-Nitroso-Di-N-Propylamine	8270C	ug/kg	180	U	180	U	--	200	U	220	U	--
N-Nitrosodiphenylamine	8270C	ug/kg	180	U	180	U	--	200	U	220	U	--
Pentachlorophenol	8270C	ug/kg	550	U	540	U	--	610	U	650	U	--
Phenanthrene	8270C	ug/kg										
Phenanthrene	8270C SIM	ug/kg	0.82	J	1.8	UJ	200.00	2.0	UJ	2.2	U	--
Phenol	8270C	ug/kg	180	U	180	U	--	200	U	220	U	--
Pyrene	8270C	ug/kg										
Pyrene	8270C SIM	ug/kg	1.0	J	0.74	J	29.89	2.0	U	2.2	U	--
1,1,1,2-Tetrachloroethane	8260B	ug/kg						4.1	U	4.9	U	--
1,1,1-Trichloroethane	8260B	ug/kg						4.1	U	4.9	U	--
1,1,2,2-Tetrachloroethane	8260B	ug/kg						4.1	U	4.9	U	--
1,1,2-Trichloroethane	8260B	ug/kg						4.1	U	4.9	U	--
1,1-Dichloroethane	8260B	ug/kg						4.1	U	4.9	U	--
1,1-Dichloroethene	8260B	ug/kg						4.1	U	4.9	U	--
1,1-Dichloropropene	8260B	ug/kg						4.1	U	4.9	U	--
1,2,3-Trichlorobenzene	8260B	ug/kg						4.1	U	4.9	UJ	--
1,2,3-Trichloropropane	8260B	ug/kg						4.1	U	4.9	U	--
1,2,4-Trichlorobenzene	8260B	ug/kg						4.1	U	4.9	U	--
1,2,4-Trimethylbenzene	8260B	ug/kg						4.1	U	4.9	U	--
1,2-Dibromo-3-chloropropane	8260B	ug/kg						4.1	U	4.9	U	--
1,2-Dibromoethane	8260B	ug/kg						4.1	UJ	4.9	U	--
1,2-Dichlorobenzene	8260B	ug/kg						4.1	U	4.9	U	--
1,2-Dichloroethane	8260B	ug/kg						4.1	UJ	4.9	U	--
1,2-Dichloropropane	8260B	ug/kg						4.1	U	4.9	U	--
1,3,5-Trimethylbenzene	8260B	ug/kg						4.1	UJ	4.9	U	--
1,3-Dichlorobenzene	8260B	ug/kg						4.1	U	4.9	U	--
1,3-Dichloropropane	8260B	ug/kg						4.1	U	4.9	UJ	--

Table C-4 - Subarea 5A Field Duplicate Results

		Location	SL-099-SA5A		SL-099-SA5A		RPD	SL-114-SA5A		SL-114-SA5A		RPD
		Sample Name:	DUP01-SA5A-QC-021811		SL-099-SA5A-SS-0.0-0.5			DUP09-SA5A-QC-031111		SL-114-SA5A-SB-4.0-5.0		
		Sample Date	02/18/2011		02/18/2011			03/11/2011		03/11/2011		
		Start Depth:	0		0			4		4		
		End Depth:	0.5		0.5			5		5		
		Area:	5A		5A			5A		5A		
		Matrix:	SO		SO			SO		SO		
		Sample Type:	FD		N			FD		N		
1,4-Dichlorobenzene	8260B	ug/kg						4.1	U	4.9	U	--
1,4-Dioxane	8260B SIM	ug/kg						17	U	17	U	--
2,2-Dichloropropane	8260B	ug/kg						4.1	U	4.9	U	--
2-Butanone	8260B	ug/kg						8.3	U	9.7	U	--
2-Chloroethyl Vinyl Ether	8260B	ug/kg						4.1	U	4.9	U	--
2-Chlorotoluene	8260B	ug/kg						4.1	U	4.9	U	--
2-Hexanone	8260B	ug/kg						8.3	U	9.7	U	--
4-Chlorotoluene	8260B	ug/kg						4.1	UJ	4.9	U	--
4-Methyl-2-Pentanone	8260B	ug/kg						8.3	UJ	9.7	U	--
Acetone	8260B	ug/kg						8.3	U	9.7	U	--
Benzene	8260B	ug/kg						4.1	U	4.9	U	--
Bromobenzene	8260B	ug/kg						4.1	U	4.9	U	--
Bromochloromethane	8260B	ug/kg						4.1	U	4.9	U	--
Bromodichloromethane	8260B	ug/kg						4.1	U	4.9	U	--
Bromoform	8260B	ug/kg						4.1	U	4.9	U	--
Bromomethane	8260B	ug/kg						4.1	U	4.9	U	--
Carbon tetrachloride	8260B	ug/kg						4.1	U	4.9	U	--
Chlorobenzene	8260B	ug/kg						4.1	U	4.9	U	--
Chloroethane	8260B	ug/kg						4.1	U	4.9	U	--
Chloroform	8260B	ug/kg						4.1	U	4.9	U	--
Chloromethane	8260B	ug/kg						4.1	U	4.9	U	--
Chlorotrifluoroethene	8260B	ug/kg						5.2	U	6.1	UJ	--
cis-1,2-Dichloroethene	8260B	ug/kg						4.1	U	4.9	U	--
cis-1,3-Dichloropropene	8260B	ug/kg						4.1	UJ	4.9	U	--
Dibromochloromethane	8260B	ug/kg						4.1	U	4.9	U	--
Dibromomethane	8260B	ug/kg						4.1	U	4.9	U	--
Dichlorodifluoromethane	8260B	ug/kg						4.1	U	4.9	U	--
EFH (C15-C20)	8015M	mg/kg						1.4	U	2.0		200.00
EFH (C21-C30)	8015M	mg/kg						1.0		7.3		-151.81
EFH (C30-C40)	8015M	mg/kg						2.9		29		-163.64
EFH (C8-C11)	8015M	mg/kg						1.4	U	1.6	U	--
Ethylbenzene	8260B	ug/kg						4.1	UJ	4.9	U	--
Freon 113	8260B	ug/kg						4.1	U	4.9	U	--
Freon 113a	8260B	ug/kg						5.2	U	6.1	U	--
GRO (C5-C12)	8015M	mg/kg						1.0	U	1.2	U	--
Hexachlorobutadiene	8260B	ug/kg						4.1	U	4.9	U	--
Isopropylbenzene	8260B	ug/kg						4.1	U	4.9	U	--
Isopropyltoluene	8260B	ug/kg						4.1	U	4.9	U	--
m,p-Xylene	8260B	ug/kg						4.1	U	4.9	U	--
Methyl tert-Butyl Ether	8260B	ug/kg						4.1	U	4.9	U	--
Methylene chloride	8260B	ug/kg						0.78		1.0		-24.72
N-Butylbenzene	8260B	ug/kg						4.1	UJ	4.9	U	--
N-Propylbenzene	8260B	ug/kg						4.1	U	4.9	U	--
o-Xylene	8260B	ug/kg						4.1	U	4.9	U	--
sec-Butylbenzene	8260B	ug/kg						4.1	U	4.9	U	--
Styrene	8260B	ug/kg						4.1	U	4.9	U	--
tert-Butylbenzene	8260B	ug/kg						4.1	U	4.9	U	--
Tetrachloroethene	8260B	ug/kg						4.1	U	4.9	UJ	--
Toluene	8260B	ug/kg						4.1	UJ	4.9	U	--
trans-1,2-Dichloroethene	8260B	ug/kg						4.1	U	4.9	U	--
trans-1,3-Dichloropropene	8260B	ug/kg						4.1	U	4.9	U	--
Trichloroethene	8260B	ug/kg						4.1	U	4.9	U	--
Trichlorofluoromethane	8260B	ug/kg						4.1	U	4.9	U	--
Vinyl Chloride	8260B	ug/kg						4.1	U	4.9	U	--

Notes:
ug/kg - microgram per kilogram
mg/kg - milligram per kilogram
ng/g - nanogram per kilogram
FD - field duplicate sample
N - normal sample
RPD - relative percent difference
SO - soil
-- - RPD not calculated when both field duplicate and normal samples were nondetect or only one sample result is reported

200* - When one result is nondetect a 200% RPD is given and sample results are qualified as estimated "J" or "UJ" in the field duplicate samples only

Limit - 50% - If RPD is above 50% detected field duplicate results only were estimated "J"

Table C-4 - Subarea 5A Field Duplicate Results

		Location	SL-148-SA5A		SL-148-SA5A		RPD	SL-181-SA5A		SL-181-SA5A		RPD
		Sample Name:	DUP15-SA5A-QC-042011		SL-148-SA5A-SB-4.0-5.0			DUP-02-SA5A-QC-022211		SL-181-SA5A-SS-0.0-0.5		
		Sample Date	04/20/2011		04/20/2011			02/22/2011		02/22/2011		
		Start Depth:	4		4			0		0		
		End Depth:	5		5			0.5		0.5		
		Area:	5A		5A			5A		5A		
		Matrix:	SO		SO			SO		SO		
		Sample Type:	FD		N			FD		N		
Chemical Name:	Lab Method:	Result Unit										
Aluminum	6010B	mg/kg	19100		19000		0.52	13500		15500		-13.79
Antimony	6020	mg/kg	0.151	J	0.191	J	-23.39	0.216	J	0.191	J	12.29
Arsenic	6020	mg/kg	4.35	J	4.37	J	-0.46	4.95	J	4.54	J	8.64
Barium	6020	mg/kg	108		108		0.00	107		100		6.76
Beryllium	6020	mg/kg	0.670		0.703		-4.81	0.523		0.555		-5.94
Boron	6010B	mg/kg	1.01	J	1.92	J	-62.12	2.80	J	3.28	J	-15.79
Cadmium	6020	mg/kg	0.0645	J	0.108	UJ	200.00	0.625		0.540		14.59
Calcium	6010B	mg/kg	2070		2020		2.44	4260		4390		-3.01
Chromium	6020	mg/kg	17.0	J	17.9	J	-5.16	20.4	J	22.7	J	-10.67
Chromium VI	7199	mg/kg	0.54	J	0.39	J	32.26	2.3	J	0.42	J	138.24
Cobalt	6020	mg/kg	6.11	J	6.36	J	-4.01	5.79	J	5.50	J	5.14
Copper	6020	mg/kg	7.87	J	7.21	J	8.75	12.8		12.9		-0.78
Cyanide	9012B	mg/kg	0.54	U	0.56	U	--					
Fluoride	300.0	mg/kg	1.6	J	1.4	J	13.33	1.3	J	1.3	J	0.00
Iron	6010B	mg/kg	20600		19900		3.46	18700		20900		-11.11
Lead	6020	mg/kg	5.26	J	5.29	J	-0.57	12.4	J	12.7	J	-2.39
Lithium	6010B	mg/kg	24.3		23.8		2.08	22.7	J	19.4	J	15.68
Magnesium	6010B	mg/kg	4200		4080		2.90	4160		4870		-15.73
Manganese	6010B	mg/kg	355		303		15.81	294		312		-5.94
Mercury	7471A	mg/kg	0.0099	J	0.0196	J	-65.76	0.0576	J	0.0595	J	-3.25
Molybdenum	6020	mg/kg	0.600		0.625		-4.08	0.463		0.481		-3.81
Nickel	6020	mg/kg	12.2	J	12.3	J	-0.82	12.4	J	12.5	J	-0.80
Nitrate	300.0	mg/kg	1.2	J	1.2	J	0.00					
Percent Moisture	160.3M	%	10.4		10.8		-3.77	13.1		14.2		-8.06
Perchlorate	314.0	ug/kg	33.5	U	33.6	U	--	34.5	U	35.0	U	--
Perchlorate	6850	ug/kg										
pH	9045M	pH unit	7.10		6.49		8.98	7.71		7.85		-1.80
Phosphorus	6010B	mg/kg	239		234		2.11	518	J	438	J	16.74
Potassium	6010B	mg/kg	2510	J	2360	J	6.16	2580		3030		-16.04
Selenium	6020	mg/kg	0.124	J	0.124	J	0.00	0.144	J	0.136	J	5.71
Silver	6020	mg/kg	0.0421	J	0.0367	J	13.71	0.183		0.186		-1.63
Sodium	6010B	mg/kg	109	J	116		-6.22	113		101	J	11.21
Strontium	6010B	mg/kg	20.7		21.2		-2.39	24.9		23.2		7.07
Thallium	6020	mg/kg	0.289		0.260		10.56	0.238		0.267		-11.49
Tin	6010B	mg/kg	11.1	U	10.9	U	--	11.3	U	11.5	U	--
Titanium	6010B	mg/kg	1160		1110		4.41	965		1090		-12.17
Vanadium	6020	mg/kg	33.7	J	35.7	J	-5.76	36.4	J	35.4	J	2.79
Zinc	6020	mg/kg	48.4		50.4		-4.05	79.0		85.9		-8.37
Zirconium	6010B	mg/kg	1.61	J	1.70	J	-5.44	3.38	J	4.41	J	-26.44
1,3,5-Trinitrobenzene	8330A	ug/kg	130	U	130	U	--					
2,4,6-Trinitrotoluene	8330A	ug/kg	130	U	130	U	--					
2,4-Diamino-6-nitrotoluene	8330A	ug/kg	270	U	270	U	--					
2,4-Dinitrotoluene	8330A	ug/kg	130	U	130	U	--					
2,6-Diamino-4-nitrotoluene	8330A	ug/kg	270	U	270	U	--					
2,6-Dinitrotoluene	8330A	ug/kg	130	U	130	U	--					
2-Amino-4,6-Dinitrotoluene	8330A	ug/kg	130	U	130	U	--					
2-Nitrotoluene	8330A	ug/kg	130	U	130	U	--					
2-Propanol	8015B	ug/kg	560	U	560	U	--					
3-Nitrotoluene	8330A	ug/kg	130	U	130	U	--					
4-Amino-2,6-Dinitrotoluene	8330A	ug/kg	130	U	130	U	--					
4-Nitrotoluene	8330A	ug/kg	130	U	130	U	--					
Diethylene Glycol	8015M	mg/kg	14	U	14	UJ	--					
Ethanol	8015B	ug/kg	560	U	560	U	--					
Ethylene Glycol	8015M	mg/kg	14	U	14	U	--					
Formaldehyde	8315A	ug/kg	1700	U	1700	U	--					
HMX	8330A	ug/kg	330	U	340	U	--					
m-Dinitrobenzene	8330A	ug/kg	130	U	130	U	--					
Methanol	8015B	ug/kg	560	U	560	U	--					
m-Terphenyl	8015B	mg/kg	3.9	U	3.9	U	--					
Nitrobenzene	8330A	ug/kg	130	U	130	U	--					
Nitroglycerin	8330A	ug/kg	2700	U	2700	U	--					
o-Terphenyl	8015B	mg/kg	3.9	U	3.9	U	--					
PETN	8330A	ug/kg	2700	U	2700	U	--					
Propylene glycol	8015M	mg/kg	14	U	14	U	--					
p-Terphenyl	8015B	mg/kg	3.9	U	3.9	U	--					
RDX	8330A	ug/kg	130	U	130	U	--					
Tetryl	8330A	ug/kg	130	U	130	U	--					
1,2,3,4,6,7,8-HpCDD	1613B	ng/kg	5.32	U	5.53	U	--	130		123		5.53
1,2,3,4,6,7,8-HpCDF	1613B	ng/kg	5.32	UJ	5.53	UJ	--	16.1		18.3		-12.79
1,2,3,4,7,8,9-HpCDF	1613B	ng/kg	5.32	UJ	5.53	UJ	--	1.21	J	1.30	J	-7.17
1,2,3,4,7,8-HxCDD	1613B	ng/kg	5.32	UJ	5.53	UJ	--	0.722	J	1.52	J	-71.19
1,2,3,4,7,8-HxCDF	1613B	ng/kg	5.32	UJ	5.53	UJ	--	2.01	J	2.42	J	-18.51
1,2,3,6,7,8-HxCDD	1613B	ng/kg	5.32	U	5.53	U	--	6.72		5.39	J	21.97
1,2,3,6,7,8-HxCDF	1613B	ng/kg	5.32	UJ	5.53	UJ	--	1.06	J	1.74	J	-48.57
1,2,3,7,8,9-HxCDD	1613B	ng/kg	5.32	UJ	5.53	UJ	--	2.81	J	2.51	J	11.28
1,2,3,7,8,9-HxCDF	1613B	ng/kg	5.32	UJ	5.53	UJ	--	0.560	J	0.592	J	-5.56
1,2,3,7,8-PeCDD	1613B	ng/kg	5.32	U	5.53	U	--	0.549	J	0.642	J	-15.62
1,2,3,7,8-PeCDF	1613B	ng/kg	5.32	U	5.53	U	--	0.741	J	0.343	J	73.43
2,3,4,6,7,8-HxCDF	1613B	ng/kg	5.32	UJ	5.53	UJ	--	1.13	J	1.42	J	-22.75
2,3,4,7,8-PeCDF	1613B	ng/kg	5.32	U	5.53	U	--	1.42	J	1.60	J	-11.92
2,3,7,8-TCDD	1613B	ng/kg	0.0255	J	1.11	UJ	200.00	0.104	J	0.0990	J	4.93
2,3,7,8-TCDF	1613B	ng/kg	1.06	U	1.11	U	--	1.06	J	1.35		-24.07
Aroclor 1016	8082	ug/kg	1.9	U	1.9	U	--	9.8	U	4.0	U	--
Aroclor 1221	8082	ug/kg	1.9	U	1.9	U	--	9.8	U	4.0	U	--
Aroclor 1232	8082	ug/kg	1.9	U	1.9	U	--	9.8	U	4.0	U	--
Aroclor 1242	8082	ug/kg	1.9	U	1.9	U	--	9.8	U	4.0	U	--
Aroclor 1248	8082	ug/kg	1.9	U	1.9	U	--	9.8	U	4.0	U	--
Aroclor 1254	8082	ug/kg	1.9	U	1.9	U	--	35	J	28	J	22.22
Aroclor 1260	8082	ug/kg	1.9	U	1.9	U	--	21	J	17	J	21.05
Aroclor 1262	8082	ug/kg	1.9	U	1.9	U	--	9.8	U	4.0	U	--
Aroclor 1268	8082	ug/kg	1.9	U	1.9	U	--	9.8	U	4.0	U	--
Aroclor 5432	8082	ug/kg	3.7	U	3.7	U	--	19	UJ	7.7	U	--
Aroclor 5442	8082	ug/kg	3.7	U	3.7	U	--	19	UJ	7.7	U	--
Aroclor 5460	8082	ug/kg	3.7	U	3.7	U	--	200	J	21	J	161.99
OCDD	1613B	ng/kg	10.6	U	11.1	U	--	1280		1300		-1.55
OCDF	1613B	ng/kg	10.6	UJ	11.1	UJ	--	39.5		41.6		-5.18
2,2-Dichlor-Propionic Acid	8151A	ug/kg						10	U	10	U	--
2,4 DB	8151A	ug/kg						2.0	U	2.0	U	--
2,4,5-T	8151A	ug/kg						0.20	U	0.20	U	--
2,4,5-TP	8151A	ug/kg						0.20	U	0.20	U	--
2,4-D	8151A	ug/kg						4.1	U	4.2	U	--
4,4'-DDD	8081A	ug/kg						2.2	U	0.40	U	--
4,4'-DDE	8081A	ug/kg						0.64	U	0.55	U	--
4,4'-DDT	8081A	ug/kg						2.7	U	2.1	U	--
Aldrin	8081A	ug/kg						0.19	U	0.19	U	--
Alpha-BHC	8081A	ug/kg						0.19	U	0.19	U	--
Beta-BHC	8081A	ug/kg						0.24		0.26	J	-8.00
Chlordane	8081A	ug/kg						3.9	U	4.0	U	--
Delta-BHC	8081A	ug/kg						0.19	U	0.19	U	--
Dicamba	8151A	ug/kg						1.4	U	1.4	U	--
Dichlorprop	8151A	ug/kg						2.0	U	2.0	U	--
Dieldrin	8081A	ug/kg						0.70	U	0.55	U	--
Dinitrobutyl Phenol	8151A	ug/kg						2.8	U	2.8	U	--
Endosulfan I	8081A	ug/kg						0.19	U	0.19	R	--
Endosulfan II	8081A	ug/kg						0.39	U	0.40	U	--
Endosulfan Sulfate	8081A	ug/kg						0.39	U	0.40	U	--
Endrin	8081A	ug/kg						0.39	U	0.40	R	--
Endrin Aldehyde	8081A	ug/kg						0.40	U	0.40	U	--

Table C-4 - Subarea 5A Field Duplicate Results

		Location	SL-148-SA5A		SL-148-SA5A		RPD	SL-181-SA5A		SL-181-SA5A		RPD
		Sample Name:	DUP15-SA5A-QC-042011		SL-148-SA5A-SB-4.0-5.0			DUP-02-SA5A-QC-022211		SL-181-SA5A-SS-0.0-0.5		
		Sample Date	04/20/2011		04/20/2011			02/22/2011		02/22/2011		
		Start Depth:	4		4			0		0		
		End Depth:	5		5			0.5		0.5		
		Area:	5A		5A			5A		5A		
		Matrix:	SO		SO			SO		SO		
		Sample Type:	FD		N			FD		N		
Endrin Ketone	8081A	ug/kg						0.39	U	0.40	U	--
Gamma-BHC (Lindane)	8081A	ug/kg						0.19	U	0.19	U	--
Heptachlor	8081A	ug/kg						0.19	U	0.19	U	--
Heptachlor Epoxide	8081A	ug/kg						0.20	U	0.19	U	--
MCPA	8151A	ug/kg						1400		1300	J	7.41
MCPP	8151A	ug/kg						290	U	290	R	--
Methoxychlor	8081A	ug/kg						1.9	U	1.9	U	--
Mirex	8081A	ug/kg						0.39	U	0.40	U	--
Toxaphene	8081A	ug/kg						7.6	U	7.7	U	--
1,2,4-Trichlorobenzene	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--
1,2-Dichlorobenzene	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--
1,2-Diphenylhydrazine	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--
1,3-Dichlorobenzene	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--
1,4-Dichlorobenzene	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--
1-Methylnaphthalene	8270C SIM	ug/kg	1.9	U	1.9	U	--	1.0	J	1.2	J	-18.18
2,4,5-Trichlorophenol	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--
2,4,6-Trichlorophenol	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--
2,4-Dichlorophenol	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--
2,4-Dimethylphenol	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--
2,4-Dinitrophenol	8270C	ug/kg	1100	U	1100	U	--	1100	U	1200	U	--
2,4-Dinitrotoluene	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--
2,6-Dinitrotoluene	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--
2-Chloronaphthalene	8270C	ug/kg	190	U	190	U	--	190	UJ	190	UJ	--
2-Chlorophenol	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--
2-Methylnaphthalene	8270C SIM	ug/kg	1.9	U	1.9	U	--	1.3	J	1.6	J	-20.69
2-Methylphenol	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--
2-Nitroaniline	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--
2-Nitrophenol	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--
3,3`-Dichlorobenzidine	8270C	ug/kg	370	U	370	U	--	380	U	380	U	--
3,5-Dimethylphenol	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--
3-Nitroaniline	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--
4,6-Dinitro-2-Methylphenol	8270C	ug/kg	560	U	560	U	--	570	U	580	U	--
4-Bromophenyl Phenyl Ether	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--
4-Chloro-3-Methylphenol	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--
4-Chloroaniline	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--
4-Chlorophenyl Phenylether	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--
4-Methylphenol	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--
4-Nitroaniline	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--
4-Nitrophenol	8270C	ug/kg	560	U	560	U	--	570	U	580	U	--
Acenaphthene	8270C SIM	ug/kg	1.9	U	1.9	U	--	1.6	J	1.4	J	13.33
Acenaphthylene	8270C SIM	ug/kg	1.9	U	1.9	U	--	2.4		2.7		-11.76
Aniline	8270C	ug/kg	560	U	560	U	--	570	U	580	U	--
Anthracene	8270C SIM	ug/kg	1.9	U	1.9	U	--	5.2		6.5		-22.22
Benzidine	8270C	ug/kg	3700	U	3700	R	--	3800	U	3800	U	--
Benzo(a)anthracene	8270C	ug/kg						32	J	82	J	-87.72
Benzo(a)anthracene	8270C SIM	ug/kg	1.9	U	1.9	U	--					
Benzo(a)pyrene	8270C	ug/kg								85	J	--
Benzo(a)pyrene	8270C SIM	ug/kg	1.9	U	1.9	U	--	43				
Benzo(b)fluoranthene	8270C	ug/kg								110	J	--
Benzo(b)fluoranthene	8270C SIM	ug/kg	1.9	U	1.9	U	--	63				
Benzo(g,h,i)perylene	8270C	ug/kg						34	J	74	J	-74.07
Benzo(g,h,i)perylene	8270C SIM	ug/kg	1.9	U	1.9	U	--					
Benzo(k)fluoranthene	8270C	ug/kg								50	J	--
Benzo(k)fluoranthene	8270C SIM	ug/kg	1.9	U	1.9	U	--	24				--
Benzoic Acid	8270C	ug/kg	560	U	560	U	--	570	U	580	U	--
Benzyl Alcohol	8270C	ug/kg	560	U	560	U	--	570	U	580	U	--
Bis(2-Chloroethoxy) methane	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--
Bis(2-Chloroethyl) ether	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--
bis(2-Chloroisopropyl) ether	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--
Bis(2-Ethylhexyl) phthalate	8270C	ug/kg						44	J	45	J	-2.25
Bis(2-Ethylhexyl) phthalate	8270C SIM	ug/kg	20	U	20	U	--					
Butylbenzylphthalate	8270C	ug/kg										
Butylbenzylphthalate	8270C SIM	ug/kg	20	U	20	U	--	30		25	J	18.18
Carbazole	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--
Chrysene	8270C	ug/kg						44	J	120	J	-92.68
Chrysene	8270C SIM	ug/kg	1.9	U	1.9	U	--					
Dibenzo(a,h)anthracene	8270C	ug/kg						21	J	22	J	-4.65
Dibenzo(a,h)anthracene	8270C SIM	ug/kg	1.9	U	1.9	U	--					
Dibenzofuran	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--
Diethylphthalate	8270C	ug/kg										
Diethylphthalate	8270C SIM	ug/kg	20	U	20	U	--	21	U	21	U	--
Dimethylphthalate	8270C	ug/kg										
Dimethylphthalate	8270C SIM	ug/kg	20	U	20	U	--	21	UJ	15	J	200.00
Di-n-Butylphthalate	8270C	ug/kg										
Di-n-Butylphthalate	8270C SIM	ug/kg	20	U	20	U	--	110		99	J	10.53
Di-N-Octyl Phthalate	8270C	ug/kg										
Di-N-Octyl Phthalate	8270C SIM	ug/kg	20	U	20	U	--	21	U	21	U	--
Fluoranthene	8270C	ug/kg						58	J	210	J	-113.43
Fluoranthene	8270C SIM	ug/kg	1.9	U	1.9	U	--					
Fluorene	8270C SIM	ug/kg	1.9	U	1.9	U	--	1.9	UJ	2.7	J	200.00
Hexachlorobenzene	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--
Hexachlorobutadiene	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--
Hexachlorocyclopentadiene	8270C	ug/kg	560	U	560	U	--	570	U	580	U	--
Hexachloroethane	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--
Indeno(1,2,3-Cd)Pyrene	8270C	ug/kg						28	J	56	J	-66.67
Indeno(1,2,3-Cd)Pyrene	8270C SIM	ug/kg	1.9	U	1.9	U	--					
Isophorone	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--
Naphthalene	8270C	ug/kg										
Naphthalene	8270C SIM	ug/kg	1.9	U	1.9	U	--	1.7	J	1.4	J	19.35
Nitrobenzene	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--
N-Nitrosodimethylamine	1625C	ng/kg	76.2		50.5	J	40.57					
N-Nitrosodimethylamine	8270C SIM	ug/kg	1.9	U	1.9	U	--	1.9	U	1.9	U	--
N-Nitroso-Di-N-Propylamine	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--
N-Nitrosodiphenylamine	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--
Pentachlorophenol	8270C	ug/kg	560	U	560	U	--	570	U	580	U	--
Phenanthrene	8270C	ug/kg						36	J	140	J	-118.18
Phenanthrene	8270C SIM	ug/kg	1.9	U	1.9	U	--					
Phenol	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--
Pyrene	8270C	ug/kg						62	J	190	J	-101.59
Pyrene	8270C SIM	ug/kg	1.9	U	1.9	U	--					
1,1,1,2-Tetrachloroethane	8260B	ug/kg	3.6	U	3.6	U	--					
1,1,1-Trichloroethane	8260B	ug/kg	3.6	U	3.6	U	--					
1,1,2,2-Tetrachloroethane	8260B	ug/kg	3.6	U	3.6	U	--					
1,1,2-Trichloroethane	8260B	ug/kg	3.6	U	3.6	U	--					
1,1-Dichloroethane	8260B	ug/kg	3.6	U	3.6	U	--					
1,1-Dichloroethene	8260B	ug/kg	3.6	U	3.6	U	--					
1,1-Dichloropropene	8260B	ug/kg	3.6	U	3.6	U	--					
1,2,3-Trichlorobenzene	8260B	ug/kg	3.6	U	3.6	U	--					
1,2,3-Trichloropropane	8260B	ug/kg	3.6	U	3.6	U	--					
1,2,4-Trichlorobenzene	8260B	ug/kg	3.6	U	3.6	U	--					
1,2,4-Trimethylbenzene	8260B	ug/kg	3.6	U	3.6	U	--					
1,2-Dibromo-3-chloropropane	8260B	ug/kg	3.6	U	3.6	U	--					
1,2-Dibromoethane	8260B	ug/kg	3.6	U	3.6	U	--					
1,2-Dichlorobenzene	8260B	ug/kg	3.6	U	3.6	U	--					
1,2-Dichloroethane	8260B	ug/kg	3.6	U	3.6	U	--					
1,2-Dichloropropane	8260B	ug/kg	3.6	U	3.6	U	--					
1,3,5-Trimethylbenzene	8260B	ug/kg	3.6	U	3.6	U	--					
1,3-Dichlorobenzene	8260B	ug/kg	3.6	U	3.6	U	--					
1,3-Dichloropropane	8260B	ug/kg	3.6	U	3.6	U	--					

Table C-4 - Subarea 5A Field Duplicate Results

		Location	SL-148-SA5A		SL-148-SA5A		RPD	SL-181-SA5A		SL-181-SA5A		RPD
		Sample Name:	DUP15-SA5A-QC-042011		SL-148-SA5A-SB-4.0-5.0			DUP-02-SA5A-QC-022211		SL-181-SA5A-SS-0.0-0.5		
		Sample Date	04/20/2011		04/20/2011			02/22/2011		02/22/2011		
		Start Depth:	4		4			0		0		
		End Depth:	5		5			0.5		0.5		
		Area:	5A		5A			5A		5A		
		Matrix:	SO		SO			SO		SO		
		Sample Type:	FD		N			FD		N		
1,4-Dichlorobenzene	8260B	ug/kg	3.6	U	3.6	U	--					
1,4-Dioxane	8260B SIM	ug/kg	14	U	13	U	--					
2,2-Dichloropropane	8260B	ug/kg	3.6	U	3.6	U	--					
2-Butanone	8260B	ug/kg	7.3	U	7.3	U	--					
2-Chloroethyl Vinyl Ether	8260B	ug/kg	3.6	U	3.6	U	--					
2-Chlorotoluene	8260B	ug/kg	3.6	U	3.6	U	--					
2-Hexanone	8260B	ug/kg	7.3	U	7.3	U	--					
4-Chlorotoluene	8260B	ug/kg	3.6	U	3.6	U	--					
4-Methyl-2-Pentanone	8260B	ug/kg	7.3	U	7.3	U	--					
Acetone	8260B	ug/kg	7.3	U	7.3	U	--					
Benzene	8260B	ug/kg	3.6	U	3.6	U	--					
Bromobenzene	8260B	ug/kg	3.6	U	3.6	U	--					
Bromochloromethane	8260B	ug/kg	3.6	U	3.6	U	--					
Bromodichloromethane	8260B	ug/kg	3.6	U	3.6	U	--					
Bromoform	8260B	ug/kg	3.6	U	3.6	U	--					
Bromomethane	8260B	ug/kg	3.6	U	3.6	U	--					
Carbon tetrachloride	8260B	ug/kg	3.6	U	3.6	U	--					
Chlorobenzene	8260B	ug/kg	3.6	U	3.6	U	--					
Chloroethane	8260B	ug/kg	3.6	U	3.6	U	--					
Chloroform	8260B	ug/kg	3.6	U	3.6	U	--					
Chloromethane	8260B	ug/kg	3.6	U	3.6	U	--					
Chlorotrifluoroethene	8260B	ug/kg	4.5	U	4.6	U	--					
cis-1,2-Dichloroethene	8260B	ug/kg	3.6	U	3.6	U	--					
cis-1,3-Dichloropropene	8260B	ug/kg	3.6	U	3.6	U	--					
Dibromochloromethane	8260B	ug/kg	3.6	U	3.6	U	--					
Dibromomethane	8260B	ug/kg	3.6	U	3.6	U	--					
Dichlorodifluoromethane	8260B	ug/kg	3.6	U	3.6	U	--					
EFH (C15-C20)	8015M	mg/kg	1.3	U	1.3	U	--					
EFH (C21-C30)	8015M	mg/kg	1.3	U	1.3	U	--					
EFH (C30-C40)	8015M	mg/kg	2.1	J	1.2	J	54.55					
EFH (C8-C11)	8015M	mg/kg	1.3	U	1.3	U	--					
Ethylbenzene	8260B	ug/kg	3.6	U	3.6	U	--					
Freon 113	8260B	ug/kg	3.6	U	3.6	U	--					
Freon 113a	8260B	ug/kg	4.5	U	4.6	U	--					
GRO (C5-C12)	8015M	mg/kg	1	U	0.9	U	--					
Hexachlorobutadiene	8260B	ug/kg	3.6	U	3.6	U	--					
Isopropylbenzene	8260B	ug/kg	3.6	U	3.6	U	--					
Isopropyltoluene	8260B	ug/kg	3.6	U	3.6	U	--					
m,p-Xylene	8260B	ug/kg	3.6	U	3.6	U	--					
Methyl tert-Butyl Ether	8260B	ug/kg	3.6	U	3.6	U	--					
Methylene chloride	8260B	ug/kg	3.6	U	3.6	U	--					
N-Butylbenzene	8260B	ug/kg	3.6	U	3.6	U	--					
N-Propylbenzene	8260B	ug/kg	3.6	U	3.6	U	--					
o-Xylene	8260B	ug/kg	3.6	U	3.6	U	--					
sec-Butylbenzene	8260B	ug/kg	3.6	U	3.6	U	--					
Styrene	8260B	ug/kg	3.6	U	3.6	U	--					
tert-Butylbenzene	8260B	ug/kg	3.6	U	3.6	U	--					
Tetrachloroethene	8260B	ug/kg	3.6	U	3.6	U	--					
Toluene	8260B	ug/kg	3.6	U	3.6	U	--					
trans-1,2-Dichloroethene	8260B	ug/kg	3.6	U	3.6	U	--					
trans-1,3-Dichloropropene	8260B	ug/kg	3.6	U	3.6	U	--					
Trichloroethene	8260B	ug/kg	3.6	U	3.6	U	--					
Trichlorofluoromethane	8260B	ug/kg	3.6	U	3.6	U	--					
Vinyl Chloride	8260B	ug/kg	3.6	U	3.6	U	--					

Notes:
ug/kg - microgram per kilogram
mg/kg - milligram per kilogram
ng/g - nanogram per kilogram
FD - field duplicate sample
N - normal sample
RPD - relative percent difference
SO - soil
-- - RPD not calculated when both field duplicate and normal samples were nondetect or only one sample result is reported

200* - When one result is nondetect a 200% RPD is given and sample results are qualified as estimated "J" or "UJ" in the field duplicate samples only

Limit - 50% - If RPD is above 50% detected field duplicate results only were estimated "J"

Table C-4 - Subarea 5A Field Duplicate Results

		Location	SL-187-SA5A		SL-187-SA5A		RPD	SL-222-SA5A		SL-222-SA5A		RPD
		Sample Name:	DUP-13-SA5A-QC-041111		SL-187-SA5A-SB-4.0-5.0			DUP-11-SA5A-QC-033011		SL-222-SA5A-SB-3.5-4.5		
		Sample Date	04/11/2011		04/11/2011			03/30/2011		03/30/2011		
		Start Depth:	4		4			3.5		3.5		
		End Depth:	5		5			4.5		4.5		
		Area:	5A		5A			5A		5A		
		Matrix:	SO		SO			SO		SO		
		Sample Type:	FD		N			FD		N		
Chemical Name:	Lab Method:	Result Unit										
Aluminum	6010B	mg/kg	9800		14900		-41.30	13300		14700		-10.00
Antimony	6020	mg/kg	0.137	J	0.0988	J	32.40	0.112	J	1.52	J	-172.55
Arsenic	6020	mg/kg	2.04	J	3.06	J	-40.00	4.68	J	4.83	J	-3.15
Barium	6020	mg/kg	101	J	114	J	-12.09	74.0	J	140	J	-61.68
Beryllium	6020	mg/kg	0.302		0.506		-50.50	0.456		0.562		-20.83
Boron	6010B	mg/kg	5.79	UJ	2.73	J	200.00	4.56	J	5.72		-22.57
Cadmium	6020	mg/kg	0.0601	J	0.167	J	-94.14	0.145	J	0.742	J	-134.61
Calcium	6010B	mg/kg	5470	J	2250	J	83.42	3590	J	4580	J	-24.24
Chromium	6020	mg/kg	9.86	J	14.9	J	-40.71	14.4	J	29.9	J	-69.98
Chromium VI	7199	mg/kg	0.60	J	1.2	UJ	200.00	1.1	U	1.1	U	--
Cobalt	6020	mg/kg	6.39	J	5.37	J	17.35	5.53		6.40		-14.59
Copper	6020	mg/kg	14.4	J	10.3	J	33.20	8.97	J	44.7	J	-133.15
Cyanide	9012B	mg/kg	0.59	U	0.56	U	--	0.54	U	0.53	U	--
Fluoride	300.0	mg/kg	1.6	J	3.2	J	-66.67	1.5		1.5		0.00
Iron	6010B	mg/kg	21400		21100		1.41	22200		23600		-6.11
Lead	6020	mg/kg	3.24	J	4.95	J	-41.76	4.65	J	82.9	J	-178.75
Lithium	6010B	mg/kg	15.0	J	20.4	J	-30.51	27.9		24.3		13.79
Magnesium	6010B	mg/kg	4160		4040		2.93	5500		4700		15.69
Manganese	6010B	mg/kg	243		265		-8.66	328	J	432	J	-27.37
Mercury	7471A	mg/kg	0.0077	J	0.115	UJ	200.00	0.103	UJ	0.0057	J	200.00
Molybdenum	6020	mg/kg	0.391		0.420		-7.15	0.379	J	1.35	J	-112.32
Nickel	6020	mg/kg	6.20	J	10.3	J	-49.70	8.94	J	21.4	J	-82.14
Nitrate	300.0	mg/kg	1.3	J	1.3	J	0.00	1.3	J	1.5	J	-14.29
Percent Moisture	160.3M	%	15.4		15.3		0.65	9.9		8.4		16.39
Perchlorate	314.0	ug/kg	35.5	U	35.4	U	--	33.3	U	32.8	U	--
Perchlorate	6850	ug/kg										
pH	9045M	pH unit	6.92		7.13		-2.99	7.90		7.95		-0.63
Phosphorus	6010B	mg/kg	858	J	341	J	86.24	405		390		3.77
Potassium	6010B	mg/kg	2490	J	3450	J	-32.32	3100		3480		-11.55
Selenium	6020	mg/kg	0.459	UJ	0.123	J	200.00	0.105	J	0.185	J	-55.17
Silver	6020	mg/kg	0.292	J	0.0283	J	164.66	0.0313	J	1.70	J	-192.77
Sodium	6010B	mg/kg	286	J	133	J	73.03	88.4	J	104	J	-16.22
Strontium	6010B	mg/kg	27.3		22.1		21.05	13.6		20.4		-40.00
Thallium	6020	mg/kg	0.105	J	0.254	J	-83.01	0.229		0.259		-12.30
Tin	6010B	mg/kg	11.6	U	11.5	U	--	10.8	UJ	10.5	UJ	--
Titanium	6010B	mg/kg	1020		1190		-15.38	1290		1330		-3.05
Vanadium	6020	mg/kg	47.6	J	26.9	J	55.57	34.3	J	31.7	J	7.88
Zinc	6020	mg/kg	34.3		54.2		-44.97	57.2	J	151	J	-90.11
Zirconium	6010B	mg/kg	1.79	J	4.83	J	-91.84	3.65	J	4.51	J	-21.08
1,3,5-Trinitrobenzene	8330A	ug/kg	140	U	140	UJ	--	130	U	130	U	--
2,4,6-Trinitrotoluene	8330A	ug/kg	140	U	140	UJ	--	130	U	130	U	--
2,4-Diamino-6-nitrotoluene	8330A	ug/kg	280	U	270	U	--	260	U	260	U	--
2,4-Dinitrotoluene	8330A	ug/kg	140	U	140	UJ	--	130	U	130	U	--
2,6-Diamino-4-nitrotoluene	8330A	ug/kg	280	U	270	U	--	260	U	260	U	--
2,6-Dinitrotoluene	8330A	ug/kg	140	U	140	U	--	130	U	130	U	--
2-Amino-4,6-Dinitrotoluene	8330A	ug/kg	140	U	140	U	--	130	U	130	U	--
2-Nitrotoluene	8330A	ug/kg	140	U	140	U	--	130	U	130	U	--
2-Propanol	8015B	ug/kg	590	U	590	U	--	550	U	550	U	--
3-Nitrotoluene	8330A	ug/kg	140	U	140	U	--	130	U	130	U	--
4-Amino-2,6-Dinitrotoluene	8330A	ug/kg	140	U	140	U	--	130	U	130	U	--
4-Nitrotoluene	8330A	ug/kg	140	U	140	U	--	130	U	130	U	--
Diethylene Glycol	8015M	mg/kg	15	U	15	U	--	14	U	14	U	--
Ethanol	8015B	ug/kg	590	U	590	U	--	550	U	550	U	--
Ethylene Glycol	8015M	mg/kg	15	U	15	U	--	14	U	14	U	--
Formaldehyde	8315A	ug/kg	7300	J	15000	J	-69.06	1700	U	1600	U	--
HMX	8330A	ug/kg	350	U	340	U	--	330	U	330	U	--
m-Dinitrobenzene	8330A	ug/kg	140	U	140	U	--	130	U	130	U	--
Methanol	8015B	ug/kg	590	UJ	150	J	200.00	550	U	550	U	--
m-Terphenyl	8015B	mg/kg	4.1	U	4.1	U	--	3.9	U	3.8	UJ	--
Nitrobenzene	8330A	ug/kg	140	U	140	U	--	130	U	130	U	--
Nitroglycerin	8330A	ug/kg	2800	U	2700	U	--	2600	U	2600	U	--
o-Terphenyl	8015B	mg/kg	4.1	U	4.1	U	--	3.9	U	3.8	U	--
PETN	8330A	ug/kg	2800	U	2700	U	--	2600	U	2600	U	--
Propylene glycol	8015M	mg/kg	15	U	15	U	--	14	U	14	U	--
p-Terphenyl	8015B	mg/kg	4.1	U	4.1	U	--	3.9	U	3.8	U	--
RDX	8330A	ug/kg	140	U	140	U	--	130	U	130	U	--
Tetryl	8330A	ug/kg	140	U	140	UJ	--	130	U	130	U	--
1,2,3,4,6,7,8-HpCDD	1613B	ng/kg	5.81	U	5.87	U	--	5.53	UJ	896	J	200.00
1,2,3,4,6,7,8-HpCDF	1613B	ng/kg	5.81	U	5.87	U	--	5.53	UJ	964	J	200.00
1,2,3,4,7,8,9-HpCDF	1613B	ng/kg	5.81	U	5.87	U	--	5.53	UJ	136	J	200.00
1,2,3,4,7,8-HxCDD	1613B	ng/kg	5.81	UJ	5.87	UJ	--	5.53	UJ	41.0	J	200.00
1,2,3,4,7,8-HxCDF	1613B	ng/kg	5.81	UJ	5.87	UJ	--	0.871	J	225	J	-198.46
1,2,3,6,7,8-HxCDD	1613B	ng/kg	0.208	J	5.87	U	200.00	5.53	UJ	90.6	J	200.00
1,2,3,6,7,8-HxCDF	1613B	ng/kg	5.81	U	5.87	U	--	5.53	UJ	197	J	200.00
1,2,3,7,8,9-HxCDD	1613B	ng/kg	0.349	J	0.244	J	35.41	5.53	UJ	64.2	J	200.00
1,2,3,7,8,9-HxCDF	1613B	ng/kg	5.81	UJ	5.87	UJ	--	5.53	UJ	79.8	J	200.00
1,2,3,7,8-PeCDD	1613B	ng/kg	5.81	U	5.87	U	--	5.53	UJ	34.9	J	200.00
1,2,3,7,8-PeCDF	1613B	ng/kg	5.81	U	5.87	U	--	5.53	UJ	89.7	J	200.00
2,3,4,6,7,8-HxCDF	1613B	ng/kg	5.81	U	5.87	U	--	5.53	UJ	369	J	200.00
2,3,4,7,8-PeCDF	1613B	ng/kg	5.81	U	5.87	U	--	5.53	UJ	187	J	200.00
2,3,7,8-TCDD	1613B	ng/kg	1.16	UJ	1.17	UJ	--	0.0402	J	4.91	J	-196.75
2,3,7,8-TCDF	1613B	ng/kg	1.16	UJ	1.17	UJ	--	1.11	UJ	50.0	J	200.00
Aroclor 1016	8082	ug/kg	2.0	U	2.0	U	--	1.9	U	1.9	U	--
Aroclor 1221	8082	ug/kg	2.0	U	2.0	U	--	1.9	U	1.9	U	--
Aroclor 1232	8082	ug/kg	2.0	U	2.0	U	--	1.9	U	1.9	U	--
Aroclor 1242	8082	ug/kg	2.0	U	2.0	U	--	1.9	U	1.9	U	--
Aroclor 1248	8082	ug/kg	2.0	U	2.0	U	--	1.9	U	1.9	U	--
Aroclor 1254	8082	ug/kg	2.0	UJ	0.62	J	200.00	1.9	U	1.9	U	--
Aroclor 1260	8082	ug/kg	2.0	U	2.0	U	--	1.9	UJ	0.90	J	200.00
Aroclor 1262	8082	ug/kg	2.0	U	2.0	U	--	1.9	U	1.9	U	--
Aroclor 1268	8082	ug/kg	2.0	U	2.0	U	--	1.9	U	1.9	U	--
Aroclor 5432	8082	ug/kg	3.9	U	3.9	U	--	3.7	U	3.6	U	--
Aroclor 5442	8082	ug/kg	3.9	U	3.9	U	--	3.7	U	3.6	U	--
Aroclor 5460	8082	ug/kg	3.9	U	3.9	U	--	32	J	3.9	J	156.55
OCDD	1613B	ng/kg	11.6	UJ	11.7	UJ	--	11.1	UJ	2420	J	200.00
OCDF	1613B	ng/kg	11.6	U	11.7	U	--	11.1	UJ	624	J	200.00
2,2-Dichlor-Propionic Acid	8151A	ug/kg										
2,4 DB	8151A	ug/kg										
2,4,5-T	8151A	ug/kg										
2,4,5-TP	8151A	ug/kg										
2,4-D	8151A	ug/kg										
4,4'-DDD	8081A	ug/kg										
4,4'-DDE	8081A	ug/kg										
4,4'-DDT	8081A	ug/kg										
Aldrin	8081A	ug/kg										
Alpha-BHC	8081A	ug/kg										
Beta-BHC	8081A	ug/kg										
Chlordane	8081A	ug/kg										
Delta-BHC	8081A	ug/kg										
Dicamba	8151A	ug/kg										
Dichlorprop	8151A	ug/kg										
Dieldrin	8081A	ug/kg										
Dinitrobutyl Phenol	8151A	ug/kg										
Endosulfan I	8081A	ug/kg										
Endosulfan II	8081A	ug/kg										
Endosulfan Sulfate	8081A	ug/kg										
Endrin	8081A	ug/kg										
Endrin Aldehyde	8081A	ug/kg										

Table C-4 - Subarea 5A Field Duplicate Results

		Location	SL-187-SA5A		SL-187-SA5A		RPD	SL-222-SA5A		SL-222-SA5A		RPD
		Sample Name:	DUP-13-SA5A-QC-041111		SL-187-SA5A-SB-4.0-5.0			DUP-11-SA5A-QC-033011		SL-222-SA5A-SB-3.5-4.5		
		Sample Date	04/11/2011		04/11/2011			03/30/2011		03/30/2011		
		Start Depth:	4		4			3.5		3.5		
		End Depth:	5		5			4.5		4.5		
		Area:	5A		5A			5A		5A		
		Matrix:	SO		SO			SO		SO		
		Sample Type:	FD		N			FD		N		
Endrin Ketone	8081A	ug/kg										
Gamma-BHC (Lindane)	8081A	ug/kg										
Heptachlor	8081A	ug/kg										
Heptachlor Epoxide	8081A	ug/kg										
MCPA	8151A	ug/kg										
MCPP	8151A	ug/kg										
Methoxychlor	8081A	ug/kg										
Mirex	8081A	ug/kg										
Toxaphene	8081A	ug/kg										
1,2,4-Trichlorobenzene	8270C	ug/kg	200	U	200	U	--	180	U	180	U	--
1,2-Dichlorobenzene	8270C	ug/kg	200	U	200	U	--	180	U	180	U	--
1,2-Diphenylhydrazine	8270C	ug/kg	200	U	200	U	--	180	U	180	U	--
1,3-Dichlorobenzene	8270C	ug/kg	200	U	200	U	--	180	U	180	U	--
1,4-Dichlorobenzene	8270C	ug/kg	200	U	200	U	--	180	U	180	U	--
1-Methylnaphthalene	8270C SIM	ug/kg	2.0	U	2.0	U	--	1.8	U	1.8	U	--
2,4,5-Trichlorophenol	8270C	ug/kg	200	U	200	U	--	180	U	180	U	--
2,4,6-Trichlorophenol	8270C	ug/kg	200	U	200	U	--	180	U	180	U	--
2,4-Dichlorophenol	8270C	ug/kg	200	U	200	U	--	180	U	180	U	--
2,4-Dimethylphenol	8270C	ug/kg	200	U	200	U	--	180	U	180	U	--
2,4-Dinitrophenol	8270C	ug/kg	1200	U	1200	U	--	1100	U	1100	U	--
2,4-Dinitrotoluene	8270C	ug/kg	200	U	200	U	--	180	U	180	U	--
2,6-Dinitrotoluene	8270C	ug/kg	200	U	200	U	--	180	U	180	U	--
2-Chloronaphthalene	8270C	ug/kg	200	U	200	U	--	180	U	180	U	--
2-Chlorophenol	8270C	ug/kg	200	U	200	U	--	180	U	180	U	--
2-Methylnaphthalene	8270C SIM	ug/kg	2.0	U	2.0	U	--	1.8	U	1.8	U	--
2-Methylphenol	8270C	ug/kg	200	U	200	U	--	180	U	180	U	--
2-Nitroaniline	8270C	ug/kg	200	U	200	U	--	180	U	180	U	--
2-Nitrophenol	8270C	ug/kg	200	U	200	U	--	180	U	180	U	--
3,3`-Dichlorobenzidine	8270C	ug/kg	390	U	390	U	--	360	U	360	U	--
3,5-Dimethylphenol	8270C	ug/kg	200	U	200	U	--	180	U	180	U	--
3-Nitroaniline	8270C	ug/kg	200	U	200	U	--	180	U	180	U	--
4,6-Dinitro-2-Methylphenol	8270C	ug/kg	590	U	590	U	--	550	U	540	U	--
4-Bromophenyl Phenyl Ether	8270C	ug/kg	200	U	200	U	--	180	U	180	U	--
4-Chloro-3-Methylphenol	8270C	ug/kg	200	U	200	U	--	180	U	180	U	--
4-Chloroaniline	8270C	ug/kg	200	U	200	U	--	180	U	180	U	--
4-Chlorophenyl Phenylether	8270C	ug/kg	200	U	200	U	--	180	U	180	U	--
4-Methylphenol	8270C	ug/kg	200	U	200	U	--	180	U	180	U	--
4-Nitroaniline	8270C	ug/kg	200	U	200	U	--	180	U	180	U	--
4-Nitrophenol	8270C	ug/kg	590	U	590	U	--	550	U	540	U	--
Acenaphthene	8270C SIM	ug/kg	2.0	U	2.0	U	--	1.8	U	1.8	U	--
Acenaphthylene	8270C SIM	ug/kg	2.0	UJ	0.42	J	200.00	1.8	U	1.8	U	--
Aniline	8270C	ug/kg	590	U	590	U	--	550	U	540	U	--
Anthracene	8270C SIM	ug/kg	0.95	J	2.2	J	-79.37	1.8	U	1.8	U	--
Benzidine	8270C	ug/kg	3900	U	3900	UJ	--	3600	U	3600	U	--
Benzo(a)anthracene	8270C	ug/kg										
Benzo(a)anthracene	8270C SIM	ug/kg	2.5	J	4.7	J	-61.11	1.8	U	1.8	U	--
Benzo(a)pyrene	8270C	ug/kg										
Benzo(a)pyrene	8270C SIM	ug/kg	2.0	UJ	1.7	J	200.00	1.8	U	1.8	U	--
Benzo(b)fluoranthene	8270C	ug/kg										
Benzo(b)fluoranthene	8270C SIM	ug/kg	2.0	UJ	1.1	J	200.00	1.8	U	1.8	U	--
Benzo(g,h,i)perylene	8270C	ug/kg	26	J	28	J	-7.41					
Benzo(g,h,i)perylene	8270C SIM	ug/kg						1.8	U	1.8	U	--
Benzo(k)fluoranthene	8270C	ug/kg										
Benzo(k)fluoranthene	8270C SIM	ug/kg	2.0	U	2.0	U	--	1.8	U	1.8	U	--
Benzoic Acid	8270C	ug/kg	590	U	590	U	--	550	U	540	U	--
Benzyl Alcohol	8270C	ug/kg	590	U	590	U	--	550	U	540	U	--
Bis(2-Chloroethoxy) methane	8270C	ug/kg	200	U	200	U	--	180	U	180	U	--
Bis(2-Chloroethyl) ether	8270C	ug/kg	200	U	200	U	--	180	U	180	U	--
bis(2-Chloroisopropyl) ether	8270C	ug/kg	200	U	200	U	--	180	U	180	U	--
Bis(2-Ethylhexyl) phthalate	8270C	ug/kg						360	U			--
Bis(2-Ethylhexyl) phthalate	8270C SIM	ug/kg	13	J	7.9	J	48.80			20	U	--
Butylbenzylphthalate	8270C	ug/kg										
Butylbenzylphthalate	8270C SIM	ug/kg	21	U	21	U	--	20	U	20	U	--
Carbazole	8270C	ug/kg	200	U	200	U	--	180	U	180	U	--
Chrysene	8270C	ug/kg										
Chrysene	8270C SIM	ug/kg	3.2		3.5		-8.96	1.8	U	1.8	U	--
Dibenzo(a,h)anthracene	8270C	ug/kg										
Dibenzo(a,h)anthracene	8270C SIM	ug/kg	2.0	UJ	1.5	J	200.00	1.8	U	1.8	U	--
Dibenzofuran	8270C	ug/kg	200	U	200	U	--	180	U	180	U	--
Diethylphthalate	8270C	ug/kg										
Diethylphthalate	8270C SIM	ug/kg	8.3	J	8.5	J	-2.38	20	U	20	U	--
Dimethylphthalate	8270C	ug/kg										
Dimethylphthalate	8270C SIM	ug/kg	21	U	21	U	--	20	U	20	U	--
Di-n-Butylphthalate	8270C	ug/kg						180	U	180	U	--
Di-n-Butylphthalate	8270C SIM	ug/kg	10	J	10	J	0.00					
Di-N-Octyl Phthalate	8270C	ug/kg										
Di-N-Octyl Phthalate	8270C SIM	ug/kg	21	U	21	U	--	11	J	20	UJ	200.00
Fluoranthene	8270C	ug/kg										
Fluoranthene	8270C SIM	ug/kg	7.6		9.9		-26.29	0.89	J	1.8	UJ	200.00
Fluorene	8270C SIM	ug/kg	2.0	U	2.0	U	--	1.8	U	1.8	U	--
Hexachlorobenzene	8270C	ug/kg	200	U	200	U	--	180	U	180	U	--
Hexachlorobutadiene	8270C	ug/kg	200	U	200	U	--	180	U	180	U	--
Hexachlorocyclopentadiene	8270C	ug/kg	590	U	590	U	--	550	U	540	U	--
Hexachloroethane	8270C	ug/kg	200	U	200	U	--	180	U	180	U	--
Indeno(1,2,3-Cd)Pyrene	8270C	ug/kg										
Indeno(1,2,3-Cd)Pyrene	8270C SIM	ug/kg	2.3	J	11	J	-130.83	1.8	U	1.8	U	--
Isophorone	8270C	ug/kg	200	U	200	U	--	180	U	180	U	--
Naphthalene	8270C	ug/kg										
Naphthalene	8270C SIM	ug/kg	2.0	U	2.0	U	--	1.4	J	1.8	UJ	200.00
Nitrobenzene	8270C	ug/kg	200	U	200	U	--	180	U	180	U	--
N-Nitrosodimethylamine	1625C	ng/kg	39.4	UJ	37.5	J	200.00	36.6	U	364	U	--
N-Nitrosodimethylamine	8270C SIM	ug/kg	2.0	UJ	2.0	UJ	--	1.8	U	1.8	U	--
N-Nitroso-Di-N-Propylamine	8270C	ug/kg	200	U	200	U	--	180	U	180	U	--
N-Nitrosodiphenylamine	8270C	ug/kg	200	U	200	U	--	180	U	180	U	--
Pentachlorophenol	8270C	ug/kg	590	U	590	U	--	550	U	540	U	--
Phenanthrene	8270C	ug/kg										
Phenanthrene	8270C SIM	ug/kg	2.0	UJ	1.3	J	200.00	1.3	J	1.8	UJ	200.00
Phenol	8270C	ug/kg	200	U	200	U	--	180	U	180	U	--
Pyrene	8270C	ug/kg										
Pyrene	8270C SIM	ug/kg	9.0		11		-20.00	1.8	U	1.8	U	--
1,1,1,2-Tetrachloroethane	8260B	ug/kg	4.0	U	4.1	U	--	4.0	U	3.7	U	--
1,1,1-Trichloroethane	8260B	ug/kg	4.0	U	4.1	U	--	4.0	U	3.7	U	--
1,1,2,2-Tetrachloroethane	8260B	ug/kg	4.0	U	4.1	U	--	4.0	U	3.7	U	--
1,1,2-Trichloroethane	8260B	ug/kg	4.0	U	4.1	U	--	4.0	U	3.7	U	--
1,1-Dichloroethane	8260B	ug/kg	4.0	U	4.1	U	--	4.0	U	3.7	U	--
1,1-Dichloroethene	8260B	ug/kg	4.0	U	4.1	U	--	4.0	U	3.7	U	--
1,1-Dichloropropene	8260B	ug/kg	4.0	U	4.1	U	--	4.0	U	3.7	U	--
1,2,3-Trichlorobenzene	8260B	ug/kg	4.0	U	4.1	U	--	4.0	U	3.7	U	--
1,2,3-Trichloropropane	8260B	ug/kg	4.0	U	4.1	U	--	4.0	U	3.7	U	--
1,2,4-Trichlorobenzene	8260B	ug/kg	4.0	U	4.1	U	--	4.0	U	3.7	U	--
1,2,4-Trimethylbenzene	8260B	ug/kg	4.0	U	4.1	U	--	4.0	U	3.7	U	--
1,2-Dibromo-3-chloropropane	8260B	ug/kg	4.0	U	4.1	U	--	4.0	U	3.7	U	--
1,2-Dibromoethane	8260B	ug/kg	4.0	U	4.1	U	--	4.0	U	3.7	U	--
1,2-Dichlorobenzene	8260B	ug/kg	4.0	U	4.1	U	--	4.0	U	3.7	U	--
1,2-Dichloroethane	8260B	ug/kg	4.0	U	4.1	U	--	4.0	U	3.7	U	--
1,2-Dichloropropane	8260B	ug/kg	4.0	U	4.1	U	--	4.0	U	3.7	U	--
1,3,5-Trimethylbenzene	8260B	ug/kg	4.0	U	4.1	U	--	4.0	U	3.7	U	--
1,3-Dichlorobenzene	8260B	ug/kg	4.0	U	4.1	U	--	4.0	U	3.7	U	--
1,3-Dichloropropane	8260B	ug/kg	4.0	U	4.1	U	--	4.0	U	3.7	U	--

Table C-4 - Subarea 5A Field Duplicate Results

		Location	SL-187-SA5A		SL-187-SA5A		RPD	SL-222-SA5A		SL-222-SA5A		RPD
		Sample Name:	DUP-13-SA5A-QC-041111		SL-187-SA5A-SB-4.0-5.0			DUP-11-SA5A-QC-033011		SL-222-SA5A-SB-3.5-4.5		
		Sample Date	04/11/2011		04/11/2011			03/30/2011		03/30/2011		
		Start Depth:	4		4			3.5		3.5		
		End Depth:	5		5			4.5		4.5		
		Area:	5A		5A			5A		5A		
		Matrix:	SO		SO			SO		SO		
		Sample Type:	FD		N			FD		N		
1,4-Dichlorobenzene	8260B	ug/kg	4.0	U	4.1	U	--	4.0	U	3.7	U	--
1,4-Dioxane	8260B SIM	ug/kg	16	U	15	U	--	14	U	14	U	--
2,2-Dichloropropane	8260B	ug/kg	4.0	U	4.1	U	--	4.0	U	3.7	U	--
2-Butanone	8260B	ug/kg	2.3	J	1.7	J	30.00	7.9	U	7.4	U	--
2-Chloroethyl Vinyl Ether	8260B	ug/kg	4.0	U	4.1	U	--	4.0	U	3.7	U	--
2-Chlorotoluene	8260B	ug/kg	4.0	U	4.1	U	--	4.0	U	3.7	U	--
2-Hexanone	8260B	ug/kg	8.1	U	8.3	U	--	7.9	U	7.4	U	--
4-Chlorotoluene	8260B	ug/kg	4.0	U	4.1	U	--	4.0	U	3.7	U	--
4-Methyl-2-Pentanone	8260B	ug/kg	8.1	U	8.3	U	--	7.9	U	7.4	U	--
Acetone	8260B	ug/kg	14		13		7.41	7.9	U	7.4	U	--
Benzene	8260B	ug/kg	4.0	U	4.1	U	--	4.0	U	3.7	U	--
Bromobenzene	8260B	ug/kg	4.0	U	4.1	U	--	4.0	U	3.7	U	--
Bromochloromethane	8260B	ug/kg	4.0	U	4.1	U	--	4.0	U	3.7	U	--
Bromodichloromethane	8260B	ug/kg	4.0	U	4.1	U	--	4.0	U	3.7	U	--
Bromoform	8260B	ug/kg	4.0	U	4.1	U	--	4.0	U	3.7	U	--
Bromomethane	8260B	ug/kg	4.0	U	4.1	U	--	4.0	U	3.7	U	--
Carbon tetrachloride	8260B	ug/kg	4.0	U	4.1	U	--	4.0	U	3.7	U	--
Chlorobenzene	8260B	ug/kg	4.0	U	4.1	U	--	4.0	U	3.7	U	--
Chloroethane	8260B	ug/kg	4.0	U	4.1	U	--	4.0	U	3.7	U	--
Chloroform	8260B	ug/kg	4.0	U	4.1	U	--	4.0	U	3.7	U	--
Chloromethane	8260B	ug/kg	4.0	U	4.1	U	--	4.0	U	3.7	U	--
Chlorotrifluoroethene	8260B	ug/kg	5.0	U	5.2	U	--	4.9	U	4.6	U	--
cis-1,2-Dichloroethene	8260B	ug/kg	4.0	U	4.1	U	--	4.0	U	3.7	U	--
cis-1,3-Dichloropropene	8260B	ug/kg	4.0	U	4.1	U	--	4.0	U	3.7	U	--
Dibromochloromethane	8260B	ug/kg	4.0	U	4.1	U	--	4.0	U	3.7	U	--
Dibromomethane	8260B	ug/kg	4.0	U	4.1	U	--	4.0	U	3.7	U	--
Dichlorodifluoromethane	8260B	ug/kg	4.0	U	4.1	U	--	4.0	U	3.7	U	--
EFH (C15-C20)	8015M	mg/kg	0.68	J	0.51	J	28.57	1.3	UJ	9.4	J	200.00
EFH (C21-C30)	8015M	mg/kg	1.4	U	1.4	U	--	3.4	J	190	J	-192.97
EFH (C30-C40)	8015M	mg/kg	0.96	J	1.6		-50.00	13	J	710	J	-192.81
EFH (C8-C11)	8015M	mg/kg	1.4	U	1.4	U	--	1.3	UJ	26	UJ	--
Ethylbenzene	8260B	ug/kg	0.15	J	4.1	UJ	200.00	4.0	U	3.7	U	--
Freon 113	8260B	ug/kg	4.0	U	4.1	U	--	4.0	U	3.7	U	--
Freon 113a	8260B	ug/kg	5.0	U	5.2	U	--	4.9	U	4.6	U	--
GRO (C5-C12)	8015M	mg/kg	0.4	J	0.3	J	28.57	0.9	U	0.9	U	--
Hexachlorobutadiene	8260B	ug/kg	4.0	U	4.1	U	--	4.0	U	3.7	U	--
Isopropylbenzene	8260B	ug/kg	0.27	J	4.1	UJ	200.00	4.0	U	3.7	U	--
Isopropyltoluene	8260B	ug/kg	4.0	U	4.1	U	--	4.0	U	3.7	U	--
m,p-Xylene	8260B	ug/kg	4.0	U	4.1	U	--	4.0	U	3.7	U	--
Methyl tert-Butyl Ether	8260B	ug/kg	4.0	U	4.1	U	--	4.0	U	3.7	U	--
Methylene chloride	8260B	ug/kg	4.0	U	4.1	U	--	4.0	U	3.7	U	--
N-Butylbenzene	8260B	ug/kg	4.0	U	4.1	U	--	4.0	U	3.7	U	--
N-Propylbenzene	8260B	ug/kg	0.26	J	4.1	UJ	200.00	4.0	U	3.7	U	--
o-Xylene	8260B	ug/kg	4.0	U	4.1	U	--	4.0	U	3.7	U	--
sec-Butylbenzene	8260B	ug/kg	0.85	J	0.14	J	143.43	4.0	U	3.7	U	--
Styrene	8260B	ug/kg	4.0	U	4.1	U	--	4.0	U	3.7	U	--
tert-Butylbenzene	8260B	ug/kg	4.0	U	4.1	U	--	4.0	U	3.7	U	--
Tetrachloroethene	8260B	ug/kg	4.0	U	4.1	U	--	4.0	U	3.7	U	--
Toluene	8260B	ug/kg	4.0	U	4.1	U	--	0.09	J	3.7	UJ	200.00
trans-1,2-Dichloroethene	8260B	ug/kg	4.0	U	4.1	U	--	4.0	U	3.7	U	--
trans-1,3-Dichloropropene	8260B	ug/kg	4.0	U	4.1	U	--	4.0	U	3.7	U	--
Trichloroethene	8260B	ug/kg	4.0	U	4.1	U	--	4.0	U	3.7	U	--
Trichlorofluoromethane	8260B	ug/kg	4.0	U	4.1	U	--	4.0	U	3.7	U	--
Vinyl Chloride	8260B	ug/kg	4.0	U	4.1	U	--	4.0	U	3.7	U	--

Notes:
ug/kg - microgram per kilogram
mg/kg - milligram per kilogram
ng/g - nanogram per kilogram
FD - field duplicate sample
N - normal sample
RPD - relative percent difference
SO - soil
-- - RPD not calculated when both field duplicate and normal samples were nondetect or only one sample result is reported

200* - When one result is nondetect a 200% RPD is given and sample results are qualified as estimated "J" or "UJ" in the field duplicate samples only

Limit - 50% - If RPD is above 50% detected field duplicate results only were estimated "J"

Table C-4 - Subarea 5A Field Duplicate Results

		Location	SL-223-SA5A		SL-223-SA5A		RPD	SL-245-SA5A		SL-245-SA5A		RPD
		Sample Name:	DUP10-SA5A-QC-032411		SL-223-SA5A-SB-4.0-5.0			DUP08-SA5A-QC-030211		SL-245-SA5A-SB-4.0-5.0		
		Sample Date	03/24/2011		03/24/2011			03/02/2011		03/02/2011		
		Start Depth:	4		4			4		4		
		End Depth:	5		5			5		5		
		Area:	5A		5A			5A		5A		
		Matrix:	SO		SO			SO		SO		
		Sample Type:	FD		N			FD		N		
Chemical Name:	Lab Method:	Result Unit										
Aluminum	6010B	mg/kg	16300		14600		11.00	11300		11100		1.79
Antimony	6020	mg/kg	0.0789	J	0.105	J	-28.38	0.214	UJ	0.0800	J	200.00
Arsenic	6020	mg/kg	4.49		4.12		8.59	3.43		3.79		-9.97
Barium	6020	mg/kg	100	J	121	J	-19.00	63.0		70.9		-11.80
Beryllium	6020	mg/kg	0.636		0.463		31.48	0.461		0.458		0.65
Boron	6010B	mg/kg	8.57		7.72		10.44	2.24	J	2.21	J	1.35
Cadmium	6020	mg/kg	0.0577	J	0.136	J	-80.85	0.0700	J	0.0508	J	31.79
Calcium	6010B	mg/kg	2670		2830		-5.82	1900	J	2160	J	-12.81
Chromium	6020	mg/kg	17.3	J	16.8	J	2.93	10.1		11.0		-8.53
Chromium VI	7199	mg/kg	0.53	J	1.1	UJ	200.00	0.44	J	1.1	UJ	200.00
Cobalt	6020	mg/kg	6.02	J	6.64	J	-9.79	3.65	J	3.96	J	-8.15
Copper	6020	mg/kg	8.25	J	9.86	J	-17.78	3.83		4.24		-10.16
Cyanide	9012B	mg/kg	0.55	U	0.54	U	--					
Fluoride	300.0	mg/kg	2.8	J	3.1	J	-10.17	3.2		2.1		41.51
Iron	6010B	mg/kg	20000		18900		5.66	15700		16800		-6.77
Lead	6020	mg/kg	6.01	J	5.68	J	5.65	4.04		3.95		2.25
Lithium	6010B	mg/kg	21.2		22.5		-5.95	20.5		23.2		-12.36
Magnesium	6010B	mg/kg	4310		4100		4.99	2980		3410		-13.46
Manganese	6010B	mg/kg	345		282		20.10	204		226		-10.23
Mercury	7471A	mg/kg	0.108	U	0.110	U	--	0.110	U	0.101	U	--
Molybdenum	6020	mg/kg	0.445		0.482		-7.98	0.339		0.344		-1.46
Nickel	6020	mg/kg	13.1	J	13.8	J	-5.20	5.72		6.15		-7.25
Nitrate	300.0	mg/kg	2.1		2.0		4.88					
Percent Moisture	160.3M	%	9.7		12.0		-21.20	9.3		8.2		12.57
Perchlorate	314.0	ug/kg	33.2	U	34.1	U	--	33.1	U	32.7	U	--
Perchlorate	6850	ug/kg										
pH	9045M	pH unit	8.41		8.28		1.56	8.22		7.99		2.84
Phosphorus	6010B	mg/kg	370	J	345	J	6.99	221	J	315	J	-35.07
Potassium	6010B	mg/kg	4120	J	3630	J	12.65	2490	J	2550	J	-2.38
Selenium	6020	mg/kg	0.132	J	0.118	J	11.20	0.0972	J	0.114	J	-15.91
Silver	6020	mg/kg	0.0443	J	0.0262	J	51.35	0.0183	J	0.0143	J	24.54
Sodium	6010B	mg/kg	195		221		-12.50	99.5	J	99.8	J	-0.30
Strontium	6010B	mg/kg	21.3		17.7		18.46	9.97		11.4		-13.38
Thallium	6020	mg/kg	0.306		0.242		23.36	0.252		0.278		-9.81
Tin	6010B	mg/kg	11.1	U	11.1	U	--	10.6	U	10.7	U	--
Titanium	6010B	mg/kg	1160		1130		2.62	930		967		-3.90
Vanadium	6020	mg/kg	33.7		34.8		-3.21	23.0	J	25.0	J	-8.33
Zinc	6020	mg/kg	50.0	J	92.5	J	-59.65	52.2		59.7		-13.40
Zirconium	6010B	mg/kg	1.03	J	1.50	J	-37.15	5.30	U	5.34	U	--
1,3,5-Trinitrobenzene	8330A	ug/kg	130	U	140	U	--					
2,4,6-Trinitrotoluene	8330A	ug/kg	130	U	140	U	--					
2,4-Diamino-6-nitrotoluene	8330A	ug/kg	270	U	270	U	--					
2,4-Dinitrotoluene	8330A	ug/kg	130	U	140	U	--					
2,6-Diamino-4-nitrotoluene	8330A	ug/kg	270	U	270	U	--					
2,6-Dinitrotoluene	8330A	ug/kg	130	U	140	U	--					
2-Amino-4,6-Dinitrotoluene	8330A	ug/kg	130	U	140	U	--					
2-Nitrotoluene	8330A	ug/kg	130	U	140	U	--					
2-Propanol	8015B	ug/kg	550	U	570	U	--					
3-Nitrotoluene	8330A	ug/kg	130	U	140	U	--					
4-Amino-2,6-Dinitrotoluene	8330A	ug/kg	130	U	140	U	--					
4-Nitrotoluene	8330A	ug/kg	130	U	140	U	--					
Diethylene Glycol	8015M	mg/kg	14	U	14	U	--					
Ethanol	8015B	ug/kg	550	U	570	U	--					
Ethylene Glycol	8015M	mg/kg	14	U	14	U	--					
Formaldehyde	8315A	ug/kg	1700	U	1700	U	--					
HMX	8330A	ug/kg	330	U	340	U	--					
m-Dinitrobenzene	8330A	ug/kg	130	U	140	U	--					
Methanol	8015B	ug/kg	550	U	570	U	--					
m-Terphenyl	8015B	mg/kg	3.9	U	4.0	UJ	--					
Nitrobenzene	8330A	ug/kg	130	U	140	U	--					
Nitroglycerin	8330A	ug/kg	2700	U	2700	U	--					
o-Terphenyl	8015B	mg/kg	3.9	U	4.0	U	--					
PETN	8330A	ug/kg	2700	U	2700	U	--					
Propylene glycol	8015M	mg/kg	14	U	14	U	--					
p-Terphenyl	8015B	mg/kg	3.9	U	4.0	UJ	--					
RDX	8330A	ug/kg	130	U	140	U	--					
Tetryl	8330A	ug/kg	130	U	140	U	--					
1,2,3,4,6,7,8-HpCDD	1613B	ng/kg	5.54	UJ	13.3	J	200.00	5.51	U	5.45	U	--
1,2,3,4,6,7,8-HpCDF	1613B	ng/kg	5.54	UJ	2.54	J	200.00	5.51	UJ	0.576	J	200.00
1,2,3,4,7,8,9-HpCDF	1613B	ng/kg	5.54	UJ	0.298	J	200.00	5.51	U	5.45	U	--
1,2,3,4,7,8-HxCDD	1613B	ng/kg	5.54	UJ	0.104	J	200.00	5.51	U	5.45	U	--
1,2,3,4,7,8-HxCDF	1613B	ng/kg	1.13	J	0.345	J	106.44	5.51	UJ	0.151	J	200.00
1,2,3,6,7,8-HxCDD	1613B	ng/kg	0.321	J	0.587	J	-58.59	0.0223	J	0.0295	J	-27.80
1,2,3,6,7,8-HxCDF	1613B	ng/kg	5.54	UJ	0.254	J	200.00	5.51	UJ	5.45	UJ	--
1,2,3,7,8,9-HxCDD	1613B	ng/kg	0.388	J	0.403	J	-3.79	5.51	U	5.45	U	--
1,2,3,7,8,9-HxCDF	1613B	ng/kg	0.342	J	0.330	J	3.57	0.0552	J	0.0594	J	-7.33
1,2,3,7,8-PeCDD	1613B	ng/kg	5.54	U	5.68	U	--	5.51	UJ	5.45	UJ	--
1,2,3,7,8-PeCDF	1613B	ng/kg	5.54	UJ	0.172	J	200.00	5.51	U	5.45	U	--
2,3,4,6,7,8-HxCDF	1613B	ng/kg	5.54	UJ	0.418	J	200.00	5.51	UJ	5.45	UJ	--
2,3,4,7,8-PeCDF	1613B	ng/kg	0.410	J	0.700	J	-52.25	5.51	U	5.45	U	--
2,3,7,8-TCDD	1613B	ng/kg	0.0207	J	1.14	UJ	200.00	1.10	U	1.09	U	--
2,3,7,8-TCDF	1613B	ng/kg	1.11	UJ	0.351	J	200.00	1.10	UJ	0.0255	J	200.00
Aroclor 1016	8082	ug/kg	1.9	U	1.9	U	--	1.9	UJ	1.8	UJ	--
Aroclor 1221	8082	ug/kg	1.9	U	1.9	U	--	1.9	UJ	1.8	UJ	--
Aroclor 1232	8082	ug/kg	1.9	U	1.9	U	--	1.9	UJ	1.8	UJ	--
Aroclor 1242	8082	ug/kg	1.9	U	1.9	U	--	1.9	UJ	1.8	UJ	--
Aroclor 1248	8082	ug/kg	1.9	U	1.9	U	--	1.9	UJ	1.8	UJ	--
Aroclor 1254	8082	ug/kg	1.9	U	1.9	U	--	1.9	UJ	1.8	UJ	--
Aroclor 1260	8082	ug/kg	5.2		4.0		26.09	1.9	UJ	1.8	UJ	--
Aroclor 1262	8082	ug/kg	1.9	U	1.9	U	--	1.9	UJ	1.8	UJ	--
Aroclor 1268	8082	ug/kg	1.9	U	1.9	U	--	1.9	UJ	1.8	UJ	--
Aroclor 5432	8082	ug/kg	3.7	U	3.7	U	--	3.6	UJ	3.6	UJ	--
Aroclor 5442	8082	ug/kg	3.7	U	3.7	U	--	3.6	UJ	3.6	UJ	--
Aroclor 5460	8082	ug/kg	3.7	U	3.7	U	--	3.6	UJ	3.6	UJ	--
OCDD	1613B	ng/kg	10.7	J	144	J	-172.33	2.53	J	4.87	J	-63.24
OCDF	1613B	ng/kg	11.1	UJ	3.26	J	200.00	11.0	UJ	10.9	UJ	--
2,2-Dichlor-Propionic Acid	8151A	ug/kg										
2,4 DB	8151A	ug/kg										
2,4,5-T	8151A	ug/kg										
2,4,5-TP	8151A	ug/kg										
2,4-D	8151A	ug/kg										
4,4'-DDD	8081A	ug/kg										
4,4'-DDE	8081A	ug/kg										
4,4'-DDT	8081A	ug/kg										
Aldrin	8081A	ug/kg										
Alpha-BHC	8081A	ug/kg										
Beta-BHC	8081A	ug/kg										
Chlordane	8081A	ug/kg										
Delta-BHC	8081A	ug/kg										
Dicamba	8151A	ug/kg										
Dichlorprop	8151A	ug/kg										
Dieldrin	8081A	ug/kg										
Dinitrobutyl Phenol	8151A	ug/kg										
Endosulfan I	8081A	ug/kg										
Endosulfan II	8081A	ug/kg										
Endosulfan Sulfate	8081A	ug/kg										
Endrin	8081A	ug/kg										
Endrin Aldehyde	8081A	ug/kg										

Table C-4 - Subarea 5A Field Duplicate Results

		Location	SL-223-SA5A		SL-223-SA5A		RPD	SL-245-SA5A		SL-245-SA5A		RPD
		Sample Name:	DUP10-SA5A-QC-032411		SL-223-SA5A-SB-4.0-5.0			DUP08-SA5A-QC-030211		SL-245-SA5A-SB-4.0-5.0		
		Sample Date	03/24/2011		03/24/2011			03/02/2011		03/02/2011		
		Start Depth:	4		4			4		4		
		End Depth:	5		5			5		5		
		Area:	5A		5A			5A		5A		
		Matrix:	SO		SO			SO		SO		
		Sample Type:	FD		N			FD		N		
Endrin Ketone	8081A	ug/kg										
Gamma-BHC (Lindane)	8081A	ug/kg										
Heptachlor	8081A	ug/kg										
Heptachlor Epoxide	8081A	ug/kg										
MCPA	8151A	ug/kg										
MCPP	8151A	ug/kg										
Methoxychlor	8081A	ug/kg										
Mirex	8081A	ug/kg										
Toxaphene	8081A	ug/kg										
1,2,4-Trichlorobenzene	8270C	ug/kg	180	U	190	U	--	180	U	180	UJ	--
1,2-Dichlorobenzene	8270C	ug/kg	180	U	190	U	--	180	U	180	U	--
1,2-Diphenylhydrazine	8270C	ug/kg	180	U	190	U	--	180	U	180	U	--
1,3-Dichlorobenzene	8270C	ug/kg	180	U	190	U	--	180	U	180	U	--
1,4-Dichlorobenzene	8270C	ug/kg	180	U	190	U	--	180	U	180	UJ	--
1-Methylnaphthalene	8270C SIM	ug/kg	1.8	U	1.9	U	--	1.8	U	1.8	U	--
2,4,5-Trichlorophenol	8270C	ug/kg	180	U	190	U	--	180	U	180	UJ	--
2,4,6-Trichlorophenol	8270C	ug/kg	180	U	190	U	--	180	U	180	UJ	--
2,4-Dichlorophenol	8270C	ug/kg	180	U	190	U	--	180	U	180	UJ	--
2,4-Dimethylphenol	8270C	ug/kg	180	U	190	U	--	180	U	180	UJ	--
2,4-Dinitrophenol	8270C	ug/kg	1100	U	1100	U	--	1100	U	1100	U	--
2,4-Dinitrotoluene	8270C	ug/kg	180	U	190	U	--	180	U	180	UJ	--
2,6-Dinitrotoluene	8270C	ug/kg	180	U	190	U	--	180	U	180	U	--
2-Chloronaphthalene	8270C	ug/kg	180	U	190	U	--	180	U	180	U	--
2-Chlorophenol	8270C	ug/kg	180	U	190	U	--	180	U	180	UJ	--
2-Methylnaphthalene	8270C SIM	ug/kg	1.8	U	1.9	U	--	1.8	U	1.8	U	--
2-Methylphenol	8270C	ug/kg	180	U	190	U	--	180	U	180	UJ	--
2-Nitroaniline	8270C	ug/kg	180	U	190	U	--	180	U	180	U	--
2-Nitrophenol	8270C	ug/kg	180	U	190	U	--	180	U	180	UJ	--
3,3`-Dichlorobenzidine	8270C	ug/kg	370	U	380	U	--	370	U	360	U	--
3,5-Dimethylphenol	8270C	ug/kg	180	U	190	U	--	180	U	180	U	--
3-Nitroaniline	8270C	ug/kg	180	U	190	U	--	180	U	180	U	--
4,6-Dinitro-2-Methylphenol	8270C	ug/kg	550	U	560	U	--	550	U	540	U	--
4-Bromophenyl Phenyl Ether	8270C	ug/kg	180	U	190	U	--	180	U	180	U	--
4-Chloro-3-Methylphenol	8270C	ug/kg	180	U	190	U	--	180	U	180	UJ	--
4-Chloroaniline	8270C	ug/kg	180	U	190	U	--	180	U	180	U	--
4-Chlorophenyl Phenylether	8270C	ug/kg	180	U	190	U	--	180	U	180	UJ	--
4-Methylphenol	8270C	ug/kg	180	U	190	U	--	180	U	180	U	--
4-Nitroaniline	8270C	ug/kg	180	U	190	U	--	180	U	180	U	--
4-Nitrophenol	8270C	ug/kg	550	U	560	U	--	550	U	540	U	--
Acenaphthene	8270C SIM	ug/kg	1.8	U	1.9	U	--	1.8	U	1.8	U	--
Acenaphthylene	8270C SIM	ug/kg	1.8	U	1.9	U	--	1.8	U	1.8	U	--
Aniline	8270C	ug/kg	550	U	560	U	--	550	U	540	U	--
Anthracene	8270C SIM	ug/kg	1.8	U	1.9	U	--	1.8	U	1.8	U	--
Benzidine	8270C	ug/kg	3700	U	3800	U	--	3700	U	3600	UJ	--
Benzo(a)anthracene	8270C	ug/kg	31	J			--					
Benzo(a)anthracene	8270C SIM	ug/kg			1.9	U	--	1.8	U	1.8	U	--
Benzo(a)pyrene	8270C	ug/kg	26	J			--					
Benzo(a)pyrene	8270C SIM	ug/kg			1.9	U	--	1.8	U	1.8	U	--
Benzo(b)fluoranthene	8270C	ug/kg	30	J			--					
Benzo(b)fluoranthene	8270C SIM	ug/kg			1.9	U	--	1.8	U	1.8	U	--
Benzo(g,h,i)perylene	8270C	ug/kg	25	J			--					
Benzo(g,h,i)perylene	8270C SIM	ug/kg			1.9	U	--	1.8	U	1.8	U	--
Benzo(k)fluoranthene	8270C	ug/kg	23	J			--					
Benzo(k)fluoranthene	8270C SIM	ug/kg			1.9	U	--	1.8	U	1.8	U	--
Benzoic Acid	8270C	ug/kg	550	U	560	U	--	550	U	540	U	--
Benzyl Alcohol	8270C	ug/kg	550	U	560	U	--	550	U	540	U	--
Bis(2-Chloroethoxy) methane	8270C	ug/kg	180	U	190	U	--	180	U	180	UJ	--
Bis(2-Chloroethyl) ether	8270C	ug/kg	180	U	190	U	--	180	U	180	U	--
bis(2-Chloroisopropyl) ether	8270C	ug/kg	180	UJ	190	UJ	--	180	U	180	U	--
Bis(2-Ethylhexyl) phthalate	8270C	ug/kg	24	J			--			20	J	--
Bis(2-Ethylhexyl) phthalate	8270C SIM	ug/kg			20	U	--	20	U			--
Butylbenzylphthalate	8270C	ug/kg										
Butylbenzylphthalate	8270C SIM	ug/kg	20	U	20	U	--	20	U	20	U	--
Carbazole	8270C	ug/kg	180	U	190	U	--	180	U	180	U	--
Chrysene	8270C	ug/kg	31	J			--					
Chrysene	8270C SIM	ug/kg			1.9	U	--	1.8	U	1.8	U	--
Dibenzo(a,h)anthracene	8270C	ug/kg										
Dibenzo(a,h)anthracene	8270C SIM	ug/kg	1.8	U	1.9	U	--	1.8	U	1.8	U	--
Dibenzofuran	8270C	ug/kg	180	U	190	U	--	180	U	180	U	--
Diethylphthalate	8270C	ug/kg										
Diethylphthalate	8270C SIM	ug/kg	20	U	20	U	--	20	U	20	U	--
Dimethylphthalate	8270C	ug/kg										
Dimethylphthalate	8270C SIM	ug/kg	20	U	20	U	--	20	U	20	U	--
Di-n-Butylphthalate	8270C	ug/kg										
Di-n-Butylphthalate	8270C SIM	ug/kg	20	U	20	U	--	20	U	20	U	--
Di-N-Octyl Phthalate	8270C	ug/kg										
Di-N-Octyl Phthalate	8270C SIM	ug/kg	20	U	20	U	--	20	UJ	10	J	200.00
Fluoranthene	8270C	ug/kg	28	J			--					
Fluoranthene	8270C SIM	ug/kg			1.9	U		1.8	U	1.8	U	--
Fluorene	8270C SIM	ug/kg	1.8	U	1.9	U	--	1.8	U	1.8	U	--
Hexachlorobenzene	8270C	ug/kg	180	U	190	U	--	180	U	180	UJ	--
Hexachlorobutadiene	8270C	ug/kg	180	U	190	U	--	180	U	180	U	--
Hexachlorocyclopentadiene	8270C	ug/kg	550	U	560	U	--	550	U	540	U	--
Hexachloroethane	8270C	ug/kg	180	U	190	U	--	180	U	180	U	--
Indeno(1,2,3-Cd)Pyrene	8270C	ug/kg										
Indeno(1,2,3-Cd)Pyrene	8270C SIM	ug/kg	1.8	U	1.9	U	--	1.8	U	1.8	U	--
Isophorone	8270C	ug/kg	180	U	190	UJ	--	180	U	180	UJ	--
Naphthalene	8270C	ug/kg										
Naphthalene	8270C SIM	ug/kg	1.8	U	1.9	U	--	1.8	U	1.8	U	--
Nitrobenzene	8270C	ug/kg	180	UJ	190	UJ	--	180	U	180	UJ	--
N-Nitrosodimethylamine	1625C	ng/kg	36.9	UJ	379	UJ	--					
N-Nitrosodimethylamine	8270C SIM	ug/kg	1.8	U	1.9	U	--	1.8	U	1.8	U	--
N-Nitroso-Di-N-Propylamine	8270C	ug/kg	180	UJ	190	UJ	--	180	U	180	U	--
N-Nitrosodiphenylamine	8270C	ug/kg	180	U	190	U	--	180	U	180	UJ	--
Pentachlorophenol	8270C	ug/kg	550	U	560	U	--	550	U	540	U	--
Phenanthrene	8270C	ug/kg										
Phenanthrene	8270C SIM	ug/kg	1.8	U	1.9	U	--	1.8	U	1.8	U	--
Phenol	8270C	ug/kg	180	U	190	U	--	180	U	180	U	--
Pyrene	8270C	ug/kg	43	J			--					
Pyrene	8270C SIM	ug/kg			1.9	U	--	1.8	U	1.8	U	--
1,1,1,2-Tetrachloroethane	8260B	ug/kg	3.9	U	3.7	U	--	4.2	U	3.7	U	--
1,1,1-Trichloroethane	8260B	ug/kg	3.9	U	3.7	U	--	4.2	U	3.7	U	--
1,1,2,2-Tetrachloroethane	8260B	ug/kg	3.9	U	3.7	U	--	4.2	U	3.7	U	--
1,1,2-Trichloroethane	8260B	ug/kg	3.9	U	3.7	U	--	4.2	U	3.7	U	--
1,1-Dichloroethane	8260B	ug/kg	3.9	U	3.7	U	--	4.2	U	3.7	U	--
1,1-Dichloroethene	8260B	ug/kg	3.9	U	3.7	U	--	4.2	U	3.7	U	--
1,1-Dichloropropene	8260B	ug/kg	3.9	U	3.7	U	--	4.2	U	3.7	U	--
1,2,3-Trichlorobenzene	8260B	ug/kg	3.9	U	3.7	U	--	4.2	U	3.7	U	--
1,2,3-Trichloropropane	8260B	ug/kg	3.9	U	3.7	U	--	4.2	U	3.7	U	--
1,2,4-Trichlorobenzene	8260B	ug/kg	3.9	U	3.7	U	--	4.2	U	3.7	U	--
1,2,4-Trimethylbenzene	8260B	ug/kg	3.9	U	3.7	U	--	4.2	U	3.7	U	--
1,2-Dibromo-3-chloropropane	8260B	ug/kg	3.9	U	3.7	U	--	4.2	U	3.7	U	--
1,2-Dibromoethane	8260B	ug/kg	3.9	U	3.7	U	--	4.2	U	3.7	U	--
1,2-Dichlorobenzene	8260B	ug/kg	3.9	U	3.7	U	--	4.2	U	3.7	U	--
1,2-Dichloroethane	8260B	ug/kg	3.9	U	3.7	U	--	4.2	U	3.7	U	--
1,2-Dichloropropane	8260B	ug/kg	3.9	U	3.7	U	--	4.2	U	3.7	U	--
1,3,5-Trimethylbenzene	8260B	ug/kg	3.9	U	3.7	U	--	4.2	U	3.7	U	--
1,3-Dichlorobenzene	8260B	ug/kg	3.9	U	3.7	U	--	4.2	U	3.7	U	--
1,3-Dichloropropane	8260B	ug/kg	3.9	U	3.7	U	--	4.2	U	3.7	U	--

Table C-4 - Subarea 5A Field Duplicate Results

		Location	SL-223-SA5A		SL-223-SA5A		RPD	SL-245-SA5A		SL-245-SA5A		RPD
		Sample Name:	DUP10-SA5A-QC-032411		SL-223-SA5A-SB-4.0-5.0			DUP08-SA5A-QC-030211		SL-245-SA5A-SB-4.0-5.0		
		Sample Date	03/24/2011		03/24/2011			03/02/2011		03/02/2011		
		Start Depth:	4		4			4		4		
		End Depth:	5		5			5		5		
		Area:	5A		5A			5A		5A		
		Matrix:	SO		SO			SO		SO		
		Sample Type:	FD		N			FD		N		
1,4-Dichlorobenzene	8260B	ug/kg	3.9	U	3.7	U	--	4.2	U	3.7	U	--
1,4-Dioxane	8260B SIM	ug/kg	14	U	14	U	--	15	U	13	U	--
2,2-Dichloropropane	8260B	ug/kg	3.9	U	3.7	U	--	4.2	U	3.7	U	--
2-Butanone	8260B	ug/kg	7.9	U	7.4	U	--	8.4	U	7.3	U	--
2-Chloroethyl Vinyl Ether	8260B	ug/kg	3.9	U	3.7	U	--	4.2	U	3.7	U	--
2-Chlorotoluene	8260B	ug/kg	3.9	U	3.7	U	--	4.2	U	3.7	U	--
2-Hexanone	8260B	ug/kg	7.9	U	7.4	U	--	8.4	U	7.3	U	--
4-Chlorotoluene	8260B	ug/kg	3.9	U	3.7	U	--	4.2	U	3.7	U	--
4-Methyl-2-Pentanone	8260B	ug/kg	7.9	U	7.4	U	--	8.4	U	7.3	U	--
Acetone	8260B	ug/kg	7.9	U	7.4	U	--	8.4	U	7.3	U	--
Benzene	8260B	ug/kg	3.9	U	3.7	U	--	4.2	U	3.7	U	--
Bromobenzene	8260B	ug/kg	3.9	U	3.7	U	--	4.2	U	3.7	U	--
Bromochloromethane	8260B	ug/kg	3.9	UJ	3.7	UJ	--	4.2	U	3.7	U	--
Bromodichloromethane	8260B	ug/kg	3.9	U	3.7	U	--	4.2	U	3.7	U	--
Bromoform	8260B	ug/kg	3.9	U	3.7	U	--	4.2	U	3.7	U	--
Bromomethane	8260B	ug/kg	3.9	U	3.7	U	--	4.2	U	3.7	U	--
Carbon tetrachloride	8260B	ug/kg	3.9	U	3.7	U	--	4.2	U	3.7	U	--
Chlorobenzene	8260B	ug/kg	3.9	U	3.7	U	--	4.2	U	3.7	U	--
Chloroethane	8260B	ug/kg	3.9	U	3.7	U	--	4.2	U	3.7	U	--
Chloroform	8260B	ug/kg	3.9	U	3.7	U	--	4.2	U	3.7	U	--
Chloromethane	8260B	ug/kg	3.9	U	3.7	U	--	4.2	U	3.7	U	--
Chlorotrifluoroethene	8260B	ug/kg	4.9	U	4.6	U	--	5.3	U	4.6	UJ	--
cis-1,2-Dichloroethene	8260B	ug/kg	3.9	U	3.7	U	--	4.2	U	3.7	U	--
cis-1,3-Dichloropropene	8260B	ug/kg	3.9	U	3.7	U	--	4.2	U	3.7	U	--
Dibromochloromethane	8260B	ug/kg	3.9	U	3.7	U	--	4.2	U	3.7	U	--
Dibromomethane	8260B	ug/kg	3.9	U	3.7	U	--	4.2	U	3.7	U	--
Dichlorodifluoromethane	8260B	ug/kg	3.9	U	3.7	U	--	4.2	U	3.7	U	--
EFH (C15-C20)	8015M	mg/kg	0.76	J	1.4	UJ	200.00					
EFH (C21-C30)	8015M	mg/kg	12	J	6.8	J	55.32					
EFH (C30-C40)	8015M	mg/kg	19		16		17.14					
EFH (C8-C11)	8015M	mg/kg	0.52	J	0.48	J	8.00					
Ethylbenzene	8260B	ug/kg	3.9	U	3.7	U	--	0.15	J	3.7	UJ	200.00
Freon 113	8260B	ug/kg	3.9	U	3.7	U	--	4.2	U	3.7	U	--
Freon 113a	8260B	ug/kg	4.9	U	4.6	U	--	5.3	U	4.6	U	--
GRO (C5-C12)	8015M	mg/kg	0.9	U	0.9	U	--					
Hexachlorobutadiene	8260B	ug/kg	3.9	U	3.7	U	--	4.2	U	3.7	U	--
Isopropylbenzene	8260B	ug/kg	3.9	U	3.7	U	--	4.2	U	3.7	U	--
Isopropyltoluene	8260B	ug/kg	3.9	U	3.7	U	--	4.2	U	3.7	U	--
m,p-Xylene	8260B	ug/kg	3.9	U	3.7	U	--	0.51	J	3.7	UJ	200.00
Methyl tert-Butyl Ether	8260B	ug/kg	3.9	U	3.7	U	--	4.2	U	3.7	U	--
Methylene chloride	8260B	ug/kg	3.9	U	3.7	UJ	--	4.2	U	3.7	U	--
N-Butylbenzene	8260B	ug/kg	3.9	U	3.7	U	--	4.2	U	3.7	U	--
N-Propylbenzene	8260B	ug/kg	3.9	U	3.7	U	--	4.2	U	3.7	U	--
o-Xylene	8260B	ug/kg	3.9	U	3.7	U	--	4.2	U	3.7	U	--
sec-Butylbenzene	8260B	ug/kg	3.9	U	3.7	U	--	4.2	U	3.7	U	--
Styrene	8260B	ug/kg	3.9	U	3.7	U	--	4.2	U	3.7	U	--
tert-Butylbenzene	8260B	ug/kg	3.9	U	3.7	U	--	4.2	U	3.7	U	--
Tetrachloroethene	8260B	ug/kg	3.9	U	3.7	U	--	4.2	U	3.7	U	--
Toluene	8260B	ug/kg	3.9	UJ	3.7	UJ	--	4.2	U	3.7	U	--
trans-1,2-Dichloroethene	8260B	ug/kg	3.9	U	3.7	U	--	4.2	U	3.7	U	--
trans-1,3-Dichloropropene	8260B	ug/kg	3.9	U	3.7	U	--	4.2	U	3.7	U	--
Trichloroethene	8260B	ug/kg	3.9	U	3.7	U	--	4.2	U	3.7	U	--
Trichlorofluoromethane	8260B	ug/kg	3.9	U	3.7	U	--	4.2	U	3.7	U	--
Vinyl Chloride	8260B	ug/kg	3.9	U	3.7	U	--	4.2	U	3.7	U	--

Notes:
ug/kg - microgram per kilogram
mg/kg - milligram per kilogram
ng/g - nanogram per kilogram
FD - field duplicate sample
N - normal sample
RPD - relative percent difference
SO - soil
-- - RPD not calculated when both field duplicate and normal samples were nondetect or only one sample result is reported

200* - When one result is nondetect a 200% RPD is given and sample results are qualified as estimated "J" or "UJ" in the field duplicate samples only

Limit - 50% - If RPD is above 50% detected field duplicate results only were estimated "J"

Table C-4 - Subarea 5A Field Duplicate Results

		Location	SL-256-SA5A		SL-256-SA5A		RPD
		Sample Name:	DUP-06-SA5A-QC-030111		SL-256-SA5A-SS-0.0-0.5		
		Sample Date	03/01/2011		03/01/2011		
		Start Depth:	0		0		
		End Depth:	0.5		0.5		
		Area:	5A		5A		
		Matrix:	SO		SO		
		Sample Type:	FD		N		
Chemical Name:	Lab Method:	Result Unit					
Aluminum	6010B	mg/kg	13000		12200		6.35
Antimony	6020	mg/kg	0.246	J	0.161	J	41.77
Arsenic	6020	mg/kg	5.80	J	5.69	J	1.91
Barium	6020	mg/kg	91.3	J	83.8	J	8.57
Beryllium	6020	mg/kg	0.674	J	0.606	J	10.63
Boron	6010B	mg/kg	4.43	J	4.46	J	-0.67
Cadmium	6020	mg/kg	0.450	J	0.388	J	14.80
Calcium	6010B	mg/kg	3990		4390		-9.55
Chromium	6020	mg/kg	22.7	J	21.3	J	6.36
Chromium VI	7199	mg/kg	0.24	J	1.1	UJ	200.00
Cobalt	6020	mg/kg	6.95	J	6.10	J	13.03
Copper	6020	mg/kg	7.97	J	6.93	J	13.96
Cyanide	9012B	mg/kg					
Fluoride	300.0	mg/kg	1.3	J	1.7	J	-26.67
Iron	6010B	mg/kg	17600		16700		5.25
Lead	6020	mg/kg	6.85	J	5.42	J	23.31
Lithium	6010B	mg/kg	19.6		18.5		5.77
Magnesium	6010B	mg/kg	4310		3990		7.71
Manganese	6010B	mg/kg	258		246		4.76
Mercury	7471A	mg/kg	0.110	UJ	0.0133	J	200.00
Molybdenum	6020	mg/kg	0.311		0.372		-17.86
Nickel	6020	mg/kg	12.7	J	11.3	J	11.67
Nitrate	300.0	mg/kg					
Percent Moisture	160.3M	%	11.4		11.5		-0.87
Perchlorate	314.0	ug/kg	33.9	U	33.9	U	--
Perchlorate	6850	ug/kg					
pH	9045M	pH unit	7.94		8.05		-1.38
Phosphorus	6010B	mg/kg	312	J	352	J	-12.05
Potassium	6010B	mg/kg	2020		2040		-0.99
Selenium	6020	mg/kg	0.165	J	0.144	J	13.59
Silver	6020	mg/kg	0.0317	J	0.0242	J	26.83
Sodium	6010B	mg/kg	85.0	J	87.9	J	-3.35
Strontium	6010B	mg/kg	17.7		17.7		0.00
Thallium	6020	mg/kg	0.315	J	0.232	J	30.35
Tin	6010B	mg/kg	10.9	U	11.2	U	--
Titanium	6010B	mg/kg	1200		1080		10.53
Vanadium	6020	mg/kg	46.1	J	42.1	J	9.07
Zinc	6020	mg/kg	167	J	157	J	6.17
Zirconium	6010B	mg/kg	1.20	J	1.37	J	-13.23
1,3,5-Trinitrobenzene	8330A	ug/kg					
2,4,6-Trinitrotoluene	8330A	ug/kg					
2,4-Diamino-6-nitrotoluene	8330A	ug/kg					
2,4-Dinitrotoluene	8330A	ug/kg					
2,6-Diamino-4-nitrotoluene	8330A	ug/kg					
2,6-Dinitrotoluene	8330A	ug/kg					
2-Amino-4,6-Dinitrotoluene	8330A	ug/kg					
2-Nitrotoluene	8330A	ug/kg					
2-Propanol	8015B	ug/kg					
3-Nitrotoluene	8330A	ug/kg					
4-Amino-2,6-Dinitrotoluene	8330A	ug/kg					
4-Nitrotoluene	8330A	ug/kg					
Diethylene Glycol	8015M	mg/kg					
Ethanol	8015B	ug/kg					
Ethylene Glycol	8015M	mg/kg					
Formaldehyde	8315A	ug/kg					
HMX	8330A	ug/kg					
m-Dinitrobenzene	8330A	ug/kg					
Methanol	8015B	ug/kg					
m-Terphenyl	8015B	mg/kg					
Nitrobenzene	8330A	ug/kg					
Nitroglycerin	8330A	ug/kg					
o-Terphenyl	8015B	mg/kg					
PETN	8330A	ug/kg					
Propylene glycol	8015M	mg/kg					
p-Terphenyl	8015B	mg/kg					
RDX	8330A	ug/kg					
Tetryl	8330A	ug/kg					
1,2,3,4,6,7,8-HpCDD	1613B	ng/kg	3.68	J	4.44	J	-18.72
1,2,3,4,6,7,8-HpCDF	1613B	ng/kg	5.64	U	5.65	U	--
1,2,3,4,7,8,9-HpCDF	1613B	ng/kg	5.64	UJ	5.65	UJ	--
1,2,3,4,7,8-HxCDD	1613B	ng/kg	5.64	U	5.65	U	--
1,2,3,4,7,8-HxCDF	1613B	ng/kg	5.64	UJ	0.429	J	200.00
1,2,3,6,7,8-HxCDD	1613B	ng/kg	0.146	J	0.162	J	-10.39
1,2,3,6,7,8-HxCDF	1613B	ng/kg	5.64	UJ	5.65	UJ	--
1,2,3,7,8,9-HxCDD	1613B	ng/kg	0.148	J	0.142	J	4.14
1,2,3,7,8,9-HxCDF	1613B	ng/kg	5.64	U	5.65	U	--
1,2,3,7,8-PeCDD	1613B	ng/kg	0.0430	J	0.0557	J	-25.73
1,2,3,7,8-PeCDF	1613B	ng/kg	0.129	J	0.137	J	-6.02
2,3,4,6,7,8-HxCDF	1613B	ng/kg	5.64	U	5.65	U	--
2,3,4,7,8-PeCDF	1613B	ng/kg	5.64	U	5.65	U	--
2,3,7,8-TCDD	1613B	ng/kg	0.0139	J	0.0156	J	-11.53
2,3,7,8-TCDF	1613B	ng/kg	0.0634	J	0.133	J	-70.88
Aroclor 1016	8082	ug/kg	9.6	U	1.9	U	--
Aroclor 1221	8082	ug/kg	9.6	U	1.9	U	--
Aroclor 1232	8082	ug/kg	9.6	U	1.9	U	--
Aroclor 1242	8082	ug/kg	9.6	U	1.9	U	--
Aroclor 1248	8082	ug/kg	9.6	U	1.9	U	--
Aroclor 1254	8082	ug/kg	9.6	U	1.9	U	--
Aroclor 1260	8082	ug/kg	5.1	J	1.9	UJ	200.00
Aroclor 1262	8082	ug/kg	9.6	U	1.9	U	--
Aroclor 1268	8082	ug/kg	9.6	U	1.9	U	--
Aroclor 5432	8082	ug/kg	19	U	3.7	U	--
Aroclor 5442	8082	ug/kg	19	U	3.7	U	--
Aroclor 5460	8082	ug/kg	19	U	3.7	U	--
OCDD	1613B	ng/kg	42.9		55.2		-25.08
OCDF	1613B	ng/kg	1.46	J	2.02	J	-32.18
2,2-Dichlor-Propionic Acid	8151A	ug/kg	10	U	10	U	--
2,4 DB	8151A	ug/kg	1.5	J	1.9	UJ	200.00
2,4,5-T	8151A	ug/kg	0.19	U	0.19	U	--
2,4,5-TP	8151A	ug/kg	0.19	U	0.19	U	--
2,4-D	8151A	ug/kg	4.1	U	4.1	U	--
4,4'-DDD	8081A	ug/kg	1.9		1.3	J	37.50
4,4'-DDE	8081A	ug/kg	0.38	U	0.38	UJ	--
4,4'-DDT	8081A	ug/kg	0.96		1.3	J	-30.09
Aldrin	8081A	ug/kg	0.19	U	0.19	UJ	--
Alpha-BHC	8081A	ug/kg	0.19	U	0.19	UJ	--
Beta-BHC	8081A	ug/kg	0.19	U	0.19	UJ	--
Chlordane	8081A	ug/kg	19	U	11	UJ	--
Delta-BHC	8081A	ug/kg	0.19	U	0.19	UJ	--
Dicamba	8151A	ug/kg	1.4	U	1.4	U	--
Dichlorprop	8151A	ug/kg	1.9	U	1.9	U	--
Dieldrin	8081A	ug/kg	4.4		4.2	J	4.65
Dinitrobutyl Phenol	8151A	ug/kg	2.7	U	2.7	U	--
Endosulfan I	8081A	ug/kg	0.19	U	0.19	UJ	--
Endosulfan II	8081A	ug/kg	0.38	U	0.38	UJ	--
Endosulfan Sulfate	8081A	ug/kg	0.38	U	0.38	UJ	--
Endrin	8081A	ug/kg	0.38	U	0.38	R	--
Endrin Aldehyde	8081A	ug/kg	0.38	U	0.38	UJ	--

Table C-4 - Subarea 5A Field Duplicate Results

		Location	SL-256-SA5A		SL-256-SA5A		RPD
		Sample Name:	DUP-06-SA5A-QC-030111		SL-256-SA5A-SS-0.0-0.5		
		Sample Date	03/01/2011		03/01/2011		
		Start Depth:	0		0		
		End Depth:	0.5		0.5		
		Area:	5A		5A		
		Matrix:	SO		SO		
		Sample Type:	FD		N		
Endrin Ketone	8081A	ug/kg	0.38	U	0.38	UJ	--
Gamma-BHC (Lindane)	8081A	ug/kg	0.19	U	0.19	UJ	--
Heptachlor	8081A	ug/kg	0.19	U	0.19	UJ	--
Heptachlor Epoxide	8081A	ug/kg	0.19	U	0.19	UJ	--
MCPA	8151A	ug/kg	280	U	280	U	--
MCPP	8151A	ug/kg	280	U	280	U	--
Methoxychlor	8081A	ug/kg	1.9	U	1.9	UJ	--
Mirex	8081A	ug/kg	0.11	J	0.34	J	-102.22
Toxaphene	8081A	ug/kg	7.4	U	7.5	UJ	--
1,2,4-Trichlorobenzene	8270C	ug/kg	190	U	190	U	--
1,2-Dichlorobenzene	8270C	ug/kg	190	U	190	U	--
1,2-Diphenylhydrazine	8270C	ug/kg	190	U	190	U	--
1,3-Dichlorobenzene	8270C	ug/kg	190	U	190	U	--
1,4-Dichlorobenzene	8270C	ug/kg	190	U	190	U	--
1-Methylnaphthalene	8270C SIM	ug/kg	9.4	U	1.9	U	--
2,4,5-Trichlorophenol	8270C	ug/kg	190	U	190	U	--
2,4,6-Trichlorophenol	8270C	ug/kg	190	U	190	U	--
2,4-Dichlorophenol	8270C	ug/kg	190	U	190	U	--
2,4-Dimethylphenol	8270C	ug/kg	190	U	190	U	--
2,4-Dinitrophenol	8270C	ug/kg	1100	U	1100	U	--
2,4-Dinitrotoluene	8270C	ug/kg	190	U	190	U	--
2,6-Dinitrotoluene	8270C	ug/kg	190	U	190	U	--
2-Chloronaphthalene	8270C	ug/kg	190	U	190	U	--
2-Chlorophenol	8270C	ug/kg	190	U	190	U	--
2-Methylnaphthalene	8270C SIM	ug/kg	9.4	U	1.9	U	--
2-Methylphenol	8270C	ug/kg	190	U	190	U	--
2-Nitroaniline	8270C	ug/kg	190	U	190	U	--
2-Nitrophenol	8270C	ug/kg	190	U	190	U	--
3,3`-Dichlorobenzidine	8270C	ug/kg	380	U	380	U	--
3,5-Dimethylphenol	8270C	ug/kg	190	U	190	U	--
3-Nitroaniline	8270C	ug/kg	190	U	190	U	--
4,6-Dinitro-2-Methylphenol	8270C	ug/kg	560	U	560	U	--
4-Bromophenyl Phenyl Ether	8270C	ug/kg	190	U	190	U	--
4-Chloro-3-Methylphenol	8270C	ug/kg	190	U	190	U	--
4-Chloroaniline	8270C	ug/kg	190	U	190	U	--
4-Chlorophenyl Phenylether	8270C	ug/kg	190	U	190	U	--
4-Methylphenol	8270C	ug/kg	190	U	190	U	--
4-Nitroaniline	8270C	ug/kg	190	U	190	U	--
4-Nitrophenol	8270C	ug/kg	560	U	560	U	--
Acenaphthene	8270C SIM	ug/kg	9.4	U	1.9	U	--
Acenaphthylene	8270C SIM	ug/kg	9.4	U	1.9	U	--
Aniline	8270C	ug/kg	560	U	560	U	--
Anthracene	8270C SIM	ug/kg	9.4	U	1.9	U	--
Benzidine	8270C	ug/kg	3800	U	3800	U	--
Benzo(a)anthracene	8270C	ug/kg					
Benzo(a)anthracene	8270C SIM	ug/kg	9.4	UJ	1.2	J	200.00
Benzo(a)pyrene	8270C	ug/kg					
Benzo(a)pyrene	8270C SIM	ug/kg	3.8	J	1.6	J	81.48
Benzo(b)fluoranthene	8270C	ug/kg					
Benzo(b)fluoranthene	8270C SIM	ug/kg	21	J	1.9	J	166.81
Benzo(g,h,i)perylene	8270C	ug/kg					
Benzo(g,h,i)perylene	8270C SIM	ug/kg	3.9	J	1.1	J	112.00
Benzo(k)fluoranthene	8270C	ug/kg					
Benzo(k)fluoranthene	8270C SIM	ug/kg	9.4	UJ	0.75	J	200.00
Benzoic Acid	8270C	ug/kg	560	U	560	U	--
Benzyl Alcohol	8270C	ug/kg	560	U	560	U	--
Bis(2-Chloroethoxy) methane	8270C	ug/kg	190	U	190	U	--
Bis(2-Chloroethyl) ether	8270C	ug/kg	190	U	190	U	--
bis(2-Chloroisopropyl) ether	8270C	ug/kg	190	U	190	U	--
Bis(2-Ethylhexyl) phthalate	8270C	ug/kg					
Bis(2-Ethylhexyl) phthalate	8270C SIM	ug/kg	38	J	20	UJ	200.00
Butylbenzylphthalate	8270C	ug/kg	190	U			--
Butylbenzylphthalate	8270C SIM	ug/kg			20	U	--
Carbazole	8270C	ug/kg	190	U	190	U	--
Chrysene	8270C	ug/kg					
Chrysene	8270C SIM	ug/kg	7.5	J	1.3	J	140.91
Dibenzo(a,h)anthracene	8270C	ug/kg					
Dibenzo(a,h)anthracene	8270C SIM	ug/kg	9.4	U	1.9	U	--
Dibenzofuran	8270C	ug/kg	190	U	190	U	--
Diethylphthalate	8270C	ug/kg	190	U			--
Diethylphthalate	8270C SIM	ug/kg			20	U	--
Dimethylphthalate	8270C	ug/kg	190	U			--
Dimethylphthalate	8270C SIM	ug/kg			20	U	--
Di-n-Butylphthalate	8270C	ug/kg	190	U			--
Di-n-Butylphthalate	8270C SIM	ug/kg			20	U	--
Di-N-Octyl Phthalate	8270C	ug/kg	190	U			--
Di-N-Octyl Phthalate	8270C SIM	ug/kg			20	U	--
Fluoranthene	8270C	ug/kg					
Fluoranthene	8270C SIM	ug/kg	3.9	J	0.80	J	131.91
Fluorene	8270C SIM	ug/kg	9.4	U	1.9	U	--
Hexachlorobenzene	8270C	ug/kg	190	U	190	U	--
Hexachlorobutadiene	8270C	ug/kg	190	U	190	U	--
Hexachlorocyclopentadiene	8270C	ug/kg	560	U	560	U	--
Hexachloroethane	8270C	ug/kg	190	U	190	U	--
Indeno(1,2,3-Cd)Pyrene	8270C	ug/kg					
Indeno(1,2,3-Cd)Pyrene	8270C SIM	ug/kg	9.4	UJ	0.89	J	200.00
Isophorone	8270C	ug/kg	190	U	190	U	--
Naphthalene	8270C	ug/kg					
Naphthalene	8270C SIM	ug/kg	9.4	U	1.9	U	--
Nitrobenzene	8270C	ug/kg	190	U	190	U	--
N-Nitrosodimethylamine	1625C	ng/kg					
N-Nitrosodimethylamine	8270C SIM	ug/kg	9.4	U	1.9	U	--
N-Nitroso-Di-N-Propylamine	8270C	ug/kg	190	U	190	U	--
N-Nitrosodiphenylamine	8270C	ug/kg	190	U	190	U	--
Pentachlorophenol	8270C	ug/kg	560	U	560	U	--
Phenanthrene	8270C	ug/kg					
Phenanthrene	8270C SIM	ug/kg	9.4	U	1.9	U	--
Phenol	8270C	ug/kg	190	U	190	U	--
Pyrene	8270C	ug/kg					
Pyrene	8270C SIM	ug/kg	5.3	J	0.86	J	144.16
1,1,1,2-Tetrachloroethane	8260B	ug/kg					
1,1,1-Trichloroethane	8260B	ug/kg					
1,1,2,2-Tetrachloroethane	8260B	ug/kg					
1,1,2-Trichloroethane	8260B	ug/kg					
1,1-Dichloroethane	8260B	ug/kg					
1,1-Dichloroethene	8260B	ug/kg					
1,1-Dichloropropene	8260B	ug/kg					
1,2,3-Trichlorobenzene	8260B	ug/kg					
1,2,3-Trichloropropane	8260B	ug/kg					
1,2,4-Trichlorobenzene	8260B	ug/kg					
1,2,4-Trimethylbenzene	8260B	ug/kg					
1,2-Dibromo-3-chloropropane	8260B	ug/kg					
1,2-Dibromoethane	8260B	ug/kg					
1,2-Dichlorobenzene	8260B	ug/kg					
1,2-Dichloroethane	8260B	ug/kg					
1,2-Dichloropropane	8260B	ug/kg					
1,3,5-Trimethylbenzene	8260B	ug/kg					
1,3-Dichlorobenzene	8260B	ug/kg					
1,3-Dichloropropane	8260B	ug/kg					

Table C-4 - Subarea 5A Field Duplicate Results

							RPD
		Location	SL-256-SA5A		SL-256-SA5A		
		Sample Name:	DUP-06-SA5A-QC-030111		SL-256-SA5A-SS-0.0-0.5		
		Sample Date	03/01/2011		03/01/2011		
		Start Depth:	0		0		
		End Depth:	0.5		0.5		
		Area:	5A		5A		
		Matrix:	SO		SO		
		Sample Type:	FD		N		
1,4-Dichlorobenzene	8260B	ug/kg					
1,4-Dioxane	8260B SIM	ug/kg					
2,2-Dichloropropane	8260B	ug/kg					
2-Butanone	8260B	ug/kg					
2-Chloroethyl Vinyl Ether	8260B	ug/kg					
2-Chlorotoluene	8260B	ug/kg					
2-Hexanone	8260B	ug/kg					
4-Chlorotoluene	8260B	ug/kg					
4-Methyl-2-Pentanone	8260B	ug/kg					
Acetone	8260B	ug/kg					
Benzene	8260B	ug/kg					
Bromobenzene	8260B	ug/kg					
Bromochloromethane	8260B	ug/kg					
Bromodichloromethane	8260B	ug/kg					
Bromoform	8260B	ug/kg					
Bromomethane	8260B	ug/kg					
Carbon tetrachloride	8260B	ug/kg					
Chlorobenzene	8260B	ug/kg					
Chloroethane	8260B	ug/kg					
Chloroform	8260B	ug/kg					
Chloromethane	8260B	ug/kg					
Chlorotrifluoroethene	8260B	ug/kg					
cis-1,2-Dichloroethene	8260B	ug/kg					
cis-1,3-Dichloropropene	8260B	ug/kg					
Dibromochloromethane	8260B	ug/kg					
Dibromomethane	8260B	ug/kg					
Dichlorodifluoromethane	8260B	ug/kg					
EFH (C15-C20)	8015M	mg/kg					
EFH (C21-C30)	8015M	mg/kg					
EFH (C30-C40)	8015M	mg/kg					
EFH (C8-C11)	8015M	mg/kg					
Ethylbenzene	8260B	ug/kg					
Freon 113	8260B	ug/kg					
Freon 113a	8260B	ug/kg					
GRO (C5-C12)	8015M	mg/kg					
Hexachlorobutadiene	8260B	ug/kg					
Isopropylbenzene	8260B	ug/kg					
Isopropyltoluene	8260B	ug/kg					
m,p-Xylene	8260B	ug/kg					
Methyl tert-Butyl Ether	8260B	ug/kg					
Methylene chloride	8260B	ug/kg					
N-Butylbenzene	8260B	ug/kg					
N-Propylbenzene	8260B	ug/kg					
o-Xylene	8260B	ug/kg					
sec-Butylbenzene	8260B	ug/kg					
Styrene	8260B	ug/kg					
tert-Butylbenzene	8260B	ug/kg					
Tetrachloroethene	8260B	ug/kg					
Toluene	8260B	ug/kg					
trans-1,2-Dichloroethene	8260B	ug/kg					
trans-1,3-Dichloropropene	8260B	ug/kg					
Trichloroethene	8260B	ug/kg					
Trichlorofluoromethane	8260B	ug/kg					
Vinyl Chloride	8260B	ug/kg					

Notes:
ug/kg - microgram per kilogram
mg/kg - milligram per kilogram
ng/g - nanogram per kilogram
FD - field duplicate sample
N - normal sample
RPD - relative percent difference
SO - soil
-- - RPD not calculated when both field duplicate and normal samples were nondetect or only one sample result is reported

200* - When one result is nondetect a 200% RPD is given and sample results are qualified as estimated "J" or "UJ" in the field duplicate samples only

Limit - 50% - If RPD is above 50% detected field duplicate results only were estimated "J"

Table C-6 - Subarea 5A Summary of Data Completeness Following Data Validation

Method Group	Analytical Method	Number of Analyte Detections without Qualifiers	Number of Estimated Results	Number of Rejected Results	Number of Non-Detected Results	Number of Estimated Non-Detected Results	Total Analytes Detected and Non-Detected	Percent of Analyte Results Judged Valid Versus Total Analyte Results Collected
Dioxins	1613B	540	1645	0	2820	78	5083	100.00%
Formaldehyde	8315A	5	3	0	87	0	95	100.00%
Herbicides	8151A	85	58	35	1006	16	1200	97.08%
Inorganics - Cyanide	9012B	0	0	0	95	0	95	100.00%
Inorganics - Fluoride	300	131	231	0	10	22	394	100.00%
Inorganics - Hexavalanent Chromium	7199	17	184	0	93	5	299	100.00%
Inorganics - Mercury	7471A	18	136	5	138	2	299	98.33%
Inorganics - Metals	6010B	2773	994	0	404	15	4186	100.00%
Inorganics - Metals	6020	1431	3128	1	121	103	4784	99.98%
Inorganics - Percent Moisture	160.3M	299	0	0	0	0	299	100.00%
Inorganics - Perchlorate	314	0	2	4	291	2	299	98.66%
Inorganics - Perchlorate	6850	1	0	0	40	0	41	100.00%
Inorganics - pH	9045M	299	0	0	0	0	299	100.00%
NDMA	1625C	18	19	0	55	3	95	100.00%
Organics - Alcohols and Terphenyls	8015B	0	4	0	554	12	570	100.00%
Organics - Energetics	8330A	0	2	2	1698	8	1710	99.88%
Organics - Total Petroleum Hydrocarbons and Glycols	8015M	74	83	0	667	31	855	100.00%
Oxidation Reduction Potential	ASTM D1498	298	0	0	0	0	298	100.00%
PCBs	8082	110	183	9	3068	218	3588	99.75%
Pesticides	8081A	105	207	19	2025	164	2520	99.25%
Semivolatiles	8270C	46	245	4	13952	364	14611	99.97%
Semivolatiles - SIM	8270C SIM	722	788	0	5355	53	6918	100.00%
Volatiles	8260B	28	104	0	10333	121	10586	100.00%
Volatiles - SIM	8260B SIM	0	0	0	158	0	158	100.00%

Appendix C. Samples by SDG for 5A

Task Code	System Sample Code	Lab SDG	Matrix Code	Sample Date	Sample Source
5A	SL-048-SA5A-SB-3.0-4.0	DE077	SO	2011-02-07	FIELD
5A	SL-049-SA5A-SB-2.0-3.0	DE077	SO	2011-02-07	FIELD
5A	SL-024-SA5A-SS-0.0-0.5	DE083	SO	2011-02-16	FIELD
5A	SL-025-SA5A-SS-0.0-0.5	DE083	SO	2011-02-16	FIELD
5A	SL-026-SA5A-SS-0.0-0.5	DE083	SO	2011-02-16	FIELD
5A	SL-028-SA5A-SS-0.0-0.5	DE083	SO	2011-02-16	FIELD
5A	SL-029-SA5A-SS-0.0-0.5	DE083	SO	2011-02-16	FIELD
5A	SL-031-SA5A-SS-0.0-0.5	DE083	SO	2011-02-16	FIELD
5A	SL-032-SA5A-SS-0.0-0.5	DE083	SO	2011-02-16	FIELD
5A	SL-041-SA5A-SS-0.0-0.5	DE083	SO	2011-02-16	FIELD
5A	SL-021-SA5A-SS-0.0-0.5	DE084	SO	2011-02-17	FIELD
5A	SL-022-SA5A-SS-0.0-0.5	DE084	SO	2011-02-17	FIELD
5A	SL-035-SA5A-SS-0.0-0.5	DE084	SO	2011-02-17	FIELD
5A	SL-036-SA5A-SS-0.0-0.5	DE084	SO	2011-02-17	FIELD
5A	SL-037-SA5A-SS-0.0-0.5	DE084	SO	2011-02-17	FIELD
5A	SL-040-SA5A-SS-0.0-0.5	DE084	SO	2011-02-17	FIELD
5A	SL-050-SA5A-SS-0.0-0.5	DE084	SO	2011-02-17	FIELD
5A	SL-051-SA5A-SS-0.0-0.5	DE084	SO	2011-02-17	FIELD
5A	DUP01-SA5A-QC-021811	DE086	SO	2011-02-18	FIELD
5A	SL-049-SA5A-SS-0.0-0.5	DE086	SO	2011-02-18	FIELD
5A	SL-052-SA5A-SS-0.0-0.5	DE086	SO	2011-02-18	FIELD
5A	SL-053-SA5A-SS-0.0-0.5	DE086	SO	2011-02-18	FIELD
5A	SL-096-SA5A-SS-0.0-0.5	DE086	SO	2011-02-18	FIELD
5A	SL-098-SA5A-SS-0.0-0.5	DE086	SO	2011-02-18	FIELD
5A	SL-099-SA5A-SS-0.0-0.5	DE086	SO	2011-02-18	FIELD
5A	SL-100-SA5A-SS-0.0-0.5	DE086	SO	2011-02-18	FIELD
5A	SL-101-SA5A-SS-0.0-0.5	DE086	SO	2011-02-18	FIELD
5A	SL-102-SA5A-SS-0.0-0.5	DE086	SO	2011-02-18	FIELD
5A	SL-241-SA5A-SS-0.0-0.5	DE086	SO	2011-02-18	FIELD
5A	SL-242-SA5A-SS-0.0-0.5	DE086	SO	2011-02-18	FIELD
5A	SL-025-SA5A-SB-4.5-5.5	DE087	SO	2011-02-21	FIELD
5A	SL-028-SA5A-SB-3.5-4.5	DE087	SO	2011-02-21	FIELD
5A	SL-029-SA5A-SB-3.0-4.0	DE087	SO	2011-02-21	FIELD
5A	SL-054-SA5A-SS-0.0-0.5	DE087	SO	2011-02-21	FIELD
5A	SL-055-SA5A-SS-0.0-0.5	DE087	SO	2011-02-21	FIELD
5A	SL-056-SA5A-SS-0.0-0.5	DE087	SO	2011-02-21	FIELD
5A	SL-057-SA5A-SS-0.0-0.5	DE087	SO	2011-02-21	FIELD
5A	SL-058-SA5A-SS-0.0-0.5	DE087	SO	2011-02-21	FIELD
5A	SL-059-SA5A-SS-0.0-0.5	DE087	SO	2011-02-21	FIELD
5A	SL-060-SA5A-SS-0.0-0.5	DE087	SO	2011-02-21	FIELD
5A	SL-061-SA5A-SS-0.0-0.5	DE087	SO	2011-02-21	FIELD
5A	SL-062-SA5A-SS-0.0-0.5	DE087	SO	2011-02-21	FIELD
5A	SL-063-SA5A-SS-0.0-0.5	DE087	SO	2011-02-21	FIELD
5A	SL-064-SA5A-SS-0.0-0.5	DE087	SO	2011-02-21	FIELD
5A	SL-095-SA5A-SS-0.0-0.5	DE087	SO	2011-02-21	FIELD
5A	DUP-02-SA5A-QC-022211	DE088	SO	2011-02-22	FIELD
5A	SL-024-SA5A-SB-2.5-3.5	DE088	SO	2011-02-22	FIELD
5A	SL-026-SA5A-SB-3.5-4.5	DE088	SO	2011-02-22	FIELD
5A	SL-031-SA5A-SB-4.0-5.0	DE088	SO	2011-02-22	FIELD
5A	SL-035-SA5A-SB-4.0-5.0	DE088	SO	2011-02-22	FIELD
5A	SL-175-SA5A-SS-0.0-0.3	DE088	SO	2011-02-22	FIELD

Appendix C. Samples by SDG for 5A

Task Code	System Sample Code	Lab SDG	Matrix Code	Sample Date	Sample Source
5A	SL-180-SA5A-SS-0.0-0.5	DE088	SO	2011-02-22	FIELD
5A	SL-181-SA5A-SS-0.0-0.5	DE088	SO	2011-02-22	FIELD
5A	SL-196-SA5A-SS-0.0-0.5	DE088	SO	2011-02-22	FIELD
5A	SL-197-SA5A-SS-0.0-0.5	DE088	SO	2011-02-22	FIELD
5A	SL-210-SA5A-SS-0.0-0.5	DE088	SO	2011-02-22	FIELD
5A	SL-211-SA5A-SS-0.0-0.5	DE088	SO	2011-02-22	FIELD
5A	SL-212-SA5A-SS-0.0-0.5	DE088	SO	2011-02-22	FIELD
5A	SL-214-SA5A-SS-0.0-0.5	DE088	SO	2011-02-22	FIELD
5A	SL-215-SA5A-SS-0.0-0.5	DE088	SO	2011-02-22	FIELD
5A	SL-217-SA5A-SS-0.0-0.5	DE088	SO	2011-02-22	FIELD
5A	SL-218-SA5A-SS-0.0-0.5	DE088	SO	2011-02-22	FIELD
5A	DUP-03-SA5A-QC-022311	DE089	SO	2011-02-23	FIELD
5A	SL-036-SA5A-SB-4.0-5.0	DE089	SO	2011-02-23	FIELD
5A	SL-037-SA5A-SB-4.0-5.0	DE089	SO	2011-02-23	FIELD
5A	SL-040-SA5A-SB-4.0-5.0	DE089	SO	2011-02-23	FIELD
5A	SL-040-SA5A-SB-9.0-10.0	DE089	SO	2011-02-23	FIELD
5A	DUP-04-SA5A-QC-022311	DE090	SO	2011-02-23	FIELD
5A	EB01-SA5A-022311	DE090	WQ	2011-02-23	FIELD
5A	SL-001-SA5A-SS-0.0-0.5	DE090	SO	2011-02-23	FIELD
5A	SL-002-SA5A-SS-0.0-0.5	DE090	SO	2011-02-23	FIELD
5A	SL-004-SA5A-SS-0.0-0.5	DE090	SO	2011-02-23	FIELD
5A	SL-006-SA5A-SS-0.0-0.5	DE090	SO	2011-02-23	FIELD
5A	SL-009-SA5A-SS-0.0-0.5	DE090	SO	2011-02-23	FIELD
5A	SL-010-SA5A-SS-0.0-0.5	DE090	SO	2011-02-23	FIELD
5A	SL-012-SA5A-SS-0.0-0.5	DE090	SO	2011-02-23	FIELD
5A	SL-013-SA5A-SS-0.0-0.5	DE090	SO	2011-02-23	FIELD
5A	SL-016-SA5A-SS-0.0-0.5	DE090	SO	2011-02-23	FIELD
5A	SL-017-SA5A-SS-0.0-0.5	DE090	SO	2011-02-23	FIELD
5A	SL-018-SA5A-SS-0.0-0.5	DE090	SO	2011-02-23	FIELD
5A	SL-019-SA5A-SS-0.0-0.5	DE090	SO	2011-02-23	FIELD
5A	SL-007-SA5A-SS-0.0-0.5	DE091	SO	2011-02-24	FIELD
5A	SL-008-SA5A-SS-0.0-0.5	DE091	SO	2011-02-24	FIELD
5A	SL-021-SA5A-SB-3.0-4.0	DE091	SO	2011-02-24	FIELD
5A	SL-022-SA5A-SB-4.0-5.0	DE091	SO	2011-02-24	FIELD
5A	SL-050-SA5A-SB-4.0-5.0	DE091	SO	2011-02-24	FIELD
5A	SL-110-SA5A-SS-0.0-0.5	DE091	SO	2011-02-24	FIELD
5A	SL-119-SA5A-SS-0.0-0.5	DE091	SO	2011-02-24	FIELD
5A	SL-120-SA5A-SS-0.0-0.5	DE091	SO	2011-02-24	FIELD
5A	SL-121-SA5A-SS-0.0-0.5	DE091	SO	2011-02-24	FIELD
5A	SL-122-SA5A-SS-0.0-0.5	DE091	SO	2011-02-24	FIELD
5A	SL-136-SA5A-SS-0.0-0.5	DE091	SO	2011-02-24	FIELD
5A	SL-137-SA5A-SS-0.0-0.5	DE091	SO	2011-02-24	FIELD
5A	SL-138-SA5A-SS-0.0-0.5	DE091	SO	2011-02-24	FIELD
5A	SL-143-SA5A-SS-0.0-0.5	DE091	SO	2011-02-24	FIELD
5A	SL-233-SA5A-SS-0.0-0.5	DE091	SO	2011-02-24	FIELD
5A	SL-250-SA5A-SS-0.0-0.5	DE091	SO	2011-02-24	FIELD
5A	SL-251-SA5A-SS-0.0-0.5	DE091	SO	2011-02-24	FIELD
5A	SL-053-SA5A-SB-3.0-4.0	DE092	SO	2011-02-25	FIELD
5A	SL-054-SA5A-SB-4.0-5.0	DE092	SO	2011-02-25	FIELD
5A	SL-054-SA5A-SB-9.0-10.0	DE092	SO	2011-02-25	FIELD
5A	SL-055-SA5A-SB-2.0-3.0	DE092	SO	2011-02-25	FIELD

Appendix C. Samples by SDG for 5A

Task Code	System Sample Code	Lab SDG	Matrix Code	Sample Date	Sample Source
5A	SL-056-SA5A-SB-4.0-5.0	DE092	SO	2011-02-25	FIELD
5A	SL-056-SA5A-SB-7.0-8.0	DE092	SO	2011-02-25	FIELD
5A	SL-126-SA5A-SS-0.0-0.5	DE092	SO	2011-02-25	FIELD
5A	SL-127-SA5A-SS-0.0-0.5	DE092	SO	2011-02-25	FIELD
5A	SL-132-SA5A-SS-0.0-0.5	DE092	SO	2011-02-25	FIELD
5A	SL-133-SA5A-SS-0.0-0.5	DE092	SO	2011-02-25	FIELD
5A	SL-144-SA5A-SS-0.0-0.5	DE092	SO	2011-02-25	FIELD
5A	SL-146-SA5A-SS-0.0-0.5	DE092	SO	2011-02-25	FIELD
5A	SL-171-SA5A-SS-0.0-0.5	DE092	SO	2011-02-25	FIELD
5A	SL-172-SA5A-SS-0.0-0.5	DE092	SO	2011-02-25	FIELD
5A	SL-173-SA5A-SS-0.0-0.5	DE092	SO	2011-02-25	FIELD
5A	SL-174-SA5A-SS-0.0-0.5	DE092	SO	2011-02-25	FIELD
5A	DUP-05-SA5A-QC-022811	DE093	SO	2011-02-28	FIELD
5A	EB02-SA5A-022811	DE093	AQ	2011-02-28	FIELD
5A	EB03-SA5A-022811	DE093	AQ	2011-02-28	FIELD
5A	SL-087-SA5A-SS-0.0-0.5	DE093	SO	2011-02-28	FIELD
5A	SL-105-SA5A-SS-0.0-0.5	DE093	SO	2011-02-28	FIELD
5A	SL-106-SA5A-SS-0.0-0.5	DE093	SO	2011-02-28	FIELD
5A	SL-107-SA5A-SS-0.0-0.5	DE093	SO	2011-02-28	FIELD
5A	SL-108-SA5A-SS-0.0-0.5	DE093	SO	2011-02-28	FIELD
5A	SL-109-SA5A-SS-0.0-0.5	DE093	SO	2011-02-28	FIELD
5A	SL-111-SA5A-SS-0.0-0.5	DE093	SO	2011-02-28	FIELD
5A	SL-145-SA5A-SS-0.0-0.5	DE093	SO	2011-02-28	FIELD
5A	SL-237-SA5A-SB-4.0-5.0	DE093	SO	2011-02-28	FIELD
5A	SL-237-SA5A-SB-9.0-10.0	DE093	SO	2011-02-28	FIELD
5A	SL-253-SA5A-SS-0.0-0.5	DE093	SO	2011-02-28	FIELD
5A	SL-255-SA5A-SS-0.0-0.5	DE093	SO	2011-02-28	FIELD
5A	DUP-06-SA5A-QC-030111	DE094	SO	2011-03-01	FIELD
5A	EB04-SA5A-030111	DE094	WQ	2011-03-01	FIELD
5A	SL-066-SA5A-SS-0.0-0.5	DE094	SO	2011-03-01	FIELD
5A	SL-072-SA5A-SS-0.0-0.5	DE094	SO	2011-03-01	FIELD
5A	SL-076-SA5A-SS-0.0-0.5	DE094	SO	2011-03-01	FIELD
5A	SL-077-SA5A-SS-0.0-0.5	DE094	SO	2011-03-01	FIELD
5A	SL-078-SA5A-SS-0.0-0.5	DE094	SO	2011-03-01	FIELD
5A	SL-103-SA5A-SS-0.0-0.5	DE094	SO	2011-03-01	FIELD
5A	SL-104-SA5A-SS-0.0-0.5	DE094	SO	2011-03-01	FIELD
5A	SL-191-SA5A-SS-0.0-0.5	DE094	SO	2011-03-01	FIELD
5A	SL-194-SA5A-SS-0.0-0.3	DE094	SO	2011-03-01	FIELD
5A	SL-195-SA5A-SS-0.0-0.2	DE094	SO	2011-03-01	FIELD
5A	SL-244-SA5A-SB-4.0-5.0	DE094	SO	2011-03-01	FIELD
5A	SL-244-SA5A-SB-9.0-10.0	DE094	SO	2011-03-01	FIELD
5A	SL-256-SA5A-SS-0.0-0.5	DE094	SO	2011-03-01	FIELD
5A	SL-257-SA5A-SS-0.0-0.5	DE094	SO	2011-03-01	FIELD
5A	DUP-07-SA5A-QC-030211	DE095	SO	2011-03-02	FIELD
5A	EB05-SA5A-030211	DE095	WQ	2011-03-02	FIELD
5A	SL-042-SA5A-SS-0.0-0.5	DE095	SO	2011-03-02	FIELD
5A	SL-044-SA5A-SS-0.0-0.5	DE095	SO	2011-03-02	FIELD
5A	SL-045-SA5A-SS-0.0-0.5	DE095	SO	2011-03-02	FIELD
5A	SL-048-SA5A-SS-0.0-0.5	DE095	SO	2011-03-02	FIELD
5A	SL-176-SA5A-SS-0.0-0.3	DE095	SO	2011-03-02	FIELD
5A	SL-178-SA5A-SS-0.0-0.4	DE095	SO	2011-03-02	FIELD

Appendix C. Samples by SDG for 5A

Task Code	System Sample Code	Lab SDG	Matrix Code	Sample Date	Sample Source
5A	SL-179-SA5A-SS-0.0-0.3	DE095	SO	2011-03-02	FIELD
5A	SL-186-SA5A-SS-0.0-0.5	DE095	SO	2011-03-02	FIELD
5A	SL-188-SA5A-SS-0.0-0.5	DE095	SO	2011-03-02	FIELD
5A	SL-189-SA5A-SS-0.0-0.5	DE095	SO	2011-03-02	FIELD
5A	DUP08-SA5A-QC-030211	DE096	SO	2011-03-02	FIELD
5A	SL-245-SA5A-SB-29.0-30.0	DE096	SO	2011-03-02	FIELD
5A	SL-245-SA5A-SB-4.0-5.0	DE096	SO	2011-03-02	FIELD
5A	SL-245-SA5A-SB-9.0-10.0	DE096	SO	2011-03-02	FIELD
5A	SL-246-SA5A-SB-4.0-5.0	DE096	SO	2011-03-02	FIELD
5A	SL-246-SA5A-SB-9.0-10.0	DE096	SO	2011-03-02	FIELD
5A	SL-247-SA5A-SB-4.0-5.0	DE096	SO	2011-03-02	FIELD
5A	SL-247-SA5A-SB-9.0-10.0	DE096	SO	2011-03-02	FIELD
5A	EB06-SA5A-030311	DE097	WQ	2011-03-03	FIELD
5A	SL-234-SA5A-SB-4.0-5.0	DE097	SO	2011-03-03	FIELD
5A	SL-234-SA5A-SB-9.0-10.0	DE097	SO	2011-03-03	FIELD
5A	SL-235-SA5A-SB-4.0-5.0	DE097	SO	2011-03-03	FIELD
5A	SL-235-SA5A-SB-8.5-9.5	DE097	SO	2011-03-03	FIELD
5A	SL-236-SA5A-SB-4.0-5.0	DE097	SO	2011-03-03	FIELD
5A	SL-236-SA5A-SB-9.0-10.0	DE097	SO	2011-03-03	FIELD
5A	SL-249-SA5A-SB-2.5-3.5	DE097	SO	2011-03-03	FIELD
5A	SL-249-SA5A-SB-9.0-10.0	DE097	SO	2011-03-03	FIELD
5A	SL-015-SA5A-SB-3.0-4.0	DE098	SO	2011-03-04	FIELD
5A	SL-233-SA5A-SB-4.0-5.0	DE098	SO	2011-03-04	FIELD
5A	SL-233-SA5A-SB-9.0-10.0	DE098	SO	2011-03-04	FIELD
5A	SL-007-SA5A-SB-4.0-5.0	DE099	SO	2011-03-07	FIELD
5A	SL-007-SA5A-SB-9.0-10.0	DE099	SO	2011-03-07	FIELD
5A	SL-012-SA5A-SB-2.0-3.0	DE099	SO	2011-03-07	FIELD
5A	SL-013-SA5A-SB-2.5-3.5	DE099	SO	2011-03-07	FIELD
5A	SL-006-SA5A-SB-2.0-3.0	DE100	SO	2011-03-08	FIELD
5A	DUP09-SA5A-QC-031111	DE102	SO	2011-03-11	FIELD
5A	SL-112-SA5A-SB-14.0-15.0	DE102	SO	2011-03-11	FIELD
5A	SL-112-SA5A-SB-8.5-9.5	DE102	SO	2011-03-11	FIELD
5A	SL-113-SA5A-SB-14.0-15.0	DE102	SO	2011-03-11	FIELD
5A	SL-113-SA5A-SB-9.0-10.0	DE102	SO	2011-03-11	FIELD
5A	SL-114-SA5A-SB-4.0-5.0	DE102	SO	2011-03-11	FIELD
5A	SL-114-SA5A-SB-9.0-10.0	DE102	SO	2011-03-11	FIELD
5A	SL-115-SA5A-SB-13.0-14.0	DE103	SO	2011-03-10	FIELD
5A	SL-115-SA5A-SB-6.5-7.5	DE103	SO	2011-03-10	FIELD
5A	SL-116-SA5A-SB-14.0-15.0	DE103	SO	2011-03-10	FIELD
5A	SL-116-SA5A-SB-6.0-7.0	DE103	SO	2011-03-10	FIELD
5A	SL-001-SA5A-SB-4.0-5.0	DE104	SO	2011-03-14	FIELD
5A	SL-117-SA5A-SB-5.0-6.0	DE104	SO	2011-03-14	FIELD
5A	SL-118-SA5A-SB-2.5-3.5	DE104	SO	2011-03-14	FIELD
5A	SL-121-SA5A-SB-2.0-3.0	DE104	SO	2011-03-14	FIELD
5A	EB07-SA5A-031511	DE105	AQ	2011-03-15	FIELD
5A	SL-132-SA5A-SB-2.0-3.0	DE105	SO	2011-03-15	FIELD
5A	SL-137-SA5A-SB-4.0-5.0	DE105	SO	2011-03-15	FIELD
5A	SL-138-SA5A-SB-4.0-5.0	DE105	SO	2011-03-15	FIELD
5A	SL-128-SA5A-SB-4.0-5.0	DE106	SO	2011-03-16	FIELD
5A	SL-128-SA5A-SB-9.0-10.0	DE106	SO	2011-03-16	FIELD
5A	SL-133-SA5A-SB-4.0-5.0	DE106	SO	2011-03-16	FIELD

Appendix C. Samples by SDG for 5A

Task Code	System Sample Code	Lab SDG	Matrix Code	Sample Date	Sample Source
5A	SL-146-SA5A-SB-3.0-4.0	DE106	SO	2011-03-16	FIELD
5A	SL-136-SA5A-SB-4.0-5.0	DE107	SO	2011-03-17	FIELD
5A	SL-139-SA5A-SB-2.5-3.5	DE107	SO	2011-03-17	FIELD
5A	SL-158-SA5A-SB-4.0-5.0	DE107	SO	2011-03-17	FIELD
5A	SL-159-SA5A-SB-4.0-5.0	DE108	SO	2011-03-18	FIELD
5A	SL-160-SA5A-SB-4.0-5.0	DE108	SO	2011-03-18	FIELD
5A	SL-160-SA5A-SB-9.0-10.0	DE108	SO	2011-03-18	FIELD
5A	SL-168-SA5A-SB-4.0-5.0	DE108	SO	2011-03-18	FIELD
5A	SL-169-SA5A-SB-4.0-5.0	DE108	SO	2011-03-18	FIELD
5A	SL-161-SA5A-SB-4.0-5.0	DE109	SO	2011-03-21	FIELD
5A	SL-161-SA5A-SB-7.5-8.5	DE109	SO	2011-03-21	FIELD
5A	SL-163-SA5A-SB-4.0-5.0	DE109	SO	2011-03-21	FIELD
5A	SL-252-SA5A-SB-4.0-5.0	DE109	SO	2011-03-21	FIELD
5A	EB08-SA5A-032211	DE110	WQ	2011-03-22	FIELD
5A	SL-180-SA5A-SB-4.0-5.0	DE110	SO	2011-03-22	FIELD
5A	SL-181-SA5A-SB-4.0-5.0	DE110	SO	2011-03-22	FIELD
5A	SL-231-SA5A-SB-2.0-3.0	DE110	SO	2011-03-22	FIELD
5A	EB09-SA5A-032311	DE111	WQ	2011-03-23	FIELD
5A	SL-197-SA5A-SB-4.0-5.0	DE111	SO	2011-03-23	FIELD
5A	SL-197-SA5A-SB-8.0-9.0	DE111	SO	2011-03-23	FIELD
5A	SL-198-SA5A-SB-3.0-4.0	DE111	SO	2011-03-23	FIELD
5A	SL-200-SA5A-SB-4.0-5.0	DE111	SO	2011-03-23	FIELD
5A	SL-239-SA5A-SB-4.0-5.0	DE111	SO	2011-03-23	FIELD
5A	SL-240-SA5A-SB-4.0-5.0	DE111	SO	2011-03-23	FIELD
5A	SL-240-SA5A-SB-9.0-10.0	DE111	SO	2011-03-23	FIELD
5A	DUP10-SA5A-QC-032411	DE112	SO	2011-03-24	FIELD
5A	SL-199-SA5A-SB-2.5-3.5	DE112	SO	2011-03-24	FIELD
5A	SL-223-SA5A-SB-4.0-5.0	DE112	SO	2011-03-24	FIELD
5A	SL-223-SA5A-SB-8.5-9.5	DE112	SO	2011-03-24	FIELD
5A	SL-224-SA5A-SB-4.0-5.0	DE112	SO	2011-03-24	FIELD
5A	SL-225-SA5A-SB-4.0-5.0	DE112	SO	2011-03-24	FIELD
5A	SL-226-SA5A-SB-4.0-5.0	DE112	SO	2011-03-24	FIELD
5A	SL-209-SA5A-SB-4.0-5.0	DE113	SO	2011-03-28	FIELD
5A	SL-211-SA5A-SB-2.5-3.5	DE113	SO	2011-03-28	FIELD
5A	SL-214-SA5A-SB-4.0-5.0	DE113	SO	2011-03-28	FIELD
5A	SL-214-SA5A-SB-8.5-9.5	DE113	SO	2011-03-28	FIELD
5A	SL-215-SA5A-SB-4.0-5.0	DE113	SO	2011-03-28	FIELD
5A	SL-216-SA5A-SB-4.0-5.0	DE113	SO	2011-03-28	FIELD
5A	EB10-SA5A-032911	DE114	WQ	2011-03-29	FIELD
5A	SL-091-SA5A-SB-3.0-4.0	DE114	SO	2011-03-29	FIELD
5A	SL-208-SA5A-SB-4.0-5.0	DE114	SO	2011-03-29	FIELD
5A	SL-208-SA5A-SB-7.5-8.5	DE114	SO	2011-03-29	FIELD
5A	SL-221-SA5A-SB-3.0-4.0	DE114	SO	2011-03-29	FIELD
5A	DUP-11-SA5A-QC-033011	DE115	SO	2011-03-30	FIELD
5A	DUP-12-SA5A-QC-033011	DE115	SO	2011-03-30	FIELD
5A	SL-082-SA5A-SB-4.0-5.0	DE115	SO	2011-03-30	FIELD
5A	SL-083-SA5A-SB-4.0-5.0	DE115	SO	2011-03-30	FIELD
5A	SL-083-SA5A-SB-9.0-10.0	DE115	SO	2011-03-30	FIELD
5A	SL-090-SA5A-SB-4.0-5.0	DE115	SO	2011-03-30	FIELD
5A	SL-093-SA5A-SB-3.5-4.5	DE115	SO	2011-03-30	FIELD
5A	SL-222-SA5A-SB-3.5-4.5	DE115	SO	2011-03-30	FIELD

Appendix C. Samples by SDG for 5A

Task Code	System Sample Code	Lab SDG	Matrix Code	Sample Date	Sample Source
5A	SL-257-SA5A-SB-2.5-3.5	DE115	SO	2011-03-30	FIELD
5A	SL-075-SA5A-SB-2.5-3.5	DE116	SO	2011-03-31	FIELD
5A	SL-089-SA5A-SB-4.0-5.0	DE116	SO	2011-03-31	FIELD
5A	SL-089-SA5A-SB-9.0-10.0	DE116	SO	2011-03-31	FIELD
5A	SL-094-SA5A-SB-4.0-5.0	DE116	SO	2011-03-31	FIELD
5A	SL-094-SA5A-SB-9.0-10.0	DE116	SO	2011-03-31	FIELD
5A	SL-071-SA5A-SB-4.0-5.0	DE117	SO	2011-04-01	FIELD
5A	SL-072-SA5A-SB-4.0-5.0	DE117	SO	2011-04-01	FIELD
5A	SL-076-SA5A-SB-4.0-5.0	DE117	SO	2011-04-01	FIELD
5A	SL-085-SA5A-SB-4.0-5.0	DE118	SO	2011-04-04	FIELD
5A	SL-087-SA5A-SB-2.0-3.0	DE118	SO	2011-04-04	FIELD
5A	EB11-SA5A-SB-040511	DE119	WQ	2011-04-05	FIELD
5A	SL-154-SA5A-SB-4.0-5.0	DE119	SO	2011-04-05	FIELD
5A	SL-154-SA5A-SB-7.0-8.0	DE119	SO	2011-04-05	FIELD
5A	SL-156-SA5A-SB-3.0-4.0	DE119	SO	2011-04-05	FIELD
5A	EB12-SA5A-SB-040611	DE120	WQ	2011-04-06	FIELD
5A	SL-151-SA5A-SB-4.0-5.0	DE120	SO	2011-04-06	FIELD
5A	SL-079-SA5A-SB-4.0-5.0	DE121	SO	2011-04-07	FIELD
5A	SL-080-SA5A-SB-3.0-4.0	DE121	SO	2011-04-07	FIELD
5A	SL-081-SA5A-SB-2.0-3.0	DE121	SO	2011-04-07	FIELD
5A	SL-088-SA5A-SB-4.0-5.0	DE121	SO	2011-04-07	FIELD
5A	SL-258-SA5A-SB-4.0-5.0	DE121	SO	2011-04-07	FIELD
5A	SL-143-SA5A-SB-4.0-5.0	DE122	SO	2011-03-25	FIELD
5A	SL-143-SA5A-SB-8.0-9.0	DE122	SO	2011-03-25	FIELD
5A	SL-144-SA5A-SB-4.0-5.0	DE122	SO	2011-03-25	FIELD
5A	SL-144-SA5A-SB-7.0-8.0	DE122	SO	2011-03-25	FIELD
5A	SL-213-SA5A-SB-4.0-5.0	DE122	SO	2011-03-25	FIELD
5A	SL-213-SA5A-SB-8.0-9.0	DE122	SO	2011-03-25	FIELD
5A	DUP-13-SA5A-QC-041111	DE123	SO	2011-04-11	FIELD
5A	SL-186-SA5A-SB-3.5-4.5	DE123	SO	2011-04-11	FIELD
5A	SL-187-SA5A-SB-4.0-5.0	DE123	SO	2011-04-11	FIELD
5A	SL-188-SA5A-SB-4.5-5.5	DE123	SO	2011-04-11	FIELD
5A	SL-189-SA5A-SB-5.0-6.0	DE123	SO	2011-04-11	FIELD
5A	SL-189-SA5A-SB-8.5-9.5	DE123	SO	2011-04-11	FIELD
5A	SL-202-SA5A-SB-3.0-4.0	DE125	SO	2011-04-12	FIELD
5A	SL-206-SA5A-SB-4.0-5.0	DE125	SO	2011-04-12	FIELD
5A	SL-207-SA5A-SB-3.0-4.0	DE125	SO	2011-04-12	FIELD
5A	SL-227-SA5A-SB-3.0-4.0	DE125	SO	2011-04-12	FIELD
5A	SL-228-SA5A-SB-3.0-4.0	DE125	SO	2011-04-12	FIELD
5A	SL-060-SA5A-SB-4.0-5.0	DE126	SO	2011-04-13	FIELD
5A	SL-060-SA5A-SB-8.0-9.0	DE126	SO	2011-04-13	FIELD
5A	SL-061-SA5A-SB-4.0-5.0	DE126	SO	2011-04-13	FIELD
5A	SL-204-SA5A-SB-4.0-5.0	DE126	SO	2011-04-13	FIELD
5A	SL-205-SA5A-SB-4.0-5.0	DE126	SO	2011-04-13	FIELD
5A	SL-205-SA5A-SB-8.0-9.0	DE126	SO	2011-04-13	FIELD
5A	DUP14-SA5A-QC-041411	DE128	SO	2011-04-14	FIELD
5A	SL-058-SA5A-SB-3.0-4.0	DE128	SO	2011-04-14	FIELD
5A	SL-059-SA5A-SB-3.0-4.0	DE128	SO	2011-04-14	FIELD
5A	SL-065-SA5A-SB-4.0-5.0	DE128	SO	2011-04-14	FIELD
5A	SL-242-SA5A-SB-2.5-3.5	DE128	SO	2011-04-14	FIELD
5A	SL-041-SA5A-SB-4.0-5.0	DE129	SO	2011-04-15	FIELD

Appendix C. Samples by SDG for 5A

Task Code	System Sample Code	Lab SDG	Matrix Code	Sample Date	Sample Source
5A	SL-044-SA5A-SB-3.0-4.0	DE129	SO	2011-04-15	FIELD
5A	SL-052-SA5A-SB-4.0-5.0	DE129	SO	2011-04-15	FIELD
5A	SL-243-SA5A-SB-4.0-5.0	DE129	SO	2011-04-15	FIELD
5A	EB13-SA5A-SB-041811	DE130	WQ	2011-04-18	FIELD
5A	SL-032-SA5A-SB-3.0-4.0	DE130	SO	2011-04-18	FIELD
5A	SL-172-SA5A-SB-4.0-5.0	DE130	SO	2011-04-18	FIELD
5A	SL-174-SA5A-SB-2.0-3.0	DE130	SO	2011-04-18	FIELD
5A	SL-254-SA5A-SB-2.5-3.5	DE130	SO	2011-04-18	FIELD
5A	EB14-SA5A-SB-041911	DE131	WQ	2011-04-19	FIELD
5A	SL-126-SA5A-SB-4.0-5.0	DE131	SO	2011-04-19	FIELD
5A	SL-127-SA5A-SB-2.0-3.0	DE131	SO	2011-04-19	FIELD
5A	SL-171-SA5A-SB-2.0-3.0	DE131	SO	2011-04-19	FIELD
5A	DUP15-SA5A-QC-042011	DE133	SO	2011-04-20	FIELD
5A	SL-148-SA5A-SB-4.0-5.0	DE133	SO	2011-04-20	FIELD
5A	SL-148-SA5A-SB-9.0-10.0	DE133	SO	2011-04-20	FIELD
5A	DUP16-SA5A-QC-042211	DE135	SO	2011-04-22	FIELD
5A	SL-064-SA5A-SB-3.0-4.0	DE135	SO	2011-04-22	FIELD
5A	SL-166-SA5A-SS-0.0-0.5	DE135	SO	2011-04-22	FIELD
5A	SL-253-SA5A-SB-4.0-5.0	DE135	SO	2011-04-15	FIELD
5A	SL-253-SA5A-SB-8.0-9.0	DE135	SO	2011-04-22	FIELD
5A	DUP-17-SA5A-QC-051611	DE151	SO	2011-05-16	FIELD
5A	EB15-SA5A-SB-051611	DE151	WQ	2011-05-16	FIELD
5A	SL-042-SA5A-SB-3.5-4.5	DE151	SO	2011-05-16	FIELD
5A	SL-167-SA5A-SB-1.0-2.0	DE151	SO	2011-05-16	FIELD
5A	SL-254-SA5A-SS-0.0-0.5	DE152	SO	2011-05-16	FIELD
5A	SL-048-SA5A-SB-3.0-4.0	DX048	SO	2011-02-07	FIELD
5A	SL-049-SA5A-SB-2.0-3.0	DX048	SO	2011-02-07	FIELD
5A	DUP01-SA5A-QC-021811	DX051	SO	2011-02-18	FIELD
5A	SL-024-SA5A-SS-0.0-0.5	DX051	SO	2011-02-16	FIELD
5A	SL-025-SA5A-SS-0.0-0.5	DX051	SO	2011-02-16	FIELD
5A	SL-026-SA5A-SS-0.0-0.5	DX051	SO	2011-02-16	FIELD
5A	SL-028-SA5A-SS-0.0-0.5	DX051	SO	2011-02-16	FIELD
5A	SL-029-SA5A-SS-0.0-0.5	DX051	SO	2011-02-16	FIELD
5A	SL-031-SA5A-SS-0.0-0.5	DX051	SO	2011-02-16	FIELD
5A	SL-032-SA5A-SS-0.0-0.5	DX051	SO	2011-02-16	FIELD
5A	SL-041-SA5A-SS-0.0-0.5	DX051	SO	2011-02-16	FIELD
5A	SL-049-SA5A-SS-0.0-0.5	DX051	SO	2011-02-18	FIELD
5A	SL-052-SA5A-SS-0.0-0.5	DX051	SO	2011-02-18	FIELD
5A	SL-053-SA5A-SS-0.0-0.5	DX051	SO	2011-02-18	FIELD
5A	SL-096-SA5A-SS-0.0-0.5	DX051	SO	2011-02-18	FIELD
5A	SL-098-SA5A-SS-0.0-0.5	DX051	SO	2011-02-18	FIELD
5A	SL-099-SA5A-SS-0.0-0.5	DX051	SO	2011-02-18	FIELD
5A	SL-100-SA5A-SS-0.0-0.5	DX051	SO	2011-02-18	FIELD
5A	SL-101-SA5A-SS-0.0-0.5	DX051	SO	2011-02-18	FIELD
5A	SL-021-SA5A-SS-0.0-0.5	DX052	SO	2011-02-17	FIELD
5A	SL-022-SA5A-SS-0.0-0.5	DX052	SO	2011-02-17	FIELD
5A	SL-035-SA5A-SS-0.0-0.5	DX052	SO	2011-02-17	FIELD
5A	SL-036-SA5A-SS-0.0-0.5	DX052	SO	2011-02-17	FIELD
5A	SL-037-SA5A-SS-0.0-0.5	DX052	SO	2011-02-17	FIELD
5A	SL-040-SA5A-SS-0.0-0.5	DX052	SO	2011-02-17	FIELD
5A	SL-050-SA5A-SS-0.0-0.5	DX052	SO	2011-02-17	FIELD

Appendix C. Samples by SDG for 5A

Task Code	System Sample Code	Lab SDG	Matrix Code	Sample Date	Sample Source
5A	SL-051-SA5A-SS-0.0-0.5	DX052	SO	2011-02-17	FIELD
5A	SL-102-SA5A-SS-0.0-0.5	DX052	SO	2011-02-18	FIELD
5A	SL-241-SA5A-SS-0.0-0.5	DX052	SO	2011-02-18	FIELD
5A	SL-242-SA5A-SS-0.0-0.5	DX052	SO	2011-02-18	FIELD
5A	DUP-03-SA5A-QC-022311	DX053	SO	2011-02-23	FIELD
5A	SL-025-SA5A-SB-4.5-5.5	DX053	SO	2011-02-21	FIELD
5A	SL-028-SA5A-SB-3.5-4.5	DX053	SO	2011-02-21	FIELD
5A	SL-029-SA5A-SB-3.0-4.0	DX053	SO	2011-02-21	FIELD
5A	SL-036-SA5A-SB-4.0-5.0	DX053	SO	2011-02-23	FIELD
5A	SL-037-SA5A-SB-4.0-5.0	DX053	SO	2011-02-23	FIELD
5A	SL-040-SA5A-SB-4.0-5.0	DX053	SO	2011-02-23	FIELD
5A	SL-040-SA5A-SB-9.0-10.0	DX053	SO	2011-02-23	FIELD
5A	SL-054-SA5A-SS-0.0-0.5	DX053	SO	2011-02-21	FIELD
5A	SL-055-SA5A-SS-0.0-0.5	DX053	SO	2011-02-21	FIELD
5A	SL-056-SA5A-SS-0.0-0.5	DX053	SO	2011-02-21	FIELD
5A	SL-057-SA5A-SS-0.0-0.5	DX053	SO	2011-02-21	FIELD
5A	SL-058-SA5A-SS-0.0-0.5	DX053	SO	2011-02-21	FIELD
5A	SL-059-SA5A-SS-0.0-0.5	DX053	SO	2011-02-21	FIELD
5A	SL-060-SA5A-SS-0.0-0.5	DX053	SO	2011-02-21	FIELD
5A	SL-061-SA5A-SS-0.0-0.5	DX053	SO	2011-02-21	FIELD
5A	SL-062-SA5A-SS-0.0-0.5	DX053	SO	2011-02-21	FIELD
5A	SL-063-SA5A-SS-0.0-0.5	DX053	SO	2011-02-21	FIELD
5A	SL-064-SA5A-SS-0.0-0.5	DX053	SO	2011-02-21	FIELD
5A	SL-095-SA5A-SS-0.0-0.5	DX053	SO	2011-02-21	FIELD
5A	DUP-02-SA5A-QC-022211	DX054	SO	2011-02-22	FIELD
5A	SL-024-SA5A-SB-2.5-3.5	DX054	SO	2011-02-22	FIELD
5A	SL-026-SA5A-SB-3.5-4.5	DX054	SO	2011-02-22	FIELD
5A	SL-031-SA5A-SB-4.0-5.0	DX054	SO	2011-02-22	FIELD
5A	SL-035-SA5A-SB-4.0-5.0	DX054	SO	2011-02-22	FIELD
5A	SL-175-SA5A-SS-0.0-0.3	DX054	SO	2011-02-22	FIELD
5A	SL-180-SA5A-SS-0.0-0.5	DX054	SO	2011-02-22	FIELD
5A	SL-181-SA5A-SS-0.0-0.5	DX054	SO	2011-02-22	FIELD
5A	SL-196-SA5A-SS-0.0-0.5	DX054	SO	2011-02-22	FIELD
5A	SL-197-SA5A-SS-0.0-0.5	DX054	SO	2011-02-22	FIELD
5A	SL-210-SA5A-SS-0.0-0.5	DX054	SO	2011-02-22	FIELD
5A	SL-211-SA5A-SS-0.0-0.5	DX054	SO	2011-02-22	FIELD
5A	SL-212-SA5A-SS-0.0-0.5	DX054	SO	2011-02-22	FIELD
5A	SL-214-SA5A-SS-0.0-0.5	DX054	SO	2011-02-22	FIELD
5A	SL-215-SA5A-SS-0.0-0.5	DX054	SO	2011-02-22	FIELD
5A	SL-217-SA5A-SS-0.0-0.5	DX054	SO	2011-02-22	FIELD
5A	SL-218-SA5A-SS-0.0-0.5	DX054	SO	2011-02-22	FIELD
5A	DUP-04-SA5A-QC-022311	DX055	SO	2011-02-23	FIELD
5A	EB01-SA5A-022311	DX055	WQ	2011-02-23	FIELD
5A	SL-001-SA5A-SS-0.0-0.5	DX055	SO	2011-02-23	FIELD
5A	SL-002-SA5A-SS-0.0-0.5	DX055	SO	2011-02-23	FIELD
5A	SL-004-SA5A-SS-0.0-0.5	DX055	SO	2011-02-23	FIELD
5A	SL-006-SA5A-SS-0.0-0.5	DX055	SO	2011-02-23	FIELD
5A	SL-009-SA5A-SS-0.0-0.5	DX055	SO	2011-02-23	FIELD
5A	SL-010-SA5A-SS-0.0-0.5	DX055	SO	2011-02-23	FIELD
5A	SL-012-SA5A-SS-0.0-0.5	DX055	SO	2011-02-23	FIELD
5A	SL-013-SA5A-SS-0.0-0.5	DX055	SO	2011-02-23	FIELD

Appendix C. Samples by SDG for 5A

Task Code	System Sample Code	Lab SDG	Matrix Code	Sample Date	Sample Source
5A	SL-016-SA5A-SS-0.0-0.5	DX055	SO	2011-02-23	FIELD
5A	SL-017-SA5A-SS-0.0-0.5	DX055	SO	2011-02-23	FIELD
5A	SL-018-SA5A-SS-0.0-0.5	DX055	SO	2011-02-23	FIELD
5A	SL-019-SA5A-SS-0.0-0.5	DX055	SO	2011-02-23	FIELD
5A	SL-007-SA5A-SS-0.0-0.5	DX056	SO	2011-02-24	FIELD
5A	SL-008-SA5A-SS-0.0-0.5	DX056	SO	2011-02-24	FIELD
5A	SL-021-SA5A-SB-3.0-4.0	DX056	SO	2011-02-24	FIELD
5A	SL-022-SA5A-SB-4.0-5.0	DX056	SO	2011-02-24	FIELD
5A	SL-050-SA5A-SB-4.0-5.0	DX056	SO	2011-02-24	FIELD
5A	SL-110-SA5A-SS-0.0-0.5	DX056	SO	2011-02-24	FIELD
5A	SL-119-SA5A-SS-0.0-0.5	DX056	SO	2011-02-24	FIELD
5A	SL-120-SA5A-SS-0.0-0.5	DX056	SO	2011-02-24	FIELD
5A	SL-121-SA5A-SS-0.0-0.5	DX056	SO	2011-02-24	FIELD
5A	SL-122-SA5A-SS-0.0-0.5	DX056	SO	2011-02-24	FIELD
5A	SL-136-SA5A-SS-0.0-0.5	DX056	SO	2011-02-24	FIELD
5A	SL-137-SA5A-SS-0.0-0.5	DX056	SO	2011-02-24	FIELD
5A	SL-138-SA5A-SS-0.0-0.5	DX056	SO	2011-02-24	FIELD
5A	SL-143-SA5A-SS-0.0-0.5	DX056	SO	2011-02-24	FIELD
5A	SL-233-SA5A-SS-0.0-0.5	DX056	SO	2011-02-24	FIELD
5A	SL-250-SA5A-SS-0.0-0.5	DX056	SO	2011-02-24	FIELD
5A	SL-251-SA5A-SS-0.0-0.5	DX056	SO	2011-02-24	FIELD
5A	SL-053-SA5A-SB-3.0-4.0	DX057	SO	2011-02-25	FIELD
5A	SL-054-SA5A-SB-4.0-5.0	DX057	SO	2011-02-25	FIELD
5A	SL-054-SA5A-SB-9.0-10.0	DX057	SO	2011-02-25	FIELD
5A	SL-055-SA5A-SB-2.0-3.0	DX057	SO	2011-02-25	FIELD
5A	SL-056-SA5A-SB-4.0-5.0	DX057	SO	2011-02-25	FIELD
5A	SL-056-SA5A-SB-7.0-8.0	DX057	SO	2011-02-25	FIELD
5A	SL-126-SA5A-SS-0.0-0.5	DX057	SO	2011-02-25	FIELD
5A	SL-127-SA5A-SS-0.0-0.5	DX057	SO	2011-02-25	FIELD
5A	SL-132-SA5A-SS-0.0-0.5	DX057	SO	2011-02-25	FIELD
5A	SL-133-SA5A-SS-0.0-0.5	DX057	SO	2011-02-25	FIELD
5A	SL-144-SA5A-SS-0.0-0.5	DX057	SO	2011-02-25	FIELD
5A	SL-146-SA5A-SS-0.0-0.5	DX057	SO	2011-02-25	FIELD
5A	SL-171-SA5A-SS-0.0-0.5	DX057	SO	2011-02-25	FIELD
5A	SL-172-SA5A-SS-0.0-0.5	DX057	SO	2011-02-25	FIELD
5A	SL-173-SA5A-SS-0.0-0.5	DX057	SO	2011-02-25	FIELD
5A	SL-174-SA5A-SS-0.0-0.5	DX057	SO	2011-02-25	FIELD
5A	DUP-05-SA5A-QC-022811	DX058	SO	2011-02-28	FIELD
5A	EB02-SA5A-022811	DX058	AQ	2011-02-28	FIELD
5A	EB03-SA5A-022811	DX058	AQ	2011-02-28	FIELD
5A	SL-087-SA5A-SS-0.0-0.5	DX058	SO	2011-02-28	FIELD
5A	SL-105-SA5A-SS-0.0-0.5	DX058	SO	2011-02-28	FIELD
5A	SL-106-SA5A-SS-0.0-0.5	DX058	SO	2011-02-28	FIELD
5A	SL-107-SA5A-SS-0.0-0.5	DX058	SO	2011-02-28	FIELD
5A	SL-108-SA5A-SS-0.0-0.5	DX058	SO	2011-02-28	FIELD
5A	SL-109-SA5A-SS-0.0-0.5	DX058	SO	2011-02-28	FIELD
5A	SL-111-SA5A-SS-0.0-0.5	DX058	SO	2011-02-28	FIELD
5A	SL-145-SA5A-SS-0.0-0.5	DX058	SO	2011-02-28	FIELD
5A	SL-237-SA5A-SB-4.0-5.0	DX058	SO	2011-02-28	FIELD
5A	SL-237-SA5A-SB-9.0-10.0	DX058	SO	2011-02-28	FIELD
5A	SL-253-SA5A-SS-0.0-0.5	DX058	SO	2011-02-28	FIELD

Appendix C. Samples by SDG for 5A

Task Code	System Sample Code	Lab SDG	Matrix Code	Sample Date	Sample Source
5A	SL-255-SA5A-SS-0.0-0.5	DX058	SO	2011-02-28	FIELD
5A	DUP-06-SA5A-QC-030111	DX059	SO	2011-03-01	FIELD
5A	EB04-SA5A-030111	DX059	WQ	2011-03-01	FIELD
5A	SL-066-SA5A-SS-0.0-0.5	DX059	SO	2011-03-01	FIELD
5A	SL-072-SA5A-SS-0.0-0.5	DX059	SO	2011-03-01	FIELD
5A	SL-076-SA5A-SS-0.0-0.5	DX059	SO	2011-03-01	FIELD
5A	SL-077-SA5A-SS-0.0-0.5	DX059	SO	2011-03-01	FIELD
5A	SL-078-SA5A-SS-0.0-0.5	DX059	SO	2011-03-01	FIELD
5A	SL-103-SA5A-SS-0.0-0.5	DX059	SO	2011-03-01	FIELD
5A	SL-104-SA5A-SS-0.0-0.5	DX059	SO	2011-03-01	FIELD
5A	SL-191-SA5A-SS-0.0-0.5	DX059	SO	2011-03-01	FIELD
5A	SL-194-SA5A-SS-0.0-0.3	DX059	SO	2011-03-01	FIELD
5A	SL-195-SA5A-SS-0.0-0.2	DX059	SO	2011-03-01	FIELD
5A	SL-244-SA5A-SB-4.0-5.0	DX059	SO	2011-03-01	FIELD
5A	SL-244-SA5A-SB-9.0-10.0	DX059	SO	2011-03-01	FIELD
5A	SL-256-SA5A-SS-0.0-0.5	DX059	SO	2011-03-01	FIELD
5A	SL-257-SA5A-SS-0.0-0.5	DX059	SO	2011-03-01	FIELD
5A	DUP-07-SA5A-QC-030211	DX060	SO	2011-03-02	FIELD
5A	EB05-SA5A-030211	DX060	WQ	2011-03-02	FIELD
5A	EB06-SA5A-030311	DX060	WQ	2011-03-03	FIELD
5A	SL-042-SA5A-SS-0.0-0.5	DX060	SO	2011-03-02	FIELD
5A	SL-044-SA5A-SS-0.0-0.5	DX060	SO	2011-03-02	FIELD
5A	SL-045-SA5A-SS-0.0-0.5	DX060	SO	2011-03-02	FIELD
5A	SL-048-SA5A-SS-0.0-0.5	DX060	SO	2011-03-02	FIELD
5A	SL-176-SA5A-SS-0.0-0.3	DX060	SO	2011-03-02	FIELD
5A	SL-178-SA5A-SS-0.0-0.4	DX060	SO	2011-03-02	FIELD
5A	SL-179-SA5A-SS-0.0-0.3	DX060	SO	2011-03-02	FIELD
5A	SL-186-SA5A-SS-0.0-0.5	DX060	SO	2011-03-02	FIELD
5A	SL-188-SA5A-SS-0.0-0.5	DX060	SO	2011-03-02	FIELD
5A	SL-189-SA5A-SS-0.0-0.5	DX060	SO	2011-03-02	FIELD
5A	SL-234-SA5A-SB-4.0-5.0	DX060	SO	2011-03-03	FIELD
5A	SL-234-SA5A-SB-9.0-10.0	DX060	SO	2011-03-03	FIELD
5A	SL-235-SA5A-SB-4.0-5.0	DX060	SO	2011-03-03	FIELD
5A	SL-235-SA5A-SB-8.5-9.5	DX060	SO	2011-03-03	FIELD
5A	SL-236-SA5A-SB-4.0-5.0	DX060	SO	2011-03-03	FIELD
5A	SL-236-SA5A-SB-9.0-10.0	DX060	SO	2011-03-03	FIELD
5A	SL-249-SA5A-SB-2.5-3.5	DX060	SO	2011-03-03	FIELD
5A	SL-249-SA5A-SB-9.0-10.0	DX060	SO	2011-03-03	FIELD
5A	DUP08-SA5A-QC-030211	DX061	SO	2011-03-02	FIELD
5A	SL-006-SA5A-SB-2.0-3.0	DX061	SO	2011-03-08	FIELD
5A	SL-007-SA5A-SB-4.0-5.0	DX061	SO	2011-03-07	FIELD
5A	SL-007-SA5A-SB-9.0-10.0	DX061	SO	2011-03-07	FIELD
5A	SL-012-SA5A-SB-2.0-3.0	DX061	SO	2011-03-07	FIELD
5A	SL-013-SA5A-SB-2.5-3.5	DX061	SO	2011-03-07	FIELD
5A	SL-015-SA5A-SB-3.0-4.0	DX061	SO	2011-03-04	FIELD
5A	SL-233-SA5A-SB-4.0-5.0	DX061	SO	2011-03-04	FIELD
5A	SL-233-SA5A-SB-9.0-10.0	DX061	SO	2011-03-04	FIELD
5A	SL-245-SA5A-SB-29.0-30.0	DX061	SO	2011-03-02	FIELD
5A	SL-245-SA5A-SB-4.0-5.0	DX061	SO	2011-03-02	FIELD
5A	SL-245-SA5A-SB-9.0-10.0	DX061	SO	2011-03-02	FIELD
5A	SL-246-SA5A-SB-4.0-5.0	DX061	SO	2011-03-02	FIELD

Appendix C. Samples by SDG for 5A

Task Code	System Sample Code	Lab SDG	Matrix Code	Sample Date	Sample Source
5A	SL-246-SA5A-SB-9.0-10.0	DX061	SO	2011-03-02	FIELD
5A	SL-247-SA5A-SB-4.0-5.0	DX061	SO	2011-03-02	FIELD
5A	SL-247-SA5A-SB-9.0-10.0	DX061	SO	2011-03-02	FIELD
5A	DUP09-SA5A-QC-031111	DX062	SO	2011-03-11	FIELD
5A	EB07-SA5A-031511	DX062	AQ	2011-03-15	FIELD
5A	SL-001-SA5A-SB-4.0-5.0	DX062	SO	2011-03-14	FIELD
5A	SL-112-SA5A-SB-14.0-15.0	DX062	SO	2011-03-11	FIELD
5A	SL-112-SA5A-SB-8.5-9.5	DX062	SO	2011-03-11	FIELD
5A	SL-113-SA5A-SB-14.0-15.0	DX062	SO	2011-03-11	FIELD
5A	SL-113-SA5A-SB-9.0-10.0	DX062	SO	2011-03-11	FIELD
5A	SL-114-SA5A-SB-4.0-5.0	DX062	SO	2011-03-11	FIELD
5A	SL-114-SA5A-SB-9.0-10.0	DX062	SO	2011-03-11	FIELD
5A	SL-115-SA5A-SB-13.0-14.0	DX062	SO	2011-03-10	FIELD
5A	SL-115-SA5A-SB-6.5-7.5	DX062	SO	2011-03-10	FIELD
5A	SL-116-SA5A-SB-14.0-15.0	DX062	SO	2011-03-10	FIELD
5A	SL-116-SA5A-SB-6.0-7.0	DX062	SO	2011-03-10	FIELD
5A	SL-117-SA5A-SB-5.0-6.0	DX062	SO	2011-03-14	FIELD
5A	SL-118-SA5A-SB-2.5-3.5	DX062	SO	2011-03-14	FIELD
5A	SL-121-SA5A-SB-2.0-3.0	DX062	SO	2011-03-14	FIELD
5A	SL-132-SA5A-SB-2.0-3.0	DX062	SO	2011-03-15	FIELD
5A	SL-137-SA5A-SB-4.0-5.0	DX062	SO	2011-03-15	FIELD
5A	SL-138-SA5A-SB-4.0-5.0	DX062	SO	2011-03-15	FIELD
5A	EB08-SA5A-032211	DX063	WQ	2011-03-22	FIELD
5A	SL-128-SA5A-SB-4.0-5.0	DX063	SO	2011-03-16	FIELD
5A	SL-128-SA5A-SB-9.0-10.0	DX063	SO	2011-03-16	FIELD
5A	SL-133-SA5A-SB-4.0-5.0	DX063	SO	2011-03-16	FIELD
5A	SL-136-SA5A-SB-4.0-5.0	DX063	SO	2011-03-17	FIELD
5A	SL-139-SA5A-SB-2.5-3.5	DX063	SO	2011-03-17	FIELD
5A	SL-146-SA5A-SB-3.0-4.0	DX063	SO	2011-03-16	FIELD
5A	SL-158-SA5A-SB-4.0-5.0	DX063	SO	2011-03-17	FIELD
5A	SL-159-SA5A-SB-4.0-5.0	DX063	SO	2011-03-18	FIELD
5A	SL-160-SA5A-SB-4.0-5.0	DX063	SO	2011-03-18	FIELD
5A	SL-160-SA5A-SB-9.0-10.0	DX063	SO	2011-03-18	FIELD
5A	SL-161-SA5A-SB-4.0-5.0	DX063	SO	2011-03-21	FIELD
5A	SL-161-SA5A-SB-7.5-8.5	DX063	SO	2011-03-21	FIELD
5A	SL-163-SA5A-SB-4.0-5.0	DX063	SO	2011-03-21	FIELD
5A	SL-168-SA5A-SB-4.0-5.0	DX063	SO	2011-03-18	FIELD
5A	SL-169-SA5A-SB-4.0-5.0	DX063	SO	2011-03-18	FIELD
5A	SL-180-SA5A-SB-4.0-5.0	DX063	SO	2011-03-22	FIELD
5A	SL-181-SA5A-SB-4.0-5.0	DX063	SO	2011-03-22	FIELD
5A	SL-231-SA5A-SB-2.0-3.0	DX063	SO	2011-03-22	FIELD
5A	SL-252-SA5A-SB-4.0-5.0	DX063	SO	2011-03-21	FIELD
5A	DUP10-SA5A-QC-032411	DX064	SO	2011-03-24	FIELD
5A	SL-143-SA5A-SB-4.0-5.0	DX064	SO	2011-03-25	FIELD
5A	SL-143-SA5A-SB-8.0-9.0	DX064	SO	2011-03-25	FIELD
5A	SL-144-SA5A-SB-4.0-5.0	DX064	SO	2011-03-25	FIELD
5A	SL-144-SA5A-SB-7.0-8.0	DX064	SO	2011-03-25	FIELD
5A	SL-197-SA5A-SB-4.0-5.0	DX064	SO	2011-03-23	FIELD
5A	SL-197-SA5A-SB-8.0-9.0	DX064	SO	2011-03-23	FIELD
5A	SL-198-SA5A-SB-3.0-4.0	DX064	SO	2011-03-23	FIELD
5A	SL-199-SA5A-SB-2.5-3.5	DX064	SO	2011-03-24	FIELD

Appendix C. Samples by SDG for 5A

Task Code	System Sample Code	Lab SDG	Matrix Code	Sample Date	Sample Source
5A	SL-200-SA5A-SB-4.0-5.0	DX064	SO	2011-03-23	FIELD
5A	SL-213-SA5A-SB-4.0-5.0	DX064	SO	2011-03-25	FIELD
5A	SL-213-SA5A-SB-8.0-9.0	DX064	SO	2011-03-25	FIELD
5A	SL-223-SA5A-SB-4.0-5.0	DX064	SO	2011-03-24	FIELD
5A	SL-223-SA5A-SB-8.5-9.5	DX064	SO	2011-03-24	FIELD
5A	SL-224-SA5A-SB-4.0-5.0	DX064	SO	2011-03-24	FIELD
5A	SL-225-SA5A-SB-4.0-5.0	DX064	SO	2011-03-24	FIELD
5A	SL-226-SA5A-SB-4.0-5.0	DX064	SO	2011-03-24	FIELD
5A	SL-239-SA5A-SB-4.0-5.0	DX064	SO	2011-03-23	FIELD
5A	SL-240-SA5A-SB-4.0-5.0	DX064	SO	2011-03-23	FIELD
5A	SL-240-SA5A-SB-9.0-10.0	DX064	SO	2011-03-23	FIELD
5A	DUP-11-SA5A-QC-033011	DX065	SO	2011-03-30	FIELD
5A	DUP-12-SA5A-QC-033011	DX065	SO	2011-03-30	FIELD
5A	EB10-SA5A-032911	DX065	WQ	2011-03-29	FIELD
5A	SL-082-SA5A-SB-4.0-5.0	DX065	SO	2011-03-30	FIELD
5A	SL-083-SA5A-SB-4.0-5.0	DX065	SO	2011-03-30	FIELD
5A	SL-083-SA5A-SB-9.0-10.0	DX065	SO	2011-03-30	FIELD
5A	SL-090-SA5A-SB-4.0-5.0	DX065	SO	2011-03-30	FIELD
5A	SL-091-SA5A-SB-3.0-4.0	DX065	SO	2011-03-29	FIELD
5A	SL-093-SA5A-SB-3.5-4.5	DX065	SO	2011-03-30	FIELD
5A	SL-208-SA5A-SB-4.0-5.0	DX065	SO	2011-03-29	FIELD
5A	SL-208-SA5A-SB-7.5-8.5	DX065	SO	2011-03-29	FIELD
5A	SL-209-SA5A-SB-4.0-5.0	DX065	SO	2011-03-28	FIELD
5A	SL-211-SA5A-SB-2.5-3.5	DX065	SO	2011-03-28	FIELD
5A	SL-214-SA5A-SB-4.0-5.0	DX065	SO	2011-03-28	FIELD
5A	SL-214-SA5A-SB-8.5-9.5	DX065	SO	2011-03-28	FIELD
5A	SL-215-SA5A-SB-4.0-5.0	DX065	SO	2011-03-28	FIELD
5A	SL-216-SA5A-SB-4.0-5.0	DX065	SO	2011-03-28	FIELD
5A	SL-221-SA5A-SB-3.0-4.0	DX065	SO	2011-03-29	FIELD
5A	SL-222-SA5A-SB-3.5-4.5	DX065	SO	2011-03-30	FIELD
5A	SL-257-SA5A-SB-2.5-3.5	DX065	SO	2011-03-30	FIELD
5A	EB11-SA5A-SB-040511	DX066	WQ	2011-04-05	FIELD
5A	SL-071-SA5A-SB-4.0-5.0	DX066	SO	2011-04-01	FIELD
5A	SL-072-SA5A-SB-4.0-5.0	DX066	SO	2011-04-01	FIELD
5A	SL-075-SA5A-SB-2.5-3.5	DX066	SO	2011-03-31	FIELD
5A	SL-076-SA5A-SB-4.0-5.0	DX066	SO	2011-04-01	FIELD
5A	SL-079-SA5A-SB-4.0-5.0	DX066	SO	2011-04-07	FIELD
5A	SL-080-SA5A-SB-3.0-4.0	DX066	SO	2011-04-07	FIELD
5A	SL-081-SA5A-SB-2.0-3.0	DX066	SO	2011-04-07	FIELD
5A	SL-085-SA5A-SB-4.0-5.0	DX066	SO	2011-04-04	FIELD
5A	SL-087-SA5A-SB-2.0-3.0	DX066	SO	2011-04-04	FIELD
5A	SL-088-SA5A-SB-4.0-5.0	DX066	SO	2011-04-07	FIELD
5A	SL-089-SA5A-SB-4.0-5.0	DX066	SO	2011-03-31	FIELD
5A	SL-089-SA5A-SB-9.0-10.0	DX066	SO	2011-03-31	FIELD
5A	SL-094-SA5A-SB-4.0-5.0	DX066	SO	2011-03-31	FIELD
5A	SL-094-SA5A-SB-9.0-10.0	DX066	SO	2011-03-31	FIELD
5A	SL-151-SA5A-SB-4.0-5.0	DX066	SO	2011-04-06	FIELD
5A	SL-154-SA5A-SB-4.0-5.0	DX066	SO	2011-04-05	FIELD
5A	SL-154-SA5A-SB-7.0-8.0	DX066	SO	2011-04-05	FIELD
5A	SL-156-SA5A-SB-3.0-4.0	DX066	SO	2011-04-05	FIELD
5A	SL-258-SA5A-SB-4.0-5.0	DX066	SO	2011-04-07	FIELD

Appendix C. Samples by SDG for 5A

Task Code	System Sample Code	Lab SDG	Matrix Code	Sample Date	Sample Source
5A	DUP-13-SA5A-QC-041111	DX067	SO	2011-04-11	FIELD
5A	SL-186-SA5A-SB-3.5-4.5	DX067	SO	2011-04-11	FIELD
5A	SL-187-SA5A-SB-4.0-5.0	DX067	SO	2011-04-11	FIELD
5A	SL-188-SA5A-SB-4.5-5.5	DX067	SO	2011-04-11	FIELD
5A	SL-189-SA5A-SB-5.0-6.0	DX067	SO	2011-04-11	FIELD
5A	SL-189-SA5A-SB-8.5-9.5	DX067	SO	2011-04-11	FIELD
5A	SL-202-SA5A-SB-3.0-4.0	DX069	SO	2011-04-12	FIELD
5A	SL-206-SA5A-SB-4.0-5.0	DX069	SO	2011-04-12	FIELD
5A	SL-207-SA5A-SB-3.0-4.0	DX069	SO	2011-04-12	FIELD
5A	SL-227-SA5A-SB-3.0-4.0	DX069	SO	2011-04-12	FIELD
5A	SL-228-SA5A-SB-3.0-4.0	DX069	SO	2011-04-12	FIELD
5A	SL-060-SA5A-SB-4.0-5.0	DX070	SO	2011-04-13	FIELD
5A	SL-060-SA5A-SB-8.0-9.0	DX070	SO	2011-04-13	FIELD
5A	SL-061-SA5A-SB-4.0-5.0	DX070	SO	2011-04-13	FIELD
5A	SL-204-SA5A-SB-4.0-5.0	DX070	SO	2011-04-13	FIELD
5A	SL-205-SA5A-SB-4.0-5.0	DX070	SO	2011-04-13	FIELD
5A	SL-205-SA5A-SB-8.0-9.0	DX070	SO	2011-04-13	FIELD
5A	EB13-SA5A-SB-041811	DX071	WQ	2011-04-18	FIELD
5A	SL-032-SA5A-SB-3.0-4.0	DX071	SO	2011-04-18	FIELD
5A	SL-172-SA5A-SB-4.0-5.0	DX071	SO	2011-04-18	FIELD
5A	SL-174-SA5A-SB-2.0-3.0	DX071	SO	2011-04-18	FIELD
5A	SL-254-SA5A-SB-2.5-3.5	DX071	SO	2011-04-18	FIELD
5A	DUP14-SA5A-QC-041411	DX072	SO	2011-04-14	FIELD
5A	SL-041-SA5A-SB-4.0-5.0	DX072	SO	2011-04-15	FIELD
5A	SL-044-SA5A-SB-3.0-4.0	DX072	SO	2011-04-15	FIELD
5A	SL-052-SA5A-SB-4.0-5.0	DX072	SO	2011-04-15	FIELD
5A	SL-058-SA5A-SB-3.0-4.0	DX072	SO	2011-04-14	FIELD
5A	SL-059-SA5A-SB-3.0-4.0	DX072	SO	2011-04-14	FIELD
5A	SL-065-SA5A-SB-4.0-5.0	DX072	SO	2011-04-14	FIELD
5A	SL-242-SA5A-SB-2.5-3.5	DX072	SO	2011-04-14	FIELD
5A	SL-243-SA5A-SB-4.0-5.0	DX072	SO	2011-04-15	FIELD
5A	SL-126-SA5A-SB-4.0-5.0	DX073	SO	2011-04-19	FIELD
5A	SL-127-SA5A-SB-2.0-3.0	DX073	SO	2011-04-19	FIELD
5A	SL-171-SA5A-SB-2.0-3.0	DX073	SO	2011-04-19	FIELD
5A	DUP15-SA5A-QC-042011	DX075	SO	2011-04-20	FIELD
5A	SL-148-SA5A-SB-4.0-5.0	DX075	SO	2011-04-20	FIELD
5A	SL-148-SA5A-SB-9.0-10.0	DX075	SO	2011-04-20	FIELD
5A	DUP16-SA5A-QC-042211	DX077	SO	2011-04-22	FIELD
5A	SL-064-SA5A-SB-3.0-4.0	DX077	SO	2011-04-22	FIELD
5A	SL-166-SA5A-SS-0.0-0.5	DX077	SO	2011-04-22	FIELD
5A	SL-253-SA5A-SB-4.0-5.0	DX077	SO	2011-04-15	FIELD
5A	SL-253-SA5A-SB-8.0-9.0	DX077	SO	2011-04-22	FIELD
5A	DUP-17-SA5A-QC-051611	DX081	SO	2011-05-16	FIELD
5A	EB15-SA5A-SB-051611	DX081	WQ	2011-05-16	FIELD
5A	SL-042-SA5A-SB-3.5-4.5	DX081	SO	2011-05-16	FIELD
5A	SL-167-SA5A-SB-1.0-2.0	DX081	SO	2011-05-16	FIELD
5A	SL-254-SA5A-SS-0.0-0.5	DX082	SO	2011-05-16	FIELD

SAMPLE DELIVERY GROUP

DE077

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
07-Feb-2011	TB-020711	6200292	TB	5030B	8260B	III
07-Feb-2011	TB-020711	6200292	TB	5030B	8260B SIM	III
07-Feb-2011	SL-160-SA5B-SB-4.0-5.0	6200288	N	3050B	6010B	III
07-Feb-2011	SL-160-SA5B-SB-4.0-5.0	6200288	N	3050B	6020	III
07-Feb-2011	SL-160-SA5B-SB-4.0-5.0	6200288	N	3060A	7199	III
07-Feb-2011	SL-160-SA5B-SB-4.0-5.0	6200288	N	3550B	8082	III
07-Feb-2011	SL-160-SA5B-SB-4.0-5.0	6200288	N	3550B	8270C	III
07-Feb-2011	SL-160-SA5B-SB-4.0-5.0	6200288	N	3550B	8270C SIM	III
07-Feb-2011	SL-160-SA5B-SB-4.0-5.0	6200288	N	5035	8260B	III
07-Feb-2011	SL-160-SA5B-SB-4.0-5.0	6200288	N	5035	8260B SIM	III
07-Feb-2011	SL-160-SA5B-SB-4.0-5.0	6200288	N	Gen Prep	9045M	III
07-Feb-2011	SL-160-SA5B-SB-4.0-5.0	6200288	N	METHOD	300.0	III
07-Feb-2011	SL-160-SA5B-SB-4.0-5.0	6200288	N	METHOD	314.0	III
07-Feb-2011	SL-160-SA5B-SB-4.0-5.0	6200288	N	METHOD	7471A	III
07-Feb-2011	SL-162-SA5B-SB-4.0-5.0	6200290	N	3050B	6010B	III
07-Feb-2011	SL-162-SA5B-SB-4.0-5.0	6200290	N	3050B	6020	III
07-Feb-2011	SL-162-SA5B-SB-4.0-5.0	6200290	N	3060A	7199	III
07-Feb-2011	SL-162-SA5B-SB-4.0-5.0	6200290	N	3550B	8082	III
07-Feb-2011	SL-162-SA5B-SB-4.0-5.0	6200290	N	3550B	8270C	III
07-Feb-2011	SL-162-SA5B-SB-4.0-5.0	6200290	N	3550B	8270C SIM	III
07-Feb-2011	SL-162-SA5B-SB-4.0-5.0	6200290	N	5035	8260B	III
07-Feb-2011	SL-162-SA5B-SB-4.0-5.0	6200290	N	5035	8260B SIM	III
07-Feb-2011	SL-162-SA5B-SB-4.0-5.0	6200290	N	Gen Prep	9045M	III
07-Feb-2011	SL-162-SA5B-SB-4.0-5.0	6200290	N	METHOD	300.0	III
07-Feb-2011	SL-162-SA5B-SB-4.0-5.0	6200290	N	METHOD	314.0	III
07-Feb-2011	SL-162-SA5B-SB-4.0-5.0	6200290	N	METHOD	7471A	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
07-Feb-2011	SL-162-SA5B-SB-4.0-5.0DUP	P200290D270652B	DUP	METHOD	314.0	III
07-Feb-2011	SL-162-SA5B-SB-4.0-5.0MS	P200290R270740B	MS	METHOD	314.0	III
07-Feb-2011	SL-048-SA5A-SB-3.0-4.0	6200286	N	3050B	6010B	III
07-Feb-2011	SL-048-SA5A-SB-3.0-4.0	6200286	N	3050B	6020	III
07-Feb-2011	SL-048-SA5A-SB-3.0-4.0	6200286	N	3060A	7199	III
07-Feb-2011	SL-048-SA5A-SB-3.0-4.0	6200286	N	3550B	8082	III
07-Feb-2011	SL-048-SA5A-SB-3.0-4.0	6200286	N	3550B	8270C	III
07-Feb-2011	SL-048-SA5A-SB-3.0-4.0	6200286	N	3550B	8270C SIM	III
07-Feb-2011	SL-048-SA5A-SB-3.0-4.0	6200286	N	5035	8260B	III
07-Feb-2011	SL-048-SA5A-SB-3.0-4.0	6200286	N	5035	8260B SIM	III
07-Feb-2011	SL-048-SA5A-SB-3.0-4.0	6200286	N	Gen Prep	9045M	III
07-Feb-2011	SL-048-SA5A-SB-3.0-4.0	6200286	N	METHOD	300.0	III
07-Feb-2011	SL-048-SA5A-SB-3.0-4.0	6200286	N	METHOD	314.0	III
07-Feb-2011	SL-048-SA5A-SB-3.0-4.0	6200286	N	METHOD	7471A	III
07-Feb-2011	SL-048-SA5A-SB-3.0-4.0DUP	P200286D221103	DUP	3050B	6010B	III
07-Feb-2011	SL-048-SA5A-SB-3.0-4.0DUP	P200286D221116A	DUP	3050B	6020	III
07-Feb-2011	SL-048-SA5A-SB-3.0-4.0DUP	P200286D221116C	DUP	3050B	6020	III
07-Feb-2011	SL-048-SA5A-SB-3.0-4.0DUP	P200286D221116D	DUP	3050B	6020	III
07-Feb-2011	SL-048-SA5A-SB-3.0-4.0DUP	P200286D221539	DUP	METHOD	7471A	III
07-Feb-2011	SL-048-SA5A-SB-3.0-4.0DUP	P200286D221635A	DUP	3050B	6020	III
07-Feb-2011	SL-048-SA5A-SB-3.0-4.0DUP	P200286D221635B	DUP	3050B	6020	III
07-Feb-2011	SL-048-SA5A-SB-3.0-4.0DUP	P200286D222125	DUP	3050B	6010B	III
07-Feb-2011	SL-048-SA5A-SB-3.0-4.0DUP	P200286D271307A	DUP	METHOD	300.0	III
07-Feb-2011	SL-048-SA5A-SB-3.0-4.0DUP	P200286D291330A	DUP	Gen Prep	9045M	III
07-Feb-2011	SL-048-SA5A-SB-3.0-4.0MSD	P200286M221122A	MSD	3050B	6020	III
07-Feb-2011	SL-048-SA5A-SB-3.0-4.0MSD	P200286M221122C	MSD	3050B	6020	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
07-Feb-2011	SL-048-SA5A-SB-3.0-4.0MSD	P200286M221122D	MSD	3050B	6020	III
07-Feb-2011	SL-048-SA5A-SB-3.0-4.0MSD	P200286M221541	MSD	METHOD	7471A	III
07-Feb-2011	SL-048-SA5A-SB-3.0-4.0MSD	P200286M221640A	MSD	3050B	6020	III
07-Feb-2011	SL-048-SA5A-SB-3.0-4.0MSD	P200286M221640B	MSD	3050B	6020	III
07-Feb-2011	SL-048-SA5A-SB-3.0-4.0MSD	P200286M222133	MSD	3050B	6010B	III
07-Feb-2011	SL-048-SA5A-SB-3.0-4.0MSD	P200286M241940A	MSD	3550B	8082	III
07-Feb-2011	SL-048-SA5A-SB-3.0-4.0MSD	P200286M261036	MSD	3550B	8270C SIM	III
07-Feb-2011	SL-048-SA5A-SB-3.0-4.0MS	P200286R221119A	MS	3050B	6020	III
07-Feb-2011	SL-048-SA5A-SB-3.0-4.0MS	P200286R221119C	MS	3050B	6020	III
07-Feb-2011	SL-048-SA5A-SB-3.0-4.0MS	P200286R221119D	MS	3050B	6020	III
07-Feb-2011	SL-048-SA5A-SB-3.0-4.0MS	P200286R221540	MS	METHOD	7471A	III
07-Feb-2011	SL-048-SA5A-SB-3.0-4.0MS	P200286R221638A	MS	3050B	6020	III
07-Feb-2011	SL-048-SA5A-SB-3.0-4.0MS	P200286R221638B	MS	3050B	6020	III
07-Feb-2011	SL-048-SA5A-SB-3.0-4.0MS	P200286R222128	MS	3050B	6010B	III
07-Feb-2011	SL-048-SA5A-SB-3.0-4.0MS	P200286R241922A	MS	3550B	8082	III
07-Feb-2011	SL-048-SA5A-SB-3.0-4.0MS	P200286R261005	MS	3550B	8270C SIM	III
07-Feb-2011	SL-048-SA5A-SB-3.0-4.0MS	P200286R271322A	MS	METHOD	300.0	III
07-Feb-2011	SL-161-SA5B-SB-4.0-5.0	6200289	N	3050B	6010B	III
07-Feb-2011	SL-161-SA5B-SB-4.0-5.0	6200289	N	3050B	6020	III
07-Feb-2011	SL-161-SA5B-SB-4.0-5.0	6200289	N	3060A	7199	III
07-Feb-2011	SL-161-SA5B-SB-4.0-5.0	6200289	N	3550B	8082	III
07-Feb-2011	SL-161-SA5B-SB-4.0-5.0	6200289	N	3550B	8270C	III
07-Feb-2011	SL-161-SA5B-SB-4.0-5.0	6200289	N	3550B	8270C SIM	III
07-Feb-2011	SL-161-SA5B-SB-4.0-5.0	6200289	N	5035	8260B	III
07-Feb-2011	SL-161-SA5B-SB-4.0-5.0	6200289	N	5035	8260B SIM	III
07-Feb-2011	SL-161-SA5B-SB-4.0-5.0	6200289	N	Gen Prep	9045M	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
07-Feb-2011	SL-161-SA5B-SB-4.0-5.0	6200289	N	METHOD	300.0	III
07-Feb-2011	SL-161-SA5B-SB-4.0-5.0	6200289	N	METHOD	314.0	III
07-Feb-2011	SL-161-SA5B-SB-4.0-5.0	6200289	N	METHOD	7471A	III
07-Feb-2011	SL-049-SA5A-SB-2.0-3.0	6200287	N	3050B	6010B	III
07-Feb-2011	SL-049-SA5A-SB-2.0-3.0	6200287	N	3050B	6020	III
07-Feb-2011	SL-049-SA5A-SB-2.0-3.0	6200287	N	3060A	7199	III
07-Feb-2011	SL-049-SA5A-SB-2.0-3.0	6200287	N	3550B	8082	III
07-Feb-2011	SL-049-SA5A-SB-2.0-3.0	6200287	N	3550B	8270C	III
07-Feb-2011	SL-049-SA5A-SB-2.0-3.0	6200287	N	3550B	8270C SIM	III
07-Feb-2011	SL-049-SA5A-SB-2.0-3.0	6200287	N	5035	8260B	III
07-Feb-2011	SL-049-SA5A-SB-2.0-3.0	6200287	N	5035	8260B SIM	III
07-Feb-2011	SL-049-SA5A-SB-2.0-3.0	6200287	N	Gen Prep	9045M	III
07-Feb-2011	SL-049-SA5A-SB-2.0-3.0	6200287	N	METHOD	300.0	III
07-Feb-2011	SL-049-SA5A-SB-2.0-3.0	6200287	N	METHOD	314.0	III
07-Feb-2011	SL-049-SA5A-SB-2.0-3.0	6200287	N	METHOD	7471A	III
07-Feb-2011	SL-163-SA5B-SB-3.5-4.5	6200291	N	3050B	6010B	III
07-Feb-2011	SL-163-SA5B-SB-3.5-4.5	6200291	N	3050B	6020	III
07-Feb-2011	SL-163-SA5B-SB-3.5-4.5	6200291	N	3060A	7199	III
07-Feb-2011	SL-163-SA5B-SB-3.5-4.5	6200291	N	3550B	8082	III
07-Feb-2011	SL-163-SA5B-SB-3.5-4.5	6200291	N	3550B	8270C	III
07-Feb-2011	SL-163-SA5B-SB-3.5-4.5	6200291	N	3550B	8270C SIM	III
07-Feb-2011	SL-163-SA5B-SB-3.5-4.5	6200291	N	5035	8260B	III
07-Feb-2011	SL-163-SA5B-SB-3.5-4.5	6200291	N	5035	8260B SIM	III
07-Feb-2011	SL-163-SA5B-SB-3.5-4.5	6200291	N	Gen Prep	9045M	III
07-Feb-2011	SL-163-SA5B-SB-3.5-4.5	6200291	N	METHOD	300.0	III
07-Feb-2011	SL-163-SA5B-SB-3.5-4.5	6200291	N	METHOD	314.0	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
07-Feb-2011	SL-163-SA5B-SB-3.5-4.5	6200291	N	METHOD	7471A	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE077 **Laboratory: LL**

EDD Filename: DE077_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: **SL-048-SA5A-SB-3.0-4.0** ***Collected:*** **2/7/2011 12:28:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.1	J	0.88	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: **SL-049-SA5A-SB-2.0-3.0** ***Collected:*** **2/7/2011 3:19:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.2		0.91	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: **SL-160-SA5B-SB-4.0-5.0** ***Collected:*** **2/7/2011 10:23:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.7		0.88	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: **SL-161-SA5B-SB-4.0-5.0** ***Collected:*** **2/7/2011 2:33:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.2		0.88	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: **SL-162-SA5B-SB-4.0-5.0** ***Collected:*** **2/7/2011 11:54:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.6		0.90	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: **SL-163-SA5B-SB-3.5-4.5** ***Collected:*** **2/7/2011 3:36:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.2		0.86	MDL	1.1	PQL	mg/Kg	J	Q

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: **SL-048-SA5A-SB-3.0-4.0** ***Collected:*** **2/7/2011 12:28:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	378		0.603	MDL	10.8	PQL	mg/Kg	J	Q
POTASSIUM	1960		19.4	MDL	53.8	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE077 **Laboratory: LL**

EDD Filename: DE077_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: **SL-048-SA5A-SB-3.0-4.0** ***Collected:*** **2/7/2011 12:28:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	102	J	40.1	MDL	108	PQL	mg/Kg	J	Z
TIN	2.45	J	1.08	MDL	10.8	PQL	mg/Kg	U	B
Zirconium	2.09	J	0.904	MDL	5.38	PQL	mg/Kg	U	B

Sample ID: **SL-049-SA5A-SB-2.0-3.0** ***Collected:*** **2/7/2011 3:19:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	517		0.619	MDL	11.0	PQL	mg/Kg	J	Q
POTASSIUM	3100		19.9	MDL	55.2	PQL	mg/Kg	J	Q
SODIUM	68.3	J	41.2	MDL	110	PQL	mg/Kg	J	Z
TIN	2.44	J	1.10	MDL	11.0	PQL	mg/Kg	U	B
Zirconium	1.72	J	0.928	MDL	5.52	PQL	mg/Kg	U	B

Sample ID: **SL-160-SA5B-SB-4.0-5.0** ***Collected:*** **2/7/2011 10:23:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	224		0.606	MDL	10.8	PQL	mg/Kg	J	Q
POTASSIUM	1620		19.5	MDL	54.1	PQL	mg/Kg	J	Q
TIN	2.45	J	1.08	MDL	10.8	PQL	mg/Kg	U	B
Zirconium	2.18	J	0.909	MDL	5.41	PQL	mg/Kg	U	B

Sample ID: **SL-161-SA5B-SB-4.0-5.0** ***Collected:*** **2/7/2011 2:33:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	255		0.607	MDL	10.8	PQL	mg/Kg	J	Q
POTASSIUM	1860		19.5	MDL	54.2	PQL	mg/Kg	J	Q
TIN	2.70	J	1.08	MDL	10.8	PQL	mg/Kg	U	B
Zirconium	2.64	J	0.911	MDL	5.42	PQL	mg/Kg	U	B

Sample ID: **SL-162-SA5B-SB-4.0-5.0** ***Collected:*** **2/7/2011 11:54:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	183		0.613	MDL	10.9	PQL	mg/Kg	J	Q
POTASSIUM	1460		19.7	MDL	54.7	PQL	mg/Kg	J	Q
TIN	2.85	J	1.09	MDL	10.9	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE077 **Laboratory: LL**

EDD Filename: DE077_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-162-SA5B-SB-4.0-5.0 **Collected: 2/7/2011 11:54:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	2.96	J	0.919	MDL	5.47	PQL	mg/Kg	J	Z

Sample ID: SL-163-SA5B-SB-3.5-4.5 **Collected: 2/7/2011 3:36:00 PM** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	214		0.592	MDL	10.6	PQL	mg/Kg	J	Q
POTASSIUM	1840		19.0	MDL	52.8	PQL	mg/Kg	J	Q
TIN	2.83	J	1.06	MDL	10.6	PQL	mg/Kg	U	B
Zirconium	2.42	J	0.887	MDL	5.28	PQL	mg/Kg	U	B

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-048-SA5A-SB-3.0-4.0 **Collected: 2/7/2011 12:28:00** **Analysis Type: REA** **Dilution: 2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.147	J	0.0659	MDL	0.220	PQL	mg/Kg	J	Z, Q
COPPER	8.40		0.0724	MDL	0.439	PQL	mg/Kg	J	A
NICKEL	16.3		0.110	MDL	0.439	PQL	mg/Kg	J	A

Sample ID: SL-048-SA5A-SB-3.0-4.0 **Collected: 2/7/2011 12:28:00** **Analysis Type: REA2** **Dilution: 2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.146	J	0.0439	MDL	0.439	PQL	mg/Kg	J	Z

Sample ID: SL-048-SA5A-SB-3.0-4.0 **Collected: 2/7/2011 12:28:00** **Analysis Type: REA4** **Dilution: 2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	57.3		0.119	MDL	0.439	PQL	mg/Kg	J	E

Sample ID: SL-048-SA5A-SB-3.0-4.0 **Collected: 2/7/2011 12:28:00** **Analysis Type: RES** **Dilution: 2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.0580	J	0.0439	MDL	0.110	PQL	mg/Kg	J	Z
CHROMIUM	24.3		0.132	MDL	0.439	PQL	mg/Kg	J	A

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE077 **Laboratory: LL**

EDD Filename: DE077_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: **SL-048-SA5A-SB-3.0-4.0** ***Collected:*** **2/7/2011 12:28:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0191	J	0.0132	MDL	0.110	PQL	mg/Kg	J	Z

Sample ID: **SL-049-SA5A-SB-2.0-3.0** ***Collected:*** **2/7/2011 3:19:00 PM** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.128	J	0.0663	MDL	0.221	PQL	mg/Kg	J	Z, Q
COPPER	9.29		0.0729	MDL	0.442	PQL	mg/Kg	J	A
NICKEL	12.7		0.110	MDL	0.442	PQL	mg/Kg	J	A

Sample ID: **SL-049-SA5A-SB-2.0-3.0** ***Collected:*** **2/7/2011 3:19:00 PM** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.110	J	0.0442	MDL	0.442	PQL	mg/Kg	J	Z

Sample ID: **SL-049-SA5A-SB-2.0-3.0** ***Collected:*** **2/7/2011 3:19:00 PM** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	90.5		0.119	MDL	0.442	PQL	mg/Kg	J	E

Sample ID: **SL-049-SA5A-SB-2.0-3.0** ***Collected:*** **2/7/2011 3:19:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHROMIUM	17.8		0.133	MDL	0.442	PQL	mg/Kg	J	A
SILVER	0.0343	J	0.0133	MDL	0.110	PQL	mg/Kg	J	Z

Sample ID: **SL-160-SA5B-SB-4.0-5.0** ***Collected:*** **2/7/2011 10:23:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.126	J	0.0656	MDL	0.219	PQL	mg/Kg	J	Z, Q
COPPER	7.54		0.0721	MDL	0.437	PQL	mg/Kg	J	A
NICKEL	13.7		0.109	MDL	0.437	PQL	mg/Kg	J	A

Sample ID: **SL-160-SA5B-SB-4.0-5.0** ***Collected:*** **2/7/2011 10:23:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0841	J	0.0437	MDL	0.437	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE077 **Laboratory: LL**

EDD Filename: DE077_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: **SL-160-SA5B-SB-4.0-5.0** ***Collected:*** **2/7/2011 10:23:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	76.2		0.118	MDL	0.437	PQL	mg/Kg	J	E

Sample ID: **SL-160-SA5B-SB-4.0-5.0** ***Collected:*** **2/7/2011 10:23:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHROMIUM	20.9		0.131	MDL	0.437	PQL	mg/Kg	J	A

Sample ID: **SL-161-SA5B-SB-4.0-5.0** ***Collected:*** **2/7/2011 2:33:00 PM** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0919	J	0.0638	MDL	0.213	PQL	mg/Kg	J	Z, Q
COPPER	8.48		0.0702	MDL	0.425	PQL	mg/Kg	J	A
NICKEL	13.4		0.106	MDL	0.425	PQL	mg/Kg	J	A

Sample ID: **SL-161-SA5B-SB-4.0-5.0** ***Collected:*** **2/7/2011 2:33:00 PM** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0823	J	0.0425	MDL	0.425	PQL	mg/Kg	J	Z

Sample ID: **SL-161-SA5B-SB-4.0-5.0** ***Collected:*** **2/7/2011 2:33:00 PM** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	107		0.115	MDL	0.425	PQL	mg/Kg	J	E

Sample ID: **SL-161-SA5B-SB-4.0-5.0** ***Collected:*** **2/7/2011 2:33:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.105	J	0.0425	MDL	0.106	PQL	mg/Kg	J	Z
CHROMIUM	21.5		0.128	MDL	0.425	PQL	mg/Kg	J	A

Sample ID: **SL-162-SA5B-SB-4.0-5.0** ***Collected:*** **2/7/2011 11:54:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.121	J	0.0650	MDL	0.217	PQL	mg/Kg	J	Z, Q
COPPER	9.81		0.0715	MDL	0.434	PQL	mg/Kg	J	A
NICKEL	13.5		0.108	MDL	0.434	PQL	mg/Kg	J	A

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE077 **Laboratory: LL**

EDD Filename: DE077_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: **SL-162-SA5B-SB-4.0-5.0** ***Collected:*** **2/7/2011 11:54:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0529	J	0.0434	MDL	0.434	PQL	mg/Kg	J	Z

Sample ID: **SL-162-SA5B-SB-4.0-5.0** ***Collected:*** **2/7/2011 11:54:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	81.3		0.117	MDL	0.434	PQL	mg/Kg	J	E

Sample ID: **SL-162-SA5B-SB-4.0-5.0** ***Collected:*** **2/7/2011 11:54:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHROMIUM	24.3		0.130	MDL	0.434	PQL	mg/Kg	J	A

Sample ID: **SL-163-SA5B-SB-3.5-4.5** ***Collected:*** **2/7/2011 3:36:00 PM** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.128	J	0.0622	MDL	0.207	PQL	mg/Kg	J	Z, Q
COPPER	8.33		0.0684	MDL	0.414	PQL	mg/Kg	J	A
NICKEL	13.5		0.104	MDL	0.414	PQL	mg/Kg	J	A

Sample ID: **SL-163-SA5B-SB-3.5-4.5** ***Collected:*** **2/7/2011 3:36:00 PM** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.122	J	0.0414	MDL	0.414	PQL	mg/Kg	J	Z

Sample ID: **SL-163-SA5B-SB-3.5-4.5** ***Collected:*** **2/7/2011 3:36:00 PM** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	110		0.112	MDL	0.414	PQL	mg/Kg	J	E

Sample ID: **SL-163-SA5B-SB-3.5-4.5** ***Collected:*** **2/7/2011 3:36:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHROMIUM	21.9		0.124	MDL	0.414	PQL	mg/Kg	J	A

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE077 **Laboratory: LL**

EDD Filename: DE077_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS
Method: 7199 **Matrix:** SO

Sample ID: SL-162-SA5B-SB-4.0-5.0 **Collected:** 2/7/2011 11:54:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.29	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Method Category: METALS
Method: 7471A **Matrix:** SO

Sample ID: SL-162-SA5B-SB-4.0-5.0 **Collected:** 2/7/2011 11:54:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0122	J	0.0031	MDL	0.108	PQL	mg/Kg	J	Z

Sample ID: SL-163-SA5B-SB-3.5-4.5 **Collected:** 2/7/2011 3:36:00 PM **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0058	J	0.0030	MDL	0.105	PQL	mg/Kg	J	Z

Method Category: SVOA
Method: 8082 **Matrix:** SO

Sample ID: SL-048-SA5A-SB-3.0-4.0 **Collected:** 2/7/2011 12:28:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L

Sample ID: SL-049-SA5A-SB-2.0-3.0 **Collected:** 2/7/2011 3:19:00 PM **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	1.1	U	1.1	MDL	3.8	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.8	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.8	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE077 **Laboratory: LL**

EDD Filename: DE077_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: **SL-160-SA5B-SB-4.0-5.0** ***Collected:*** **2/7/2011 10:23:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	2.3		0.43	MDL	1.9	PQL	ug/Kg	J	S
Aroclor 5432	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L
Aroclor 5460	1.2	J	1.1	MDL	3.6	PQL	ug/Kg	J	Z, S, L

Sample ID: **SL-161-SA5B-SB-4.0-5.0** ***Collected:*** **2/7/2011 2:33:00 PM** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	9.3		0.37	MDL	1.9	PQL	ug/Kg	J	S
AROCLOR 1260	3.1		0.43	MDL	1.9	PQL	ug/Kg	J	S
Aroclor 5432	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L
Aroclor 5460	3.3	J	1.1	MDL	3.7	PQL	ug/Kg	J	Z, S, L

Sample ID: **SL-162-SA5B-SB-4.0-5.0** ***Collected:*** **2/7/2011 11:54:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L
Aroclor 5460	2.4	J	1.1	MDL	3.7	PQL	ug/Kg	J	Z, L

Sample ID: **SL-163-SA5B-SB-3.5-4.5** ***Collected:*** **2/7/2011 3:36:00 PM** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	1.1	J	0.42	MDL	1.8	PQL	ug/Kg	J	Z
Aroclor 5432	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L
Aroclor 5460	1.3	J	1.1	MDL	3.6	PQL	ug/Kg	J	Z, L

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE077 **Laboratory: LL**

EDD Filename: DE077_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C SIM **Matrix:** SO

Sample ID: **SL-048-SA5A-SB-3.0-4.0** ***Collected:*** **2/7/2011 12:28:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NAPHTHALENE	0.94	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: **SL-049-SA5A-SB-2.0-3.0** ***Collected:*** **2/7/2011 3:19:00 PM** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	0.78	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.1	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
CHRYSENE	0.90	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	0.91	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
NAPHTHALENE	0.92	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: **SL-160-SA5B-SB-4.0-5.0** ***Collected:*** **2/7/2011 10:23:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACENAPHTHYLENE	0.40	J	0.37	MDL	1.8	PQL	ug/Kg	J	Z
ANTHRACENE	1.1	J	0.37	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	1.4	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.1	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	1.3	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.7	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.3	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
CHRYSENE	1.4	J	0.37	MDL	1.8	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	1.1	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
Di-n-butylphthalate	7.0	J	6.6	MDL	20	PQL	ug/Kg	J	Z
FLUORANTHENE	1.4	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
FLUORENE	0.79	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	1.4	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
NAPHTHALENE	0.90	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
PHENANTHRENE	1.4	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
PYRENE	1.5	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: **SL-161-SA5B-SB-4.0-5.0** ***Collected:*** **2/7/2011 2:33:00 PM** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	0.59	J	0.37	MDL	1.8	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE077 **Laboratory: LL**

EDD Filename: DE077_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C SIM **Matrix: SO**

Sample ID: **SL-161-SA5B-SB-4.0-5.0** ***Collected:*** **2/7/2011 2:33:00 PM** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	0.88	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	0.76	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	0.94	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.4	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.1	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
CHRYSENE	1.0	J	0.37	MDL	1.8	PQL	ug/Kg	J	Z
FLUORANTHENE	0.86	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	1.1	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
NAPHTHALENE	1.1	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
PHENANTHRENE	0.93	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
PYRENE	1.1	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: **SL-162-SA5B-SB-4.0-5.0** ***Collected:*** **2/7/2011 11:54:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(K)FLUORANTHENE	0.81	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
CHRYSENE	0.61	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z
NAPHTHALENE	1.4	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: **SL-163-SA5B-SB-3.5-4.5** ***Collected:*** **2/7/2011 3:36:00 PM** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHRYSENE	0.41	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z
NAPHTHALENE	0.83	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z

Method Category: VOA

Method: 8260B **Matrix: SO**

Sample ID: **SL-048-SA5A-SB-3.0-4.0** ***Collected:*** **2/7/2011 12:28:00** ***Analysis Type:*** **RES** ***Dilution:*** **0.91**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	1.3	J	0.24	MDL	4.0	PQL	ug/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE077 **Laboratory: LL**

EDD Filename: DE077_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: **SL-049-SA5A-SB-2.0-3.0** ***Collected:*** **2/7/2011 3:19:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** **0.9**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.82	J	0.24	MDL	4.1	PQL	ug/Kg	U	B

Sample ID: **SL-160-SA5B-SB-4.0-5.0** ***Collected:*** **2/7/2011 10:23:00** ***Analysis Type:*** **RES** ***Dilution:*** **1.13**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.55	J	0.30	MDL	5.0	PQL	ug/Kg	U	B

Sample ID: **SL-161-SA5B-SB-4.0-5.0** ***Collected:*** **2/7/2011 2:33:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** **1.02**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.63	J	0.27	MDL	4.5	PQL	ug/Kg	U	B

Sample ID: **SL-162-SA5B-SB-4.0-5.0** ***Collected:*** **2/7/2011 11:54:00** ***Analysis Type:*** **RES** ***Dilution:*** **1.06**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ETHYLBENZENE	0.13	J	0.07	MDL	4.8	PQL	ug/Kg	J	Z
m,p-Xylene	0.46	J	0.20	MDL	4.8	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	0.72	J	0.29	MDL	4.8	PQL	ug/Kg	U	B

Sample ID: **SL-163-SA5B-SB-3.5-4.5** ***Collected:*** **2/7/2011 3:36:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** **1.14**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.75	J	0.29	MDL	4.9	PQL	ug/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE077 **Laboratory: LL**

EDD Filename: DE077_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
*#	Professional Judgment
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Verification Correlation Coefficient
C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE077 **Laboratory: LL**

EDD Filename: DE077_v1 **eQAPP Name: CDM_SSFL_110509**

F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation
L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery Lower Estimation

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE077 **Laboratory: LL**

EDD Filename: DE077_v1 **eQAPP Name: CDM_SSFL_110509**

R	Continuing Calibration Verification Percent Recovery Lower Rejection
R	Continuing Calibration Verification Percent Recovery Upper Estimation
R	Continuing Calibration Verification Percent Recovery Upper Rejection
R	Continuing Calibration Verification Relative Response Factor
R	Initial Calibration Relative Response Factor
R	Initial Calibration Verification Percent Recovery Lower Estimation
R	Initial Calibration Verification Percent Recovery Lower Rejection
R	Initial Calibration Verification Percent Recovery Upper Estimation
R	Initial Calibration Verification Percent Recovery Upper Rejection
R	Initial Calibration Verification Relative Response Factor
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control Outlier Reports

DE077

Method Blank Outlier Report

Lab Reporting Batch ID: DE077 **Laboratory: LL**

EDD Filename: DE077_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P04108BB222105	2/11/2011 9:05:00 PM	TIN	1.50 mg/Kg	SL-048-SA5A-SB-3.0-4.0 SL-049-SA5A-SB-2.0-3.0 SL-160-SA5B-SB-4.0-5.0 SL-161-SA5B-SB-4.0-5.0 SL-162-SA5B-SB-4.0-5.0 SL-163-SA5B-SB-3.5-4.5

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-048-SA5A-SB-3.0-4.0(RES)	TIN	2.45 mg/Kg	2.45U mg/Kg
SL-049-SA5A-SB-2.0-3.0(RES)	TIN	2.44 mg/Kg	2.44U mg/Kg
SL-160-SA5B-SB-4.0-5.0(RES)	TIN	2.45 mg/Kg	2.45U mg/Kg
SL-161-SA5B-SB-4.0-5.0(RES)	TIN	2.70 mg/Kg	2.70U mg/Kg
SL-162-SA5B-SB-4.0-5.0(RES)	TIN	2.85 mg/Kg	2.85U mg/Kg
SL-163-SA5B-SB-3.5-4.5(RES)	TIN	2.83 mg/Kg	2.83U mg/Kg

Method: 6020
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P04126BB221626A	2/22/2011 4:26:00 PM	COPPER	0.0662 mg/Kg	SL-048-SA5A-SB-3.0-4.0 SL-049-SA5A-SB-2.0-3.0 SL-160-SA5B-SB-4.0-5.0 SL-161-SA5B-SB-4.0-5.0 SL-162-SA5B-SB-4.0-5.0 SL-163-SA5B-SB-3.5-4.5

Method: 8260B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB66B211537A	2/8/2011 3:37:00 PM	METHYLENE CHLORIDE TOLUENE	0.44 ug/Kg 0.09 ug/Kg	SL-048-SA5A-SB-3.0-4.0 SL-049-SA5A-SB-2.0-3.0 SL-160-SA5B-SB-4.0-5.0 SL-161-SA5B-SB-4.0-5.0 SL-162-SA5B-SB-4.0-5.0 SL-163-SA5B-SB-3.5-4.5

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-048-SA5A-SB-3.0-4.0(RES)	METHYLENE CHLORIDE	1.3 ug/Kg	4.0U ug/Kg
SL-049-SA5A-SB-2.0-3.0(RES)	METHYLENE CHLORIDE	0.82 ug/Kg	4.1U ug/Kg
SL-160-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.55 ug/Kg	5.0U ug/Kg

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Method Blank Outlier Report

Lab Reporting Batch ID: DE077 **Laboratory: LL**

EDD Filename: DE077_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8260B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-161-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.63 ug/Kg	4.5U ug/Kg
SL-162-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.72 ug/Kg	4.8U ug/Kg
SL-163-SA5B-SB-3.5-4.5(RES)	METHYLENE CHLORIDE	0.75 ug/Kg	4.9U ug/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE077 **Laboratory: LL**

EDD Filename: DE077_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-048-SA5A-SB-3.0-4.0MS **SL-048-SA5A-SB-3.0-4.0MSD** (SL-048-SA5A-SB-3.0-4.0 SL -049-SA5A-SB-2.0-3.0 SL -160-SA5B-SB-4.0-5.0 SL -161-SA5B-SB-4.0-5.0 SL -162-SA5B-SB-4.0-5.0 SL -163-SA5B-SB-3.5-4.5)	ANTIMONY	43	40	75.00-125.00	-	ANTIMONY	J (all detects) UJ (all non-detects)
SL-048-SA5A-SB-3.0-4.0MS **SL-048-SA5A-SB-3.0-4.0MSD** (SL-048-SA5A-SB-3.0-4.0 SL -049-SA5A-SB-2.0-3.0 SL -160-SA5B-SB-4.0-5.0 SL -161-SA5B-SB-4.0-5.0 SL -162-SA5B-SB-4.0-5.0 SL -163-SA5B-SB-3.5-4.5)	BARIUM	126	133	75.00-125.00	-	BARIUM	No Qual, >4x

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-048-SA5A-SB-3.0-4.0MS	ALUMINUM	1344	1349	75.00-125.00	-	ALUMINUM	J(all detects)
SL-048-SA5A-SB-3.0-4.0MSD	CALCIUM	203	162	75.00-125.00	-	CALCIUM	
(SL-048-SA5A-SB-3.0-4.0	IRON	784	458	75.00-125.00	-	IRON	Al, Ca, Fe, Mg, Mn, Ti No Qual, >4x
SL -049-SA5A-SB-2.0-3.0	MAGNESIUM	351	177	75.00-125.00	-	MAGNESIUM	
SL -160-SA5B-SB-4.0-5.0	MANGANESE	174	-	75.00-125.00	-	MANGANESE	
SL -161-SA5B-SB-4.0-5.0	PHOSPHORUS	139	-	75.00-125.00	-	PHOSPHORUS	
SL -162-SA5B-SB-4.0-5.0	POTASSIUM	137	-	75.00-125.00	-	POTASSIUM	
SL -163-SA5B-SB-3.5-4.5)	TITANIUM	396	303	75.00-125.00	-	TITANIUM	

Method: 300.0
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-048-SA5A-SB-3.0-4.0MS (SL-048-SA5A-SB-3.0-4.0 SL -049-SA5A-SB-2.0-3.0 SL -160-SA5B-SB-4.0-5.0 SL -161-SA5B-SB-4.0-5.0 SL -162-SA5B-SB-4.0-5.0 SL -163-SA5B-SB-3.5-4.5)	FLUORIDE	54	-	80.00-120.00	-	FLUORIDE	J(all detects) UJ(all non-detects)

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE077 **Laboratory: LL**

EDD Filename: DE077_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 300.0
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-048-SA5A-SB-3.0-4.0DUP (SL-048-SA5A-SB-3.0-4.0 SL -049-SA5A-SB-2.0-3.0 SL -160-SA5B-SB-4.0-5.0 SL -161-SA5B-SB-4.0-5.0 SL -162-SA5B-SB-4.0-5.0 SL -163-SA5B-SB-3.5-4.5)	FLUORIDE	200	20.00	No Qual OK by difference

Method: 6010B
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-048-SA5A-SB-3.0-4.0DUP (SL-048-SA5A-SB-3.0-4.0 SL -049-SA5A-SB-2.0-3.0 SL -160-SA5B-SB-4.0-5.0 SL -161-SA5B-SB-4.0-5.0 SL -162-SA5B-SB-4.0-5.0 SL -163-SA5B-SB-3.5-4.5)	Zirconium	21	20.00	No Qual OK by difference

Method: 6020
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-048-SA5A-SB-3.0-4.0DUP (SL-048-SA5A-SB-3.0-4.0 SL -049-SA5A-SB-2.0-3.0 SL -160-SA5B-SB-4.0-5.0 SL -161-SA5B-SB-4.0-5.0 SL -162-SA5B-SB-4.0-5.0 SL -163-SA5B-SB-3.5-4.5)	BARIUM	21	20.00	J(all detects) UJ(all non-detects)

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE077 **Laboratory: LL**

EDD Filename: DE077_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P9LALCSQ260051 (SL-048-SA5A-SB-3.0-4.0 SL-049-SA5A-SB-2.0-3.0 SL-160-SA5B-SB-4.0-5.0 SL-161-SA5B-SB-4.0-5.0 SL-162-SA5B-SB-4.0-5.0 SL-163-SA5B-SB-3.5-4.5)	PHENOL	113	-	58.00-112.00	-	PHENOL	J (all detects)

Method: 8082
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P10480AY241845A (SL-048-SA5A-SB-3.0-4.0 SL-049-SA5A-SB-2.0-3.0 SL-160-SA5B-SB-4.0-5.0 SL-161-SA5B-SB-4.0-5.0 SL-162-SA5B-SB-4.0-5.0 SL-163-SA5B-SB-3.5-4.5)	Aroclor 5442	-	63	75.00-125.00	-	Aroclor 5432, 5442, 5460	J(all detects) UJ(all non-detects)

Surrogate Outlier Report

Lab Reporting Batch ID: DE077 **Laboratory: LL**

EDD Filename: DE077_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8082
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-160-SA5B-SB-4.0-5.0	DECACHLOROBIPHENYL	137	45.00-120.00	All Target Analytes	J (all detects)
SL-161-SA5B-SB-4.0-5.0	DECACHLOROBIPHENYL	123	45.00-120.00	All Target Analytes	J(all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE077 **Laboratory: LL**

EDD Filename: DE077_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-048-SA5A-SB-3.0-4.0	SODIUM	J	102	108	PQL	mg/Kg	J (all detects)
	TIN	J	2.45	10.8	PQL	mg/Kg	
	Zirconium	J	2.09	5.38	PQL	mg/Kg	
SL-049-SA5A-SB-2.0-3.0	SODIUM	J	68.3	110	PQL	mg/Kg	J (all detects)
	TIN	J	2.44	11.0	PQL	mg/Kg	
	Zirconium	J	1.72	5.52	PQL	mg/Kg	
SL-160-SA5B-SB-4.0-5.0	TIN	J	2.45	10.8	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.18	5.41	PQL	mg/Kg	
SL-161-SA5B-SB-4.0-5.0	TIN	J	2.70	10.8	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.64	5.42	PQL	mg/Kg	
SL-162-SA5B-SB-4.0-5.0	TIN	J	2.85	10.9	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.96	5.47	PQL	mg/Kg	
SL-163-SA5B-SB-3.5-4.5	TIN	J	2.83	10.6	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.42	5.28	PQL	mg/Kg	

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-048-SA5A-SB-3.0-4.0	ANTIMONY	J	0.147	0.220	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0580	0.110	PQL	mg/Kg	
	SELENIUM	J	0.146	0.439	PQL	mg/Kg	
	SILVER	J	0.0191	0.110	PQL	mg/Kg	
SL-049-SA5A-SB-2.0-3.0	ANTIMONY	J	0.128	0.221	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.110	0.442	PQL	mg/Kg	
	SILVER	J	0.0343	0.110	PQL	mg/Kg	
SL-160-SA5B-SB-4.0-5.0	ANTIMONY	J	0.126	0.219	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0841	0.437	PQL	mg/Kg	
SL-161-SA5B-SB-4.0-5.0	ANTIMONY	J	0.0919	0.213	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.105	0.106	PQL	mg/Kg	
	SELENIUM	J	0.0823	0.425	PQL	mg/Kg	
SL-162-SA5B-SB-4.0-5.0	ANTIMONY	J	0.121	0.217	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0529	0.434	PQL	mg/Kg	
SL-163-SA5B-SB-3.5-4.5	ANTIMONY	J	0.128	0.207	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.122	0.414	PQL	mg/Kg	

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-162-SA5B-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.29	1.1	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE077 **Laboratory: LL**

EDD Filename: DE077_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7471A
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-162-SA5B-SB-4.0-5.0	MERCURY	J	0.0122	0.108	PQL	mg/Kg	J (all detects)
SL-163-SA5B-SB-3.5-4.5	MERCURY	J	0.0058	0.105	PQL	mg/Kg	J (all detects)

Method: 8082
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-160-SA5B-SB-4.0-5.0	Aroclor 5460	J	1.2	3.6	PQL	ug/Kg	J (all detects)
SL-161-SA5B-SB-4.0-5.0	Aroclor 5460	J	3.3	3.7	PQL	ug/Kg	J (all detects)
SL-162-SA5B-SB-4.0-5.0	Aroclor 5460	J	2.4	3.7	PQL	ug/Kg	J (all detects)
SL-163-SA5B-SB-3.5-4.5	AROCLOR 1260 Aroclor 5460	J J	1.1 1.3	1.8 3.6	PQL PQL	ug/Kg ug/Kg	J (all detects)

Method: 8260B
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-048-SA5A-SB-3.0-4.0	METHYLENE CHLORIDE	J	1.3	4.0	PQL	ug/Kg	J (all detects)
SL-049-SA5A-SB-2.0-3.0	METHYLENE CHLORIDE	J	0.82	4.1	PQL	ug/Kg	J (all detects)
SL-160-SA5B-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.55	5.0	PQL	ug/Kg	J (all detects)
SL-161-SA5B-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.63	4.5	PQL	ug/Kg	J (all detects)
SL-162-SA5B-SB-4.0-5.0	ETHYLBENZENE m,p-Xylene METHYLENE CHLORIDE	J J J	0.13 0.46 0.72	4.8 4.8 4.8	PQL PQL PQL	ug/Kg ug/Kg ug/Kg	J (all detects)
SL-163-SA5B-SB-3.5-4.5	METHYLENE CHLORIDE	J	0.75	4.9	PQL	ug/Kg	J (all detects)

Method: 8270C SIM
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-048-SA5A-SB-3.0-4.0	NAPHTHALENE	J	0.94	1.8	PQL	ug/Kg	J (all detects)
SL-049-SA5A-SB-2.0-3.0	BENZO(B)FLUORANTHENE BENZO(G,H,I)PERYLENE CHRYSENE INDENO(1,2,3-CD)PYRENE NAPHTHALENE	J J J J J	0.78 1.1 0.90 0.91 0.92	1.9 1.9 1.9 1.9 1.9	PQL PQL PQL PQL PQL	ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE077 **Laboratory: LL**

EDD Filename: DE077_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8270C SIM**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-160-SA5B-SB-4.0-5.0	ACENAPHTHYLENE	J	0.40	1.8	PQL	ug/Kg	J (all detects)
	ANTHRACENE	J	1.1	1.8	PQL	ug/Kg	
	BENZO(A)ANTHRACENE	J	1.4	1.8	PQL	ug/Kg	
	BENZO(A)PYRENE	J	1.1	1.8	PQL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	1.3	1.8	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.7	1.8	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	1.3	1.8	PQL	ug/Kg	
	CHRYSENE	J	1.4	1.8	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	1.1	1.8	PQL	ug/Kg	
	Di-n-butylphthalate	J	7.0	20	PQL	ug/Kg	
	FLUORANTHENE	J	1.4	1.8	PQL	ug/Kg	
	FLUORENE	J	0.79	1.8	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.4	1.8	PQL	ug/Kg	
	NAPHTHALENE	J	0.90	1.8	PQL	ug/Kg	
	PHENANTHRENE	J	1.4	1.8	PQL	ug/Kg	
	PYRENE	J	1.5	1.8	PQL	ug/Kg	
SL-161-SA5B-SB-4.0-5.0	ANTHRACENE	J	0.59	1.8	PQL	ug/Kg	J (all detects)
	BENZO(A)ANTHRACENE	J	0.88	1.8	PQL	ug/Kg	
	BENZO(A)PYRENE	J	0.76	1.8	PQL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	0.94	1.8	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.4	1.8	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	1.1	1.8	PQL	ug/Kg	
	CHRYSENE	J	1.0	1.8	PQL	ug/Kg	
	FLUORANTHENE	J	0.86	1.8	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.1	1.8	PQL	ug/Kg	
	NAPHTHALENE	J	1.1	1.8	PQL	ug/Kg	
	PHENANTHRENE	J	0.93	1.8	PQL	ug/Kg	
	PYRENE	J	1.1	1.8	PQL	ug/Kg	
SL-162-SA5B-SB-4.0-5.0	BENZO(K)FLUORANTHENE	J	0.81	1.9	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	0.61	1.9	PQL	ug/Kg	
	NAPHTHALENE	J	1.4	1.9	PQL	ug/Kg	
SL-163-SA5B-SB-3.5-4.5	CHRYSENE	J	0.41	1.8	PQL	ug/Kg	J (all detects)
	NAPHTHALENE	J	0.83	1.8	PQL	ug/Kg	

LDC #: 25764A4

SDG #: DE077

Laboratory: Lancaster Laboratories

VALIDATION COMPLETENESS WORKSHEET

ADR

Date: 7/6/11

Page: 1 of 1

Reviewer: CR

2nd Reviewer: [illegible]

METHOD: Metals (EPA SW 846 Method 6010B/6020A/7000)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	N	Sampling dates:
II.	ICP/MS Tune	—	
III.	Calibration	—	
IV.	Blanks	SW	
V.	ICP Interference Check Sample (ICS) Analysis	N	
VI.	Matrix Spike Analysis	N	MS/D (Al, Ba, Ca, Fe, Mg, Mn, Ti, Zn >4X)
VII.	Duplicate Sample Analysis	N	D, P (Zr < 5xRL)
VIII.	Laboratory Control Samples (LCS)	N A	LCS
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	SW	Cr: 11%, Cu: 16%, Ni: 21% (J/UJ/A)
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	—	
XV	Field Blanks	—	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: Soil

1	SL-048-SA5A-SB-3.0-4.0	11		21		31	
2	SL-049-SA5A-SB-2.0-3.0	12		22		32	
3	SL-160-SA5B-SB-4.0-5.0	13		23		33	
4	SL-161-SA5B-SB-4.0-5.0	14		24		34	
5	SL-162-SA5B-SB-4.0-5.0	15		25		35	
6	SL-163-SA5B-SB-3.5-4.5	16		26		36	
7	(1) MS	17		27		37	
8	MSD	18		28		38	
9	DUP	19		29		39	
10		20		30		40	

Notes:

LDC #: 25764A4

VALIDATION FINDINGS WORKSHEET
PB/ICB/CCB QUALIFIED SAMPLES

Reviewer: CB
2nd Reviewer: A

METHOD: Trace metals (EPA SW 864 Method 6010B/6020/7000)
Sample Concentration units, unless otherwise noted: mg/Kg

Soil preparation factor applied: 100x x MS: 2xdil
Associated Samples: All Reason Code: B

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit	1	2	3	4	6						
Zr			5.8	2.9	2.1	1.7	2.2	2.6	2.4						

Samples with analyte concentrations within five times the associated ICB, CCB or PB concentration are listed above with the identifications from the Validation Completeness Worksheet. These sample results were qualified as not detected, "U".

Note : a - The listed analyte concentration is the highest ICB, CCB, or PB detected in the analysis of each element.

SAMPLE DELIVERY GROUP

DE083

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
16-Feb-2011	TB-021611	6208353	TB	5030B	8015M	III
16-Feb-2011	TB-021611	6208353	TB	5030B	8260B	III
16-Feb-2011	TB-021611	6208353	TB	5030B	8260B SIM	III
16-Feb-2011	SL-032-SA5A-SS-0.0-0.5	6208348	N	3050B	6010B	III
16-Feb-2011	SL-032-SA5A-SS-0.0-0.5	6208348	N	3050B	6020	III
16-Feb-2011	SL-032-SA5A-SS-0.0-0.5	6208348	N	3060A	7199	III
16-Feb-2011	SL-032-SA5A-SS-0.0-0.5	6208348	N	3550B	8081A	III
16-Feb-2011	SL-032-SA5A-SS-0.0-0.5	6208348	N	3550B	8082	III
16-Feb-2011	SL-032-SA5A-SS-0.0-0.5	6208348	N	3550B	8151A	III
16-Feb-2011	SL-032-SA5A-SS-0.0-0.5	6208348	N	3550B	8270C	III
16-Feb-2011	SL-032-SA5A-SS-0.0-0.5	6208348	N	3550B	8270C SIM	III
16-Feb-2011	SL-032-SA5A-SS-0.0-0.5	6208348	N	Gen Prep	9045M	III
16-Feb-2011	SL-032-SA5A-SS-0.0-0.5	6208348	N	METHOD	300.0	III
16-Feb-2011	SL-032-SA5A-SS-0.0-0.5	6208348	N	METHOD	314.0	III
16-Feb-2011	SL-032-SA5A-SS-0.0-0.5	6208348	N	METHOD	7471A	III
16-Feb-2011	SL-041-SA5A-SS-0.0-0.5	6208349	N	3050B	6010B	III
16-Feb-2011	SL-041-SA5A-SS-0.0-0.5	6208349	N	3050B	6020	III
16-Feb-2011	SL-041-SA5A-SS-0.0-0.5	6208349	N	3060A	7199	III
16-Feb-2011	SL-041-SA5A-SS-0.0-0.5	6208349	N	3550B	8081A	III
16-Feb-2011	SL-041-SA5A-SS-0.0-0.5	6208349	N	3550B	8082	III
16-Feb-2011	SL-041-SA5A-SS-0.0-0.5	6208349	N	3550B	8151A	III
16-Feb-2011	SL-041-SA5A-SS-0.0-0.5	6208349	N	3550B	8270C	III
16-Feb-2011	SL-041-SA5A-SS-0.0-0.5	6208349	N	3550B	8270C SIM	III
16-Feb-2011	SL-041-SA5A-SS-0.0-0.5	6208349	N	Gen Prep	9045M	III
16-Feb-2011	SL-041-SA5A-SS-0.0-0.5	6208349	N	METHOD	300.0	III
16-Feb-2011	SL-041-SA5A-SS-0.0-0.5	6208349	N	METHOD	314.0	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
16-Feb-2011	SL-041-SA5A-SS-0.0-0.5	6208349	N	METHOD	7471A	III
16-Feb-2011	SL-024-SA5A-SS-0.0-0.5	6208342	N	3050B	6010B	III
16-Feb-2011	SL-024-SA5A-SS-0.0-0.5	6208342	N	3050B	6020	III
16-Feb-2011	SL-024-SA5A-SS-0.0-0.5	6208342	N	3060A	7199	III
16-Feb-2011	SL-024-SA5A-SS-0.0-0.5	6208342	N	3550B	8081A	III
16-Feb-2011	SL-024-SA5A-SS-0.0-0.5	6208342	N	3550B	8082	III
16-Feb-2011	SL-024-SA5A-SS-0.0-0.5	6208342	N	3550B	8151A	III
16-Feb-2011	SL-024-SA5A-SS-0.0-0.5	6208342	N	3550B	8270C	III
16-Feb-2011	SL-024-SA5A-SS-0.0-0.5	6208342	N	3550B	8270C SIM	III
16-Feb-2011	SL-024-SA5A-SS-0.0-0.5	6208342	N	Gen Prep	9045M	III
16-Feb-2011	SL-024-SA5A-SS-0.0-0.5	6208342	N	METHOD	300.0	III
16-Feb-2011	SL-024-SA5A-SS-0.0-0.5	6208342	N	METHOD	314.0	III
16-Feb-2011	SL-024-SA5A-SS-0.0-0.5	6208342	N	METHOD	7471A	III
16-Feb-2011	SL-024-SA5A-SS-0.0-0.5DUP	P208342D220252	DUP	3050B	6010B	III
16-Feb-2011	SL-024-SA5A-SS-0.0-0.5DUP	P208342D220603	DUP	3050B	6010B	III
16-Feb-2011	SL-024-SA5A-SS-0.0-0.5DUP	P208342D220912	DUP	METHOD	7471A	III
16-Feb-2011	SL-024-SA5A-SS-0.0-0.5DUP	P208342D221154A	DUP	3050B	6020	III
16-Feb-2011	SL-024-SA5A-SS-0.0-0.5DUP	P208342D221154B	DUP	3050B	6020	III
16-Feb-2011	SL-024-SA5A-SS-0.0-0.5DUP	P208342D221154C	DUP	3050B	6020	III
16-Feb-2011	SL-024-SA5A-SS-0.0-0.5DUP	P208342D221154D	DUP	3050B	6020	III
16-Feb-2011	SL-024-SA5A-SS-0.0-0.5DUP	P208342D221314A	DUP	3050B	6020	III
16-Feb-2011	SL-024-SA5A-SS-0.0-0.5DUP	P208342D271434A	DUP	METHOD	314.0	III
16-Feb-2011	SL-024-SA5A-SS-0.0-0.5DUP	P208342D271623A	DUP	3060A	7199	III
16-Feb-2011	SL-024-SA5A-SS-0.0-0.5MSD	P208342M220300	MSD	3050B	6010B	III
16-Feb-2011	SL-024-SA5A-SS-0.0-0.5MSD	P208342M220610	MSD	3050B	6010B	III
16-Feb-2011	SL-024-SA5A-SS-0.0-0.5MSD	P208342M220914	MSD	METHOD	7471A	III

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IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
16-Feb-2011	SL-024-SA5A-SS-0.0-0.5MSD	P208342M221200A	MSD	3050B	6020	III
16-Feb-2011	SL-024-SA5A-SS-0.0-0.5MSD	P208342M221200B	MSD	3050B	6020	III
16-Feb-2011	SL-024-SA5A-SS-0.0-0.5MSD	P208342M221200C	MSD	3050B	6020	III
16-Feb-2011	SL-024-SA5A-SS-0.0-0.5MSD	P208342M221200D	MSD	3050B	6020	III
16-Feb-2011	SL-024-SA5A-SS-0.0-0.5MSD	P208342M221319A	MSD	3050B	6020	III
16-Feb-2011	SL-024-SA5A-SS-0.0-0.5MSD	P208342M241753A	MSD	3550B	8151A	III
16-Feb-2011	SL-024-SA5A-SS-0.0-0.5MSD	P208342M260230	MSD	3550B	8270C SIM	III
16-Feb-2011	SL-024-SA5A-SS-0.0-0.5MS	P208342R220256	MS	3050B	6010B	III
16-Feb-2011	SL-024-SA5A-SS-0.0-0.5MS	P208342R220607	MS	3050B	6010B	III
16-Feb-2011	SL-024-SA5A-SS-0.0-0.5MS	P208342R220913	MS	METHOD	7471A	III
16-Feb-2011	SL-024-SA5A-SS-0.0-0.5MS	P208342R221157A	MS	3050B	6020	III
16-Feb-2011	SL-024-SA5A-SS-0.0-0.5MS	P208342R221157B	MS	3050B	6020	III
16-Feb-2011	SL-024-SA5A-SS-0.0-0.5MS	P208342R221157C	MS	3050B	6020	III
16-Feb-2011	SL-024-SA5A-SS-0.0-0.5MS	P208342R221157D	MS	3050B	6020	III
16-Feb-2011	SL-024-SA5A-SS-0.0-0.5MS	P208342R221316A	MS	3050B	6020	III
16-Feb-2011	SL-024-SA5A-SS-0.0-0.5MS	P208342R241726A	MS	3550B	8151A	III
16-Feb-2011	SL-024-SA5A-SS-0.0-0.5MS	P208342R260156	MS	3550B	8270C SIM	III
16-Feb-2011	SL-024-SA5A-SS-0.0-0.5MS	P208342R271458A	MS	METHOD	314.0	III
16-Feb-2011	SL-024-SA5A-SS-0.0-0.5MS	P208342R271540A	MS	3060A	7199	III
16-Feb-2011	SL-026-SA5A-SS-0.0-0.5	6208344	N	3050B	6010B	III
16-Feb-2011	SL-026-SA5A-SS-0.0-0.5	6208344	N	3050B	6020	III
16-Feb-2011	SL-026-SA5A-SS-0.0-0.5	6208344	N	3060A	7199	III
16-Feb-2011	SL-026-SA5A-SS-0.0-0.5	6208344	N	3550B	8081A	III
16-Feb-2011	SL-026-SA5A-SS-0.0-0.5	6208344	N	3550B	8082	III
16-Feb-2011	SL-026-SA5A-SS-0.0-0.5	6208344	N	3550B	8151A	III
16-Feb-2011	SL-026-SA5A-SS-0.0-0.5	6208344	N	3550B	8270C	III

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IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
16-Feb-2011	SL-026-SA5A-SS-0.0-0.5	6208344	N	3550B	8270C SIM	III
16-Feb-2011	SL-026-SA5A-SS-0.0-0.5	6208344	N	Gen Prep	9045M	III
16-Feb-2011	SL-026-SA5A-SS-0.0-0.5	6208344	N	METHOD	300.0	III
16-Feb-2011	SL-026-SA5A-SS-0.0-0.5	6208344	N	METHOD	314.0	III
16-Feb-2011	SL-026-SA5A-SS-0.0-0.5	6208344	N	METHOD	6850	III
16-Feb-2011	SL-026-SA5A-SS-0.0-0.5	6208344	N	METHOD	7471A	III
16-Feb-2011	SL-335-SA5B-SB-2.0-3.0	6208352	N	3050B	6010B	III
16-Feb-2011	SL-335-SA5B-SB-2.0-3.0	6208352	N	3050B	6020	III
16-Feb-2011	SL-335-SA5B-SB-2.0-3.0	6208352	N	3060A	7199	III
16-Feb-2011	SL-335-SA5B-SB-2.0-3.0	6208352	N	3546	1625C	III
16-Feb-2011	SL-335-SA5B-SB-2.0-3.0	6208352	N	3550B	8015B	III
16-Feb-2011	SL-335-SA5B-SB-2.0-3.0	6208352	N	3550B	8015M	III
16-Feb-2011	SL-335-SA5B-SB-2.0-3.0	6208352	N	3550B	8082	III
16-Feb-2011	SL-335-SA5B-SB-2.0-3.0	6208352	N	3550B	8270C	III
16-Feb-2011	SL-335-SA5B-SB-2.0-3.0	6208352	N	3550B	8270C SIM	III
16-Feb-2011	SL-335-SA5B-SB-2.0-3.0	6208352	N	5035	8015M	III
16-Feb-2011	SL-335-SA5B-SB-2.0-3.0	6208352	N	5035	8260B	III
16-Feb-2011	SL-335-SA5B-SB-2.0-3.0	6208352	N	5035	8260B SIM	III
16-Feb-2011	SL-335-SA5B-SB-2.0-3.0	6208352	N	8330	8330A	III
16-Feb-2011	SL-335-SA5B-SB-2.0-3.0	6208352	N	Gen Prep	314.0	III
16-Feb-2011	SL-335-SA5B-SB-2.0-3.0	6208352	N	Gen Prep	9045M	III
16-Feb-2011	SL-335-SA5B-SB-2.0-3.0	6208352	N	METHOD	300.0	III
16-Feb-2011	SL-335-SA5B-SB-2.0-3.0	6208352	N	METHOD	7471A	III
16-Feb-2011	SL-335-SA5B-SB-2.0-3.0	6208352	N	METHOD	8015B	III
16-Feb-2011	SL-335-SA5B-SB-2.0-3.0	6208352	N	METHOD	8015M	III
16-Feb-2011	SL-335-SA5B-SB-2.0-3.0	6208352	N	METHOD	8315A	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
16-Feb-2011	SL-335-SA5B-SB-2.0-3.0	6208352	N	METHOD	9012B	III
16-Feb-2011	SL-335-SA5B-SB-2.0-3.0DUP	P208352D272029B	DUP	METHOD	300.0	III
16-Feb-2011	SL-335-SA5B-SB-2.0-3.0MS	P208352R272044B	MS	METHOD	300.0	III
16-Feb-2011	SL-031-SA5A-SS-0.0-0.5	6208347	N	3050B	6010B	III
16-Feb-2011	SL-031-SA5A-SS-0.0-0.5	6208347	N	3050B	6020	III
16-Feb-2011	SL-031-SA5A-SS-0.0-0.5	6208347	N	3060A	7199	III
16-Feb-2011	SL-031-SA5A-SS-0.0-0.5	6208347	N	3550B	8081A	III
16-Feb-2011	SL-031-SA5A-SS-0.0-0.5	6208347	N	3550B	8082	III
16-Feb-2011	SL-031-SA5A-SS-0.0-0.5	6208347	N	3550B	8151A	III
16-Feb-2011	SL-031-SA5A-SS-0.0-0.5	6208347	N	3550B	8270C	III
16-Feb-2011	SL-031-SA5A-SS-0.0-0.5	6208347	N	3550B	8270C SIM	III
16-Feb-2011	SL-031-SA5A-SS-0.0-0.5	6208347	N	Gen Prep	9045M	III
16-Feb-2011	SL-031-SA5A-SS-0.0-0.5	6208347	N	METHOD	300.0	III
16-Feb-2011	SL-031-SA5A-SS-0.0-0.5	6208347	N	METHOD	314.0	III
16-Feb-2011	SL-031-SA5A-SS-0.0-0.5	6208347	N	METHOD	7471A	III
16-Feb-2011	SL-031-SA5A-SS-0.0-0.5DUP	P208347D291130A	DUP	Gen Prep	9045M	III
16-Feb-2011	SL-333-SA5B-SB-4.0-5.0	6208351	N	3050B	6010B	III
16-Feb-2011	SL-333-SA5B-SB-4.0-5.0	6208351	N	3050B	6020	III
16-Feb-2011	SL-333-SA5B-SB-4.0-5.0	6208351	N	3060A	7199	III
16-Feb-2011	SL-333-SA5B-SB-4.0-5.0	6208351	N	3546	1625C	III
16-Feb-2011	SL-333-SA5B-SB-4.0-5.0	6208351	N	3550B	8015B	III
16-Feb-2011	SL-333-SA5B-SB-4.0-5.0	6208351	N	3550B	8015M	III
16-Feb-2011	SL-333-SA5B-SB-4.0-5.0	6208351	N	3550B	8082	III
16-Feb-2011	SL-333-SA5B-SB-4.0-5.0	6208351	N	3550B	8270C	III
16-Feb-2011	SL-333-SA5B-SB-4.0-5.0	6208351	N	3550B	8270C SIM	III
16-Feb-2011	SL-333-SA5B-SB-4.0-5.0	6208351	N	5035	8015M	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
16-Feb-2011	SL-333-SA5B-SB-4.0-5.0	6208351	N	5035	8260B	III
16-Feb-2011	SL-333-SA5B-SB-4.0-5.0	6208351	N	5035	8260B SIM	III
16-Feb-2011	SL-333-SA5B-SB-4.0-5.0	6208351	N	8330	8330A	III
16-Feb-2011	SL-333-SA5B-SB-4.0-5.0	6208351	N	Gen Prep	9045M	III
16-Feb-2011	SL-333-SA5B-SB-4.0-5.0	6208351	N	METHOD	300.0	III
16-Feb-2011	SL-333-SA5B-SB-4.0-5.0	6208351	N	METHOD	314.0	III
16-Feb-2011	SL-333-SA5B-SB-4.0-5.0	6208351	N	METHOD	7471A	III
16-Feb-2011	SL-333-SA5B-SB-4.0-5.0	6208351	N	METHOD	8015B	III
16-Feb-2011	SL-333-SA5B-SB-4.0-5.0	6208351	N	METHOD	8015M	III
16-Feb-2011	SL-333-SA5B-SB-4.0-5.0	6208351	N	METHOD	8315A	III
16-Feb-2011	SL-333-SA5B-SB-4.0-5.0	6208351	N	METHOD	9012B	III
16-Feb-2011	SL-333-SA5B-SB-4.0-5.0MSD	P208351M322033A	MSD	METHOD	8015B	III
16-Feb-2011	SL-333-SA5B-SB-4.0-5.0MS	P208351R322018A	MS	METHOD	8015B	III
16-Feb-2011	SL-028-SA5A-SS-0.0-0.5	6208345	N	3050B	6010B	III
16-Feb-2011	SL-028-SA5A-SS-0.0-0.5	6208345	N	3050B	6020	III
16-Feb-2011	SL-028-SA5A-SS-0.0-0.5	6208345	N	3060A	7199	III
16-Feb-2011	SL-028-SA5A-SS-0.0-0.5	6208345	N	3550B	8081A	III
16-Feb-2011	SL-028-SA5A-SS-0.0-0.5	6208345	N	3550B	8082	III
16-Feb-2011	SL-028-SA5A-SS-0.0-0.5	6208345	N	3550B	8151A	III
16-Feb-2011	SL-028-SA5A-SS-0.0-0.5	6208345	N	3550B	8270C	III
16-Feb-2011	SL-028-SA5A-SS-0.0-0.5	6208345	N	3550B	8270C SIM	III
16-Feb-2011	SL-028-SA5A-SS-0.0-0.5	6208345	N	Gen Prep	9045M	III
16-Feb-2011	SL-028-SA5A-SS-0.0-0.5	6208345	N	METHOD	300.0	III
16-Feb-2011	SL-028-SA5A-SS-0.0-0.5	6208345	N	METHOD	314.0	III
16-Feb-2011	SL-028-SA5A-SS-0.0-0.5	6208345	N	METHOD	7471A	III
16-Feb-2011	SL-028-SA5A-SS-0.0-0.5MSD	P208345M242038A	MSD	3550B	8151A	III

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IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
16-Feb-2011	SL-028-SA5A-SS-0.0-0.5MS	P208345R242011A	MS	3550B	8151A	III
16-Feb-2011	SL-029-SA5A-SS-0.0-0.5	6208346	N	3050B	6010B	III
16-Feb-2011	SL-029-SA5A-SS-0.0-0.5	6208346	N	3050B	6020	III
16-Feb-2011	SL-029-SA5A-SS-0.0-0.5	6208346	N	3060A	7199	III
16-Feb-2011	SL-029-SA5A-SS-0.0-0.5	6208346	N	3550B	8081A	III
16-Feb-2011	SL-029-SA5A-SS-0.0-0.5	6208346	N	3550B	8082	III
16-Feb-2011	SL-029-SA5A-SS-0.0-0.5	6208346	N	3550B	8151A	III
16-Feb-2011	SL-029-SA5A-SS-0.0-0.5	6208346	N	3550B	8270C	III
16-Feb-2011	SL-029-SA5A-SS-0.0-0.5	6208346	N	3550B	8270C SIM	III
16-Feb-2011	SL-029-SA5A-SS-0.0-0.5	6208346	N	Gen Prep	9045M	III
16-Feb-2011	SL-029-SA5A-SS-0.0-0.5	6208346	N	METHOD	300.0	III
16-Feb-2011	SL-029-SA5A-SS-0.0-0.5	6208346	N	METHOD	314.0	III
16-Feb-2011	SL-029-SA5A-SS-0.0-0.5	6208346	N	METHOD	7471A	III
16-Feb-2011	SL-025-SA5A-SS-0.0-0.5	6208343	N	3050B	6010B	III
16-Feb-2011	SL-025-SA5A-SS-0.0-0.5	6208343	N	3050B	6020	III
16-Feb-2011	SL-025-SA5A-SS-0.0-0.5	6208343	N	3060A	7199	III
16-Feb-2011	SL-025-SA5A-SS-0.0-0.5	6208343	N	3550B	8081A	III
16-Feb-2011	SL-025-SA5A-SS-0.0-0.5	6208343	N	3550B	8082	III
16-Feb-2011	SL-025-SA5A-SS-0.0-0.5	6208343	N	3550B	8151A	III
16-Feb-2011	SL-025-SA5A-SS-0.0-0.5	6208343	N	3550B	8270C	III
16-Feb-2011	SL-025-SA5A-SS-0.0-0.5	6208343	N	3550B	8270C SIM	III
16-Feb-2011	SL-025-SA5A-SS-0.0-0.5	6208343	N	Gen Prep	9045M	III
16-Feb-2011	SL-025-SA5A-SS-0.0-0.5	6208343	N	METHOD	300.0	III
16-Feb-2011	SL-025-SA5A-SS-0.0-0.5	6208343	N	METHOD	314.0	III
16-Feb-2011	SL-025-SA5A-SS-0.0-0.5	6208343	N	METHOD	7471A	III
16-Feb-2011	SL-025-SA5A-SS-0.0-0.5DUP	P208343D271656A	DUP	METHOD	300.0	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
16-Feb-2011	SL-025-SA5A-SS-0.0-0.5MS	P208343R271712A	MS	METHOD	300.0	III
16-Feb-2011	SL-332-SA5B-SB-4.0-5.0	6208350	N	3050B	6010B	III
16-Feb-2011	SL-332-SA5B-SB-4.0-5.0	6208350	N	3050B	6020	III
16-Feb-2011	SL-332-SA5B-SB-4.0-5.0	6208350	N	3060A	7199	III
16-Feb-2011	SL-332-SA5B-SB-4.0-5.0	6208350	N	3546	1625C	III
16-Feb-2011	SL-332-SA5B-SB-4.0-5.0	6208350	N	3550B	8015B	III
16-Feb-2011	SL-332-SA5B-SB-4.0-5.0	6208350	N	3550B	8015M	III
16-Feb-2011	SL-332-SA5B-SB-4.0-5.0	6208350	N	3550B	8082	III
16-Feb-2011	SL-332-SA5B-SB-4.0-5.0	6208350	N	3550B	8270C	III
16-Feb-2011	SL-332-SA5B-SB-4.0-5.0	6208350	N	3550B	8270C SIM	III
16-Feb-2011	SL-332-SA5B-SB-4.0-5.0	6208350	N	5035	8015M	III
16-Feb-2011	SL-332-SA5B-SB-4.0-5.0	6208350	N	5035	8260B	III
16-Feb-2011	SL-332-SA5B-SB-4.0-5.0	6208350	N	5035	8260B SIM	III
16-Feb-2011	SL-332-SA5B-SB-4.0-5.0	6208350	N	8330	8330A	III
16-Feb-2011	SL-332-SA5B-SB-4.0-5.0	6208350	N	Gen Prep	9045M	III
16-Feb-2011	SL-332-SA5B-SB-4.0-5.0	6208350	N	METHOD	300.0	III
16-Feb-2011	SL-332-SA5B-SB-4.0-5.0	6208350	N	METHOD	314.0	III
16-Feb-2011	SL-332-SA5B-SB-4.0-5.0	6208350	N	METHOD	7471A	III
16-Feb-2011	SL-332-SA5B-SB-4.0-5.0	6208350	N	METHOD	8015B	III
16-Feb-2011	SL-332-SA5B-SB-4.0-5.0	6208350	N	METHOD	8015M	III
16-Feb-2011	SL-332-SA5B-SB-4.0-5.0	6208350	N	METHOD	8315A	III
16-Feb-2011	SL-332-SA5B-SB-4.0-5.0	6208350	N	METHOD	9012B	III
16-Feb-2011	SL-332-SA5B-SB-4.0-5.0MSD	P208350M241750A	MSD	METHOD	8315A	III
16-Feb-2011	SL-332-SA5B-SB-4.0-5.0MSD	P208350M320551A	MSD	3550B	8015M	III
16-Feb-2011	SL-332-SA5B-SB-4.0-5.0MSD	P208350M321735A	MSD	METHOD	8015M	III
16-Feb-2011	SL-332-SA5B-SB-4.0-5.0MS	P208350R241740A	MS	METHOD	8315A	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
16-Feb-2011	SL-332-SA5B-SB-4.0-5.0MS	P208350R320526A	MS	3550B	8015M	III
16-Feb-2011	SL-332-SA5B-SB-4.0-5.0MS	P208350R321718A	MS	METHOD	8015M	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE083 **Laboratory: LL**

EDD Filename: PrepDE083_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: **SL-024-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 10:30:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	3.9		0.87	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: **SL-025-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 1:28:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.8		0.93	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: **SL-026-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 10:45:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.7		0.90	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: **SL-028-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 12:55:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.8		0.89	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: **SL-029-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 1:10:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.9		0.91	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: **SL-031-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 11:10:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.7		0.90	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: **SL-032-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 9:20:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.3		0.88	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: **SL-041-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 9:30:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.2		0.89	MDL	1.1	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

porting Batch ID: DE083 Laboratory: LL

lename: PrepDE083_v1 eQAPP Name: CDM_SSFL_110509

Category: GENCHEM

: 300.0 Matrix: SO

D: SL-332-SA5B-SB-4.0-5.0 Collected: 2/16/2011 4:16:00 Analysis Type: RES Dilution: 1

	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
E	2.9		0.88	MDL	1.1	PQL	mg/Kg	J	Q

D: SL-333-SA5B-SB-4.0-5.0 Collected: 2/16/2011 12:30:00 Analysis Type: RES Dilution: 1

	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
E	3.8		0.91	MDL	1.1	PQL	mg/Kg	J	Q

Category: METALS

: 6010B Matrix: SO

D: SL-024-SA5A-SS-0.0-0.5 Collected: 2/16/2011 10:30:00 Analysis Type: REA Dilution: 1

	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
	20.7		0.23	MDL	2.1	PQL	mg/Kg	J	A

D: SL-024-SA5A-SS-0.0-0.5 Collected: 2/16/2011 10:30:00 Analysis Type: RES Dilution: 1

	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
	1.90	J	0.940	MDL	5.28	PQL	mg/Kg	J	Z
UM	3260		19.0	MDL	52.8	PQL	mg/Kg	J	Q
	67.6	J	39.4	MDL	106	PQL	mg/Kg	J	Z
	2.59	J	1.06	MDL	10.6	PQL	mg/Kg	U	B
	2.20	J	0.887	MDL	5.28	PQL	mg/Kg	J	Z

D: SL-025-SA5A-SS-0.0-0.5 Collected: 2/16/2011 1:28:00 Analysis Type: REA Dilution: 1

	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
	20.3		0.25	MDL	2.3	PQL	mg/Kg	J	A

D: SL-025-SA5A-SS-0.0-0.5 Collected: 2/16/2011 1:28:00 Analysis Type: RES Dilution: 1

	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
	3.37	J	1.02	MDL	5.71	PQL	mg/Kg	J	Z
UM	3490		20.6	MDL	57.1	PQL	mg/Kg	J	Q
	81.4	J	42.6	MDL	114	PQL	mg/Kg	J	Z

a non-reportable result

ame and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE083 **Laboratory: LL**

EDD Filename: PrepDE083_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: **SL-025-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 1:28:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.80	J	1.14	MDL	11.4	PQL	mg/Kg	U	B
Zirconium	2.33	J	0.960	MDL	5.71	PQL	mg/Kg	J	Z

Sample ID: **SL-026-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 10:45:00** ***Analysis Type:*** **REA** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LITHIUM	22.5		0.24	MDL	2.2	PQL	mg/Kg	J	A

Sample ID: **SL-026-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 10:45:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.55	J	0.970	MDL	5.45	PQL	mg/Kg	J	Z
POTASSIUM	3100		19.6	MDL	54.5	PQL	mg/Kg	J	Q
SODIUM	90.1	J	40.6	MDL	109	PQL	mg/Kg	J	Z
TIN	2.88	J	1.09	MDL	10.9	PQL	mg/Kg	U	B
Zirconium	1.78	J	0.915	MDL	5.45	PQL	mg/Kg	U	B

Sample ID: **SL-028-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 12:55:00** ***Analysis Type:*** **REA** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LITHIUM	17.1		0.23	MDL	2.1	PQL	mg/Kg	J	A

Sample ID: **SL-028-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 12:55:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.54	J	0.949	MDL	5.33	PQL	mg/Kg	J	Z
POTASSIUM	3520		19.2	MDL	53.3	PQL	mg/Kg	J	Q
SODIUM	81.4	J	39.8	MDL	107	PQL	mg/Kg	J	Z
TIN	2.61	J	1.07	MDL	10.7	PQL	mg/Kg	U	B
Zirconium	2.24	J	0.895	MDL	5.33	PQL	mg/Kg	J	Z

Sample ID: **SL-029-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 1:10:00** ***Analysis Type:*** **REA** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LITHIUM	20.7		0.25	MDL	2.2	PQL	mg/Kg	J	A

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE083 **Laboratory: LL**

EDD Filename: PrepDE083_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: **SL-029-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 1:10:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.67	J	0.998	MDL	5.61	PQL	mg/Kg	J	Z
POTASSIUM	3370		20.2	MDL	56.1	PQL	mg/Kg	J	Q
SODIUM	99.5	J	41.8	MDL	112	PQL	mg/Kg	J	Z
TIN	2.55	J	1.12	MDL	11.2	PQL	mg/Kg	U	B
Zirconium	2.46	J	0.942	MDL	5.61	PQL	mg/Kg	J	Z

Sample ID: **SL-031-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 11:10:00** ***Analysis Type:*** **REA** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LITHIUM	16.3		0.25	MDL	2.2	PQL	mg/Kg	J	A

Sample ID: **SL-031-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 11:10:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.06	J	0.996	MDL	5.59	PQL	mg/Kg	J	Z
POTASSIUM	3130		20.1	MDL	55.9	PQL	mg/Kg	J	Q
SODIUM	78.9	J	41.7	MDL	112	PQL	mg/Kg	J	Z
TIN	2.58	J	1.12	MDL	11.2	PQL	mg/Kg	U	B
Zirconium	1.96	J	0.940	MDL	5.59	PQL	mg/Kg	J	Z

Sample ID: **SL-032-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 9:20:00** ***Analysis Type:*** **REA** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LITHIUM	27.1		0.24	MDL	2.1	PQL	mg/Kg	J	A

Sample ID: **SL-032-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 9:20:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.54	J	0.956	MDL	5.37	PQL	mg/Kg	J	Z
POTASSIUM	4870		19.3	MDL	53.7	PQL	mg/Kg	J	Q
SODIUM	71.0	J	40.1	MDL	107	PQL	mg/Kg	J	Z
TIN	3.01	J	1.07	MDL	10.7	PQL	mg/Kg	U	B
Zirconium	1.30	J	0.902	MDL	5.37	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE083 **Laboratory: LL**

EDD Filename: PrepDE083_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: **SL-041-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 9:30:00** ***Analysis Type:*** **REA** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LITHIUM	25.3		0.24	MDL	2.2	PQL	mg/Kg	J	A

Sample ID: **SL-041-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 9:30:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.41	J	0.976	MDL	5.48	PQL	mg/Kg	J	Z
POTASSIUM	4360		19.7	MDL	54.8	PQL	mg/Kg	J	Q
SODIUM	66.6	J	40.9	MDL	110	PQL	mg/Kg	J	Z
TIN	2.50	J	1.10	MDL	11.0	PQL	mg/Kg	U	B
Zirconium	1.39	J	0.921	MDL	5.48	PQL	mg/Kg	U	B

Sample ID: **SL-332-SA5B-SB-4.0-5.0** ***Collected:*** **2/16/2011 4:16:00** ***Analysis Type:*** **REA** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LITHIUM	15.6		0.23	MDL	2.1	PQL	mg/Kg	J	A

Sample ID: **SL-332-SA5B-SB-4.0-5.0** ***Collected:*** **2/16/2011 4:16:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	2500		19.2	MDL	53.4	PQL	mg/Kg	J	Q
TIN	2.49	J	1.07	MDL	10.7	PQL	mg/Kg	U	B
Zirconium	0.914	J	0.897	MDL	5.34	PQL	mg/Kg	U	B

Sample ID: **SL-333-SA5B-SB-4.0-5.0** ***Collected:*** **2/16/2011 12:30:00** ***Analysis Type:*** **REA** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LITHIUM	13.2		0.25	MDL	2.3	PQL	mg/Kg	J	A

Sample ID: **SL-333-SA5B-SB-4.0-5.0** ***Collected:*** **2/16/2011 12:30:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.04	J	1.01	MDL	5.66	PQL	mg/Kg	J	Z
POTASSIUM	2050		20.4	MDL	56.6	PQL	mg/Kg	J	Q
TIN	2.74	J	1.13	MDL	11.3	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE083 **Laboratory: LL**

EDD Filename: PrepDE083_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-335-SA5B-SB-2.0-3.0 *Collected:* 2/16/2011 10:57:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LITHIUM	15.7		0.24	MDL	2.2	PQL	mg/Kg	J	A

Sample ID: SL-335-SA5B-SB-2.0-3.0 *Collected:* 2/16/2011 10:57:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	2990		19.5	MDL	54.2	PQL	mg/Kg	J	Q
TIN	2.87	J	1.08	MDL	10.8	PQL	mg/Kg	U	B
Zirconium	0.965	J	0.910	MDL	5.42	PQL	mg/Kg	U	B

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-024-SA5A-SS-0.0-0.5 *Collected:* 2/16/2011 10:30:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.298		0.0427	MDL	0.107	PQL	mg/Kg	J	Q, E

Sample ID: SL-024-SA5A-SS-0.0-0.5 *Collected:* 2/16/2011 10:30:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.253	J	0.0427	MDL	0.427	PQL	mg/Kg	J	Z, Q

Sample ID: SL-024-SA5A-SS-0.0-0.5 *Collected:* 2/16/2011 10:30:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.08		0.0533	MDL	0.107	PQL	mg/Kg	J	Q

Sample ID: SL-024-SA5A-SS-0.0-0.5 *Collected:* 2/16/2011 10:30:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	142		0.115	MDL	0.427	PQL	mg/Kg	J	E, A

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE083 **Laboratory: LL**

EDD Filename: PrepDE083_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: **SL-024-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 10:30:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.306		0.0640	MDL	0.213	PQL	mg/Kg	J	Q, E
ARSENIC	6.24		0.0853	MDL	0.427	PQL	mg/Kg	J	Q, E
CHROMIUM	26.5		0.128	MDL	0.427	PQL	mg/Kg	J	Q, A
COBALT	8.39		0.0213	MDL	0.107	PQL	mg/Kg	J	Q, E, A
COPPER	15.3		0.0704	MDL	0.427	PQL	mg/Kg	J	Q, E, A
LEAD	22.0		0.0111	MDL	0.213	PQL	mg/Kg	J	A
NICKEL	17.7		0.107	MDL	0.427	PQL	mg/Kg	J	Q, E, A
SILVER	0.0856	J	0.0128	MDL	0.107	PQL	mg/Kg	J	Z, Q
THALLIUM	0.398		0.0320	MDL	0.107	PQL	mg/Kg	J	Q
VANADIUM	51.9		0.0235	MDL	0.107	PQL	mg/Kg	J	E
ZINC	89.9		0.597	MDL	3.20	PQL	mg/Kg	J	A

Sample ID: **SL-025-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 1:28:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.270	J	0.0453	MDL	0.453	PQL	mg/Kg	J	Z, Q

Sample ID: **SL-025-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 1:28:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.695		0.0566	MDL	0.113	PQL	mg/Kg	J	Q

Sample ID: **SL-025-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 1:28:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	173		0.122	MDL	0.453	PQL	mg/Kg	J	E, A

Sample ID: **SL-025-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 1:28:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.226	J	0.0679	MDL	0.226	PQL	mg/Kg	J	Q, E
ARSENIC	5.77		0.0905	MDL	0.453	PQL	mg/Kg	J	Q, E
CADMIUM	4.60		0.0453	MDL	0.113	PQL	mg/Kg	J	Q, E
CHROMIUM	32.4		0.136	MDL	0.453	PQL	mg/Kg	J	Q, A
COBALT	9.76		0.0226	MDL	0.113	PQL	mg/Kg	J	Q, E, A

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

porting Batch ID: DE083 Laboratory: LL

lename: PrepDE083_v1 eQAPP Name: CDM_SSFL_110509

Category: METALS

: 6020 Matrix: SO

D: SL-025-SA5A-SS-0.0-0.5 Collected: 2/16/2011 1:28:00 Analysis Type: RES Dilution: 2

	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
	18.3		0.0747	MDL	0.453	PQL	mg/Kg	J	Q, E, A
	36.1		0.0118	MDL	0.226	PQL	mg/Kg	J	A
	26.5		0.113	MDL	0.453	PQL	mg/Kg	J	Q, E, A
	0.161		0.0136	MDL	0.113	PQL	mg/Kg	J	Q
M	0.409		0.0339	MDL	0.113	PQL	mg/Kg	J	Q
JM	54.5		0.0249	MDL	0.113	PQL	mg/Kg	J	E
	138		0.634	MDL	3.39	PQL	mg/Kg	J	A

D: SL-026-SA5A-SS-0.0-0.5 Collected: 2/16/2011 10:45:00 Analysis Type: REA Dilution: 2

	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
M	0.222		0.0432	MDL	0.108	PQL	mg/Kg	J	Q, E

D: SL-026-SA5A-SS-0.0-0.5 Collected: 2/16/2011 10:45:00 Analysis Type: REA2 Dilution: 2

	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
M	0.133	J	0.0432	MDL	0.432	PQL	mg/Kg	J	Z, Q

D: SL-026-SA5A-SS-0.0-0.5 Collected: 2/16/2011 10:45:00 Analysis Type: REA3 Dilution: 2

	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ENUM	0.738		0.0540	MDL	0.108	PQL	mg/Kg	J	Q

D: SL-026-SA5A-SS-0.0-0.5 Collected: 2/16/2011 10:45:00 Analysis Type: REA4 Dilution: 2

	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
	138		0.117	MDL	0.432	PQL	mg/Kg	J	E, A

D: SL-026-SA5A-SS-0.0-0.5 Collected: 2/16/2011 10:45:00 Analysis Type: RES Dilution: 2

	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NY	0.283		0.0648	MDL	0.216	PQL	mg/Kg	J	Q, E
;	5.40		0.0863	MDL	0.432	PQL	mg/Kg	J	Q, E
UM	27.4		0.130	MDL	0.432	PQL	mg/Kg	J	Q, A
	8.67		0.0216	MDL	0.108	PQL	mg/Kg	J	Q, E, A

; a non-reportable result

lame and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE083 **Laboratory: LL**

EDD Filename: PrepDE083_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: **SL-026-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 10:45:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	13.7		0.0712	MDL	0.432	PQL	mg/Kg	J	Q, E, A
LEAD	26.2		0.0112	MDL	0.216	PQL	mg/Kg	J	A
NICKEL	16.3		0.108	MDL	0.432	PQL	mg/Kg	J	Q, E, A
SILVER	0.0551	J	0.0130	MDL	0.108	PQL	mg/Kg	J	Z, Q
THALLIUM	0.376		0.0324	MDL	0.108	PQL	mg/Kg	J	Q
VANADIUM	56.9		0.0237	MDL	0.108	PQL	mg/Kg	J	E
ZINC	92.2		0.604	MDL	3.24	PQL	mg/Kg	J	A

Sample ID: **SL-028-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 12:55:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.196	J	0.0443	MDL	0.443	PQL	mg/Kg	J	Z, Q

Sample ID: **SL-028-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 12:55:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.949		0.0554	MDL	0.111	PQL	mg/Kg	J	Q

Sample ID: **SL-028-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 12:55:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	148		0.120	MDL	0.443	PQL	mg/Kg	J	E, A

Sample ID: **SL-028-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 12:55:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.209	J	0.0665	MDL	0.222	PQL	mg/Kg	J	Z, Q, E
ARSENIC	5.46		0.0887	MDL	0.443	PQL	mg/Kg	J	Q, E
CADMIUM	0.413		0.0443	MDL	0.111	PQL	mg/Kg	J	Q, E
CHROMIUM	28.0		0.133	MDL	0.443	PQL	mg/Kg	J	Q, A
COBALT	9.41		0.0222	MDL	0.111	PQL	mg/Kg	J	Q, E, A
COPPER	15.1		0.0732	MDL	0.443	PQL	mg/Kg	J	Q, E, A
LEAD	9.21		0.0115	MDL	0.222	PQL	mg/Kg	J	A
NICKEL	17.6		0.111	MDL	0.443	PQL	mg/Kg	J	Q, E, A
SILVER	0.0480	J	0.0133	MDL	0.111	PQL	mg/Kg	J	Z, Q

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE083 **Laboratory: LL**

EDD Filename: PrepDE083_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: **SL-028-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 12:55:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
THALLIUM	0.421		0.0333	MDL	0.111	PQL	mg/Kg	J	Q
VANADIUM	51.3		0.0244	MDL	0.111	PQL	mg/Kg	J	E
ZINC	71.8		0.621	MDL	3.33	PQL	mg/Kg	J	A

Sample ID: **SL-029-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 1:10:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.165		0.0440	MDL	0.110	PQL	mg/Kg	UJ	Q, E, B

Sample ID: **SL-029-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 1:10:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.180	J	0.0440	MDL	0.440	PQL	mg/Kg	J	Z, Q

Sample ID: **SL-029-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 1:10:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.00		0.0550	MDL	0.110	PQL	mg/Kg	J	Q

Sample ID: **SL-029-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 1:10:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	119		0.119	MDL	0.440	PQL	mg/Kg	J	E, A

Sample ID: **SL-029-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 1:10:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.142	J	0.0660	MDL	0.220	PQL	mg/Kg	J	Z, Q, E
ARSENIC	5.10		0.0880	MDL	0.440	PQL	mg/Kg	J	Q, E
CHROMIUM	25.6		0.132	MDL	0.440	PQL	mg/Kg	J	Q, A
COBALT	7.58		0.0220	MDL	0.110	PQL	mg/Kg	J	Q, E, A
COPPER	13.0		0.0726	MDL	0.440	PQL	mg/Kg	J	Q, E, A
LEAD	12.8		0.0114	MDL	0.220	PQL	mg/Kg	J	A
NICKEL	15.0		0.110	MDL	0.440	PQL	mg/Kg	J	Q, E, A
SILVER	0.0535	J	0.0132	MDL	0.110	PQL	mg/Kg	J	Z, Q

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE083 **Laboratory: LL**

EDD Filename: PrepDE083_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix:** SQ

Sample ID: **SL-029-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 1:10:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
THALLIUM	0.333		0.0330	MDL	0.110	PQL	mg/Kg	J	Q
VANADIUM	46.0		0.0242	MDL	0.110	PQL	mg/Kg	J	E
ZINC	70.3		0.616	MDL	3.30	PQL	mg/Kg	J	A

Sample ID: **SL-031-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 11:10:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.450		0.0435	MDL	0.435	PQL	mg/Kg	J	Q

Sample ID: **SL-031-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 11:10:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.34		0.0543	MDL	0.109	PQL	mg/Kg	J	Q

Sample ID: **SL-031-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 11:10:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	126		0.117	MDL	0.435	PQL	mg/Kg	J	E, A

Sample ID: **SL-031-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 11:10:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.197	J	0.0652	MDL	0.217	PQL	mg/Kg	J	Z, Q, E
ARSENIC	5.08		0.0869	MDL	0.435	PQL	mg/Kg	J	Q, E
CADMIUM	0.324		0.0435	MDL	0.109	PQL	mg/Kg	J	Q, E
CHROMIUM	27.0		0.130	MDL	0.435	PQL	mg/Kg	J	Q, A
COBALT	9.56		0.0217	MDL	0.109	PQL	mg/Kg	J	Q, E, A
COPPER	14.8		0.0717	MDL	0.435	PQL	mg/Kg	J	Q, E, A
LEAD	11.1		0.0113	MDL	0.217	PQL	mg/Kg	J	A
NICKEL	17.6		0.109	MDL	0.435	PQL	mg/Kg	J	Q, E, A
SILVER	0.0658	J	0.0130	MDL	0.109	PQL	mg/Kg	J	Z, Q
THALLIUM	0.404		0.0326	MDL	0.109	PQL	mg/Kg	J	Q
VANADIUM	49.4		0.0239	MDL	0.109	PQL	mg/Kg	J	E
ZINC	148		0.608	MDL	3.26	PQL	mg/Kg	J	A

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE083 **Laboratory: LL**

EDD Filename: PrepDE083_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: **SL-032-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 9:20:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
THALLIUM	0.259		0.0332	MDL	0.111	PQL	mg/Kg	J	Q

Sample ID: **SL-032-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 9:20:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.169	J	0.0442	MDL	0.442	PQL	mg/Kg	J	Z, Q

Sample ID: **SL-032-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 9:20:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.545		0.0553	MDL	0.111	PQL	mg/Kg	J	Q

Sample ID: **SL-032-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 9:20:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	120		0.119	MDL	0.442	PQL	mg/Kg	J	E, A

Sample ID: **SL-032-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 9:20:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.160	J	0.0664	MDL	0.221	PQL	mg/Kg	J	Z, Q, E
ARSENIC	5.19		0.0885	MDL	0.442	PQL	mg/Kg	J	Q, E
CADMIUM	0.223		0.0442	MDL	0.111	PQL	mg/Kg	J	Q, E
CHROMIUM	22.1		0.133	MDL	0.442	PQL	mg/Kg	J	Q, A
COBALT	6.97		0.0221	MDL	0.111	PQL	mg/Kg	J	Q, E, A
COPPER	11.6		0.0730	MDL	0.442	PQL	mg/Kg	J	Q, E, A
LEAD	11.6		0.0115	MDL	0.221	PQL	mg/Kg	J	A
NICKEL	13.9		0.111	MDL	0.442	PQL	mg/Kg	J	Q, E, A
SILVER	0.0620	J	0.0133	MDL	0.111	PQL	mg/Kg	J	Z, Q
VANADIUM	41.0		0.0243	MDL	0.111	PQL	mg/Kg	J	E
ZINC	72.8		0.619	MDL	3.32	PQL	mg/Kg	J	A

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE083 **Laboratory: LL**

EDD Filename: PrepDE083_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: **SL-041-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 9:30:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
THALLIUM	0.225		0.0329	MDL	0.110	PQL	mg/Kg	J	Q

Sample ID: **SL-041-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 9:30:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.108	J	0.0439	MDL	0.439	PQL	mg/Kg	J	Z, Q

Sample ID: **SL-041-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 9:30:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.740		0.0548	MDL	0.110	PQL	mg/Kg	J	Q

Sample ID: **SL-041-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 9:30:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	136		0.118	MDL	0.439	PQL	mg/Kg	J	E, A

Sample ID: **SL-041-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 9:30:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0932	J	0.0658	MDL	0.219	PQL	mg/Kg	J	Z, Q, E
ARSENIC	6.03		0.0877	MDL	0.439	PQL	mg/Kg	J	Q, E
CADMIUM	0.297		0.0439	MDL	0.110	PQL	mg/Kg	J	Q, E
CHROMIUM	26.7		0.132	MDL	0.439	PQL	mg/Kg	J	Q, A
COBALT	7.87		0.0219	MDL	0.110	PQL	mg/Kg	J	Q, E, A
COPPER	13.9		0.0724	MDL	0.439	PQL	mg/Kg	J	Q, E, A
LEAD	11.1		0.0114	MDL	0.219	PQL	mg/Kg	J	A
NICKEL	16.1		0.110	MDL	0.439	PQL	mg/Kg	J	Q, E, A
SILVER	0.0431	J	0.0132	MDL	0.110	PQL	mg/Kg	J	Z, Q
VANADIUM	48.3		0.0241	MDL	0.110	PQL	mg/Kg	J	E
ZINC	86.1		0.614	MDL	3.29	PQL	mg/Kg	J	A

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE083 **Laboratory: LL**

EDD Filename: PrepDE083_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: **SL-332-SA5B-SB-4.0-5.0** ***Collected:*** **2/16/2011 4:16:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.231	J	0.0436	MDL	0.436	PQL	mg/Kg	J	Z, Q

Sample ID: **SL-332-SA5B-SB-4.0-5.0** ***Collected:*** **2/16/2011 4:16:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.582		0.0545	MDL	0.109	PQL	mg/Kg	J	Q

Sample ID: **SL-332-SA5B-SB-4.0-5.0** ***Collected:*** **2/16/2011 4:16:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	82.9		0.118	MDL	0.436	PQL	mg/Kg	J	E, A

Sample ID: **SL-332-SA5B-SB-4.0-5.0** ***Collected:*** **2/16/2011 4:16:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.136	J	0.0654	MDL	0.218	PQL	mg/Kg	J	Z, Q, E
ARSENIC	5.06		0.0871	MDL	0.436	PQL	mg/Kg	J	Q, E
CADMIUM	0.0881	J	0.0436	MDL	0.109	PQL	mg/Kg	J	Z, Q, E
CHROMIUM	16.8		0.131	MDL	0.436	PQL	mg/Kg	J	Q, A
COBALT	4.43		0.0218	MDL	0.109	PQL	mg/Kg	J	Q, E, A
COPPER	8.56		0.0719	MDL	0.436	PQL	mg/Kg	J	Q, E, A
LEAD	6.63		0.0113	MDL	0.218	PQL	mg/Kg	J	A
NICKEL	10.2		0.109	MDL	0.436	PQL	mg/Kg	J	Q, E, A
SILVER	0.0273	J	0.0131	MDL	0.109	PQL	mg/Kg	J	Z, Q
THALLIUM	0.288		0.0327	MDL	0.109	PQL	mg/Kg	J	Q
VANADIUM	45.0		0.0240	MDL	0.109	PQL	mg/Kg	J	E
ZINC	75.1		0.610	MDL	3.27	PQL	mg/Kg	J	A

Sample ID: **SL-333-SA5B-SB-4.0-5.0** ***Collected:*** **2/16/2011 12:30:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0977	J	0.0453	MDL	0.453	PQL	mg/Kg	J	Z, Q

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE083 **Laboratory: LL**

EDD Filename: PrepDE083_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: **SL-333-SA5B-SB-4.0-5.0** ***Collected:*** **2/16/2011 12:30:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.217		0.0566	MDL	0.113	PQL	mg/Kg	UJ	Q, B

Sample ID: **SL-333-SA5B-SB-4.0-5.0** ***Collected:*** **2/16/2011 12:30:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	51.1		0.122	MDL	0.453	PQL	mg/Kg	J	E, A

Sample ID: **SL-333-SA5B-SB-4.0-5.0** ***Collected:*** **2/16/2011 12:30:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0824	J	0.0679	MDL	0.226	PQL	mg/Kg	J	Z, Q, E
ARSENIC	3.96		0.0905	MDL	0.453	PQL	mg/Kg	J	Q, E
CADMIUM	0.0453	U	0.0453	MDL	0.113	PQL	mg/Kg	UJ	E
CHROMIUM	11.9		0.136	MDL	0.453	PQL	mg/Kg	J	Q, A
COBALT	2.26		0.0226	MDL	0.113	PQL	mg/Kg	J	Q, E, A
COPPER	4.12		0.0747	MDL	0.453	PQL	mg/Kg	J	Q, E, A
LEAD	5.25		0.0118	MDL	0.226	PQL	mg/Kg	J	A
NICKEL	4.76		0.113	MDL	0.453	PQL	mg/Kg	J	Q, E, A
SILVER	0.0273	J	0.0136	MDL	0.113	PQL	mg/Kg	J	Z, Q
THALLIUM	0.300		0.0339	MDL	0.113	PQL	mg/Kg	J	Q
VANADIUM	24.8		0.0249	MDL	0.113	PQL	mg/Kg	J	E
ZINC	58.1		0.634	MDL	3.39	PQL	mg/Kg	J	A

Sample ID: **SL-335-SA5B-SB-2.0-3.0** ***Collected:*** **2/16/2011 10:57:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.183	J	0.0429	MDL	0.429	PQL	mg/Kg	J	Z, Q

Sample ID: **SL-335-SA5B-SB-2.0-3.0** ***Collected:*** **2/16/2011 10:57:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.07		0.0536	MDL	0.107	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE083 **Laboratory: LL**

EDD Filename: PrepDE083_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: **SL-335-SA5B-SB-2.0-3.0** ***Collected:*** **2/16/2011 10:57:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	63.5		0.116	MDL	0.429	PQL	mg/Kg	J	E, A

Sample ID: **SL-335-SA5B-SB-2.0-3.0** ***Collected:*** **2/16/2011 10:57:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.180	J	0.0644	MDL	0.215	PQL	mg/Kg	J	Z, Q, E
ARSENIC	6.14		0.0858	MDL	0.429	PQL	mg/Kg	J	Q, E
CADMIUM	0.0459	J	0.0429	MDL	0.107	PQL	mg/Kg	J	Z, Q, E
CHROMIUM	15.9		0.129	MDL	0.429	PQL	mg/Kg	J	Q, A
COBALT	3.95		0.0215	MDL	0.107	PQL	mg/Kg	J	Q, E, A
COPPER	4.80		0.0708	MDL	0.429	PQL	mg/Kg	J	Q, E, A
LEAD	6.93		0.0112	MDL	0.215	PQL	mg/Kg	J	A
NICKEL	6.20		0.107	MDL	0.429	PQL	mg/Kg	J	Q, E, A
SILVER	0.0203	J	0.0129	MDL	0.107	PQL	mg/Kg	J	Z, Q
THALLIUM	0.410		0.0322	MDL	0.107	PQL	mg/Kg	J	Q
VANADIUM	41.6		0.0236	MDL	0.107	PQL	mg/Kg	J	E
ZINC	64.7		0.601	MDL	3.22	PQL	mg/Kg	J	A

Method Category: METALS

Method: 7199 **Matrix: SO**

Sample ID: **SL-024-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 10:30:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.45	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: **SL-026-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 10:45:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.43	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: **SL-028-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 12:55:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.50	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE083 **Laboratory: LL**

EDD Filename: PrepDE083_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 7199 **Matrix: SO**

Sample ID: SL-029-SA5A-SS-0.0-0.5 **Collected: 2/16/2011 1:10:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.74	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-031-SA5A-SS-0.0-0.5 **Collected: 2/16/2011 11:10:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.40	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-041-SA5A-SS-0.0-0.5 **Collected: 2/16/2011 9:30:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.28	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-333-SA5B-SB-4.0-5.0 **Collected: 2/16/2011 12:30:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.24	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 7471A **Matrix: SO**

Sample ID: SL-025-SA5A-SS-0.0-0.5 **Collected: 2/16/2011 1:28:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0221	J	0.0033	MDL	0.115	PQL	mg/Kg	J	Z

Sample ID: SL-026-SA5A-SS-0.0-0.5 **Collected: 2/16/2011 10:45:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0438	J	0.0030	MDL	0.105	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE083 **Laboratory: LL**

EDD Filename: PrepDE083_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8015M **Matrix: SO**

Sample ID: **SL-332-SA5B-SB-4.0-5.0** ***Collected:*** **2/16/2011 4:16:00** ***Analysis Type:*** **REA** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DIETHYLENE GLYCOL	6.6	U	6.6	MDL	14	PQL	mg/Kg	UJ	Q

Method Category: SVOA

Method: 8081A **Matrix: SO**

Sample ID: **SL-024-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 10:30:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DIELDRIN	0.17	J	0.072	MDL	0.37	PQL	ug/Kg	J	Z
ENDOSULFAN SULFATE	0.22	J	0.072	MDL	0.37	PQL	ug/Kg	J	Z

Sample ID: **SL-025-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 1:28:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DELTA-BHC	0.059	J	0.042	MDL	0.19	PQL	ug/Kg	J	Z
DIELDRIN	0.18	J	0.077	MDL	0.40	PQL	ug/Kg	J	Z
ENDRIN ALDEHYDE	0.16	J	0.077	MDL	0.40	PQL	ug/Kg	J	Z
MIREX	0.32	J	0.077	MDL	0.40	PQL	ug/Kg	J	Z

Sample ID: **SL-026-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 10:45:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	0.10	J	0.074	MDL	0.38	PQL	ug/Kg	J	Z
4,4'-DDE	0.32	J	0.074	MDL	0.38	PQL	ug/Kg	J	Z
ENDOSULFAN SULFATE	0.13	J	0.074	MDL	0.38	PQL	ug/Kg	J	Z
ENDRIN ALDEHYDE	0.20	J	0.074	MDL	0.38	PQL	ug/Kg	J	Z
gamma-BHC (Lindane)	0.056	J	0.038	MDL	0.19	PQL	ug/Kg	J	Z
MIREX	0.23	J	0.074	MDL	0.38	PQL	ug/Kg	J	Z

Sample ID: **SL-028-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 12:55:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDT	0.083	J	0.073	MDL	0.38	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE083 **Laboratory: LL**

EDD Filename: PrepDE083_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8081A **Matrix:** SO

Sample ID: SL-029-SA5A-SS-0.0-0.5 *Collected:* 2/16/2011 1:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDE	0.15	J	0.075	MDL	0.39	PQL	ug/Kg	J	Z
4,4'-DDT	0.37	J	0.075	MDL	0.39	PQL	ug/Kg	J	Z
ENDRIN ALDEHYDE	0.11	J	0.075	MDL	0.39	PQL	ug/Kg	J	Z
MIREX	0.23	J	0.075	MDL	0.39	PQL	ug/Kg	J	Z

Sample ID: SL-031-SA5A-SS-0.0-0.5 *Collected:* 2/16/2011 11:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALPHA-BHC	0.13	J	0.038	MDL	0.19	PQL	ug/Kg	J	Z, S
DELTA-BHC	0.12	J	0.041	MDL	0.19	PQL	ug/Kg	J	Z, S
ENDRIN ALDEHYDE	1.5		0.075	MDL	0.38	PQL	ug/Kg	J	S
HEPTACHLOR EPOXIDE	0.095	J	0.038	MDL	0.19	PQL	ug/Kg	J	Z, S

Sample ID: SL-032-SA5A-SS-0.0-0.5 *Collected:* 2/16/2011 9:20:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDE	0.17	J	0.073	MDL	0.38	PQL	ug/Kg	J	Z
4,4'-DDT	0.27	J	0.073	MDL	0.38	PQL	ug/Kg	J	Z
ENDRIN ALDEHYDE	0.093	J	0.073	MDL	0.38	PQL	ug/Kg	J	Z
MIREX	0.081	J	0.073	MDL	0.38	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: SL-024-SA5A-SS-0.0-0.5 *Collected:* 2/16/2011 10:30:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	5.7		0.72	MDL	3.7	PQL	ug/Kg	J	S
AROCLOR 1260	14		0.85	MDL	3.7	PQL	ug/Kg	J	S
Aroclor 5432	2.2	U	2.2	MDL	7.2	PQL	ug/Kg	UJ	L
Aroclor 5442	2.2	U	2.2	MDL	7.2	PQL	ug/Kg	UJ	L
Aroclor 5460	12		2.2	MDL	7.2	PQL	ug/Kg	J	S, L

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE083 **Laboratory: LL**

EDD Filename: PrepDE083_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: **SL-025-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 1:28:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	6.2		0.91	MDL	4.0	PQL	ug/Kg	J	S
Aroclor 5460	10		2.3	MDL	7.7	PQL	ug/Kg	J	S

Sample ID: **SL-026-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 10:45:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	7.2		0.37	MDL	1.9	PQL	ug/Kg	J	S
AROCLOR 1260	6.1		0.44	MDL	1.9	PQL	ug/Kg	J	S
Aroclor 5460	7.1		1.1	MDL	3.7	PQL	ug/Kg	J	S

Sample ID: **SL-029-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 1:10:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	1.4	J	0.88	MDL	3.8	PQL	ug/Kg	J	Z

Sample ID: **SL-031-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 11:10:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	0.60	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z, S
AROCLOR 1260	1.2	J	0.44	MDL	1.9	PQL	ug/Kg	J	Z, S

Sample ID: **SL-032-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 9:20:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	1.6	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z
AROCLOR 1260	1.1	J	0.43	MDL	1.9	PQL	ug/Kg	J	Z
Aroclor 5432	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L
Aroclor 5460	2.5	J	1.1	MDL	3.7	PQL	ug/Kg	J	Z, L

Sample ID: **SL-041-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 9:30:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	1.2	J	0.43	MDL	1.9	PQL	ug/Kg	J	Z, S
Aroclor 5460	2.1	J	1.1	MDL	3.7	PQL	ug/Kg	J	Z, S

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE083 **Laboratory: LL**

EDD Filename: PrepDE083_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8151A **Matrix:** SO

Sample ID: **SL-024-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 10:30:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4,5-TP (Silvex)	0.31		0.082	MDL	0.18	PQL	ug/Kg	J	Q
DICAMBA	0.44	U	0.44	MDL	1.3	PQL	ug/Kg	R	Q
DINOSEB	0.87	U	0.87	MDL	2.6	PQL	ug/Kg	R	L

Sample ID: **SL-025-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 1:28:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DICAMBA	0.48	J	0.47	MDL	1.4	PQL	ug/Kg	J	Z
DINOSEB	0.93	U	0.93	MDL	2.8	PQL	ug/Kg	R	L

Sample ID: **SL-026-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 10:45:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.90	U	0.90	MDL	2.7	PQL	ug/Kg	R	L

Sample ID: **SL-028-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 12:55:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DALAPON	4.9	U	4.9	MDL	10	PQL	ug/Kg	R	Q
DINOSEB	0.89	U	0.89	MDL	2.7	PQL	ug/Kg	R	L
MCPP	170	J	83	MDL	280	PQL	ug/Kg	U	B

Sample ID: **SL-029-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 1:10:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DICAMBA	0.92	J	0.45	MDL	1.4	PQL	ug/Kg	J	Z
DINOSEB	0.91	U	0.91	MDL	2.7	PQL	ug/Kg	R	L

Sample ID: **SL-031-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 11:10:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DICAMBA	0.51	J	0.45	MDL	1.4	PQL	ug/Kg	J	Z
DINOSEB	0.90	U	0.90	MDL	2.7	PQL	ug/Kg	R	L

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE083 **Laboratory: LL**

EDD Filename: PrepDE083_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8151A **Matrix: SO**

Sample ID: SL-032-SA5A-SS-0.0-0.5 **Collected:** 2/16/2011 9:20:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.88	U	0.88	MDL	2.7	PQL	ug/Kg	R	L

Sample ID: SL-041-SA5A-SS-0.0-0.5 **Collected:** 2/16/2011 9:30:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.89	U	0.89	MDL	2.7	PQL	ug/Kg	R	L

Method Category: SVOA

Method: 8270C **Matrix: SO**

Sample ID: SL-024-SA5A-SS-0.0-0.5 **Collected:** 2/16/2011 10:30:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHRYSENE	25	J	18	MDL	180	PQL	ug/Kg	J	Z

Sample ID: SL-026-SA5A-SS-0.0-0.5 **Collected:** 2/16/2011 10:45:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)PYRENE	72	J	19	MDL	190	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	41	J	19	MDL	190	PQL	ug/Kg	J	Z

Sample ID: SL-028-SA5A-SS-0.0-0.5 **Collected:** 2/16/2011 12:55:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	35	J	18	MDL	370	PQL	ug/Kg	U	B

Sample ID: SL-031-SA5A-SS-0.0-0.5 **Collected:** 2/16/2011 11:10:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACENAPHTHENE	38	J	19	MDL	190	PQL	ug/Kg	J	Z
ANTHRACENE	96	J	19	MDL	190	PQL	ug/Kg	J	Z
CARBAZOLE	140	J	19	MDL	190	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	180	J	19	MDL	190	PQL	ug/Kg	J	Z
DIBENZOFURAN	19	J	19	MDL	190	PQL	ug/Kg	J	Z
FLUORENE	26	J	19	MDL	190	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE083 **Laboratory: LL**

EDD Filename: PrepDE083_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: **SL-333-SA5B-SB-4.0-5.0** ***Collected:*** **2/16/2011 12:30:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)PYRENE	20	J	19	MDL	190	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8270C SIM **Matrix:** SO

Sample ID: **SL-024-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 10:30:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	0.61	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	1.7	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	24		6.5	MDL	20	PQL	ug/Kg	U	B
Butylbenzylphthalate	9.6	J	6.5	MDL	20	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	0.77	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
Di-n-butylphthalate	10	J	6.5	MDL	20	PQL	ug/Kg	U	B

Sample ID: **SL-025-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 1:28:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	0.83	J	0.78	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	0.93	J	0.78	MDL	1.9	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	17	J	7.0	MDL	21	PQL	ug/Kg	U	B
Butylbenzylphthalate	8.8	J	7.0	MDL	21	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	0.95	J	0.78	MDL	1.9	PQL	ug/Kg	J	Z
PHENANTHRENE	1.5	J	0.78	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: **SL-026-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 10:45:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	0.81	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	0.87	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
ACENAPHTHYLENE	0.82	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z
ANTHRACENE	1.4	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	33		6.7	MDL	20	PQL	ug/Kg	U	B
Di-n-butylphthalate	25		6.7	MDL	20	PQL	ug/Kg	U	B
NAPHTHALENE	0.89	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE083 **Laboratory: LL**

EDD Filename: PrepDE083_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C SIM **Matrix:** SO

Sample ID: **SL-028-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 12:55:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Butylbenzylphthalate	7.3	J	6.7	MDL	20	PQL	ug/Kg	J	Z
Di-n-butylphthalate	13	J	6.7	MDL	20	PQL	ug/Kg	U	B

Sample ID: **SL-029-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 1:10:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	0.69	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z
Butylbenzylphthalate	19	J	6.8	MDL	20	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	0.91	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
Di-n-butylphthalate	11	J	6.8	MDL	20	PQL	ug/Kg	U	B

Sample ID: **SL-031-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 11:10:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	1.0	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	1.2	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	15	J	6.8	MDL	20	PQL	ug/Kg	U	B
Butylbenzylphthalate	7.2	J	6.8	MDL	20	PQL	ug/Kg	J	Z
Di-n-butylphthalate	10	J	6.8	MDL	20	PQL	ug/Kg	U	B
NAPHTHALENE	1.4	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: **SL-032-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 9:20:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACENAPHTHYLENE	0.53	J	0.37	MDL	1.8	PQL	ug/Kg	J	Z
ANTHRACENE	0.45	J	0.37	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	1.0	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.0	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.6	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	0.81	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	18	J	6.6	MDL	20	PQL	ug/Kg	U	B
Butylbenzylphthalate	8.2	J	6.6	MDL	20	PQL	ug/Kg	J	Z
Di-n-butylphthalate	11	J	6.6	MDL	20	PQL	ug/Kg	U	B
Di-n-octylphthalate	15	J	6.6	MDL	20	PQL	ug/Kg	J	Z
PHENANTHRENE	1.4	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE083 **Laboratory: LL**

EDD Filename: PrepDE083_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C SIM **Matrix:** SO

Sample ID: **SL-032-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 9:20:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PYRENE	1.5	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: **SL-041-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 9:30:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACENAPHTHYLENE	0.51	J	0.37	MDL	1.8	PQL	ug/Kg	J	Z
ANTHRACENE	0.38	J	0.37	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	0.84	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	0.86	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	0.89	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	21		6.6	MDL	20	PQL	ug/Kg	U	B
Butylbenzylphthalate	8.5	J	6.6	MDL	20	PQL	ug/Kg	J	Z
Di-n-butylphthalate	14	J	6.6	MDL	20	PQL	ug/Kg	U	B
INDENO(1,2,3-CD)PYRENE	0.77	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
PHENANTHRENE	1.6	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: **SL-332-SA5B-SB-4.0-5.0** ***Collected:*** **2/16/2011 4:16:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	21		6.6	MDL	20	PQL	ug/Kg	U	B
Butylbenzylphthalate	18	J	6.6	MDL	20	PQL	ug/Kg	J	Z
Di-n-butylphthalate	14	J	6.6	MDL	20	PQL	ug/Kg	U	B
PHENANTHRENE	1.2	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: **SL-333-SA5B-SB-4.0-5.0** ***Collected:*** **2/16/2011 12:30:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	0.62	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	0.82	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	1.7	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.1	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	0.79	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	19	J	6.9	MDL	21	PQL	ug/Kg	U	B
Butylbenzylphthalate	7.2	J	6.9	MDL	21	PQL	ug/Kg	J	Z
CHRYSENE	1.7	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE083 **Laboratory: LL**

EDD Filename: PrepDE083_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C SIM **Matrix:** SO

Sample ID: SL-333-SA5B-SB-4.0-5.0 **Collected:** 2/16/2011 12:30:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Di-n-butylphthalate	8.4	J	6.9	MDL	21	PQL	ug/Kg	U	B

Sample ID: SL-335-SA5B-SB-2.0-3.0 **Collected:** 2/16/2011 10:57:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	15	J	6.6	MDL	20	PQL	ug/Kg	U	B

Method Category: VOA

Method: 8015B **Matrix:** SO

Sample ID: SL-335-SA5B-SB-2.0-3.0 **Collected:** 2/16/2011 10:57:00 **Analysis Type:** REA4 **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHANOL	310	J	110	MDL	550	PQL	ug/Kg	J	Z

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: SL-332-SA5B-SB-4.0-5.0 **Collected:** 2/16/2011 4:16:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 0.83

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,4-TRICHLOROBENZENE	0.17	U	0.17	MDL	3.7	PQL	ug/Kg	UJ	L
CIS-1,3-DICHLOROPROPENE	0.15	U	0.15	MDL	3.7	PQL	ug/Kg	UJ	L
METHYLENE CHLORIDE	0.52	J	0.22	MDL	3.7	PQL	ug/Kg	U	B

Sample ID: SL-333-SA5B-SB-4.0-5.0 **Collected:** 2/16/2011 12:30:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 0.86

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,4-TRICHLOROBENZENE	0.18	U	0.18	MDL	3.9	PQL	ug/Kg	UJ	L
CIS-1,3-DICHLOROPROPENE	0.16	U	0.16	MDL	3.9	PQL	ug/Kg	UJ	L
METHYLENE CHLORIDE	0.67	J	0.24	MDL	3.9	PQL	ug/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE083 **Laboratory: LL**

EDD Filename: PrepDE083_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: **SL-335-SA5B-SB-2.0-3.0** ***Collected:*** **2/16/2011 10:57:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **0.96**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,4-TRICHLOROBENZENE	0.19	U	0.19	MDL	4.2	PQL	ug/Kg	UJ	L
CIS-1,3-DICHLOROPROPENE	0.17	U	0.17	MDL	4.2	PQL	ug/Kg	UJ	L
METHYLENE CHLORIDE	0.68	J	0.25	MDL	4.2	PQL	ug/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE083 **Laboratory: LL**

EDD Filename: PrepDE083_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
*#	Professional Judgment
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Verification Correlation Coefficient
C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE083 **Laboratory: LL**

EDD Filename: PrepDE083_v1 **eQAPP Name: CDM_SSFL_110509**

F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation
L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery Lower Estimation

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE083 **Laboratory: LL**

EDD Filename: PrepDE083_v1 **eQAPP Name: CDM_SSFL_110509**

R	Continuing Calibration Verification Percent Recovery Lower Rejection
R	Continuing Calibration Verification Percent Recovery Upper Estimation
R	Continuing Calibration Verification Percent Recovery Upper Rejection
R	Continuing Calibration Verification Relative Response Factor
R	Initial Calibration Relative Response Factor
R	Initial Calibration Verification Percent Recovery Lower Estimation
R	Initial Calibration Verification Percent Recovery Lower Rejection
R	Initial Calibration Verification Percent Recovery Upper Estimation
R	Initial Calibration Verification Percent Recovery Upper Rejection
R	Initial Calibration Verification Relative Response Factor
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control Outlier Reports

DE083

Method Blank Outlier Report

Lab Reporting Batch ID: DE083 **Laboratory: LL**

EDD Filename: DE083_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P04808AB220232	2/21/2011 2:32:00 AM	PHOSPHORUS TIN	1.08 mg/Kg 1.35 mg/Kg	SL-024-SA5A-SS-0.0-0.5 SL-025-SA5A-SS-0.0-0.5 SL-026-SA5A-SS-0.0-0.5 SL-028-SA5A-SS-0.0-0.5 SL-029-SA5A-SS-0.0-0.5 SL-031-SA5A-SS-0.0-0.5 SL-032-SA5A-SS-0.0-0.5 SL-041-SA5A-SS-0.0-0.5 SL-332-SA5B-SB-4.0-5.0 SL-333-SA5B-SB-4.0-5.0 SL-335-SA5B-SB-2.0-3.0
P04808AB220550	2/22/2011 5:50:00 AM	LITHIUM	0.63 mg/Kg	SL-024-SA5A-SS-0.0-0.5 SL-025-SA5A-SS-0.0-0.5 SL-026-SA5A-SS-0.0-0.5 SL-028-SA5A-SS-0.0-0.5 SL-029-SA5A-SS-0.0-0.5 SL-031-SA5A-SS-0.0-0.5 SL-032-SA5A-SS-0.0-0.5 SL-041-SA5A-SS-0.0-0.5 SL-332-SA5B-SB-4.0-5.0 SL-333-SA5B-SB-4.0-5.0 SL-335-SA5B-SB-2.0-3.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-024-SA5A-SS-0.0-0.5(RES)	TIN	2.59 mg/Kg	2.59U mg/Kg
SL-025-SA5A-SS-0.0-0.5(RES)	TIN	2.80 mg/Kg	2.80U mg/Kg
SL-026-SA5A-SS-0.0-0.5(RES)	TIN	2.88 mg/Kg	2.88U mg/Kg
SL-028-SA5A-SS-0.0-0.5(RES)	TIN	2.61 mg/Kg	2.61U mg/Kg
SL-029-SA5A-SS-0.0-0.5(RES)	TIN	2.55 mg/Kg	2.55U mg/Kg
SL-031-SA5A-SS-0.0-0.5(RES)	TIN	2.58 mg/Kg	2.58U mg/Kg
SL-032-SA5A-SS-0.0-0.5(RES)	TIN	3.01 mg/Kg	3.01U mg/Kg
SL-041-SA5A-SS-0.0-0.5(RES)	TIN	2.50 mg/Kg	2.50U mg/Kg
SL-332-SA5B-SB-4.0-5.0(RES)	TIN	2.49 mg/Kg	2.49U mg/Kg
SL-333-SA5B-SB-4.0-5.0(RES)	TIN	2.74 mg/Kg	2.74U mg/Kg
SL-335-SA5B-SB-2.0-3.0(RES)	TIN	2.87 mg/Kg	2.87U mg/Kg

Method: 6020
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P04826AB221142A	2/28/2011 11:42:00 AM	COPPER LEAD	0.162 mg/Kg 0.0131 mg/Kg	SL-024-SA5A-SS-0.0-0.5 SL-025-SA5A-SS-0.0-0.5 SL-026-SA5A-SS-0.0-0.5 SL-028-SA5A-SS-0.0-0.5 SL-029-SA5A-SS-0.0-0.5 SL-031-SA5A-SS-0.0-0.5 SL-032-SA5A-SS-0.0-0.5 SL-041-SA5A-SS-0.0-0.5 SL-332-SA5B-SB-4.0-5.0 SL-333-SA5B-SB-4.0-5.0 SL-335-SA5B-SB-2.0-3.0

Method Blank Outlier Report

Lab Reporting Batch ID: DE083 **Laboratory: LL**

EDD Filename: DE083_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8151A
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P54548AB241603A	2/24/2011 4:03:00 PM	2,4-DB MCPP	0.75 ug/Kg 210 ug/Kg	SL-032-SA5A-SS-0.0-0.5
P57575AB241849A	2/28/2011 6:49:00 PM	MCPP	350 ug/Kg	SL-024-SA5A-SS-0.0-0.5 SL-025-SA5A-SS-0.0-0.5 SL-026-SA5A-SS-0.0-0.5 SL-028-SA5A-SS-0.0-0.5 SL-029-SA5A-SS-0.0-0.5 SL-031-SA5A-SS-0.0-0.5 SL-041-SA5A-SS-0.0-0.5

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-028-SA5A-SS-0.0-0.5(RES)	MCPP	170 ug/Kg	280U ug/Kg

Method: 8260B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB74B211252A	2/17/2011 12:52:00 PM	CHLOROFORM METHYLENE CHLORIDE TOLUENE	0.14 ug/Kg 0.39 ug/Kg 0.11 ug/Kg	SL-332-SA5B-SB-4.0-5.0 SL-333-SA5B-SB-4.0-5.0 SL-335-SA5B-SB-2.0-3.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-332-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.52 ug/Kg	3.7U ug/Kg
SL-333-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.67 ug/Kg	3.9U ug/Kg
SL-335-SA5B-SB-2.0-3.0(RES)	METHYLENE CHLORIDE	0.68 ug/Kg	4.2U ug/Kg

Method: 8270C
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKLG05B261510	2/26/2011 3:10:00 PM	BIS(2-ETHYLHEXYL)PHTHALATE	20 ug/Kg	SL-024-SA5A-SS-0.0-0.5 SL-025-SA5A-SS-0.0-0.5 SL-026-SA5A-SS-0.0-0.5 SL-028-SA5A-SS-0.0-0.5 SL-029-SA5A-SS-0.0-0.5 SL-031-SA5A-SS-0.0-0.5 SL-032-SA5A-SS-0.0-0.5 SL-041-SA5A-SS-0.0-0.5 SL-332-SA5B-SB-4.0-5.0 SL-333-SA5B-SB-4.0-5.0 SL-335-SA5B-SB-2.0-3.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-028-SA5A-SS-0.0-0.5(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	35 ug/Kg	370U ug/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE083 **Laboratory: LL**

EDD Filename: DE083_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8270C SIM**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKLJ05B260014	2/25/2011 12:14:00 AM	BIS(2-ETHYLHEXYL)PHTHALATE Di-n-butylphthalate	9.4 ug/Kg 6.5 ug/Kg	SL-024-SA5A-SS-0.0-0.5 SL-025-SA5A-SS-0.0-0.5 SL-026-SA5A-SS-0.0-0.5 SL-028-SA5A-SS-0.0-0.5 SL-029-SA5A-SS-0.0-0.5 SL-031-SA5A-SS-0.0-0.5 SL-032-SA5A-SS-0.0-0.5 SL-041-SA5A-SS-0.0-0.5 SL-332-SA5B-SB-4.0-5.0 SL-333-SA5B-SB-4.0-5.0 SL-335-SA5B-SB-2.0-3.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-024-SA5A-SS-0.0-0.5(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	24 ug/Kg	24U ug/Kg
SL-024-SA5A-SS-0.0-0.5(RES)	Di-n-butylphthalate	10 ug/Kg	20U ug/Kg
SL-025-SA5A-SS-0.0-0.5(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	17 ug/Kg	21U ug/Kg
SL-026-SA5A-SS-0.0-0.5(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	33 ug/Kg	33U ug/Kg
SL-026-SA5A-SS-0.0-0.5(RES)	Di-n-butylphthalate	25 ug/Kg	25U ug/Kg
SL-028-SA5A-SS-0.0-0.5(RES)	Di-n-butylphthalate	13 ug/Kg	20U ug/Kg
SL-029-SA5A-SS-0.0-0.5(RES)	Di-n-butylphthalate	11 ug/Kg	20U ug/Kg
SL-031-SA5A-SS-0.0-0.5(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	15 ug/Kg	20U ug/Kg
SL-031-SA5A-SS-0.0-0.5(RES)	Di-n-butylphthalate	10 ug/Kg	20U ug/Kg
SL-032-SA5A-SS-0.0-0.5(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	18 ug/Kg	20U ug/Kg
SL-032-SA5A-SS-0.0-0.5(RES)	Di-n-butylphthalate	11 ug/Kg	20U ug/Kg
SL-041-SA5A-SS-0.0-0.5(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	21 ug/Kg	21U ug/Kg
SL-041-SA5A-SS-0.0-0.5(RES)	Di-n-butylphthalate	14 ug/Kg	20U ug/Kg
SL-332-SA5B-SB-4.0-5.0(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	21 ug/Kg	21U ug/Kg
SL-332-SA5B-SB-4.0-5.0(RES)	Di-n-butylphthalate	14 ug/Kg	20U ug/Kg
SL-333-SA5B-SB-4.0-5.0(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	19 ug/Kg	21U ug/Kg
SL-333-SA5B-SB-4.0-5.0(RES)	Di-n-butylphthalate	8.4 ug/Kg	21U ug/Kg
SL-335-SA5B-SB-2.0-3.0(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	15 ug/Kg	20U ug/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE083 **Laboratory: LL**

EDD Filename: DE083_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020

Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-024-SA5A-SS-0.0-0.5MS **SL-024-SA5A-SS-0.0-0.5MSD** (SL-024-SA5A-SS-0.0-0.5 SL -025-SA5A-SS-0.0-0.5 SL -026-SA5A-SS-0.0-0.5 SL -028-SA5A-SS-0.0-0.5 SL -029-SA5A-SS-0.0-0.5 SL -031-SA5A-SS-0.0-0.5 SL -032-SA5A-SS-0.0-0.5 SL -041-SA5A-SS-0.0-0.5 SL -332-SA5B-SB-4.0-5.0 SL -333-SA5B-SB-4.0-5.0 SL -335-SA5B-SB-2.0-3.0)	CHROMIUM COBALT COPPER LEAD NICKEL SILVER THALLIUM	- 140 - 135 131 138 -	165 154 148 242 160 156 143	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	- - - - - - -	CHROMIUM COBALT COPPER LEAD NICKEL SILVER THALLIUM	J (all detects) Pb No Qual, >4x
SL-024-SA5A-SS-0.0-0.5MS **SL-024-SA5A-SS-0.0-0.5MSD** (SL-024-SA5A-SS-0.0-0.5 SL -025-SA5A-SS-0.0-0.5 SL -026-SA5A-SS-0.0-0.5 SL -028-SA5A-SS-0.0-0.5 SL -029-SA5A-SS-0.0-0.5 SL -031-SA5A-SS-0.0-0.5 SL -032-SA5A-SS-0.0-0.5 SL -041-SA5A-SS-0.0-0.5 SL -332-SA5B-SB-4.0-5.0 SL -333-SA5B-SB-4.0-5.0 SL -335-SA5B-SB-2.0-3.0)	ANTIMONY ARSENIC CADMIUM VANADIUM ZINC	41 48 138 59 58	63 - 182 143 183	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	29 (20.00) - 24 (20.00) - -	ANTIMONY ARSENIC CADMIUM VANADIUM ZINC	J(all detects) UJ(all non-detects) V, Zn No Qual, >4x
SL-024-SA5A-SS-0.0-0.5MS **SL-024-SA5A-SS-0.0-0.5MSD** (SL-024-SA5A-SS-0.0-0.5 SL -025-SA5A-SS-0.0-0.5 SL -026-SA5A-SS-0.0-0.5 SL -028-SA5A-SS-0.0-0.5 SL -029-SA5A-SS-0.0-0.5 SL -031-SA5A-SS-0.0-0.5 SL -032-SA5A-SS-0.0-0.5 SL -041-SA5A-SS-0.0-0.5 SL -332-SA5B-SB-4.0-5.0 SL -333-SA5B-SB-4.0-5.0 SL -335-SA5B-SB-2.0-3.0)	SELENIUM	128	157	75.00-125.00	-	SELENIUM	J(all detects)
SL-024-SA5A-SS-0.0-0.5MS **SL-024-SA5A-SS-0.0-0.5MSD** (SL-024-SA5A-SS-0.0-0.5 SL -025-SA5A-SS-0.0-0.5 SL -026-SA5A-SS-0.0-0.5 SL -028-SA5A-SS-0.0-0.5 SL -029-SA5A-SS-0.0-0.5 SL -031-SA5A-SS-0.0-0.5 SL -032-SA5A-SS-0.0-0.5 SL -041-SA5A-SS-0.0-0.5 SL -332-SA5B-SB-4.0-5.0 SL -333-SA5B-SB-4.0-5.0 SL -335-SA5B-SB-2.0-3.0)	MOLYBDENUM	136	156	75.00-125.00	-	MOLYBDENUM	J(all detects)
SL-024-SA5A-SS-0.0-0.5MS **SL-024-SA5A-SS-0.0-0.5MSD** (SL-024-SA5A-SS-0.0-0.5 SL -025-SA5A-SS-0.0-0.5 SL -026-SA5A-SS-0.0-0.5 SL -028-SA5A-SS-0.0-0.5 SL -029-SA5A-SS-0.0-0.5 SL -031-SA5A-SS-0.0-0.5 SL -032-SA5A-SS-0.0-0.5 SL -041-SA5A-SS-0.0-0.5 SL -332-SA5B-SB-4.0-5.0 SL -333-SA5B-SB-4.0-5.0 SL -335-SA5B-SB-2.0-3.0)	BARIUM	-20	168	75.00-125.00	-	BARIUM	No Qual, >4x

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE083 **Laboratory: LL**

EDD Filename: DE083_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-024-SA5A-SS-0.0-0.5MS **SL-024-SA5A-SS-0.0-0.5MSD** (SL-024-SA5A-SS-0.0-0.5 SL -025-SA5A-SS-0.0-0.5 SL -026-SA5A-SS-0.0-0.5 SL -028-SA5A-SS-0.0-0.5 SL -029-SA5A-SS-0.0-0.5 SL -031-SA5A-SS-0.0-0.5 SL -032-SA5A-SS-0.0-0.5 SL -041-SA5A-SS-0.0-0.5 SL -332-SA5B-SB-4.0-5.0 SL -333-SA5B-SB-4.0-5.0 SL -335-SA5B-SB-2.0-3.0)	ALUMINUM CALCIUM IRON MAGNESIUM POTASSIUM TITANIUM	1237 181 218 147 - 291	1545 183 661 230 137 312	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	- - - - - -	ALUMINUM CALCIUM IRON MAGNESIUM POTASSIUM TITANIUM	J(all detects) Al, Ca, Fe, Mg, Ti No Qual, >4x

Method: 300.0
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-025-SA5A-SS-0.0-0.5MS (SL-024-SA5A-SS-0.0-0.5 SL -025-SA5A-SS-0.0-0.5 SL -026-SA5A-SS-0.0-0.5 SL -028-SA5A-SS-0.0-0.5 SL -029-SA5A-SS-0.0-0.5 SL -031-SA5A-SS-0.0-0.5 SL -032-SA5A-SS-0.0-0.5 SL -041-SA5A-SS-0.0-0.5 SL -332-SA5B-SB-4.0-5.0 SL -333-SA5B-SB-4.0-5.0)	FLUORIDE	51	-	80.00-120.00	-	FLUORIDE	J(all detects) UJ(all non-detects)

Method: 8015M
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-332-SA5B-SB-4.0-5.0MSD (SL-332-SA5B-SB-4.0-5.0)	ETHYLENE GLYCOL	-	-	63.00-107.00	21 (20.00)	ETHYLENE GLYCOL	J(all detects)
SL-332-SA5B-SB-4.0-5.0MS **SL-332-SA5B-SB-4.0-5.0MSD** (SL-332-SA5B-SB-4.0-5.0)	DIETHYLENE GLYCOL	52	-	59.00-109.00	33 (20.00)	DIETHYLENE GLYCOL	J(all detects) UJ(all non-detects)
SL-332-SA5B-SB-4.0-5.0MS **SL-332-SA5B-SB-4.0-5.0MSD** (SL-332-SA5B-SB-4.0-5.0)	EFH (C21-C30) EFH (C30-C40)	2133 16238	5256 25509	49.00-123.00 49.00-123.00	- -	EFH (C21-C30) EFH (C30-C40)	No Qual Diluted Out
SL-332-SA5B-SB-4.0-5.0MS **SL-332-SA5B-SB-4.0-5.0MSD** (SL-332-SA5B-SB-4.0-5.0)	EFH (C12-C14) EFH (C15-C20) EFH (C8-C11)	0 0 0	0 0 0	49.00-123.00 49.00-123.00 49.00-123.00	- - -	EFH (C12-C14) EFH (C15-C20) EFH (C8-C11)	No Qual Diluted Out

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE083 **Laboratory: LL**

EDD Filename: DE083_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8151A

Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-024-SA5A-SS-0.0-0.5MS **SL-024-SA5A-SS-0.0-0.5MSD** (SL-024-SA5A-SS-0.0-0.5)	2,4-DB DALAPON MCPA	- 253 235	241 - -	20.00-170.00 12.00-86.00 31.00-184.00	108 (50.00) 116 (50.00) 90 (50.00)	2,4-DB DALAPON MCPA	J(all detects)
SL-024-SA5A-SS-0.0-0.5MS **SL-024-SA5A-SS-0.0-0.5MSD** (SL-024-SA5A-SS-0.0-0.5)	DICAMBA	-2	-222	33.00-120.00	126 (50.00)	DICAMBA	J(all detects) R(all non-detects)
SL-024-SA5A-SS-0.0-0.5MS (SL-024-SA5A-SS-0.0-0.5)	2,4,5-TP (Silvex)	7	-	10.00-183.00	-	2,4,5-TP (Silvex)	J(all detects) UJ(all non-detects)
SL-028-SA5A-SS-0.0-0.5MS **SL-028-SA5A-SS-0.0-0.5MSD** (SL-028-SA5A-SS-0.0-0.5)	DICAMBA	205	193	33.00-120.00	-	DICAMBA	J(all detects)
SL-028-SA5A-SS-0.0-0.5MS **SL-028-SA5A-SS-0.0-0.5MSD** (SL-028-SA5A-SS-0.0-0.5)	DALAPON	0	-	12.00-86.00	200 (50.00)	DALAPON	J(all detects) R(all non-detects)

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE083 **Laboratory: LL**

EDD Filename: DE083_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-024-SA5A-SS-0.0-0.5DUP	ANTIMONY	55	20.00	
(SL-024-SA5A-SS-0.0-0.5	ARSENIC	23	20.00	
SL-025-SA5A-SS-0.0-0.5	BARIUM	21	20.00	
SL-026-SA5A-SS-0.0-0.5	CADMIUM	29	20.00	
SL-028-SA5A-SS-0.0-0.5	COBALT	27	20.00	
SL-029-SA5A-SS-0.0-0.5	COPPER	23	20.00	J (all detects)
SL-031-SA5A-SS-0.0-0.5	NICKEL	21	20.00	UJ (all non-detects)
SL-032-SA5A-SS-0.0-0.5	SILVER	81	20.00	
SL-041-SA5A-SS-0.0-0.5	THALLIUM	47	20.00	Sb, Cd, Ag, Tl
SL-332-SA5B-SB-4.0-5.0	VANADIUM	22	20.00	No Qual
SL-333-SA5B-SB-4.0-5.0				OK by difference
SL-335-SA5B-SB-2.0-3.0)				

Method: 7471A
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-024-SA5A-SS-0.0-0.5DUP	MERCURY	200	20.00	
(SL-024-SA5A-SS-0.0-0.5				
SL-025-SA5A-SS-0.0-0.5				
SL-026-SA5A-SS-0.0-0.5				
SL-028-SA5A-SS-0.0-0.5				
SL-029-SA5A-SS-0.0-0.5				No Qual
SL-031-SA5A-SS-0.0-0.5				OK by difference
SL-032-SA5A-SS-0.0-0.5				
SL-041-SA5A-SS-0.0-0.5				
SL-332-SA5B-SB-4.0-5.0				
SL-333-SA5B-SB-4.0-5.0				
SL-335-SA5B-SB-2.0-3.0)				

Method: 160.3M
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-032-SA5A-SS-0.0-0.5DUP	MOISTURE	35	20.00	
(SL-024-SA5A-SS-0.0-0.5				
SL-025-SA5A-SS-0.0-0.5				
SL-026-SA5A-SS-0.0-0.5				
SL-028-SA5A-SS-0.0-0.5				Not Validated
SL-029-SA5A-SS-0.0-0.5				
SL-031-SA5A-SS-0.0-0.5				
SL-032-SA5A-SS-0.0-0.5				
SL-041-SA5A-SS-0.0-0.5)				

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE083 **Laboratory: LL**

EDD Filename: DE083_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8330A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P10537AQ240255A (SL-332-SA5B-SB-4.0-5.0 SL -333-SA5B-SB-4.0-5.0 SL -335-SA5B-SB-2.0-3.0)	2,4,6-TRINITROTOLUENE	121	-	80.00-120.00	-	2,4,6-TRINITROTOLUENE	J (all detects)

Method: 8082
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P10547AY240525A (SL-024-SA5A-SS-0.0-0.5 SL -032-SA5A-SS-0.0-0.5)	Aroclor 5442	-	71	75.00-125.00	-	Aroclor 5432, 5442, 5460	J(all detects) UJ(all non-detects)

Method: 8151A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P10548AQ241631A (SL-032-SA5A-SS-0.0-0.5)	DINOSEB	7	-	10.00-136.00	-	DINOSEB	J(all detects) R(all non-detects)
P10575AQ241916A (SL-024-SA5A-SS-0.0-0.5 SL -025-SA5A-SS-0.0-0.5 SL -026-SA5A-SS-0.0-0.5 SL -028-SA5A-SS-0.0-0.5 SL -029-SA5A-SS-0.0-0.5 SL -031-SA5A-SS-0.0-0.5 SL -041-SA5A-SS-0.0-0.5)	DINOSEB	8	-	10.00-136.00	-	DINOSEB	J(all detects) R(all non-detects)

Method: 8260B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
LCSB74Q211326A (SL-332-SA5B-SB-4.0-5.0 SL -333-SA5B-SB-4.0-5.0 SL -335-SA5B-SB-2.0-3.0)	1,2,4-TRICHLOROBENZENE CIS-1,3-DICHLOROPROPENE	67 79	- -	68.00-120.00 80.00-120.00	- -	1,2,4-TRICHLOROBENZENE CIS-1,3-DICHLOROPROPENE	J(all detects) UJ(all non-detects)

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Surrogate Outlier Report

Lab Reporting Batch ID: DE083 **Laboratory: LL**

EDD Filename: DE083_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8015B
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-332-SA5B-SB-4.0-5.0	n-Triacontane-d62	427	50.00-150.00	All Target Analytes	J(all detects)
SL-333-SA5B-SB-4.0-5.0	n-Triacontane-d62	196	50.00-150.00	All Target Analytes	J(all detects)

Method: 8081A
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-031-SA5A-SS-0.0-0.5	DECACHLOROBIPHENYL	1024	20.00-120.00	All Target Analytes	J(all detects)

Method: 8082
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-024-SA5A-SS-0.0-0.5	DECACHLOROBIPHENYL	141	45.00-120.00	All Target Analytes	J (all detects)
SL-025-SA5A-SS-0.0-0.5	DECACHLOROBIPHENYL	130	45.00-120.00	All Target Analytes	J(all detects)
SL-026-SA5A-SS-0.0-0.5	DECACHLOROBIPHENYL	130	45.00-120.00	All Target Analytes	J(all detects)
SL-031-SA5A-SS-0.0-0.5	DECACHLOROBIPHENYL	144	45.00-120.00	All Target Analytes	J(all detects)
SL-041-SA5A-SS-0.0-0.5	DECACHLOROBIPHENYL	135	45.00-120.00	All Target Analytes	J(all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE083 **Laboratory: LL**

EDD Filename: DE083_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-024-SA5A-SS-0.0-0.5	BORON	J	1.90	5.28	PQL	mg/Kg	J (all detects)
	SODIUM	J	67.6	106	PQL	mg/Kg	
	TIN	J	2.59	10.6	PQL	mg/Kg	
	Zirconium	J	2.20	5.28	PQL	mg/Kg	
SL-025-SA5A-SS-0.0-0.5	BORON	J	3.37	5.71	PQL	mg/Kg	J (all detects)
	SODIUM	J	81.4	114	PQL	mg/Kg	
	TIN	J	2.80	11.4	PQL	mg/Kg	
	Zirconium	J	2.33	5.71	PQL	mg/Kg	
SL-026-SA5A-SS-0.0-0.5	BORON	J	1.55	5.45	PQL	mg/Kg	J (all detects)
	SODIUM	J	90.1	109	PQL	mg/Kg	
	TIN	J	2.88	10.9	PQL	mg/Kg	
	Zirconium	J	1.78	5.45	PQL	mg/Kg	
SL-028-SA5A-SS-0.0-0.5	BORON	J	2.54	5.33	PQL	mg/Kg	J (all detects)
	SODIUM	J	81.4	107	PQL	mg/Kg	
	TIN	J	2.61	10.7	PQL	mg/Kg	
	Zirconium	J	2.24	5.33	PQL	mg/Kg	
SL-029-SA5A-SS-0.0-0.5	BORON	J	2.67	5.61	PQL	mg/Kg	J (all detects)
	SODIUM	J	99.5	112	PQL	mg/Kg	
	TIN	J	2.55	11.2	PQL	mg/Kg	
	Zirconium	J	2.46	5.61	PQL	mg/Kg	
SL-031-SA5A-SS-0.0-0.5	BORON	J	2.06	5.59	PQL	mg/Kg	J (all detects)
	SODIUM	J	78.9	112	PQL	mg/Kg	
	TIN	J	2.58	11.2	PQL	mg/Kg	
	Zirconium	J	1.96	5.59	PQL	mg/Kg	
SL-032-SA5A-SS-0.0-0.5	BORON	J	1.54	5.37	PQL	mg/Kg	J (all detects)
	SODIUM	J	71.0	107	PQL	mg/Kg	
	TIN	J	3.01	10.7	PQL	mg/Kg	
	Zirconium	J	1.30	5.37	PQL	mg/Kg	
SL-041-SA5A-SS-0.0-0.5	BORON	J	1.41	5.48	PQL	mg/Kg	J (all detects)
	SODIUM	J	66.6	110	PQL	mg/Kg	
	TIN	J	2.50	11.0	PQL	mg/Kg	
	Zirconium	J	1.39	5.48	PQL	mg/Kg	
SL-332-SA5B-SB-4.0-5.0	TIN	J	2.49	10.7	PQL	mg/Kg	J (all detects)
	Zirconium	J	0.914	5.34	PQL	mg/Kg	
SL-333-SA5B-SB-4.0-5.0	BORON	J	1.04	5.66	PQL	mg/Kg	J (all detects)
	TIN	J	2.74	11.3	PQL	mg/Kg	
SL-335-SA5B-SB-2.0-3.0	TIN	J	2.87	10.8	PQL	mg/Kg	J (all detects)
	Zirconium	J	0.965	5.42	PQL	mg/Kg	

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-024-SA5A-SS-0.0-0.5	SELENIUM	J	0.253	0.427	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0856	0.107	PQL	mg/Kg	
SL-025-SA5A-SS-0.0-0.5	SELENIUM	J	0.270	0.453	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE083 **Laboratory: LL**

EDD Filename: DE083_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-026-SA5A-SS-0.0-0.5	SELENIUM	J	0.133	0.432	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0551	0.108	PQL	mg/Kg	
SL-028-SA5A-SS-0.0-0.5	ANTIMONY	J	0.209	0.222	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.196	0.443	PQL	mg/Kg	
	SILVER	J	0.0480	0.111	PQL	mg/Kg	
SL-029-SA5A-SS-0.0-0.5	ANTIMONY	J	0.142	0.220	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.180	0.440	PQL	mg/Kg	
	SILVER	J	0.0535	0.110	PQL	mg/Kg	
SL-031-SA5A-SS-0.0-0.5	ANTIMONY	J	0.197	0.217	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0658	0.109	PQL	mg/Kg	
SL-032-SA5A-SS-0.0-0.5	ANTIMONY	J	0.160	0.221	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.169	0.442	PQL	mg/Kg	
	SILVER	J	0.0620	0.111	PQL	mg/Kg	
SL-041-SA5A-SS-0.0-0.5	ANTIMONY	J	0.0932	0.219	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.108	0.439	PQL	mg/Kg	
	SILVER	J	0.0431	0.110	PQL	mg/Kg	
SL-332-SA5B-SB-4.0-5.0	ANTIMONY	J	0.136	0.218	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0881	0.109	PQL	mg/Kg	
	SELENIUM	J	0.231	0.436	PQL	mg/Kg	
	SILVER	J	0.0273	0.109	PQL	mg/Kg	
SL-333-SA5B-SB-4.0-5.0	ANTIMONY	J	0.0824	0.226	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0977	0.453	PQL	mg/Kg	
	SILVER	J	0.0273	0.113	PQL	mg/Kg	
SL-335-SA5B-SB-2.0-3.0	ANTIMONY	J	0.180	0.215	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0459	0.107	PQL	mg/Kg	
	SELENIUM	J	0.183	0.429	PQL	mg/Kg	
	SILVER	J	0.0203	0.107	PQL	mg/Kg	

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-024-SA5A-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.45	1.1	PQL	mg/Kg	J (all detects)
SL-026-SA5A-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.43	1.1	PQL	mg/Kg	J (all detects)
SL-028-SA5A-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.50	1.1	PQL	mg/Kg	J (all detects)
SL-029-SA5A-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.74	1.1	PQL	mg/Kg	J (all detects)
SL-031-SA5A-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.40	1.1	PQL	mg/Kg	J (all detects)
SL-041-SA5A-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.28	1.1	PQL	mg/Kg	J (all detects)
SL-333-SA5B-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.24	1.1	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE083 **Laboratory: LL**

EDD Filename: DE083_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7471A
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-025-SA5A-SS-0.0-0.5	MERCURY	J	0.0221	0.115	PQL	mg/Kg	J (all detects)
SL-026-SA5A-SS-0.0-0.5	MERCURY	J	0.0438	0.105	PQL	mg/Kg	J (all detects)

Method: 8015B
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-335-SA5B-SB-2.0-3.0	METHANOL	J	310	550	PQL	ug/Kg	J (all detects)

Method: 8081A
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-024-SA5A-SS-0.0-0.5	DIELDRIN	J	0.17	0.37	PQL	ug/Kg	J (all detects)
	ENDOSULFAN SULFATE	J	0.22	0.37	PQL	ug/Kg	
SL-025-SA5A-SS-0.0-0.5	DELTA-BHC	J	0.059	0.19	PQL	ug/Kg	J (all detects)
	DIELDRIN	J	0.18	0.40	PQL	ug/Kg	
	ENDRIN ALDEHYDE	J	0.16	0.40	PQL	ug/Kg	
	MIREX	J	0.32	0.40	PQL	ug/Kg	
SL-026-SA5A-SS-0.0-0.5	4,4'-DDD	J	0.10	0.38	PQL	ug/Kg	J (all detects)
	4,4'-DDE	J	0.32	0.38	PQL	ug/Kg	
	ENDOSULFAN SULFATE	J	0.13	0.38	PQL	ug/Kg	
	ENDRIN ALDEHYDE	J	0.20	0.38	PQL	ug/Kg	
	gamma-BHC (Lindane)	J	0.056	0.19	PQL	ug/Kg	
	MIREX	J	0.23	0.38	PQL	ug/Kg	
SL-028-SA5A-SS-0.0-0.5	4,4'-DDT	J	0.083	0.38	PQL	ug/Kg	J (all detects)
SL-029-SA5A-SS-0.0-0.5	4,4'-DDE	J	0.15	0.39	PQL	ug/Kg	J (all detects)
	4,4'-DDT	J	0.37	0.39	PQL	ug/Kg	
	ENDRIN ALDEHYDE	J	0.11	0.39	PQL	ug/Kg	
	MIREX	J	0.23	0.39	PQL	ug/Kg	
SL-031-SA5A-SS-0.0-0.5	ALPHA-BHC	J	0.13	0.19	PQL	ug/Kg	J (all detects)
	DELTA-BHC	J	0.12	0.19	PQL	ug/Kg	
	HEPTACHLOR EPOXIDE	J	0.095	0.19	PQL	ug/Kg	
SL-032-SA5A-SS-0.0-0.5	4,4'-DDE	J	0.17	0.38	PQL	ug/Kg	J (all detects)
	4,4'-DDT	J	0.27	0.38	PQL	ug/Kg	
	ENDRIN ALDEHYDE	J	0.093	0.38	PQL	ug/Kg	
	MIREX	J	0.081	0.38	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE083 **Laboratory: LL**

EDD Filename: DE083_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8082
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-029-SA5A-SS-0.0-0.5	AROCLOR 1260	J	1.4	3.8	PQL	ug/Kg	J (all detects)
SL-031-SA5A-SS-0.0-0.5	AROCLOR 1254	J	0.60	1.9	PQL	ug/Kg	J (all detects)
	AROCLOR 1260	J	1.2	1.9	PQL	ug/Kg	
SL-032-SA5A-SS-0.0-0.5	AROCLOR 1254	J	1.6	1.9	PQL	ug/Kg	J (all detects)
	AROCLOR 1260	J	1.1	1.9	PQL	ug/Kg	
	Aroclor 5460	J	2.5	3.7	PQL	ug/Kg	
SL-041-SA5A-SS-0.0-0.5	AROCLOR 1260	J	1.2	1.9	PQL	ug/Kg	J (all detects)
	Aroclor 5460	J	2.1	3.7	PQL	ug/Kg	

Method: 8151A
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-025-SA5A-SS-0.0-0.5	DICAMBA	J	0.48	1.4	PQL	ug/Kg	J (all detects)
SL-028-SA5A-SS-0.0-0.5	MCPP	J	170	280	PQL	ug/Kg	J (all detects)
SL-029-SA5A-SS-0.0-0.5	DICAMBA	J	0.92	1.4	PQL	ug/Kg	J (all detects)
SL-031-SA5A-SS-0.0-0.5	DICAMBA	J	0.51	1.4	PQL	ug/Kg	J (all detects)

Method: 8260B
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-332-SA5B-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.52	3.7	PQL	ug/Kg	J (all detects)
SL-333-SA5B-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.67	3.9	PQL	ug/Kg	J (all detects)
SL-335-SA5B-SB-2.0-3.0	METHYLENE CHLORIDE	J	0.68	4.2	PQL	ug/Kg	J (all detects)

Method: 8270C
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-024-SA5A-SS-0.0-0.5	CHRYSENE	J	25	180	PQL	ug/Kg	J (all detects)
SL-026-SA5A-SS-0.0-0.5	BENZO(A)PYRENE	J	72	190	PQL	ug/Kg	J (all detects)
	BENZO(G,H,I)PERYLENE	J	41	190	PQL	ug/Kg	
SL-028-SA5A-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	35	370	PQL	ug/Kg	J (all detects)
SL-031-SA5A-SS-0.0-0.5	ACENAPHTHENE	J	38	190	PQL	ug/Kg	J (all detects)
	ANTHRACENE	J	96	190	PQL	ug/Kg	
	CARBAZOLE	J	140	190	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	180	190	PQL	ug/Kg	
	DIBENZOFURAN	J	19	190	PQL	ug/Kg	
	FLUORENE	J	26	190	PQL	ug/Kg	

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Reporting Limit Outliers

Lab Reporting Batch ID: DE083 **Laboratory: LL**

EDD Filename: DE083_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-333-SA5B-SB-4.0-5.0	BENZO(A)PYRENE	J	20	190	PQL	ug/Kg	J (all detects)

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-024-SA5A-SS-0.0-0.5	ANTHRACENE	J	0.61	1.8	PQL	ug/Kg	J (all detects)
	BENZO(A)ANTHRACENE	J	1.7	1.8	PQL	ug/Kg	
	Butylbenzylphthalate	J	9.6	20	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	0.77	1.8	PQL	ug/Kg	
	Di-n-butylphthalate	J	10	20	PQL	ug/Kg	
SL-025-SA5A-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	0.83	1.9	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	0.93	1.9	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	17	21	PQL	ug/Kg	
	Butylbenzylphthalate	J	8.8	21	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	0.95	1.9	PQL	ug/Kg	
	PHENANTHRENE	J	1.5	1.9	PQL	ug/Kg	
SL-026-SA5A-SS-0.0-0.5	1-METHYLNAPHTHALENE	J	0.81	1.9	PQL	ug/Kg	J (all detects)
	2-METHYLNAPHTHALENE	J	0.87	1.9	PQL	ug/Kg	
	ACENAPHTHYLENE	J	0.82	1.9	PQL	ug/Kg	
	ANTHRACENE	J	1.4	1.9	PQL	ug/Kg	
	NAPHTHALENE	J	0.89	1.9	PQL	ug/Kg	
SL-028-SA5A-SS-0.0-0.5	Butylbenzylphthalate	J	7.3	20	PQL	ug/Kg	J (all detects)
	Di-n-butylphthalate	J	13	20	PQL	ug/Kg	
SL-029-SA5A-SS-0.0-0.5	ANTHRACENE	J	0.69	1.9	PQL	ug/Kg	J (all detects)
	Butylbenzylphthalate	J	19	20	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	0.91	1.9	PQL	ug/Kg	
	Di-n-butylphthalate	J	11	20	PQL	ug/Kg	
SL-031-SA5A-SS-0.0-0.5	1-METHYLNAPHTHALENE	J	1.0	1.9	PQL	ug/Kg	J (all detects)
	2-METHYLNAPHTHALENE	J	1.2	1.9	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	15	20	PQL	ug/Kg	
	Butylbenzylphthalate	J	7.2	20	PQL	ug/Kg	
	Di-n-butylphthalate	J	10	20	PQL	ug/Kg	
	NAPHTHALENE	J	1.4	1.9	PQL	ug/Kg	
SL-032-SA5A-SS-0.0-0.5	ACENAPHTHYLENE	J	0.53	1.8	PQL	ug/Kg	J (all detects)
	ANTHRACENE	J	0.45	1.8	PQL	ug/Kg	
	BENZO(A)ANTHRACENE	J	1.0	1.8	PQL	ug/Kg	
	BENZO(A)PYRENE	J	1.0	1.8	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.6	1.8	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	0.81	1.8	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	18	20	PQL	ug/Kg	
	Butylbenzylphthalate	J	8.2	20	PQL	ug/Kg	
	Di-n-butylphthalate	J	11	20	PQL	ug/Kg	
	Di-n-octylphthalate	J	15	20	PQL	ug/Kg	
	PHENANTHRENE	J	1.4	1.8	PQL	ug/Kg	
	PYRENE	J	1.5	1.8	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE083 **Laboratory: LL**

EDD Filename: DE083_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-041-SA5A-SS-0.0-0.5	ACENAPHTHYLENE	J	0.51	1.8	PQL	ug/Kg	J (all detects)
	ANTHRACENE	J	0.38	1.8	PQL	ug/Kg	
	BENZO(A)ANTHRACENE	J	0.84	1.8	PQL	ug/Kg	
	BENZO(A)PYRENE	J	0.86	1.8	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	0.89	1.8	PQL	ug/Kg	
	Butylbenzylphthalate	J	8.5	20	PQL	ug/Kg	
	Di-n-butylphthalate	J	14	20	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	0.77	1.8	PQL	ug/Kg	
	PHENANTHRENE	J	1.6	1.8	PQL	ug/Kg	
SL-332-SA5B-SB-4.0-5.0	Butylbenzylphthalate	J	18	20	PQL	ug/Kg	J (all detects)
	Di-n-butylphthalate	J	14	20	PQL	ug/Kg	
	PHENANTHRENE	J	1.2	1.8	PQL	ug/Kg	
SL-333-SA5B-SB-4.0-5.0	ANTHRACENE	J	0.62	1.9	PQL	ug/Kg	J (all detects)
	BENZO(A)ANTHRACENE	J	0.82	1.9	PQL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	1.7	1.9	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.1	1.9	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	0.79	1.9	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	19	21	PQL	ug/Kg	
	Butylbenzylphthalate	J	7.2	21	PQL	ug/Kg	
	CHRYSENE	J	1.7	1.9	PQL	ug/Kg	
	Di-n-butylphthalate	J	8.4	21	PQL	ug/Kg	
SL-335-SA5B-SB-2.0-3.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	15	20	PQL	ug/Kg	J (all detects)

LDC #: 25764G4

SDG #: DE083

Laboratory: Lancaster Laboratories

VALIDATION COMPLETENESS WORKSHEET

ADR

Date: 7/6/11

Page: 1 of 1

Reviewer: OR

2nd Reviewer: A

METHOD: Metals (EPA SW 846 Method 6010B/6020A/7000)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	N	Sampling dates:
II.	ICP/MS Tune	—	
III.	Calibration	—	
IV.	Blanks	SW	
V.	ICP Interference Check Sample (ICS) Analysis	N	
VI.	Matrix Spike Analysis	N	MS/D (Al, Ba, Ca, Fe, Pb, Mg, Mn, P, Ti, V, Zn >4x)
VII.	Duplicate Sample Analysis	N	DUP (Sb, Cd, Hg, Ag, Tl <4x RL)
VIII.	Laboratory Control Samples (LCS)	A	LCS
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	SW	J/UJ/A)
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	—	
XV	Field Blanks	—	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: Soil

1	SL-024-SA5A-SS-0.0-0.5	11	SL-335-SA5B-SB-2.0-3.0	21		31	
2	SL-025-SA5A-SS-0.0-0.5	12	(~~X~~1) MS	22		32	
3	SL-026-SA5A-SS-0.0-0.5	13	MSD	23		33	
4	SL-028-SA5A-SS-0.0-0.5	14	DUP	24		34	
5	SL-029-SA5A-SS-0.0-0.5	15		25		35	
6	SL-031-SA5A-SS-0.0-0.5	16		26		36	
7	SL-032-SA5A-SS-0.0-0.5	17		27		37	
8	SL-041-SA5A-SS-0.0-0.5	18		28		38	
9	SL-332-SA5B-SB-4.0-5.0	19		29		39	
10	SL-333-SA5B-SB-4.0-5.0	20		30		40	

Notes:

LDC #: 25764G4

VALIDATION FINDINGS WORKSHEET
PB/ICB/CCB QUALIFIED SAMPLES

Page: 1 of 1
Reviewer: CK
2nd Reviewer: [illegible]

METHOD: Trace metals (EPA SW 864 Method 6010B/6020/7000) Soil preparation factor applied: 100x x MS: 2xdil

Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: All Reason Code: B

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit	3	7	8	9	11						
Zr			3.9	1.95	1.8	1.3	1.4	0.91	0.97						

Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: 1, 3, 5 Reason Code: B

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit	5										
Cd			0.21	0.21	0.17										

Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: 2, 10 Reason Code: B

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit	10										
Mo			0.26	0.26	0.22										

Samples with analyte concentrations within five times the associated ICB, CCB or PB concentration are listed above with the identifications from the Validation Completeness Worksheet. These sample results were qualified as not detected, "U".

Note : a - The listed analyte concentration is the highest ICB, CCB, or PB detected in the analysis of each element.

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 9
SERIAL DILUTIONS
SDG No.: DE083
Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: 6208342BKG Serial Dilution Lab Sample ID: 6208342L
Batch ID(s): P04808A, P04826A
Concentration Units: UG/L

Analyte	Mass	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Diff.	Q	M
Aluminum		128556.8600		129047.7000		0		P
Antimony	121	1.4320		1.5065	B	5		MS
Arsenic	75	29.2500		23.4550		20		MS
Barium	137	663.6000		529.5000		20	E	MS
Beryllium	9	2.7110		3.1855		18		MS
Boron		17.9700	B	44.5000	U	100		P
Cadmium	111	1.3990		1.7755	B	27		MS
Calcium		22191.8900		23498.2500		6		P
Chromium	52	124.3000		102.1500		18	E	MS
Cobalt	59	39.3000		34.5500		12	E	MS
Copper	63	71.6400		58.4000		18	E	MS
Iron		159013.1400		168316.5000		6		P
Lead	208	103.0000		85.5500		17	E	MS
Lithium		195.4800		355.2500		82	E	P
Magnesium		34273.8600		36329.0500		6		P
Manganese		3021.7700		3188.0000		6		P
Molybdenum	98	5.0530		4.2200		16		MS
Nickel	60	83.0600		73.7000		11	E	MS
Phosphorus		4306.7400		4466.4500		4		P
Potassium		30900.9400		32447.5500		5		P
Selenium	78	1.1840	B	1.0625	B	10		MS
Silver	107	0.4013	B	0.4166	B	4		MS
Sodium		639.8100	B	1865.0000	U	100		P
Strontium		172.2100		182.7000		6		P
Thallium	203	1.8650		1.6055	B	14		MS
Tin		24.5300	B	50.0000	U	100		P
Titanium		10533.5100		11263.9000		7		P
Vanadium	51	243.1000		219.1500		10		MS
Zinc	66	421.4000		373.9500		11	E	MS
Zirconium		20.7900	B	42.0000	U	100		P

NOTE: An E in column Q indicates the presence of a chemical or physical interference in the matrix when the % difference is greater than 10%. This applies only when (I) is greater than or equal to 50x MDL for ICP, 100x MDL for ICP-MS (6020), 50x MDL for ICP-MS (200.8), or 25x MDL for GFAA.

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry

CONCENTRATION QUALIFIERS: DE083 4082
U= Below MDL
B= Below LOQ

FLAGS:
E = Matrix Effects exist as proven by Serial Dilution or Spiked Dilution

SAMPLE DELIVERY GROUP

DE084

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
17-Feb-2011	TB-021711	6209570	TB	5030B	8015M	III
17-Feb-2011	TB-021711	6209570	TB	5030B	8260B	III
17-Feb-2011	TB-021711	6209570	TB	5030B	8260B SIM	III
17-Feb-2011	SL-336-SA5B-SB-4.0-5.0	6209568	N	3050B	6010B	III
17-Feb-2011	SL-336-SA5B-SB-4.0-5.0	6209568	N	3050B	6020	III
17-Feb-2011	SL-336-SA5B-SB-4.0-5.0	6209568	N	3060A	7199	III
17-Feb-2011	SL-336-SA5B-SB-4.0-5.0	6209568	N	3546	1625C	III
17-Feb-2011	SL-336-SA5B-SB-4.0-5.0	6209568	N	3550B	8015B	III
17-Feb-2011	SL-336-SA5B-SB-4.0-5.0	6209568	N	3550B	8015M	III
17-Feb-2011	SL-336-SA5B-SB-4.0-5.0	6209568	N	3550B	8082	III
17-Feb-2011	SL-336-SA5B-SB-4.0-5.0	6209568	N	3550B	8270C	III
17-Feb-2011	SL-336-SA5B-SB-4.0-5.0	6209568	N	3550B	8270C SIM	III
17-Feb-2011	SL-336-SA5B-SB-4.0-5.0	6209568	N	5035	8015M	III
17-Feb-2011	SL-336-SA5B-SB-4.0-5.0	6209568	N	5035	8260B	III
17-Feb-2011	SL-336-SA5B-SB-4.0-5.0	6209568	N	5035	8260B SIM	III
17-Feb-2011	SL-336-SA5B-SB-4.0-5.0	6209568	N	8330	8330A	III
17-Feb-2011	SL-336-SA5B-SB-4.0-5.0	6209568	N	Gen Prep	9045M	III
17-Feb-2011	SL-336-SA5B-SB-4.0-5.0	6209568	N	METHOD	300.0	III
17-Feb-2011	SL-336-SA5B-SB-4.0-5.0	6209568	N	METHOD	314.0	III
17-Feb-2011	SL-336-SA5B-SB-4.0-5.0	6209568	N	METHOD	7471A	III
17-Feb-2011	SL-336-SA5B-SB-4.0-5.0	6209568	N	METHOD	8015B	III
17-Feb-2011	SL-336-SA5B-SB-4.0-5.0	6209568	N	METHOD	8015M	III
17-Feb-2011	SL-336-SA5B-SB-4.0-5.0	6209568	N	METHOD	8315A	III
17-Feb-2011	SL-336-SA5B-SB-4.0-5.0	6209568	N	METHOD	9012B	III
17-Feb-2011	SL-022-SA5A-SS-0.0-0.5	6209558	N	3050B	6010B	III
17-Feb-2011	SL-022-SA5A-SS-0.0-0.5	6209558	N	3050B	6020	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
17-Feb-2011	SL-022-SA5A-SS-0.0-0.5	6209558	N	3060A	7199	III
17-Feb-2011	SL-022-SA5A-SS-0.0-0.5	6209558	N	3550B	8081A	III
17-Feb-2011	SL-022-SA5A-SS-0.0-0.5	6209558	N	3550B	8082	III
17-Feb-2011	SL-022-SA5A-SS-0.0-0.5	6209558	N	3550B	8151A	III
17-Feb-2011	SL-022-SA5A-SS-0.0-0.5	6209558	N	3550B	8270C	III
17-Feb-2011	SL-022-SA5A-SS-0.0-0.5	6209558	N	3550B	8270C SIM	III
17-Feb-2011	SL-022-SA5A-SS-0.0-0.5	6209558	N	Gen Prep	9045M	III
17-Feb-2011	SL-022-SA5A-SS-0.0-0.5	6209558	N	METHOD	300.0	III
17-Feb-2011	SL-022-SA5A-SS-0.0-0.5	6209558	N	METHOD	314.0	III
17-Feb-2011	SL-022-SA5A-SS-0.0-0.5	6209558	N	METHOD	7471A	III
17-Feb-2011	SL-022-SA5A-SS-0.0-0.5MSD	P209558M241902A	MSD	3550B	8081A	III
17-Feb-2011	SL-022-SA5A-SS-0.0-0.5MS	P209558R241848A	MS	3550B	8081A	III
17-Feb-2011	SL-021-SA5A-SS-0.0-0.5	6209557	N	3050B	6010B	III
17-Feb-2011	SL-021-SA5A-SS-0.0-0.5	6209557	N	3050B	6020	III
17-Feb-2011	SL-021-SA5A-SS-0.0-0.5	6209557	N	3060A	7199	III
17-Feb-2011	SL-021-SA5A-SS-0.0-0.5	6209557	N	3550B	8081A	III
17-Feb-2011	SL-021-SA5A-SS-0.0-0.5	6209557	N	3550B	8082	III
17-Feb-2011	SL-021-SA5A-SS-0.0-0.5	6209557	N	3550B	8151A	III
17-Feb-2011	SL-021-SA5A-SS-0.0-0.5	6209557	N	3550B	8270C	III
17-Feb-2011	SL-021-SA5A-SS-0.0-0.5	6209557	N	3550B	8270C SIM	III
17-Feb-2011	SL-021-SA5A-SS-0.0-0.5	6209557	N	Gen Prep	9045M	III
17-Feb-2011	SL-021-SA5A-SS-0.0-0.5	6209557	N	METHOD	300.0	III
17-Feb-2011	SL-021-SA5A-SS-0.0-0.5	6209557	N	METHOD	314.0	III
17-Feb-2011	SL-021-SA5A-SS-0.0-0.5	6209557	N	METHOD	7471A	III
17-Feb-2011	SL-021-SA5A-SS-0.0-0.5DUP	P209557D220828	DUP	3050B	6010B	III
17-Feb-2011	SL-021-SA5A-SS-0.0-0.5DUP	P209557D220933	DUP	METHOD	7471A	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
17-Feb-2011	SL-021-SA5A-SS-0.0-0.5DUP	P209557D221127A	DUP	3050B	6020	III
17-Feb-2011	SL-021-SA5A-SS-0.0-0.5DUP	P209557D221127C	DUP	3050B	6020	III
17-Feb-2011	SL-021-SA5A-SS-0.0-0.5DUP	P209557D221127D	DUP	3050B	6020	III
17-Feb-2011	SL-021-SA5A-SS-0.0-0.5DUP	P209557D221627B	DUP	3050B	6020	III
17-Feb-2011	SL-021-SA5A-SS-0.0-0.5DUP	P209557D271448A	DUP	METHOD	314.0	III
17-Feb-2011	SL-021-SA5A-SS-0.0-0.5DUP	P209557D272216A	DUP	METHOD	300.0	III
17-Feb-2011	SL-021-SA5A-SS-0.0-0.5DUP	P209557D291050A	DUP	Gen Prep	9045M	III
17-Feb-2011	SL-021-SA5A-SS-0.0-0.5MSD	P209557M220835	MSD	3050B	6010B	III
17-Feb-2011	SL-021-SA5A-SS-0.0-0.5MSD	P209557M220935	MSD	METHOD	7471A	III
17-Feb-2011	SL-021-SA5A-SS-0.0-0.5MSD	P209557M221133A	MSD	3050B	6020	III
17-Feb-2011	SL-021-SA5A-SS-0.0-0.5MSD	P209557M221133C	MSD	3050B	6020	III
17-Feb-2011	SL-021-SA5A-SS-0.0-0.5MSD	P209557M221133D	MSD	3050B	6020	III
17-Feb-2011	SL-021-SA5A-SS-0.0-0.5MSD	P209557M221631B	MSD	3050B	6020	III
17-Feb-2011	SL-021-SA5A-SS-0.0-0.5MSD	P209557M240916A	MSD	3550B	8082	III
17-Feb-2011	SL-021-SA5A-SS-0.0-0.5MSD	P209557M260416	MSD	3550B	8270C SIM	III
17-Feb-2011	SL-021-SA5A-SS-0.0-0.5MSD	P209557M260530	MSD	3550B	8270C	III
17-Feb-2011	SL-021-SA5A-SS-0.0-0.5MS	P209557R220831	MS	3050B	6010B	III
17-Feb-2011	SL-021-SA5A-SS-0.0-0.5MS	P209557R220934	MS	METHOD	7471A	III
17-Feb-2011	SL-021-SA5A-SS-0.0-0.5MS	P209557R221130A	MS	3050B	6020	III
17-Feb-2011	SL-021-SA5A-SS-0.0-0.5MS	P209557R221130C	MS	3050B	6020	III
17-Feb-2011	SL-021-SA5A-SS-0.0-0.5MS	P209557R221130D	MS	3050B	6020	III
17-Feb-2011	SL-021-SA5A-SS-0.0-0.5MS	P209557R221629B	MS	3050B	6020	III
17-Feb-2011	SL-021-SA5A-SS-0.0-0.5MS	P209557R240853A	MS	3550B	8082	III
17-Feb-2011	SL-021-SA5A-SS-0.0-0.5MS	P209557R260341	MS	3550B	8270C SIM	III
17-Feb-2011	SL-021-SA5A-SS-0.0-0.5MS	P209557R260504	MS	3550B	8270C	III
17-Feb-2011	SL-021-SA5A-SS-0.0-0.5MS	P209557R271512A	MS	METHOD	314.0	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
17-Feb-2011	SL-021-SA5A-SS-0.0-0.5MS	P209557R272231A	MS	METHOD	300.0	III
17-Feb-2011	SL-337-SA5B-SB-3.0-4.0	6209569	N	3050B	6010B	III
17-Feb-2011	SL-337-SA5B-SB-3.0-4.0	6209569	N	3050B	6020	III
17-Feb-2011	SL-337-SA5B-SB-3.0-4.0	6209569	N	3060A	7199	III
17-Feb-2011	SL-337-SA5B-SB-3.0-4.0	6209569	N	3546	1625C	III
17-Feb-2011	SL-337-SA5B-SB-3.0-4.0	6209569	N	3550B	8015B	III
17-Feb-2011	SL-337-SA5B-SB-3.0-4.0	6209569	N	3550B	8015M	III
17-Feb-2011	SL-337-SA5B-SB-3.0-4.0	6209569	N	3550B	8082	III
17-Feb-2011	SL-337-SA5B-SB-3.0-4.0	6209569	N	3550B	8270C	III
17-Feb-2011	SL-337-SA5B-SB-3.0-4.0	6209569	N	3550B	8270C SIM	III
17-Feb-2011	SL-337-SA5B-SB-3.0-4.0	6209569	N	5035	8015M	III
17-Feb-2011	SL-337-SA5B-SB-3.0-4.0	6209569	N	5035	8260B	III
17-Feb-2011	SL-337-SA5B-SB-3.0-4.0	6209569	N	5035	8260B SIM	III
17-Feb-2011	SL-337-SA5B-SB-3.0-4.0	6209569	N	8330	8330A	III
17-Feb-2011	SL-337-SA5B-SB-3.0-4.0	6209569	N	Gen Prep	9045M	III
17-Feb-2011	SL-337-SA5B-SB-3.0-4.0	6209569	N	METHOD	300.0	III
17-Feb-2011	SL-337-SA5B-SB-3.0-4.0	6209569	N	METHOD	314.0	III
17-Feb-2011	SL-337-SA5B-SB-3.0-4.0	6209569	N	METHOD	7471A	III
17-Feb-2011	SL-337-SA5B-SB-3.0-4.0	6209569	N	METHOD	8015B	III
17-Feb-2011	SL-337-SA5B-SB-3.0-4.0	6209569	N	METHOD	8015M	III
17-Feb-2011	SL-337-SA5B-SB-3.0-4.0	6209569	N	METHOD	8315A	III
17-Feb-2011	SL-337-SA5B-SB-3.0-4.0	6209569	N	METHOD	9012B	III
17-Feb-2011	SL-035-SA5A-SS-0.0-0.5	6209559	N	3050B	6010B	III
17-Feb-2011	SL-035-SA5A-SS-0.0-0.5	6209559	N	3050B	6020	III
17-Feb-2011	SL-035-SA5A-SS-0.0-0.5	6209559	N	3060A	7199	III
17-Feb-2011	SL-035-SA5A-SS-0.0-0.5	6209559	N	3550B	8081A	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
17-Feb-2011	SL-035-SA5A-SS-0.0-0.5	6209559	N	3550B	8082	III
17-Feb-2011	SL-035-SA5A-SS-0.0-0.5	6209559	N	3550B	8151A	III
17-Feb-2011	SL-035-SA5A-SS-0.0-0.5	6209559	N	3550B	8270C	III
17-Feb-2011	SL-035-SA5A-SS-0.0-0.5	6209559	N	3550B	8270C SIM	III
17-Feb-2011	SL-035-SA5A-SS-0.0-0.5	6209559	N	Gen Prep	9045M	III
17-Feb-2011	SL-035-SA5A-SS-0.0-0.5	6209559	N	METHOD	300.0	III
17-Feb-2011	SL-035-SA5A-SS-0.0-0.5	6209559	N	METHOD	314.0	III
17-Feb-2011	SL-035-SA5A-SS-0.0-0.5	6209559	N	METHOD	7471A	III
17-Feb-2011	SL-331-SA5B-SB-3.0-4.0	6209567	N	3050B	6010B	III
17-Feb-2011	SL-331-SA5B-SB-3.0-4.0	6209567	N	3050B	6020	III
17-Feb-2011	SL-331-SA5B-SB-3.0-4.0	6209567	N	3060A	7199	III
17-Feb-2011	SL-331-SA5B-SB-3.0-4.0	6209567	N	3546	1625C	III
17-Feb-2011	SL-331-SA5B-SB-3.0-4.0	6209567	N	3550B	8015B	III
17-Feb-2011	SL-331-SA5B-SB-3.0-4.0	6209567	N	3550B	8015M	III
17-Feb-2011	SL-331-SA5B-SB-3.0-4.0	6209567	N	3550B	8082	III
17-Feb-2011	SL-331-SA5B-SB-3.0-4.0	6209567	N	3550B	8270C	III
17-Feb-2011	SL-331-SA5B-SB-3.0-4.0	6209567	N	3550B	8270C SIM	III
17-Feb-2011	SL-331-SA5B-SB-3.0-4.0	6209567	N	5035	8015M	III
17-Feb-2011	SL-331-SA5B-SB-3.0-4.0	6209567	N	5035	8260B	III
17-Feb-2011	SL-331-SA5B-SB-3.0-4.0	6209567	N	5035	8260B SIM	III
17-Feb-2011	SL-331-SA5B-SB-3.0-4.0	6209567	N	8330	8330A	III
17-Feb-2011	SL-331-SA5B-SB-3.0-4.0	6209567	N	Gen Prep	9045M	III
17-Feb-2011	SL-331-SA5B-SB-3.0-4.0	6209567	N	METHOD	300.0	III
17-Feb-2011	SL-331-SA5B-SB-3.0-4.0	6209567	N	METHOD	314.0	III
17-Feb-2011	SL-331-SA5B-SB-3.0-4.0	6209567	N	METHOD	7471A	III
17-Feb-2011	SL-331-SA5B-SB-3.0-4.0	6209567	N	METHOD	8015B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
17-Feb-2011	SL-331-SA5B-SB-3.0-4.0	6209567	N	METHOD	8015M	III
17-Feb-2011	SL-331-SA5B-SB-3.0-4.0	6209567	N	METHOD	8315A	III
17-Feb-2011	SL-331-SA5B-SB-3.0-4.0	6209567	N	METHOD	9012B	III
17-Feb-2011	SL-331-SA5B-SB-3.0-4.0DUP	P209567D270148B	DUP	METHOD	300.0	III
17-Feb-2011	SL-331-SA5B-SB-3.0-4.0DUP	P209567D272000B	DUP	METHOD	314.0	III
17-Feb-2011	SL-331-SA5B-SB-3.0-4.0MS	P209567R270204B	MS	METHOD	300.0	III
17-Feb-2011	SL-331-SA5B-SB-3.0-4.0MS	P209567R272024B	MS	METHOD	314.0	III
17-Feb-2011	SL-321-SA5B-SB-3.0-4.0	6209565	N	3050B	6010B	III
17-Feb-2011	SL-321-SA5B-SB-3.0-4.0	6209565	N	3050B	6020	III
17-Feb-2011	SL-321-SA5B-SB-3.0-4.0	6209565	N	3060A	7199	III
17-Feb-2011	SL-321-SA5B-SB-3.0-4.0	6209565	N	3546	1625C	III
17-Feb-2011	SL-321-SA5B-SB-3.0-4.0	6209565	N	3550B	8015B	III
17-Feb-2011	SL-321-SA5B-SB-3.0-4.0	6209565	N	3550B	8015M	III
17-Feb-2011	SL-321-SA5B-SB-3.0-4.0	6209565	N	3550B	8082	III
17-Feb-2011	SL-321-SA5B-SB-3.0-4.0	6209565	N	3550B	8270C	III
17-Feb-2011	SL-321-SA5B-SB-3.0-4.0	6209565	N	3550B	8270C SIM	III
17-Feb-2011	SL-321-SA5B-SB-3.0-4.0	6209565	N	5035	8015M	III
17-Feb-2011	SL-321-SA5B-SB-3.0-4.0	6209565	N	5035	8260B	III
17-Feb-2011	SL-321-SA5B-SB-3.0-4.0	6209565	N	5035	8260B SIM	III
17-Feb-2011	SL-321-SA5B-SB-3.0-4.0	6209565	N	8330	8330A	III
17-Feb-2011	SL-321-SA5B-SB-3.0-4.0	6209565	N	Gen Prep	9045M	III
17-Feb-2011	SL-321-SA5B-SB-3.0-4.0	6209565	N	METHOD	300.0	III
17-Feb-2011	SL-321-SA5B-SB-3.0-4.0	6209565	N	METHOD	314.0	III
17-Feb-2011	SL-321-SA5B-SB-3.0-4.0	6209565	N	METHOD	7471A	III
17-Feb-2011	SL-321-SA5B-SB-3.0-4.0	6209565	N	METHOD	8015B	III
17-Feb-2011	SL-321-SA5B-SB-3.0-4.0	6209565	N	METHOD	8015M	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
17-Feb-2011	SL-321-SA5B-SB-3.0-4.0	6209565	N	METHOD	8315A	III
17-Feb-2011	SL-321-SA5B-SB-3.0-4.0	6209565	N	METHOD	9012B	III
17-Feb-2011	SL-321-SA5B-SB-3.0-4.0DUP	P209565D271007A	DUP	METHOD	9012B	III
17-Feb-2011	SL-321-SA5B-SB-3.0-4.0DUP	P209565D271831A	DUP	3060A	7199	III
17-Feb-2011	SL-321-SA5B-SB-3.0-4.0MS	P209565R271008A	MS	METHOD	9012B	III
17-Feb-2011	SL-321-SA5B-SB-3.0-4.0MS	P209565R271800A	MS	3060A	7199	III
17-Feb-2011	SL-040-SA5A-SS-0.0-0.5	6209562	N	3050B	6010B	III
17-Feb-2011	SL-040-SA5A-SS-0.0-0.5	6209562	N	3050B	6020	III
17-Feb-2011	SL-040-SA5A-SS-0.0-0.5	6209562	N	3060A	7199	III
17-Feb-2011	SL-040-SA5A-SS-0.0-0.5	6209562	N	3550B	8081A	III
17-Feb-2011	SL-040-SA5A-SS-0.0-0.5	6209562	N	3550B	8082	III
17-Feb-2011	SL-040-SA5A-SS-0.0-0.5	6209562	N	3550B	8151A	III
17-Feb-2011	SL-040-SA5A-SS-0.0-0.5	6209562	N	3550B	8270C	III
17-Feb-2011	SL-040-SA5A-SS-0.0-0.5	6209562	N	3550B	8270C SIM	III
17-Feb-2011	SL-040-SA5A-SS-0.0-0.5	6209562	N	Gen Prep	9045M	III
17-Feb-2011	SL-040-SA5A-SS-0.0-0.5	6209562	N	METHOD	300.0	III
17-Feb-2011	SL-040-SA5A-SS-0.0-0.5	6209562	N	METHOD	314.0	III
17-Feb-2011	SL-040-SA5A-SS-0.0-0.5	6209562	N	METHOD	7471A	III
17-Feb-2011	SL-037-SA5A-SS-0.0-0.5	6209561	N	3050B	6010B	III
17-Feb-2011	SL-037-SA5A-SS-0.0-0.5	6209561	N	3050B	6020	III
17-Feb-2011	SL-037-SA5A-SS-0.0-0.5	6209561	N	3060A	7199	III
17-Feb-2011	SL-037-SA5A-SS-0.0-0.5	6209561	N	3550B	8081A	III
17-Feb-2011	SL-037-SA5A-SS-0.0-0.5	6209561	N	3550B	8082	III
17-Feb-2011	SL-037-SA5A-SS-0.0-0.5	6209561	N	3550B	8151A	III
17-Feb-2011	SL-037-SA5A-SS-0.0-0.5	6209561	N	3550B	8270C	III
17-Feb-2011	SL-037-SA5A-SS-0.0-0.5	6209561	N	3550B	8270C SIM	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
17-Feb-2011	SL-037-SA5A-SS-0.0-0.5	6209561	N	Gen Prep	9045M	III
17-Feb-2011	SL-037-SA5A-SS-0.0-0.5	6209561	N	METHOD	300.0	III
17-Feb-2011	SL-037-SA5A-SS-0.0-0.5	6209561	N	METHOD	314.0	III
17-Feb-2011	SL-037-SA5A-SS-0.0-0.5	6209561	N	METHOD	6850	III
17-Feb-2011	SL-037-SA5A-SS-0.0-0.5	6209561	N	METHOD	7471A	III
17-Feb-2011	SL-036-SA5A-SS-0.0-0.5	6209560	N	3050B	6010B	III
17-Feb-2011	SL-036-SA5A-SS-0.0-0.5	6209560	N	3050B	6020	III
17-Feb-2011	SL-036-SA5A-SS-0.0-0.5	6209560	N	3060A	7199	III
17-Feb-2011	SL-036-SA5A-SS-0.0-0.5	6209560	N	3550B	8081A	III
17-Feb-2011	SL-036-SA5A-SS-0.0-0.5	6209560	N	3550B	8082	III
17-Feb-2011	SL-036-SA5A-SS-0.0-0.5	6209560	N	3550B	8151A	III
17-Feb-2011	SL-036-SA5A-SS-0.0-0.5	6209560	N	3550B	8270C	III
17-Feb-2011	SL-036-SA5A-SS-0.0-0.5	6209560	N	3550B	8270C SIM	III
17-Feb-2011	SL-036-SA5A-SS-0.0-0.5	6209560	N	Gen Prep	9045M	III
17-Feb-2011	SL-036-SA5A-SS-0.0-0.5	6209560	N	METHOD	300.0	III
17-Feb-2011	SL-036-SA5A-SS-0.0-0.5	6209560	N	METHOD	314.0	III
17-Feb-2011	SL-036-SA5A-SS-0.0-0.5	6209560	N	METHOD	7471A	III
17-Feb-2011	SL-050-SA5A-SS-0.0-0.5	6209563	N	3050B	6010B	III
17-Feb-2011	SL-050-SA5A-SS-0.0-0.5	6209563	N	3050B	6020	III
17-Feb-2011	SL-050-SA5A-SS-0.0-0.5	6209563	N	3060A	7199	III
17-Feb-2011	SL-050-SA5A-SS-0.0-0.5	6209563	N	3550B	8081A	III
17-Feb-2011	SL-050-SA5A-SS-0.0-0.5	6209563	N	3550B	8082	III
17-Feb-2011	SL-050-SA5A-SS-0.0-0.5	6209563	N	3550B	8151A	III
17-Feb-2011	SL-050-SA5A-SS-0.0-0.5	6209563	N	3550B	8270C	III
17-Feb-2011	SL-050-SA5A-SS-0.0-0.5	6209563	N	3550B	8270C SIM	III
17-Feb-2011	SL-050-SA5A-SS-0.0-0.5	6209563	N	Gen Prep	9045M	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
17-Feb-2011	SL-050-SA5A-SS-0.0-0.5	6209563	N	METHOD	300.0	III
17-Feb-2011	SL-050-SA5A-SS-0.0-0.5	6209563	N	METHOD	314.0	III
17-Feb-2011	SL-050-SA5A-SS-0.0-0.5	6209563	N	METHOD	7471A	III
17-Feb-2011	SL-051-SA5A-SS-0.0-0.5	6209564	N	3050B	6010B	III
17-Feb-2011	SL-051-SA5A-SS-0.0-0.5	6209564	N	3050B	6020	III
17-Feb-2011	SL-051-SA5A-SS-0.0-0.5	6209564	N	3060A	7199	III
17-Feb-2011	SL-051-SA5A-SS-0.0-0.5	6209564	N	3550B	8081A	III
17-Feb-2011	SL-051-SA5A-SS-0.0-0.5	6209564	N	3550B	8082	III
17-Feb-2011	SL-051-SA5A-SS-0.0-0.5	6209564	N	3550B	8151A	III
17-Feb-2011	SL-051-SA5A-SS-0.0-0.5	6209564	N	3550B	8270C	III
17-Feb-2011	SL-051-SA5A-SS-0.0-0.5	6209564	N	3550B	8270C SIM	III
17-Feb-2011	SL-051-SA5A-SS-0.0-0.5	6209564	N	Gen Prep	9045M	III
17-Feb-2011	SL-051-SA5A-SS-0.0-0.5	6209564	N	METHOD	300.0	III
17-Feb-2011	SL-051-SA5A-SS-0.0-0.5	6209564	N	METHOD	314.0	III
17-Feb-2011	SL-051-SA5A-SS-0.0-0.5	6209564	N	METHOD	7471A	III
17-Feb-2011	SL-322-SA5B-SB-3.0-4.0	6209566	N	3050B	6010B	III
17-Feb-2011	SL-322-SA5B-SB-3.0-4.0	6209566	N	3050B	6020	III
17-Feb-2011	SL-322-SA5B-SB-3.0-4.0	6209566	N	3060A	7199	III
17-Feb-2011	SL-322-SA5B-SB-3.0-4.0	6209566	N	3546	1625C	III
17-Feb-2011	SL-322-SA5B-SB-3.0-4.0	6209566	N	3550B	8015B	III
17-Feb-2011	SL-322-SA5B-SB-3.0-4.0	6209566	N	3550B	8015M	III
17-Feb-2011	SL-322-SA5B-SB-3.0-4.0	6209566	N	3550B	8082	III
17-Feb-2011	SL-322-SA5B-SB-3.0-4.0	6209566	N	3550B	8270C	III
17-Feb-2011	SL-322-SA5B-SB-3.0-4.0	6209566	N	3550B	8270C SIM	III
17-Feb-2011	SL-322-SA5B-SB-3.0-4.0	6209566	N	5035	8015M	III
17-Feb-2011	SL-322-SA5B-SB-3.0-4.0	6209566	N	5035	8260B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
17-Feb-2011	SL-322-SA5B-SB-3.0-4.0	6209566	N	5035	8260B SIM	III
17-Feb-2011	SL-322-SA5B-SB-3.0-4.0	6209566	N	8330	8330A	III
17-Feb-2011	SL-322-SA5B-SB-3.0-4.0	6209566	N	Gen Prep	9045M	III
17-Feb-2011	SL-322-SA5B-SB-3.0-4.0	6209566	N	METHOD	300.0	III
17-Feb-2011	SL-322-SA5B-SB-3.0-4.0	6209566	N	METHOD	314.0	III
17-Feb-2011	SL-322-SA5B-SB-3.0-4.0	6209566	N	METHOD	7471A	III
17-Feb-2011	SL-322-SA5B-SB-3.0-4.0	6209566	N	METHOD	8015B	III
17-Feb-2011	SL-322-SA5B-SB-3.0-4.0	6209566	N	METHOD	8015M	III
17-Feb-2011	SL-322-SA5B-SB-3.0-4.0	6209566	N	METHOD	8315A	III
17-Feb-2011	SL-322-SA5B-SB-3.0-4.0	6209566	N	METHOD	9012B	III

III = EPA Level 3 Data Review
IV = EPA Level 4 Data Validation
N = Normal Sample
FD = Field Duplicate
TB = Trip Blank
FB = Field Blank
MS = Matrix Spike
MSD = Matrix Spike Duplicate

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE084 **Laboratory: LL**

EDD Filename: DE084_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: **SL-021-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 9:40:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.5		0.89	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: **SL-022-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 9:25:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	4.1		0.87	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: **SL-035-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 10:40:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.2		0.87	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: **SL-036-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 1:58:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.2		0.88	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: **SL-037-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 1:28:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	0.86	U	0.86	MDL	1.1	PQL	mg/Kg	UJ	Q

Sample ID: **SL-040-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 1:10:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.2		0.88	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: **SL-050-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 2:20:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.3		0.88	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: **SL-051-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 2:40:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.7		0.89	MDL	1.1	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE084 **Laboratory: LL**

EDD Filename: DE084_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: GENCHEM

Method: 300.0 **Matrix: SO**

Sample ID: SL-321-SA5B-SB-3.0-4.0 *Collected:* 2/17/2011 1:09:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	7.8		0.91	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-322-SA5B-SB-3.0-4.0 *Collected:* 2/17/2011 3:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.3		0.85	MDL	1.1	PQL	mg/Kg	J	Q

Method Category: GENCHEM

Method: 314.0 **Matrix: SO**

Sample ID: SL-036-SA5A-SS-0.0-0.5 *Collected:* 2/17/2011 1:58:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PERCHLORATE	13.8	J	9.9	MDL	32.9	PQL	ug/Kg	J	Z

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-021-SA5A-SS-0.0-0.5 *Collected:* 2/17/2011 9:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	3140		20.0	MDL	55.7	PQL	mg/Kg	J	Q
SODIUM	80.8	J	41.5	MDL	111	PQL	mg/Kg	J	Z
TIN	2.65	J	1.11	MDL	11.1	PQL	mg/Kg	U	B
Zirconium	3.82	J	0.935	MDL	5.57	PQL	mg/Kg	J	Z

Sample ID: SL-022-SA5A-SS-0.0-0.5 *Collected:* 2/17/2011 9:25:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	3290		19.4	MDL	53.8	PQL	mg/Kg	J	Q
SODIUM	96.9	J	40.1	MDL	108	PQL	mg/Kg	J	Z
TIN	2.76	J	1.08	MDL	10.8	PQL	mg/Kg	U	B
Zirconium	2.71	J	0.903	MDL	5.38	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE084 **Laboratory: LL**

EDD Filename: DE084_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-035-SA5A-SS-0.0-0.5 ***Collected:*** 2/17/2011 10:40:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	3590		18.7	MDL	52.0	PQL	mg/Kg	J	Q
SODIUM	91.6	J	38.8	MDL	104	PQL	mg/Kg	J	Z
TIN	2.46	J	1.04	MDL	10.4	PQL	mg/Kg	U	B
Zirconium	2.72	J	0.874	MDL	5.20	PQL	mg/Kg	J	Z

Sample ID: SL-036-SA5A-SS-0.0-0.5 ***Collected:*** 2/17/2011 1:58:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	3560		19.6	MDL	54.3	PQL	mg/Kg	J	Q
SODIUM	89.1	J	40.5	MDL	109	PQL	mg/Kg	J	Z
TIN	2.64	J	1.09	MDL	10.9	PQL	mg/Kg	U	B
Zirconium	3.54	J	0.913	MDL	5.43	PQL	mg/Kg	J	Z

Sample ID: SL-037-SA5A-SS-0.0-0.5 ***Collected:*** 2/17/2011 1:28:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	3640		18.6	MDL	51.8	PQL	mg/Kg	J	Q
SODIUM	81.3	J	38.6	MDL	104	PQL	mg/Kg	J	Z
TIN	2.54	J	1.04	MDL	10.4	PQL	mg/Kg	U	B
Zirconium	3.47	J	0.869	MDL	5.18	PQL	mg/Kg	J	Z

Sample ID: SL-040-SA5A-SS-0.0-0.5 ***Collected:*** 2/17/2011 1:10:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	3860		19.1	MDL	53.2	PQL	mg/Kg	J	Q
SODIUM	78.8	J	39.7	MDL	106	PQL	mg/Kg	J	Z
TIN	2.68	J	1.06	MDL	10.6	PQL	mg/Kg	U	B
Zirconium	3.60	J	0.893	MDL	5.32	PQL	mg/Kg	J	Z

Sample ID: SL-050-SA5A-SS-0.0-0.5 ***Collected:*** 2/17/2011 2:20:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	3440		19.5	MDL	54.0	PQL	mg/Kg	J	Q
SODIUM	81.1	J	40.3	MDL	108	PQL	mg/Kg	J	Z
TIN	2.39	J	1.08	MDL	10.8	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE084 **Laboratory: LL**

EDD Filename: DE084_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: **SL-050-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 2:20:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	3.09	J	0.908	MDL	5.40	PQL	mg/Kg	J	Z

Sample ID: **SL-051-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 2:40:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	3990		19.4	MDL	53.8	PQL	mg/Kg	J	Q
SODIUM	90.0	J	40.1	MDL	108	PQL	mg/Kg	J	Z
TIN	2.56	J	1.08	MDL	10.8	PQL	mg/Kg	U	B
Zirconium	3.84	J	0.903	MDL	5.38	PQL	mg/Kg	J	Z

Sample ID: **SL-321-SA5B-SB-3.0-4.0** ***Collected:*** **2/17/2011 1:09:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	4530		19.9	MDL	55.3	PQL	mg/Kg	J	Q
TIN	4.03	J	1.11	MDL	11.1	PQL	mg/Kg	U	B
Zirconium	2.02	J	0.929	MDL	5.53	PQL	mg/Kg	J	Z

Sample ID: **SL-322-SA5B-SB-3.0-4.0** ***Collected:*** **2/17/2011 3:30:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	2690		19.2	MDL	53.4	PQL	mg/Kg	J	Q
TIN	2.97	J	1.07	MDL	10.7	PQL	mg/Kg	U	B
Zirconium	1.45	J	0.897	MDL	5.34	PQL	mg/Kg	J	Z

Sample ID: **SL-331-SA5B-SB-3.0-4.0** ***Collected:*** **2/17/2011 11:44:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	3470		19.2	MDL	53.3	PQL	mg/Kg	J	Q
TIN	2.55	J	1.07	MDL	10.7	PQL	mg/Kg	U	B
Zirconium	2.48	J	0.895	MDL	5.33	PQL	mg/Kg	J	Z

Sample ID: **SL-336-SA5B-SB-4.0-5.0** ***Collected:*** **2/17/2011 9:19:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	3330		20.8	MDL	57.7	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE084 **Laboratory: LL**

EDD Filename: DE084_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: **SL-336-SA5B-SB-4.0-5.0** ***Collected:*** **2/17/2011 9:19:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.61	J	1.15	MDL	11.5	PQL	mg/Kg	U	B
Zirconium	2.46	J	0.970	MDL	5.77	PQL	mg/Kg	J	Z

Sample ID: **SL-337-SA5B-SB-3.0-4.0** ***Collected:*** **2/17/2011 10:33:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	4490		20.1	MDL	56.0	PQL	mg/Kg	J	Q
TIN	2.90	J	1.12	MDL	11.2	PQL	mg/Kg	U	B
Zirconium	1.25	J	0.940	MDL	5.60	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: **SL-021-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 9:40:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.149	J	0.0437	MDL	0.437	PQL	mg/Kg	U	B

Sample ID: **SL-021-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 9:40:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.722		0.0546	MDL	0.109	PQL	mg/Kg	J	Q

Sample ID: **SL-021-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 9:40:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	123		0.118	MDL	0.437	PQL	mg/Kg	J	A

Sample ID: **SL-021-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 9:40:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.288		0.0445	MDL	0.111	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE084 **Laboratory: LL**

EDD Filename: DE084_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: **SL-021-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 9:40:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.207	J	0.0655	MDL	0.218	PQL	mg/Kg	UJ	Q, E, B
ARSENIC	5.48		0.0873	MDL	0.437	PQL	mg/Kg	J	Q
BERYLLIUM	0.703		0.0175	MDL	0.109	PQL	mg/Kg	J	Q
CHROMIUM	20.7		0.131	MDL	0.437	PQL	mg/Kg	J	Q, A
COBALT	6.49		0.0218	MDL	0.109	PQL	mg/Kg	J	Q, A
COPPER	10.6		0.0721	MDL	0.437	PQL	mg/Kg	J	Q, A
LEAD	10.1		0.0114	MDL	0.218	PQL	mg/Kg	J	Q, A
NICKEL	13.6		0.109	MDL	0.437	PQL	mg/Kg	J	Q, A
SILVER	0.0688	J	0.0131	MDL	0.109	PQL	mg/Kg	UJ	Q, B
VANADIUM	39.0		0.0240	MDL	0.109	PQL	mg/Kg	J	Q, A
ZINC	66.1		0.611	MDL	3.28	PQL	mg/Kg	J	A

Sample ID: **SL-022-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 9:25:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.127	J	0.0422	MDL	0.422	PQL	mg/Kg	U	B

Sample ID: **SL-022-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 9:25:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.812		0.0527	MDL	0.105	PQL	mg/Kg	J	Q

Sample ID: **SL-022-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 9:25:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	127		0.114	MDL	0.422	PQL	mg/Kg	J	A

Sample ID: **SL-022-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 9:25:00** ***Analysis Type:*** **REA5** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.107	J	0.0430	MDL	0.108	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE084 **Laboratory: LL**

EDD Filename: DE084_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: **SL-022-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 9:25:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.149	J	0.0632	MDL	0.211	PQL	mg/Kg	UJ	Q, E, B
ARSENIC	6.03		0.0843	MDL	0.422	PQL	mg/Kg	J	Q
BERYLLIUM	0.688		0.0169	MDL	0.105	PQL	mg/Kg	J	Q
CHROMIUM	21.9		0.126	MDL	0.422	PQL	mg/Kg	J	Q, A
COBALT	6.93		0.0211	MDL	0.105	PQL	mg/Kg	J	Q, A
COPPER	11.4		0.0696	MDL	0.422	PQL	mg/Kg	J	Q, A
LEAD	14.0		0.0110	MDL	0.211	PQL	mg/Kg	J	Q, A
NICKEL	14.3		0.105	MDL	0.422	PQL	mg/Kg	J	Q, A
SILVER	0.168		0.0126	MDL	0.105	PQL	mg/Kg	J	Q
VANADIUM	41.2		0.0232	MDL	0.105	PQL	mg/Kg	J	Q, A
ZINC	74.6		0.590	MDL	3.16	PQL	mg/Kg	J	A

Sample ID: **SL-035-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 10:40:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.131	J	0.0420	MDL	0.420	PQL	mg/Kg	U	B

Sample ID: **SL-035-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 10:40:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.887		0.0525	MDL	0.105	PQL	mg/Kg	J	Q

Sample ID: **SL-035-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 10:40:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	126		0.113	MDL	0.420	PQL	mg/Kg	J	A

Sample ID: **SL-035-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 10:40:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.234		0.0630	MDL	0.210	PQL	mg/Kg	UJ	Q, E, B
ARSENIC	4.68		0.0841	MDL	0.420	PQL	mg/Kg	J	Q
BERYLLIUM	0.597		0.0168	MDL	0.105	PQL	mg/Kg	J	Q
CHROMIUM	21.1		0.126	MDL	0.420	PQL	mg/Kg	J	Q, A
COBALT	7.14		0.0210	MDL	0.105	PQL	mg/Kg	J	Q, A

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE084 **Laboratory: LL**

EDD Filename: DE084_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: **SL-035-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 10:40:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	11.9		0.0693	MDL	0.420	PQL	mg/Kg	J	Q, A
LEAD	13.1		0.0109	MDL	0.210	PQL	mg/Kg	J	Q, A
NICKEL	14.0		0.105	MDL	0.420	PQL	mg/Kg	J	Q, A
SILVER	0.0723	J	0.0126	MDL	0.105	PQL	mg/Kg	UJ	Q, B
VANADIUM	38.0		0.0231	MDL	0.105	PQL	mg/Kg	J	Q, A
ZINC	69.5		0.588	MDL	3.15	PQL	mg/Kg	J	A

Sample ID: **SL-036-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 1:58:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.124	J	0.0435	MDL	0.435	PQL	mg/Kg	U	B

Sample ID: **SL-036-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 1:58:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.00		0.0543	MDL	0.109	PQL	mg/Kg	J	Q

Sample ID: **SL-036-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 1:58:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	166		0.117	MDL	0.435	PQL	mg/Kg	J	A

Sample ID: **SL-036-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 1:58:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.315		0.0652	MDL	0.217	PQL	mg/Kg	UJ	Q, E, B
ARSENIC	6.95		0.0869	MDL	0.435	PQL	mg/Kg	J	Q
BERYLLIUM	0.658		0.0174	MDL	0.109	PQL	mg/Kg	J	Q
CHROMIUM	28.1		0.130	MDL	0.435	PQL	mg/Kg	J	Q, A
COBALT	8.66		0.0217	MDL	0.109	PQL	mg/Kg	J	Q, A
COPPER	18.4		0.0717	MDL	0.435	PQL	mg/Kg	J	Q, A
LEAD	27.3		0.0113	MDL	0.217	PQL	mg/Kg	J	Q, A
NICKEL	18.9		0.109	MDL	0.435	PQL	mg/Kg	J	Q, A
SILVER	0.0837	J	0.0130	MDL	0.109	PQL	mg/Kg	UJ	Q, B
VANADIUM	54.8		0.0239	MDL	0.109	PQL	mg/Kg	J	Q, A

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE084 **Laboratory: LL**

EDD Filename: DE084_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: **SL-036-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 1:58:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ZINC	105		0.609	MDL	3.26	PQL	mg/Kg	J	A

Sample ID: **SL-037-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 1:28:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.116	J	0.0426	MDL	0.426	PQL	mg/Kg	U	B

Sample ID: **SL-037-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 1:28:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.21		0.0533	MDL	0.107	PQL	mg/Kg	J	Q

Sample ID: **SL-037-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 1:28:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	154		0.115	MDL	0.426	PQL	mg/Kg	J	A

Sample ID: **SL-037-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 1:28:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.276		0.0639	MDL	0.213	PQL	mg/Kg	UJ	Q, E, B
ARSENIC	7.26		0.0853	MDL	0.426	PQL	mg/Kg	J	Q
BERYLLIUM	0.684		0.0171	MDL	0.107	PQL	mg/Kg	J	Q
CHROMIUM	29.4		0.128	MDL	0.426	PQL	mg/Kg	J	Q, A
COBALT	8.75		0.0213	MDL	0.107	PQL	mg/Kg	J	Q, A
COPPER	17.6		0.0703	MDL	0.426	PQL	mg/Kg	J	Q, A
LEAD	39.0		0.0111	MDL	0.213	PQL	mg/Kg	J	Q, A
NICKEL	18.6		0.107	MDL	0.426	PQL	mg/Kg	J	Q, A
SILVER	0.0828	J	0.0128	MDL	0.107	PQL	mg/Kg	UJ	Q, B
VANADIUM	53.9		0.0234	MDL	0.107	PQL	mg/Kg	J	Q, A
ZINC	116		0.597	MDL	3.20	PQL	mg/Kg	J	A

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE084 **Laboratory: LL**

EDD Filename: DE084_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: **SL-040-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 1:10:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.111	J	0.0430	MDL	0.430	PQL	mg/Kg	U	B

Sample ID: **SL-040-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 1:10:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.856		0.0537	MDL	0.107	PQL	mg/Kg	J	Q

Sample ID: **SL-040-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 1:10:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	130		0.116	MDL	0.430	PQL	mg/Kg	J	A

Sample ID: **SL-040-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 1:10:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.201		0.0425	MDL	0.106	PQL	mg/Kg	U	B

Sample ID: **SL-040-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 1:10:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.163	J	0.0644	MDL	0.215	PQL	mg/Kg	UJ	Q, E, B
ARSENIC	4.66		0.0859	MDL	0.430	PQL	mg/Kg	J	Q
BERYLLIUM	0.596		0.0172	MDL	0.107	PQL	mg/Kg	J	Q
CHROMIUM	22.6		0.129	MDL	0.430	PQL	mg/Kg	J	Q, A
COBALT	6.48		0.0215	MDL	0.107	PQL	mg/Kg	J	Q, A
COPPER	12.5		0.0709	MDL	0.430	PQL	mg/Kg	J	Q, A
LEAD	16.1		0.0112	MDL	0.215	PQL	mg/Kg	J	Q, A
NICKEL	14.5		0.107	MDL	0.430	PQL	mg/Kg	J	Q, A
SILVER	0.0487	J	0.0129	MDL	0.107	PQL	mg/Kg	UJ	Q, B
VANADIUM	38.9		0.0236	MDL	0.107	PQL	mg/Kg	J	Q, A
ZINC	70.6		0.601	MDL	3.22	PQL	mg/Kg	J	A

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE084 **Laboratory: LL**

EDD Filename: DE084_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-050-SA5A-SS-0.0-0.5 *Collected:* 2/17/2011 2:20:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.133	J	0.0428	MDL	0.428	PQL	mg/Kg	U	B

Sample ID: SL-050-SA5A-SS-0.0-0.5 *Collected:* 2/17/2011 2:20:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.782		0.0535	MDL	0.107	PQL	mg/Kg	J	Q

Sample ID: SL-050-SA5A-SS-0.0-0.5 *Collected:* 2/17/2011 2:20:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	125		0.116	MDL	0.428	PQL	mg/Kg	J	A

Sample ID: SL-050-SA5A-SS-0.0-0.5 *Collected:* 2/17/2011 2:20:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.227		0.0432	MDL	0.108	PQL	mg/Kg	U	B

Sample ID: SL-050-SA5A-SS-0.0-0.5 *Collected:* 2/17/2011 2:20:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.150	J	0.0642	MDL	0.214	PQL	mg/Kg	UJ	Q, E, B
ARSENIC	5.56		0.0856	MDL	0.428	PQL	mg/Kg	J	Q
BERYLLIUM	0.634		0.0171	MDL	0.107	PQL	mg/Kg	J	Q
CHROMIUM	22.3		0.128	MDL	0.428	PQL	mg/Kg	J	Q, A
COBALT	6.58		0.0214	MDL	0.107	PQL	mg/Kg	J	Q, A
COPPER	11.8		0.0706	MDL	0.428	PQL	mg/Kg	J	Q, A
LEAD	10.6		0.0111	MDL	0.214	PQL	mg/Kg	J	Q, A
NICKEL	15.4		0.107	MDL	0.428	PQL	mg/Kg	J	Q, A
SILVER	0.0559	J	0.0128	MDL	0.107	PQL	mg/Kg	UJ	Q, B
VANADIUM	39.5		0.0235	MDL	0.107	PQL	mg/Kg	J	Q, A
ZINC	70.8		0.599	MDL	3.21	PQL	mg/Kg	J	A

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE084 **Laboratory: LL**

EDD Filename: DE084_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: **SL-051-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 2:40:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.146	J	0.0430	MDL	0.430	PQL	mg/Kg	U	B

Sample ID: **SL-051-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 2:40:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.07		0.0538	MDL	0.108	PQL	mg/Kg	J	Q

Sample ID: **SL-051-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 2:40:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	150		0.116	MDL	0.430	PQL	mg/Kg	J	A

Sample ID: **SL-051-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 2:40:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.221		0.0434	MDL	0.109	PQL	mg/Kg	U	B

Sample ID: **SL-051-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 2:40:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.183	J	0.0645	MDL	0.215	PQL	mg/Kg	UJ	Q, E, B
ARSENIC	6.03		0.0860	MDL	0.430	PQL	mg/Kg	J	Q
BERYLLIUM	0.706		0.0172	MDL	0.108	PQL	mg/Kg	J	Q
CHROMIUM	27.2		0.129	MDL	0.430	PQL	mg/Kg	J	Q, A
COBALT	8.04		0.0215	MDL	0.108	PQL	mg/Kg	J	Q, A
COPPER	15.7		0.0710	MDL	0.430	PQL	mg/Kg	J	Q, A
LEAD	18.9		0.0112	MDL	0.215	PQL	mg/Kg	J	Q, A
NICKEL	18.1		0.108	MDL	0.430	PQL	mg/Kg	J	Q, A
SILVER	0.0712	J	0.0129	MDL	0.108	PQL	mg/Kg	UJ	Q, B
VANADIUM	46.5		0.0237	MDL	0.108	PQL	mg/Kg	J	Q, A
ZINC	95.8		0.602	MDL	3.23	PQL	mg/Kg	J	A

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

eporting Batch ID: DE084 | Laboratory: LL

ilename: DE084_v1 | eQAPP Name: CDM_SSFL_110509

a Category: METALS

d: 6020 Matrix: SO

ID: SL-321-SA5B-SB-3.0-4.0 Collected: 2/17/2011 1:09:00 Analysis Type: REA Dilution: 2

e	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
UM	0.166	J	0.0447	MDL	0.447	PQL	mg/Kg	U	B

ID: SL-321-SA5B-SB-3.0-4.0 Collected: 2/17/2011 1:09:00 Analysis Type: REA2 Dilution: 2

e	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DENUM	0.788		0.0558	MDL	0.112	PQL	mg/Kg	J	Q

ID: SL-321-SA5B-SB-3.0-4.0 Collected: 2/17/2011 1:09:00 Analysis Type: REA3 Dilution: 2

e	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
l	164		0.121	MDL	0.447	PQL	mg/Kg	J	A

ID: SL-321-SA5B-SB-3.0-4.0 Collected: 2/17/2011 1:09:00 Analysis Type: REA4 Dilution: 2

e	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
IM	0.0673	J	0.0451	MDL	0.113	PQL	mg/Kg	U	B

ID: SL-321-SA5B-SB-3.0-4.0 Collected: 2/17/2011 1:09:00 Analysis Type: RES Dilution: 2

e	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NY	0.121	J	0.0670	MDL	0.223	PQL	mg/Kg	UJ	Q, E, B
C	14.5		0.0893	MDL	0.447	PQL	mg/Kg	J	Q
IUM	1.28		0.0179	MDL	0.112	PQL	mg/Kg	J	Q
IUM	43.5		0.134	MDL	0.447	PQL	mg/Kg	J	Q, A
-	7.61		0.0223	MDL	0.112	PQL	mg/Kg	J	Q, A
R	31.8		0.0737	MDL	0.447	PQL	mg/Kg	J	Q, A
	19.4		0.0116	MDL	0.223	PQL	mg/Kg	J	Q, A
	18.1		0.112	MDL	0.447	PQL	mg/Kg	J	Q, A
	0.0549	J	0.0134	MDL	0.112	PQL	mg/Kg	UJ	Q, B
UM	74.5		0.0246	MDL	0.112	PQL	mg/Kg	J	Q, A
	180		0.625	MDL	3.35	PQL	mg/Kg	J	A

s a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE084 **Laboratory: LL**

EDD Filename: DE084_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: **SL-322-SA5B-SB-3.0-4.0** ***Collected:*** **2/17/2011 3:30:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0752	J	0.0419	MDL	0.419	PQL	mg/Kg	U	B

Sample ID: **SL-322-SA5B-SB-3.0-4.0** ***Collected:*** **2/17/2011 3:30:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.580		0.0524	MDL	0.105	PQL	mg/Kg	J	Q

Sample ID: **SL-322-SA5B-SB-3.0-4.0** ***Collected:*** **2/17/2011 3:30:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	80.7		0.113	MDL	0.419	PQL	mg/Kg	J	A

Sample ID: **SL-322-SA5B-SB-3.0-4.0** ***Collected:*** **2/17/2011 3:30:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0858	J	0.0628	MDL	0.209	PQL	mg/Kg	UJ	Q, E, B
ARSENIC	5.73		0.0838	MDL	0.419	PQL	mg/Kg	J	Q
BERYLLIUM	0.512		0.0168	MDL	0.105	PQL	mg/Kg	J	Q
CHROMIUM	9.28		0.126	MDL	0.419	PQL	mg/Kg	J	Q, A
COBALT	4.37		0.0209	MDL	0.105	PQL	mg/Kg	J	Q, A
COPPER	2.76		0.0691	MDL	0.419	PQL	mg/Kg	J	Q, A
LEAD	6.38		0.0109	MDL	0.209	PQL	mg/Kg	J	Q, A
NICKEL	4.37		0.105	MDL	0.419	PQL	mg/Kg	J	Q, A
SILVER	0.0188	J	0.0126	MDL	0.105	PQL	mg/Kg	UJ	Q, B
VANADIUM	24.6		0.0230	MDL	0.105	PQL	mg/Kg	J	Q, A
ZINC	80.6		0.587	MDL	3.14	PQL	mg/Kg	J	A

Sample ID: **SL-331-SA5B-SB-3.0-4.0** ***Collected:*** **2/17/2011 11:44:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.139	J	0.0431	MDL	0.431	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE084 **Laboratory: LL**

EDD Filename: DE084_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: **SL-331-SA5B-SB-3.0-4.0** ***Collected:*** **2/17/2011 11:44:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.910		0.0538	MDL	0.108	PQL	mg/Kg	J	Q

Sample ID: **SL-331-SA5B-SB-3.0-4.0** ***Collected:*** **2/17/2011 11:44:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	142		0.116	MDL	0.431	PQL	mg/Kg	J	A

Sample ID: **SL-331-SA5B-SB-3.0-4.0** ***Collected:*** **2/17/2011 11:44:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.0887	J	0.0418	MDL	0.105	PQL	mg/Kg	U	B

Sample ID: **SL-331-SA5B-SB-3.0-4.0** ***Collected:*** **2/17/2011 11:44:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.123	J	0.0646	MDL	0.215	PQL	mg/Kg	UJ	Q, E, B
ARSENIC	5.64		0.0861	MDL	0.431	PQL	mg/Kg	J	Q
BERYLLIUM	0.753		0.0172	MDL	0.108	PQL	mg/Kg	J	Q
CHROMIUM	20.6		0.129	MDL	0.431	PQL	mg/Kg	J	Q, A
COBALT	6.56		0.0215	MDL	0.108	PQL	mg/Kg	J	Q, A
COPPER	10.6		0.0710	MDL	0.431	PQL	mg/Kg	J	Q, A
LEAD	7.12		0.0112	MDL	0.215	PQL	mg/Kg	J	Q, A
NICKEL	13.7		0.108	MDL	0.431	PQL	mg/Kg	J	Q, A
SILVER	0.0504	J	0.0129	MDL	0.108	PQL	mg/Kg	UJ	Q, B
VANADIUM	38.1		0.0237	MDL	0.108	PQL	mg/Kg	J	Q, A
ZINC	75.6		0.603	MDL	3.23	PQL	mg/Kg	J	A

Sample ID: **SL-336-SA5B-SB-4.0-5.0** ***Collected:*** **2/17/2011 9:19:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.166	J	0.0444	MDL	0.444	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE084 **Laboratory: LL**

EDD Filename: DE084_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: **SL-336-SA5B-SB-4.0-5.0** ***Collected:*** **2/17/2011 9:19:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.73		0.0555	MDL	0.111	PQL	mg/Kg	J	Q

Sample ID: **SL-336-SA5B-SB-4.0-5.0** ***Collected:*** **2/17/2011 9:19:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	148		0.120	MDL	0.444	PQL	mg/Kg	J	A

Sample ID: **SL-336-SA5B-SB-4.0-5.0** ***Collected:*** **2/17/2011 9:19:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.143		0.0453	MDL	0.113	PQL	mg/Kg	U	B

Sample ID: **SL-336-SA5B-SB-4.0-5.0** ***Collected:*** **2/17/2011 9:19:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.140	J	0.0666	MDL	0.222	PQL	mg/Kg	UJ	Q, E, B
ARSENIC	5.94		0.0888	MDL	0.444	PQL	mg/Kg	J	Q
BERYLLIUM	0.716		0.0178	MDL	0.111	PQL	mg/Kg	J	Q
CHROMIUM	21.1		0.133	MDL	0.444	PQL	mg/Kg	J	Q, A
COBALT	6.78		0.0222	MDL	0.111	PQL	mg/Kg	J	Q, A
COPPER	11.7		0.0733	MDL	0.444	PQL	mg/Kg	J	Q, A
LEAD	8.49		0.0115	MDL	0.222	PQL	mg/Kg	J	Q, A
NICKEL	14.4		0.111	MDL	0.444	PQL	mg/Kg	J	Q, A
SILVER	0.0421	J	0.0133	MDL	0.111	PQL	mg/Kg	UJ	Q, B
VANADIUM	40.5		0.0244	MDL	0.111	PQL	mg/Kg	J	Q, A
ZINC	90.8		0.622	MDL	3.33	PQL	mg/Kg	J	A

Sample ID: **SL-337-SA5B-SB-3.0-4.0** ***Collected:*** **2/17/2011 10:33:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.138	J	0.0443	MDL	0.443	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE084 **Laboratory: LL**

EDD Filename: DE084_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-337-SA5B-SB-3.0-4.0 *Collected:* 2/17/2011 10:33:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.58		0.0554	MDL	0.111	PQL	mg/Kg	J	Q

Sample ID: SL-337-SA5B-SB-3.0-4.0 *Collected:* 2/17/2011 10:33:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	140		0.120	MDL	0.443	PQL	mg/Kg	J	A

Sample ID: SL-337-SA5B-SB-3.0-4.0 *Collected:* 2/17/2011 10:33:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.102	J	0.0452	MDL	0.113	PQL	mg/Kg	U	B

Sample ID: SL-337-SA5B-SB-3.0-4.0 *Collected:* 2/17/2011 10:33:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.145	J	0.0665	MDL	0.222	PQL	mg/Kg	UJ	Q, E, B
ARSENIC	5.41		0.0887	MDL	0.443	PQL	mg/Kg	J	Q
BERYLLIUM	0.667		0.0177	MDL	0.111	PQL	mg/Kg	J	Q
CHROMIUM	19.8		0.133	MDL	0.443	PQL	mg/Kg	J	Q, A
COBALT	6.21		0.0222	MDL	0.111	PQL	mg/Kg	J	Q, A
COPPER	10.1		0.0731	MDL	0.443	PQL	mg/Kg	J	Q, A
LEAD	6.70		0.0115	MDL	0.222	PQL	mg/Kg	J	Q, A
NICKEL	12.9		0.111	MDL	0.443	PQL	mg/Kg	J	Q, A
SILVER	0.0585	J	0.0133	MDL	0.111	PQL	mg/Kg	UJ	Q, B
VANADIUM	37.0		0.0244	MDL	0.111	PQL	mg/Kg	J	Q, A
ZINC	79.9		0.621	MDL	3.32	PQL	mg/Kg	J	A

Method Category: METALS

Method: 7199 **Matrix: SO**

Sample ID: SL-021-SA5A-SS-0.0-0.5 *Collected:* 2/17/2011 9:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.42	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE084 **Laboratory: LL**

EDD Filename: DE084_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 7199 **Matrix:** SO

Sample ID: **SL-035-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 10:40:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.45	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: **SL-036-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 1:58:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.54	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: **SL-037-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 1:28:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.50	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: **SL-040-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 1:10:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.39	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: **SL-321-SA5B-SB-3.0-4.0** ***Collected:*** **2/17/2011 1:09:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.23	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: **SL-331-SA5B-SB-3.0-4.0** ***Collected:*** **2/17/2011 11:44:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.60	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: **SL-337-SA5B-SB-3.0-4.0** ***Collected:*** **2/17/2011 10:33:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.49	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE084 **Laboratory: LL**

EDD Filename: DE084_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 7471A **Matrix: SO**

Sample ID: SL-022-SA5A-SS-0.0-0.5 *Collected:* 2/17/2011 9:25:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0113	J	0.0031	MDL	0.107	PQL	mg/Kg	J	Z

Sample ID: SL-036-SA5A-SS-0.0-0.5 *Collected:* 2/17/2011 1:58:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0080	J	0.0031	MDL	0.107	PQL	mg/Kg	J	Z

Sample ID: SL-037-SA5A-SS-0.0-0.5 *Collected:* 2/17/2011 1:28:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0117	J	0.0030	MDL	0.104	PQL	mg/Kg	J	Z

Sample ID: SL-051-SA5A-SS-0.0-0.5 *Collected:* 2/17/2011 2:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0067	J	0.0030	MDL	0.105	PQL	mg/Kg	J	Z

Method Category: SVOA

Method: 1625C **Matrix: SO**

Sample ID: SL-331-SA5B-SB-3.0-4.0 *Collected:* 2/17/2011 11:44:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	21.2	J	17.9	MDL	35.9	PQL	ng/Kg	J	Z

Sample ID: SL-336-SA5B-SB-4.0-5.0 *Collected:* 2/17/2011 9:19:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	24.7	J	19.1	MDL	38.1	PQL	ng/Kg	J	Z

Sample ID: SL-337-SA5B-SB-3.0-4.0 *Collected:* 2/17/2011 10:33:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	25.3	J	18.8	MDL	37.7	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE084 **Laboratory: LL**

EDD Filename: DE084_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8015M **Matrix: SO**

Sample ID: SL-331-SA5B-SB-3.0-4.0 *Collected:* 2/17/2011 11:44:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	0.48	J	0.43	MDL	1.3	PQL	mg/Kg	J	Z

Sample ID: SL-336-SA5B-SB-4.0-5.0 *Collected:* 2/17/2011 9:19:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C8-C11)	0.71	J	0.46	MDL	1.4	PQL	mg/Kg	J	Z

Sample ID: SL-337-SA5B-SB-3.0-4.0 *Collected:* 2/17/2011 10:33:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C21-C30)	0.94	J	0.45	MDL	1.4	PQL	mg/Kg	J	Z
EFH (C8-C11)	0.58	J	0.45	MDL	1.4	PQL	mg/Kg	J	Z

Method Category: SVOA

Method: 8081A **Matrix: SO**

Sample ID: SL-021-SA5A-SS-0.0-0.5 *Collected:* 2/17/2011 9:40:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDE	0.11	J	0.073	MDL	0.38	PQL	ug/Kg	J	Z
ENDRIN ALDEHYDE	0.11	J	0.073	MDL	0.38	PQL	ug/Kg	J	Z

Sample ID: SL-022-SA5A-SS-0.0-0.5 *Collected:* 2/17/2011 9:25:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ENDRIN ALDEHYDE	0.073	J	0.072	MDL	0.37	PQL	ug/Kg	J	Z
ENDRIN KETONE	0.11	J	0.072	MDL	0.37	PQL	ug/Kg	J	Z

Sample ID: SL-036-SA5A-SS-0.0-0.5 *Collected:* 2/17/2011 1:58:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DIELDRIN	0.26	J	0.072	MDL	0.37	PQL	ug/Kg	J	Z
HEPTACHLOR EPOXIDE	0.049	J	0.037	MDL	0.18	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE084 **Laboratory: LL**

EDD Filename: DE084_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8081A **Matrix:** SO

Sample ID: **SL-037-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 1:28:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ENDOSULFAN II	0.15	J	0.071	MDL	0.37	PQL	ug/Kg	J	Z
ENDRIN ALDEHYDE	0.28	J	0.071	MDL	0.37	PQL	ug/Kg	J	Z
HEPTACHLOR EPOXIDE	0.092	J	0.037	MDL	0.18	PQL	ug/Kg	J	Z
MIREX	0.30	J	0.071	MDL	0.37	PQL	ug/Kg	J	Z

Sample ID: **SL-040-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 1:10:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ENDRIN KETONE	0.098	J	0.072	MDL	0.37	PQL	ug/Kg	J	Z

Sample ID: **SL-050-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 2:20:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDE	0.20	J	0.073	MDL	0.37	PQL	ug/Kg	J	Z
4,4'-DDT	0.24	J	0.073	MDL	0.37	PQL	ug/Kg	J	Z

Sample ID: **SL-051-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 2:40:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	0.18	J	0.073	MDL	0.38	PQL	ug/Kg	J	Z
4,4'-DDE	0.15	J	0.073	MDL	0.38	PQL	ug/Kg	J	Z
4,4'-DDT	0.31	J	0.073	MDL	0.38	PQL	ug/Kg	J	Z
ENDRIN ALDEHYDE	0.12	J	0.073	MDL	0.38	PQL	ug/Kg	J	Z
ENDRIN KETONE	0.083	J	0.073	MDL	0.38	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: **SL-021-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 9:40:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	0.60	J	0.43	MDL	1.9	PQL	ug/Kg	J	Z
Aroclor 5432	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE084 **Laboratory: LL**

EDD Filename: DE084_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: **SL-022-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 9:25:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	1.2	J	0.42	MDL	1.8	PQL	ug/Kg	J	Z
Aroclor 5432	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L
Aroclor 5460	3.3	J	1.1	MDL	3.6	PQL	ug/Kg	J	Z, L

Sample ID: **SL-035-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 10:40:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L

Sample ID: **SL-036-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 1:58:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	5.4		0.86	MDL	3.7	PQL	ug/Kg	J	S
Aroclor 5432	2.2	U	2.2	MDL	7.2	PQL	ug/Kg	UJ	L
Aroclor 5442	2.2	U	2.2	MDL	7.2	PQL	ug/Kg	UJ	L
Aroclor 5460	8.6		2.2	MDL	7.2	PQL	ug/Kg	J	S, L

Sample ID: **SL-037-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 1:28:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	2.2	U	2.2	MDL	7.1	PQL	ug/Kg	UJ	L
Aroclor 5442	2.2	U	2.2	MDL	7.1	PQL	ug/Kg	UJ	L
Aroclor 5460	11		2.2	MDL	7.1	PQL	ug/Kg	J	L

Sample ID: **SL-040-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 1:10:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE084 **Laboratory: LL**

EDD Filename: DE084_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: **SL-050-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 2:20:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	1.4	J	0.36	MDL	1.9	PQL	ug/Kg	J	Z
Aroclor 5432	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L
Aroclor 5460	2.0	J	1.1	MDL	3.6	PQL	ug/Kg	J	Z, L

Sample ID: **SL-051-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 2:40:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	0.99	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z
AROCLOR 1260	1.2	J	0.43	MDL	1.9	PQL	ug/Kg	J	Z
Aroclor 5432	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L

Sample ID: **SL-321-SA5B-SB-3.0-4.0** ***Collected:*** **2/17/2011 1:09:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	1.1	U	1.1	MDL	3.8	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.8	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.8	PQL	ug/Kg	UJ	L

Sample ID: **SL-322-SA5B-SB-3.0-4.0** ***Collected:*** **2/17/2011 3:30:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	1.1	U	1.1	MDL	3.5	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.5	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.5	PQL	ug/Kg	UJ	L

Sample ID: **SL-331-SA5B-SB-3.0-4.0** ***Collected:*** **2/17/2011 11:44:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE084 **Laboratory: LL**

EDD Filename: DE084_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: **SL-336-SA5B-SB-4.0-5.0** ***Collected:*** **2/17/2011 9:19:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	1.2	U	1.2	MDL	3.8	PQL	ug/Kg	UJ	L
Aroclor 5442	1.2	U	1.2	MDL	3.8	PQL	ug/Kg	UJ	L
Aroclor 5460	1.2	U	1.2	MDL	3.8	PQL	ug/Kg	UJ	L

Sample ID: **SL-337-SA5B-SB-3.0-4.0** ***Collected:*** **2/17/2011 10:33:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	1.1	U	1.1	MDL	3.8	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.8	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.8	PQL	ug/Kg	UJ	L

Method Category: SVOA

Method: 8151A **Matrix: SO**

Sample ID: **SL-021-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 9:40:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DICAMBA	1.1	J	0.45	MDL	1.3	PQL	ug/Kg	J	Z
DINOSEB	0.89	U	0.89	MDL	2.7	PQL	ug/Kg	R	L
MCPP	410		84	MDL	280	PQL	ug/Kg	U	B

Sample ID: **SL-022-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 9:25:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DICAMBA	1.2	J	0.43	MDL	1.3	PQL	ug/Kg	J	Z
DINOSEB	0.87	U	0.87	MDL	2.6	PQL	ug/Kg	R	L
MCPP	100	J	81	MDL	270	PQL	ug/Kg	U	B

Sample ID: **SL-035-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 10:40:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.87	U	0.87	MDL	2.6	PQL	ug/Kg	R	L

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE084 **Laboratory: LL**

EDD Filename: DE084_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8151A **Matrix: SO**

Sample ID: SL-036-SA5A-SS-0.0-0.5 *Collected:* 2/17/2011 1:58:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.88	U	0.88	MDL	2.6	PQL	ug/Kg	R	L

Sample ID: SL-037-SA5A-SS-0.0-0.5 *Collected:* 2/17/2011 1:28:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.86	U	0.86	MDL	2.6	PQL	ug/Kg	R	L

Sample ID: SL-040-SA5A-SS-0.0-0.5 *Collected:* 2/17/2011 1:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.88	U	0.88	MDL	2.6	PQL	ug/Kg	R	L

Sample ID: SL-050-SA5A-SS-0.0-0.5 *Collected:* 2/17/2011 2:20:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.88	U	0.88	MDL	2.6	PQL	ug/Kg	R	L

Sample ID: SL-051-SA5A-SS-0.0-0.5 *Collected:* 2/17/2011 2:40:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.89	U	0.89	MDL	2.7	PQL	ug/Kg	R	L

Method Category: SVOA

Method: 8270C **Matrix: SO**

Sample ID: SL-021-SA5A-SS-0.0-0.5 *Collected:* 2/17/2011 9:40:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZIDINE	1300	U	1300	MDL	3700	PQL	ug/Kg	UJ	Q
BIS(2-CHLOROISOPROPYL) ETHER	18	U	18	MDL	180	PQL	ug/Kg	UJ	Q

Sample ID: SL-035-SA5A-SS-0.0-0.5 *Collected:* 2/17/2011 10:40:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	26	J	18	MDL	360	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE084 **Laboratory: LL**

EDD Filename: DE084_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: **SL-036-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 1:58:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	43	J	18	MDL	360	PQL	ug/Kg	J	Z

Sample ID: **SL-037-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 1:28:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	120	J	18	MDL	360	PQL	ug/Kg	J	Z

Sample ID: **SL-050-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 2:20:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	21	J	18	MDL	370	PQL	ug/Kg	J	Z

Sample ID: **SL-051-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 2:40:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	39	J	18	MDL	370	PQL	ug/Kg	J	Z

Sample ID: **SL-322-SA5B-SB-3.0-4.0** ***Collected:*** **2/17/2011 3:30:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	22	J	18	MDL	360	PQL	ug/Kg	J	Z

Sample ID: **SL-336-SA5B-SB-4.0-5.0** ***Collected:*** **2/17/2011 9:19:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	21	J	19	MDL	380	PQL	ug/Kg	J	Z

Sample ID: **SL-337-SA5B-SB-3.0-4.0** ***Collected:*** **2/17/2011 10:33:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	19	J	19	MDL	380	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE084 **Laboratory: LL**

EDD Filename: DE084_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C SIM **Matrix:** SO

Sample ID: **SL-035-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 10:40:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-METHYLNAPHTHALENE	0.78	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
ACENAPHTHYLENE	0.35	J	0.35	MDL	1.8	PQL	ug/Kg	J	Z
ANTHRACENE	0.55	J	0.35	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.6	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
Butylbenzylphthalate	8.4	J	6.4	MDL	19	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	1.3	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
NAPHTHALENE	0.77	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: **SL-036-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 1:58:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACENAPHTHYLENE	0.50	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z
ANTHRACENE	1.2	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z
Butylbenzylphthalate	8.2	J	6.5	MDL	20	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	0.86	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	1.7	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
NAPHTHALENE	0.75	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: **SL-037-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 1:28:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACENAPHTHYLENE	0.56	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z
ANTHRACENE	1.1	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z
Butylbenzylphthalate	8.5	J	6.5	MDL	19	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	0.99	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
NAPHTHALENE	0.81	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: **SL-040-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 1:10:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACENAPHTHYLENE	0.70	J	0.37	MDL	1.8	PQL	ug/Kg	J	Z
ANTHRACENE	1.2	J	0.37	MDL	1.8	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	22		6.6	MDL	20	PQL	ug/Kg	U	B
Butylbenzylphthalate	8.6	J	6.6	MDL	20	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	1.2	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE084 **Laboratory: LL**

EDD Filename: DE084_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C SIM **Matrix: SO**

Sample ID: SL-040-SA5A-SS-0.0-0.5 *Collected:* 2/17/2011 1:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NAPHTHALENE	0.90	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-051-SA5A-SS-0.0-0.5 *Collected:* 2/17/2011 2:40:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACENAPHTHYLENE	0.85	J	0.37	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.5	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
Di-n-octylphthalate	11	J	6.6	MDL	20	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	1.7	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-336-SA5B-SB-4.0-5.0 *Collected:* 2/17/2011 9:19:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	0.76	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
CHRYSENE	0.66	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-337-SA5B-SB-3.0-4.0 *Collected:* 2/17/2011 10:33:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHRYSENE	0.41	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z

Method Category: VOA

Method: 8260B **Matrix: SO**

Sample ID: SL-321-SA5B-SB-3.0-4.0 *Collected:* 2/17/2011 1:09:00 *Analysis Type:* RES *Dilution:* 0.94

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	1.4	J	0.26	MDL	4.3	PQL	ug/Kg	U	B

Sample ID: SL-322-SA5B-SB-3.0-4.0 *Collected:* 2/17/2011 3:30:00 *Analysis Type:* RES *Dilution:* 0.98

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ETHYLBENZENE	0.1	J	0.06	MDL	4.2	PQL	ug/Kg	J	Z
m,p-Xylene	0.27	J	0.18	MDL	4.2	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	0.54	J	0.25	MDL	4.2	PQL	ug/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE084 **Laboratory: LL**

EDD Filename: DE084_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: **SL-331-SA5B-SB-3.0-4.0** ***Collected:*** **2/17/2011 11:44:00** ***Analysis Type:*** **RES** ***Dilution:*** **1.08**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZENE	0.18	J	0.12	MDL	4.6	PQL	ug/Kg	J	Z
ETHYLBENZENE	0.17	J	0.07	MDL	4.6	PQL	ug/Kg	J	Z
m,p-Xylene	0.56	J	0.20	MDL	4.6	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	0.80	J	0.28	MDL	4.6	PQL	ug/Kg	U	B
TOLUENE	0.14	J	0.09	MDL	4.6	PQL	ug/Kg	U	B

Sample ID: **SL-336-SA5B-SB-4.0-5.0** ***Collected:*** **2/17/2011 9:19:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ETHYLBENZENE	0.1	J	0.07	MDL	4.6	PQL	ug/Kg	J	Z
m,p-Xylene	0.30	J	0.20	MDL	4.6	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	2.8	J	0.28	MDL	4.6	PQL	ug/Kg	U	B

Sample ID: **SL-337-SA5B-SB-3.0-4.0** ***Collected:*** **2/17/2011 10:33:00** ***Analysis Type:*** **RES** ***Dilution:*** **0.91**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHLOROFORM	0.14	J	0.12	MDL	4.1	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE084 **Laboratory: LL**

EDD Filename: DE084_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
*#	Professional Judgment
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Verification Correlation Coefficient
C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE084 **Laboratory: LL**

EDD Filename: DE084_v1 **eQAPP Name: CDM_SSFL_110509**

F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation
L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery Lower Estimation

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE084 **Laboratory: LL**

EDD Filename: DE084_v1 **eQAPP Name: CDM_SSFL_110509**

R	Continuing Calibration Verification Percent Recovery Lower Rejection
R	Continuing Calibration Verification Percent Recovery Upper Estimation
R	Continuing Calibration Verification Percent Recovery Upper Rejection
R	Continuing Calibration Verification Relative Response Factor
R	Initial Calibration Relative Response Factor
R	Initial Calibration Verification Percent Recovery Lower Estimation
R	Initial Calibration Verification Percent Recovery Lower Rejection
R	Initial Calibration Verification Percent Recovery Upper Estimation
R	Initial Calibration Verification Percent Recovery Upper Rejection
R	Initial Calibration Verification Relative Response Factor
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control Outlier Reports

DE084

Method Blank Outlier Report

Lab Reporting Batch ID: DE084 **Laboratory: LL**

EDD Filename: DE084_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P05208BB220810	2/22/2011 8:10:00 AM	PHOSPHORUS TIN	1.25 mg/Kg 1.43 mg/Kg	SL-021-SA5A-SS-0.0-0.5 SL-022-SA5A-SS-0.0-0.5 SL-035-SA5A-SS-0.0-0.5 SL-036-SA5A-SS-0.0-0.5 SL-037-SA5A-SS-0.0-0.5 SL-040-SA5A-SS-0.0-0.5 SL-050-SA5A-SS-0.0-0.5 SL-051-SA5A-SS-0.0-0.5 SL-321-SA5B-SB-3.0-4.0 SL-322-SA5B-SB-3.0-4.0 SL-331-SA5B-SB-3.0-4.0 SL-336-SA5B-SB-4.0-5.0 SL-337-SA5B-SB-3.0-4.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-021-SA5A-SS-0.0-0.5(RES)	TIN	2.65 mg/Kg	2.65U mg/Kg
SL-022-SA5A-SS-0.0-0.5(RES)	TIN	2.76 mg/Kg	2.76U mg/Kg
SL-035-SA5A-SS-0.0-0.5(RES)	TIN	2.46 mg/Kg	2.46U mg/Kg
SL-036-SA5A-SS-0.0-0.5(RES)	TIN	2.64 mg/Kg	2.64U mg/Kg
SL-037-SA5A-SS-0.0-0.5(RES)	TIN	2.54 mg/Kg	2.54U mg/Kg
SL-040-SA5A-SS-0.0-0.5(RES)	TIN	2.68 mg/Kg	2.68U mg/Kg
SL-050-SA5A-SS-0.0-0.5(RES)	TIN	2.39 mg/Kg	2.39U mg/Kg
SL-051-SA5A-SS-0.0-0.5(RES)	TIN	2.56 mg/Kg	2.56U mg/Kg
SL-321-SA5B-SB-3.0-4.0(RES)	TIN	4.03 mg/Kg	4.03U mg/Kg
SL-322-SA5B-SB-3.0-4.0(RES)	TIN	2.97 mg/Kg	2.97U mg/Kg
SL-331-SA5B-SB-3.0-4.0(RES)	TIN	2.55 mg/Kg	2.55U mg/Kg
SL-336-SA5B-SB-4.0-5.0(RES)	TIN	2.61 mg/Kg	2.61U mg/Kg
SL-337-SA5B-SB-3.0-4.0(RES)	TIN	2.90 mg/Kg	2.90U mg/Kg

Method: 6020
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P05226BB221114A	3/3/2011 11:14:00 AM	ANTIMONY BERYLLIUM COBALT COPPER LEAD NICKEL SILVER VANADIUM ZINC	0.141 mg/Kg 0.0417 mg/Kg 0.0570 mg/Kg 0.135 mg/Kg 0.0459 mg/Kg 0.138 mg/Kg 0.0256 mg/Kg 0.0749 mg/Kg 0.568 mg/Kg	SL-021-SA5A-SS-0.0-0.5 SL-022-SA5A-SS-0.0-0.5 SL-035-SA5A-SS-0.0-0.5 SL-036-SA5A-SS-0.0-0.5 SL-037-SA5A-SS-0.0-0.5 SL-040-SA5A-SS-0.0-0.5 SL-050-SA5A-SS-0.0-0.5 SL-051-SA5A-SS-0.0-0.5 SL-321-SA5B-SB-3.0-4.0 SL-322-SA5B-SB-3.0-4.0 SL-331-SA5B-SB-3.0-4.0 SL-336-SA5B-SB-4.0-5.0 SL-337-SA5B-SB-3.0-4.0

Method Blank Outlier Report

Lab Reporting Batch ID: DE084 **Laboratory: LL**

EDD Filename: DE084_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **6020**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P05226BB221114C	3/3/2011 11:14:00 AM	MOLYBDENUM	0.0824 mg/Kg	SL-021-SA5A-SS-0.0-0.5 SL-022-SA5A-SS-0.0-0.5 SL-035-SA5A-SS-0.0-0.5 SL-036-SA5A-SS-0.0-0.5 SL-037-SA5A-SS-0.0-0.5 SL-040-SA5A-SS-0.0-0.5 SL-050-SA5A-SS-0.0-0.5 SL-051-SA5A-SS-0.0-0.5 SL-321-SA5B-SB-3.0-4.0 SL-322-SA5B-SB-3.0-4.0 SL-331-SA5B-SB-3.0-4.0 SL-336-SA5B-SB-4.0-5.0 SL-337-SA5B-SB-3.0-4.0
P05226BB221114D	3/3/2011 11:14:00 AM	BARIUM	0.215 mg/Kg	SL-021-SA5A-SS-0.0-0.5 SL-022-SA5A-SS-0.0-0.5 SL-035-SA5A-SS-0.0-0.5 SL-036-SA5A-SS-0.0-0.5 SL-037-SA5A-SS-0.0-0.5 SL-040-SA5A-SS-0.0-0.5 SL-050-SA5A-SS-0.0-0.5 SL-051-SA5A-SS-0.0-0.5 SL-321-SA5B-SB-3.0-4.0 SL-322-SA5B-SB-3.0-4.0 SL-331-SA5B-SB-3.0-4.0 SL-336-SA5B-SB-4.0-5.0 SL-337-SA5B-SB-3.0-4.0
P05226BB221615B	3/3/2011 4:15:00 PM	SELENIUM	0.0571 mg/Kg	SL-021-SA5A-SS-0.0-0.5 SL-022-SA5A-SS-0.0-0.5 SL-035-SA5A-SS-0.0-0.5 SL-036-SA5A-SS-0.0-0.5 SL-037-SA5A-SS-0.0-0.5 SL-040-SA5A-SS-0.0-0.5 SL-050-SA5A-SS-0.0-0.5 SL-051-SA5A-SS-0.0-0.5 SL-321-SA5B-SB-3.0-4.0 SL-322-SA5B-SB-3.0-4.0 SL-331-SA5B-SB-3.0-4.0 SL-336-SA5B-SB-4.0-5.0 SL-337-SA5B-SB-3.0-4.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-021-SA5A-SS-0.0-0.5(REA)	SELENIUM	0.149 mg/Kg	0.149U mg/Kg
SL-021-SA5A-SS-0.0-0.5(RES)	ANTIMONY	0.207 mg/Kg	0.207U mg/Kg
SL-021-SA5A-SS-0.0-0.5(RES)	SILVER	0.0688 mg/Kg	0.0688U mg/Kg
SL-022-SA5A-SS-0.0-0.5(REA)	SELENIUM	0.127 mg/Kg	0.127U mg/Kg
SL-022-SA5A-SS-0.0-0.5(RES)	ANTIMONY	0.149 mg/Kg	0.149U mg/Kg
SL-035-SA5A-SS-0.0-0.5(REA)	SELENIUM	0.131 mg/Kg	0.131U mg/Kg
SL-035-SA5A-SS-0.0-0.5(RES)	ANTIMONY	0.234 mg/Kg	0.234U mg/Kg
SL-035-SA5A-SS-0.0-0.5(RES)	SILVER	0.0723 mg/Kg	0.0723U mg/Kg
SL-036-SA5A-SS-0.0-0.5(REA)	SELENIUM	0.124 mg/Kg	0.124U mg/Kg
SL-036-SA5A-SS-0.0-0.5(RES)	ANTIMONY	0.315 mg/Kg	0.315U mg/Kg
SL-036-SA5A-SS-0.0-0.5(RES)	SILVER	0.0837 mg/Kg	0.0837U mg/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE084 **Laboratory: LL**

EDD Filename: DE084_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **6020**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-037-SA5A-SS-0.0-0.5(REA)	SELENIUM	0.116 mg/Kg	0.116U mg/Kg
SL-037-SA5A-SS-0.0-0.5(RES)	ANTIMONY	0.276 mg/Kg	0.276U mg/Kg
SL-037-SA5A-SS-0.0-0.5(RES)	SILVER	0.0828 mg/Kg	0.0828U mg/Kg
SL-040-SA5A-SS-0.0-0.5(REA)	SELENIUM	0.111 mg/Kg	0.111U mg/Kg
SL-040-SA5A-SS-0.0-0.5(RES)	ANTIMONY	0.163 mg/Kg	0.163U mg/Kg
SL-040-SA5A-SS-0.0-0.5(RES)	SILVER	0.0487 mg/Kg	0.0487U mg/Kg
SL-050-SA5A-SS-0.0-0.5(REA)	SELENIUM	0.133 mg/Kg	0.133U mg/Kg
SL-050-SA5A-SS-0.0-0.5(RES)	ANTIMONY	0.150 mg/Kg	0.150U mg/Kg
SL-050-SA5A-SS-0.0-0.5(RES)	SILVER	0.0559 mg/Kg	0.0559U mg/Kg
SL-051-SA5A-SS-0.0-0.5(REA)	SELENIUM	0.146 mg/Kg	0.146U mg/Kg
SL-051-SA5A-SS-0.0-0.5(RES)	ANTIMONY	0.183 mg/Kg	0.183U mg/Kg
SL-051-SA5A-SS-0.0-0.5(RES)	SILVER	0.0712 mg/Kg	0.0712U mg/Kg
SL-321-SA5B-SB-3.0-4.0(REA)	SELENIUM	0.166 mg/Kg	0.166U mg/Kg
SL-321-SA5B-SB-3.0-4.0(RES)	ANTIMONY	0.121 mg/Kg	0.121U mg/Kg
SL-321-SA5B-SB-3.0-4.0(RES)	SILVER	0.0549 mg/Kg	0.0549U mg/Kg
SL-322-SA5B-SB-3.0-4.0(REA)	SELENIUM	0.0752 mg/Kg	0.0752U mg/Kg
SL-322-SA5B-SB-3.0-4.0(RES)	ANTIMONY	0.0858 mg/Kg	0.0858U mg/Kg
SL-322-SA5B-SB-3.0-4.0(RES)	SILVER	0.0188 mg/Kg	0.0188U mg/Kg
SL-331-SA5B-SB-3.0-4.0(REA)	SELENIUM	0.139 mg/Kg	0.139U mg/Kg
SL-331-SA5B-SB-3.0-4.0(RES)	ANTIMONY	0.123 mg/Kg	0.123U mg/Kg
SL-331-SA5B-SB-3.0-4.0(RES)	SILVER	0.0504 mg/Kg	0.0504U mg/Kg
SL-336-SA5B-SB-4.0-5.0(REA)	SELENIUM	0.166 mg/Kg	0.166U mg/Kg
SL-336-SA5B-SB-4.0-5.0(RES)	ANTIMONY	0.140 mg/Kg	0.140U mg/Kg
SL-336-SA5B-SB-4.0-5.0(RES)	SILVER	0.0421 mg/Kg	0.0421U mg/Kg
SL-337-SA5B-SB-3.0-4.0(REA)	SELENIUM	0.138 mg/Kg	0.138U mg/Kg
SL-337-SA5B-SB-3.0-4.0(RES)	ANTIMONY	0.145 mg/Kg	0.145U mg/Kg
SL-337-SA5B-SB-3.0-4.0(RES)	SILVER	0.0585 mg/Kg	0.0585U mg/Kg

Method: **8151A**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P54548AB241603A	2/24/2011 4:03:00 PM	2,4-DB MCPP	0.75 ug/Kg 210 ug/Kg	SL-051-SA5A-SS-0.0-0.5

Method Blank Outlier Report

Lab Reporting Batch ID: DE084 **Laboratory: LL**

EDD Filename: DE084_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8151A
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P57575AB241849A	2/28/2011 6:49:00 PM	MCPP	350 ug/Kg	SL-021-SA5A-SS-0.0-0.5 SL-022-SA5A-SS-0.0-0.5 SL-035-SA5A-SS-0.0-0.5 SL-036-SA5A-SS-0.0-0.5 SL-037-SA5A-SS-0.0-0.5 SL-040-SA5A-SS-0.0-0.5 SL-050-SA5A-SS-0.0-0.5

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-021-SA5A-SS-0.0-0.5(RES)	MCPP	410 ug/Kg	410U ug/Kg
SL-022-SA5A-SS-0.0-0.5(RES)	MCPP	100 ug/Kg	270U ug/Kg

Method: 8260B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB76B211953A	2/18/2011 7:53:00 PM	METHYLENE CHLORIDE	0.30 ug/Kg	SL-321-SA5B-SB-3.0-4.0 SL-322-SA5B-SB-3.0-4.0 SL-336-SA5B-SB-4.0-5.0 SL-337-SA5B-SB-3.0-4.0
VBLKB77B212158A	2/24/2011 9:58:00 PM	ACETONE METHYLENE CHLORIDE TOLUENE	8.7 ug/Kg 1.1 ug/Kg 0.1 ug/Kg	SL-331-SA5B-SB-3.0-4.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-321-SA5B-SB-3.0-4.0(RES)	METHYLENE CHLORIDE	1.4 ug/Kg	4.3U ug/Kg
SL-322-SA5B-SB-3.0-4.0(RES)	METHYLENE CHLORIDE	0.54 ug/Kg	4.2U ug/Kg
SL-331-SA5B-SB-3.0-4.0(RES)	METHYLENE CHLORIDE	0.80 ug/Kg	4.6U ug/Kg
SL-331-SA5B-SB-3.0-4.0(RES)	TOLUENE	0.14 ug/Kg	4.6U ug/Kg
SL-336-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	2.8 ug/Kg	4.6U ug/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE084 **Laboratory: LL**

EDD Filename: DE084_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8270C SIM**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKLK05B262306	2/25/2011 11:06:00 PM	BIS(2-ETHYLHEXYL)PHTHALATE Di-n-butylphthalate	9.5 ug/Kg 7.7 ug/Kg	SL-021-SA5A-SS-0.0-0.5 SL-022-SA5A-SS-0.0-0.5 SL-035-SA5A-SS-0.0-0.5 SL-036-SA5A-SS-0.0-0.5 SL-037-SA5A-SS-0.0-0.5 SL-040-SA5A-SS-0.0-0.5 SL-050-SA5A-SS-0.0-0.5 SL-051-SA5A-SS-0.0-0.5 SL-321-SA5B-SB-3.0-4.0 SL-322-SA5B-SB-3.0-4.0 SL-331-SA5B-SB-3.0-4.0 SL-336-SA5B-SB-4.0-5.0 SL-337-SA5B-SB-3.0-4.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-040-SA5A-SS-0.0-0.5(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	22 ug/Kg	22U ug/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE084 **Laboratory: LL**

EDD Filename: DE084_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020

Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-021-SA5A-SS-0.0-0.5MS **SL-021-SA5A-SS-0.0-0.5MSD** (SL-021-SA5A-SS-0.0-0.5 SL -022-SA5A-SS-0.0-0.5 SL -035-SA5A-SS-0.0-0.5 SL -036-SA5A-SS-0.0-0.5 SL -037-SA5A-SS-0.0-0.5 SL -040-SA5A-SS-0.0-0.5 SL -050-SA5A-SS-0.0-0.5 SL -051-SA5A-SS-0.0-0.5 SL -321-SA5B-SB-3.0-4.0 SL -322-SA5B-SB-3.0-4.0 SL -331-SA5B-SB-3.0-4.0 SL -336-SA5B-SB-4.0-5.0 SL -337-SA5B-SB-3.0-4.0)	ARSENIC BERYLLIUM CHROMIUM COBALT COPPER LEAD NICKEL SILVER VANADIUM ZINC	126 - 143 - 131 201 139 137 155 182	205 133 189 136 155 229 180 156 230 285	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	- - - - - - - - - -	ARSENIC BERYLLIUM CHROMIUM COBALT COPPER LEAD NICKEL SILVER VANADIUM ZINC	J (all detects) Zn No Qual, >4x
SL-021-SA5A-SS-0.0-0.5MS **SL-021-SA5A-SS-0.0-0.5MSD** (SL-021-SA5A-SS-0.0-0.5 SL -022-SA5A-SS-0.0-0.5 SL -035-SA5A-SS-0.0-0.5 SL -036-SA5A-SS-0.0-0.5 SL -037-SA5A-SS-0.0-0.5 SL -040-SA5A-SS-0.0-0.5 SL -050-SA5A-SS-0.0-0.5 SL -051-SA5A-SS-0.0-0.5 SL -321-SA5B-SB-3.0-4.0 SL -322-SA5B-SB-3.0-4.0 SL -331-SA5B-SB-3.0-4.0 SL -336-SA5B-SB-4.0-5.0 SL -337-SA5B-SB-3.0-4.0)	ANTIMONY	48	73	75.00-125.00	34 (20.00)	ANTIMONY	J(all detects) UJ(all non-detects)
SL-021-SA5A-SS-0.0-0.5MS **SL-021-SA5A-SS-0.0-0.5MSD** (SL-021-SA5A-SS-0.0-0.5 SL -022-SA5A-SS-0.0-0.5 SL -035-SA5A-SS-0.0-0.5 SL -036-SA5A-SS-0.0-0.5 SL -037-SA5A-SS-0.0-0.5 SL -040-SA5A-SS-0.0-0.5 SL -050-SA5A-SS-0.0-0.5 SL -051-SA5A-SS-0.0-0.5 SL -321-SA5B-SB-3.0-4.0 SL -322-SA5B-SB-3.0-4.0 SL -331-SA5B-SB-3.0-4.0 SL -336-SA5B-SB-4.0-5.0 SL -337-SA5B-SB-3.0-4.0)	MOLYBDENUM	137	163	75.00-125.00	-	MOLYBDENUM	J(all detects)
SL-021-SA5A-SS-0.0-0.5MS **SL-021-SA5A-SS-0.0-0.5MSD** (SL-021-SA5A-SS-0.0-0.5 SL -022-SA5A-SS-0.0-0.5 SL -035-SA5A-SS-0.0-0.5 SL -036-SA5A-SS-0.0-0.5 SL -037-SA5A-SS-0.0-0.5 SL -040-SA5A-SS-0.0-0.5 SL -050-SA5A-SS-0.0-0.5 SL -051-SA5A-SS-0.0-0.5 SL -321-SA5B-SB-3.0-4.0 SL -322-SA5B-SB-3.0-4.0 SL -331-SA5B-SB-3.0-4.0 SL -336-SA5B-SB-4.0-5.0 SL -337-SA5B-SB-3.0-4.0)	BARIUM	237	420	75.00-125.00	-	BARIUM	No Qual, >4x

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE084 **Laboratory: LL**

EDD Filename: DE084_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-021-SA5A-SS-0.0-0.5MS	ALUMINUM	2302	2326	75.00-125.00	-	ALUMINUM	
SL-021-SA5A-SS-0.0-0.5MSD	CALCIUM	203	233	75.00-125.00	-	CALCIUM	
(SL-021-SA5A-SS-0.0-0.5	IRON	1348	2145	75.00-125.00	-	IRON	J(all detects)
SL -022-SA5A-SS-0.0-0.5	MAGNESIUM	274	278	75.00-125.00	-	MAGNESIUM	
SL -035-SA5A-SS-0.0-0.5	MANGANESE	-	139	75.00-125.00	-	MANGANESE	Al, Ca, Fe,
SL -036-SA5A-SS-0.0-0.5	POTASSIUM	141	150	75.00-125.00	-	POTASSIUM	Mg, Mn, Ti
SL -037-SA5A-SS-0.0-0.5	TITANIUM	312	339	75.00-125.00	-	TITANIUM	No Qual, >4x
SL -040-SA5A-SS-0.0-0.5							
SL -050-SA5A-SS-0.0-0.5							
SL -051-SA5A-SS-0.0-0.5							
SL -321-SA5B-SB-3.0-4.0							
SL -322-SA5B-SB-3.0-4.0							
SL -331-SA5B-SB-3.0-4.0							
SL -336-SA5B-SB-4.0-5.0							
SL -337-SA5B-SB-3.0-4.0)							

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-021-SA5A-SS-0.0-0.5MS (SL-021-SA5A-SS-0.0-0.5)	2,4,5-TRICHLOROPHENOL	111	-	78.00-109.00	-	2,4,5-TRICHLOROPHENOL	J(all detects)
SL-021-SA5A-SS-0.0-0.5MS	BENZIDINE	14	15	35.00-141.00	-	BENZIDINE	J(all detects)
SL-021-SA5A-SS-0.0-0.5MSD (SL-021-SA5A-SS-0.0-0.5)	BIS(2-CHLOROISOPROPYL) ET	1	-	55.00-142.00	195 (30.00)	BIS(2-CHLOROISOPROPYL) E	UJ(all non-detects)

Method: 300.0
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-021-SA5A-SS-0.0-0.5MS	FLUORIDE	50	-	80.00-120.00	-	FLUORIDE	
(SL-021-SA5A-SS-0.0-0.5							
SL -022-SA5A-SS-0.0-0.5							
SL -035-SA5A-SS-0.0-0.5							
SL -036-SA5A-SS-0.0-0.5							
SL -037-SA5A-SS-0.0-0.5							J(all detects)
SL -040-SA5A-SS-0.0-0.5							UJ(all non-detects)
SL -050-SA5A-SS-0.0-0.5							
SL -051-SA5A-SS-0.0-0.5							
SL -321-SA5B-SB-3.0-4.0							
SL -322-SA5B-SB-3.0-4.0)							

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE084 **Laboratory: LL**

EDD Filename: DE084_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 300.0
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-021-SA5A-SS-0.0-0.5DUP	FLUORIDE	40	20.00	
(SL-021-SA5A-SS-0.0-0.5	Nitrate-NO3	44	20.00	
SL -022-SA5A-SS-0.0-0.5				
SL -035-SA5A-SS-0.0-0.5				
SL -036-SA5A-SS-0.0-0.5				
SL -037-SA5A-SS-0.0-0.5				No Qual
SL -040-SA5A-SS-0.0-0.5				OK by difference
SL -050-SA5A-SS-0.0-0.5				
SL -051-SA5A-SS-0.0-0.5				
SL -321-SA5B-SB-3.0-4.0				
SL -322-SA5B-SB-3.0-4.0)				

Method: 6020
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-021-SA5A-SS-0.0-0.5DUP	ANTIMONY	67	20.00	
(SL-021-SA5A-SS-0.0-0.5	SELENIUM	21	20.00	
SL -022-SA5A-SS-0.0-0.5	SILVER	44	20.00	
SL -035-SA5A-SS-0.0-0.5				
SL -036-SA5A-SS-0.0-0.5				
SL -037-SA5A-SS-0.0-0.5				
SL -040-SA5A-SS-0.0-0.5				No Qual
SL -050-SA5A-SS-0.0-0.5				OK by difference
SL -051-SA5A-SS-0.0-0.5				
SL -321-SA5B-SB-3.0-4.0				
SL -322-SA5B-SB-3.0-4.0				
SL -331-SA5B-SB-3.0-4.0				
SL -336-SA5B-SB-4.0-5.0				
SL -337-SA5B-SB-3.0-4.0)				

Method: 7199
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-321-SA5B-SB-3.0-4.0DUP	HEXAVALENT CHROMIUM	59	20.00	
(SL-021-SA5A-SS-0.0-0.5				
SL -022-SA5A-SS-0.0-0.5				
SL -035-SA5A-SS-0.0-0.5				
SL -036-SA5A-SS-0.0-0.5				
SL -037-SA5A-SS-0.0-0.5				
SL -040-SA5A-SS-0.0-0.5				No Qual
SL -050-SA5A-SS-0.0-0.5				OK by difference
SL -051-SA5A-SS-0.0-0.5				
SL -321-SA5B-SB-3.0-4.0				
SL -322-SA5B-SB-3.0-4.0				
SL -331-SA5B-SB-3.0-4.0				
SL -336-SA5B-SB-4.0-5.0				
SL -337-SA5B-SB-3.0-4.0)				

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE084 **Laboratory: LL**

EDD Filename: DE084_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8330A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P10537AQ240255A (SL-321-SA5B-SB-3.0-4.0 SL -322-SA5B-SB-3.0-4.0 SL -331-SA5B-SB-3.0-4.0 SL -336-SA5B-SB-4.0-5.0 SL -337-SA5B-SB-3.0-4.0)	2,4,6-TRINITROTOLUENE	121	-	80.00-120.00	-	2,4,6-TRINITROTOLUENE	J (all detects)

Method: 8082
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P10547AY240525A (SL-021-SA5A-SS-0.0-0.5 SL -022-SA5A-SS-0.0-0.5 SL -035-SA5A-SS-0.0-0.5 SL -036-SA5A-SS-0.0-0.5 SL -037-SA5A-SS-0.0-0.5 SL -040-SA5A-SS-0.0-0.5 SL -050-SA5A-SS-0.0-0.5 SL -051-SA5A-SS-0.0-0.5 SL -321-SA5B-SB-3.0-4.0 SL -322-SA5B-SB-3.0-4.0 SL -331-SA5B-SB-3.0-4.0 SL -336-SA5B-SB-4.0-5.0 SL -337-SA5B-SB-3.0-4.0)	Aroclor 5442	-	71	75.00-125.00	-	Aroclor 5432, 5442, 5460	J(all detects) UJ(all non-detects)

Method: 8151A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P10548AQ241631A (SL-051-SA5A-SS-0.0-0.5)	DINOSEB	7	-	10.00-136.00	-	DINOSEB	J(all detects) R(all non-detects)
P10575AQ241916A (SL-021-SA5A-SS-0.0-0.5 SL -022-SA5A-SS-0.0-0.5 SL -035-SA5A-SS-0.0-0.5 SL -036-SA5A-SS-0.0-0.5 SL -037-SA5A-SS-0.0-0.5 SL -040-SA5A-SS-0.0-0.5 SL -050-SA5A-SS-0.0-0.5)	DINOSEB	8	-	10.00-136.00	-	DINOSEB	J(all detects) R(all non-detects)

Method: 8260B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
LCS1B77Y212045A (SL-331-SA5B-SB-3.0-4.0)	2-Chloro-1,1,1-trifluoroethane	-	124	78.00-120.00	-	2-Chloro-1,1,1-trifluoroethane	J(all detects)

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Surrogate Outlier Report

Lab Reporting Batch ID: DE084 **Laboratory: LL**

EDD Filename: DE084_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8082
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-036-SA5A-SS-0.0-0.5	DECACHLOROBIPHENYL	125	45.00-120.00	All Target Analytes	J (all detects)
SL-040-SA5A-SS-0.0-0.5	DECACHLOROBIPHENYL	142	45.00-120.00	All Target Analytes	J(all detects)

Method: 8270C SIM
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-037-SA5A-SS-0.0-0.5	Nitrobenzene-d5	132	40.00-130.00	No Affected Compounds	No Qual One Out

Reporting Limit Outliers

Lab Reporting Batch ID: DE084 **Laboratory: LL**

EDD Filename: DE084_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1625C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-331-SA5B-SB-3.0-4.0	N-NITROSODIMETHYLAMINE	J	21.2	35.9	PQL	ng/Kg	J (all detects)
SL-336-SA5B-SB-4.0-5.0	N-NITROSODIMETHYLAMINE	J	24.7	38.1	PQL	ng/Kg	J (all detects)
SL-337-SA5B-SB-3.0-4.0	N-NITROSODIMETHYLAMINE	J	25.3	37.7	PQL	ng/Kg	J (all detects)

Method: 314.0

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-036-SA5A-SS-0.0-0.5	PERCHLORATE	J	13.8	32.9	PQL	ug/Kg	J (all detects)

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-021-SA5A-SS-0.0-0.5	SODIUM	J	80.8	111	PQL	mg/Kg	J (all detects)
	TIN	J	2.65	11.1	PQL	mg/Kg	
	Zirconium	J	3.82	5.57	PQL	mg/Kg	
SL-022-SA5A-SS-0.0-0.5	SODIUM	J	96.9	108	PQL	mg/Kg	J (all detects)
	TIN	J	2.76	10.8	PQL	mg/Kg	
	Zirconium	J	2.71	5.38	PQL	mg/Kg	
SL-035-SA5A-SS-0.0-0.5	SODIUM	J	91.6	104	PQL	mg/Kg	J (all detects)
	TIN	J	2.46	10.4	PQL	mg/Kg	
	Zirconium	J	2.72	5.20	PQL	mg/Kg	
SL-036-SA5A-SS-0.0-0.5	SODIUM	J	89.1	109	PQL	mg/Kg	J (all detects)
	TIN	J	2.64	10.9	PQL	mg/Kg	
	Zirconium	J	3.54	5.43	PQL	mg/Kg	
SL-037-SA5A-SS-0.0-0.5	SODIUM	J	81.3	104	PQL	mg/Kg	J (all detects)
	TIN	J	2.54	10.4	PQL	mg/Kg	
	Zirconium	J	3.47	5.18	PQL	mg/Kg	
SL-040-SA5A-SS-0.0-0.5	SODIUM	J	78.8	106	PQL	mg/Kg	J (all detects)
	TIN	J	2.68	10.6	PQL	mg/Kg	
	Zirconium	J	3.60	5.32	PQL	mg/Kg	
SL-050-SA5A-SS-0.0-0.5	SODIUM	J	81.1	108	PQL	mg/Kg	J (all detects)
	TIN	J	2.39	10.8	PQL	mg/Kg	
	Zirconium	J	3.09	5.40	PQL	mg/Kg	
SL-051-SA5A-SS-0.0-0.5	SODIUM	J	90.0	108	PQL	mg/Kg	J (all detects)
	TIN	J	2.56	10.8	PQL	mg/Kg	
	Zirconium	J	3.84	5.38	PQL	mg/Kg	
SL-321-SA5B-SB-3.0-4.0	TIN	J	4.03	11.1	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.02	5.53	PQL	mg/Kg	
SL-322-SA5B-SB-3.0-4.0	TIN	J	2.97	10.7	PQL	mg/Kg	J (all detects)
	Zirconium	J	1.45	5.34	PQL	mg/Kg	
SL-331-SA5B-SB-3.0-4.0	TIN	J	2.55	10.7	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.48	5.33	PQL	mg/Kg	

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Reporting Limit Outliers

Lab Reporting Batch ID: DE084 **Laboratory: LL**

EDD Filename: DE084_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-336-SA5B-SB-4.0-5.0	TIN	J	2.61	11.5	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.46	5.77	PQL	mg/Kg	
SL-337-SA5B-SB-3.0-4.0	TIN	J	2.90	11.2	PQL	mg/Kg	J (all detects)
	Zirconium	J	1.25	5.60	PQL	mg/Kg	

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-021-SA5A-SS-0.0-0.5	ANTIMONY	J	0.207	0.218	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.149	0.437	PQL	mg/Kg	
	SILVER	J	0.0688	0.109	PQL	mg/Kg	
SL-022-SA5A-SS-0.0-0.5	ANTIMONY	J	0.149	0.211	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.107	0.108	PQL	mg/Kg	
	SELENIUM	J	0.127	0.422	PQL	mg/Kg	
SL-035-SA5A-SS-0.0-0.5	SELENIUM	J	0.131	0.420	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0723	0.105	PQL	mg/Kg	
SL-036-SA5A-SS-0.0-0.5	SELENIUM	J	0.124	0.435	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0837	0.109	PQL	mg/Kg	
SL-037-SA5A-SS-0.0-0.5	SELENIUM	J	0.116	0.426	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0828	0.107	PQL	mg/Kg	
SL-040-SA5A-SS-0.0-0.5	ANTIMONY	J	0.163	0.215	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.111	0.430	PQL	mg/Kg	
	SILVER	J	0.0487	0.107	PQL	mg/Kg	
SL-050-SA5A-SS-0.0-0.5	ANTIMONY	J	0.150	0.214	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.133	0.428	PQL	mg/Kg	
	SILVER	J	0.0559	0.107	PQL	mg/Kg	
SL-051-SA5A-SS-0.0-0.5	ANTIMONY	J	0.183	0.215	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.146	0.430	PQL	mg/Kg	
	SILVER	J	0.0712	0.108	PQL	mg/Kg	
SL-321-SA5B-SB-3.0-4.0	ANTIMONY	J	0.121	0.223	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0673	0.113	PQL	mg/Kg	
	SELENIUM	J	0.166	0.447	PQL	mg/Kg	
	SILVER	J	0.0549	0.112	PQL	mg/Kg	
SL-322-SA5B-SB-3.0-4.0	ANTIMONY	J	0.0858	0.209	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0752	0.419	PQL	mg/Kg	
	SILVER	J	0.0188	0.105	PQL	mg/Kg	
SL-331-SA5B-SB-3.0-4.0	ANTIMONY	J	0.123	0.215	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0887	0.105	PQL	mg/Kg	
	SELENIUM	J	0.139	0.431	PQL	mg/Kg	
	SILVER	J	0.0504	0.108	PQL	mg/Kg	
SL-336-SA5B-SB-4.0-5.0	ANTIMONY	J	0.140	0.222	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.166	0.444	PQL	mg/Kg	
	SILVER	J	0.0421	0.111	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE084 **Laboratory: LL**

EDD Filename: DE084_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-337-SA5B-SB-3.0-4.0	ANTIMONY	J	0.145	0.222	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.102	0.113	PQL	mg/Kg	
	SELENIUM	J	0.138	0.443	PQL	mg/Kg	
	SILVER	J	0.0585	0.111	PQL	mg/Kg	

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-021-SA5A-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.42	1.1	PQL	mg/Kg	J (all detects)
SL-035-SA5A-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.45	1.1	PQL	mg/Kg	J (all detects)
SL-036-SA5A-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.54	1.1	PQL	mg/Kg	J (all detects)
SL-037-SA5A-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.50	1.1	PQL	mg/Kg	J (all detects)
SL-040-SA5A-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.39	1.1	PQL	mg/Kg	J (all detects)
SL-321-SA5B-SB-3.0-4.0	HEXAVALENT CHROMIUM	J	0.23	1.1	PQL	mg/Kg	J (all detects)
SL-331-SA5B-SB-3.0-4.0	HEXAVALENT CHROMIUM	J	0.60	1.1	PQL	mg/Kg	J (all detects)
SL-337-SA5B-SB-3.0-4.0	HEXAVALENT CHROMIUM	J	0.49	1.1	PQL	mg/Kg	J (all detects)

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-022-SA5A-SS-0.0-0.5	MERCURY	J	0.0113	0.107	PQL	mg/Kg	J (all detects)
SL-036-SA5A-SS-0.0-0.5	MERCURY	J	0.0080	0.107	PQL	mg/Kg	J (all detects)
SL-037-SA5A-SS-0.0-0.5	MERCURY	J	0.0117	0.104	PQL	mg/Kg	J (all detects)
SL-051-SA5A-SS-0.0-0.5	MERCURY	J	0.0067	0.105	PQL	mg/Kg	J (all detects)

Method: 8015M

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-331-SA5B-SB-3.0-4.0	EFH (C30-C40)	J	0.48	1.3	PQL	mg/Kg	J (all detects)
SL-336-SA5B-SB-4.0-5.0	EFH (C8-C11)	J	0.71	1.4	PQL	mg/Kg	J (all detects)
SL-337-SA5B-SB-3.0-4.0	EFH (C21-C30)	J	0.94	1.4	PQL	mg/Kg	J (all detects)
	EFH (C8-C11)	J	0.58	1.4	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE084 **Laboratory: LL**

EDD Filename: DE084_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8081A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-021-SA5A-SS-0.0-0.5	4,4'-DDE	J	0.11	0.38	PQL	ug/Kg	J (all detects)
	ENDRIN ALDEHYDE	J	0.11	0.38	PQL	ug/Kg	
SL-022-SA5A-SS-0.0-0.5	ENDRIN ALDEHYDE	J	0.073	0.37	PQL	ug/Kg	J (all detects)
	ENDRIN KETONE	J	0.11	0.37	PQL	ug/Kg	
SL-036-SA5A-SS-0.0-0.5	DIELDRIN	J	0.26	0.37	PQL	ug/Kg	J (all detects)
	HEPTACHLOR EPOXIDE	J	0.049	0.18	PQL	ug/Kg	
SL-037-SA5A-SS-0.0-0.5	ENDOSULFAN II	J	0.15	0.37	PQL	ug/Kg	J (all detects)
	ENDRIN ALDEHYDE	J	0.28	0.37	PQL	ug/Kg	
	HEPTACHLOR EPOXIDE	J	0.092	0.18	PQL	ug/Kg	
	MIREX	J	0.30	0.37	PQL	ug/Kg	
SL-040-SA5A-SS-0.0-0.5	ENDRIN KETONE	J	0.098	0.37	PQL	ug/Kg	J (all detects)
SL-050-SA5A-SS-0.0-0.5	4,4'-DDE	J	0.20	0.37	PQL	ug/Kg	J (all detects)
	4,4'-DDT	J	0.24	0.37	PQL	ug/Kg	
SL-051-SA5A-SS-0.0-0.5	4,4'-DDD	J	0.18	0.38	PQL	ug/Kg	J (all detects)
	4,4'-DDE	J	0.15	0.38	PQL	ug/Kg	
	4,4'-DDT	J	0.31	0.38	PQL	ug/Kg	
	ENDRIN ALDEHYDE	J	0.12	0.38	PQL	ug/Kg	
	ENDRIN KETONE	J	0.083	0.38	PQL	ug/Kg	

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-021-SA5A-SS-0.0-0.5	AROCLOR 1260	J	0.60	1.9	PQL	ug/Kg	J (all detects)
SL-022-SA5A-SS-0.0-0.5	AROCLOR 1260	J	1.2	1.8	PQL	ug/Kg	J (all detects)
	Aroclor 5460	J	3.3	3.6	PQL	ug/Kg	
SL-050-SA5A-SS-0.0-0.5	AROCLOR 1254	J	1.4	1.9	PQL	ug/Kg	J (all detects)
	Aroclor 5460	J	2.0	3.6	PQL	ug/Kg	
SL-051-SA5A-SS-0.0-0.5	AROCLOR 1254	J	0.99	1.9	PQL	ug/Kg	J (all detects)
	AROCLOR 1260	J	1.2	1.9	PQL	ug/Kg	

Method: 8151A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-021-SA5A-SS-0.0-0.5	DICAMBA	J	1.1	1.3	PQL	ug/Kg	J (all detects)
SL-022-SA5A-SS-0.0-0.5	DICAMBA	J	1.2	1.3	PQL	ug/Kg	J (all detects)
	MCPP	J	100	270	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE084 **Laboratory: LL**

EDD Filename: DE084_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8260B
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-321-SA5B-SB-3.0-4.0	METHYLENE CHLORIDE	J	1.4	4.3	PQL	ug/Kg	J (all detects)
SL-322-SA5B-SB-3.0-4.0	ETHYLBENZENE	J	0.1	4.2	PQL	ug/Kg	J (all detects)
	m,p-Xylene	J	0.27	4.2	PQL	ug/Kg	
	METHYLENE CHLORIDE	J	0.54	4.2	PQL	ug/Kg	
SL-331-SA5B-SB-3.0-4.0	BENZENE	J	0.18	4.6	PQL	ug/Kg	J (all detects)
	ETHYLBENZENE	J	0.17	4.6	PQL	ug/Kg	
	m,p-Xylene	J	0.56	4.6	PQL	ug/Kg	
	METHYLENE CHLORIDE	J	0.80	4.6	PQL	ug/Kg	
	TOLUENE	J	0.14	4.6	PQL	ug/Kg	
SL-336-SA5B-SB-4.0-5.0	ETHYLBENZENE	J	0.1	4.6	PQL	ug/Kg	J (all detects)
	m,p-Xylene	J	0.30	4.6	PQL	ug/Kg	
	METHYLENE CHLORIDE	J	2.8	4.6	PQL	ug/Kg	
SL-337-SA5B-SB-3.0-4.0	CHLOROFORM	J	0.14	4.1	PQL	ug/Kg	J (all detects)

Method: 8270C
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-035-SA5A-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	26	360	PQL	ug/Kg	J (all detects)
SL-036-SA5A-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	43	360	PQL	ug/Kg	J (all detects)
SL-037-SA5A-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	120	360	PQL	ug/Kg	J (all detects)
SL-050-SA5A-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	21	370	PQL	ug/Kg	J (all detects)
SL-051-SA5A-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	39	370	PQL	ug/Kg	J (all detects)
SL-322-SA5B-SB-3.0-4.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	22	360	PQL	ug/Kg	J (all detects)
SL-336-SA5B-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	21	380	PQL	ug/Kg	J (all detects)
SL-337-SA5B-SB-3.0-4.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	19	380	PQL	ug/Kg	J (all detects)

Method: 8270C SIM
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-035-SA5A-SS-0.0-0.5	2-METHYLNAPHTHALENE	J	0.78	1.8	PQL	ug/Kg	J (all detects)
	ACENAPHTHYLENE	J	0.35	1.8	PQL	ug/Kg	
	ANTHRACENE	J	0.55	1.8	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	1.6	1.8	PQL	ug/Kg	
	Butylbenzylphthalate	J	8.4	19	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.3	1.8	PQL	ug/Kg	
	NAPHTHALENE	J	0.77	1.8	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE084 **Laboratory: LL**

EDD Filename: DE084_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-036-SA5A-SS-0.0-0.5	ACENAPHTHYLENE	J	0.50	1.8	PQL	ug/Kg	J (all detects)
	ANTHRACENE	J	1.2	1.8	PQL	ug/Kg	
	Butylbenzylphthalate	J	8.2	20	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	0.86	1.8	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.7	1.8	PQL	ug/Kg	
	NAPHTHALENE	J	0.75	1.8	PQL	ug/Kg	
SL-037-SA5A-SS-0.0-0.5	ACENAPHTHYLENE	J	0.56	1.8	PQL	ug/Kg	J (all detects)
	ANTHRACENE	J	1.1	1.8	PQL	ug/Kg	
	Butylbenzylphthalate	J	8.5	19	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	0.99	1.8	PQL	ug/Kg	
	NAPHTHALENE	J	0.81	1.8	PQL	ug/Kg	
SL-040-SA5A-SS-0.0-0.5	ACENAPHTHYLENE	J	0.70	1.8	PQL	ug/Kg	J (all detects)
	ANTHRACENE	J	1.2	1.8	PQL	ug/Kg	
	Butylbenzylphthalate	J	8.6	20	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.2	1.8	PQL	ug/Kg	
	NAPHTHALENE	J	0.90	1.8	PQL	ug/Kg	
SL-051-SA5A-SS-0.0-0.5	ACENAPHTHYLENE	J	0.85	1.8	PQL	ug/Kg	J (all detects)
	BENZO(K)FLUORANTHENE	J	1.5	1.8	PQL	ug/Kg	
	Di-n-octylphthalate	J	11	20	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.7	1.8	PQL	ug/Kg	
SL-336-SA5B-SB-4.0-5.0	BENZO(B)FLUORANTHENE	J	0.76	1.9	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	0.66	1.9	PQL	ug/Kg	
SL-337-SA5B-SB-3.0-4.0	CHRYSENE	J	0.41	1.9	PQL	ug/Kg	J (all detects)

LDC #: 25764H4

SDG #: DE084

Laboratory: Lancaster Laboratories

VALIDATION COMPLETENESS WORKSHEET

ADR

Date: 7/6/14

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Reviewer: OR

2nd Reviewer: A

METHOD: Metals (EPA SW 846 Method 6010B/6020A/7000)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	N	Sampling dates:
II.	ICP/MS Tune	—	
III.	Calibration	—	
IV.	Blanks	SW	
V.	ICP Interference Check Sample (ICS) Analysis	N	
VI.	Matrix Spike Analysis	N	MS/D(Al, Ba, Ca, Fe, Mg, Mn, Ti, Zn >4X)
VII.	Duplicate Sample Analysis	N	Dup(Sb, Se, Ag <5xRL)
VIII.	Laboratory Control Samples (LCS)	A	LCS
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	SW	
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	—	
XV	Field Blanks	—	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: Soil

1	SL-021-SA5A-SS-0.0-0.5	11	SL-331-SA5B-SB-3.0-4.0	21		31	
2	SL-022-SA5A-SS-0.0-0.5	12	SL-336-SA5B-SB-4.0-5.0	22		32	
3	SL-035-SA5A-SS-0.0-0.5	13	SL-337-SA5B-SB-3.0-4.0	23		33	
4	SL-036-SA5A-SS-0.0-0.5	14	(SL-021) MS	24		34	
5	SL-037-SA5A-SS-0.0-0.5	15	MSD	25		35	
6	SL-040-SA5A-SS-0.0-0.5	16	DUP	26		36	
7	SL-050-SA5A-SS-0.0-0.5	17		27		37	
8	SL-051-SA5A-SS-0.0-0.5	18		28		38	
9	SL-321-SA5B-SB-3.0-4.0	19		29		39	
10	SL-322-SA5B-SB-3.0-4.0	20		30		40	

Notes:

LDC #: 25764H4

VALIDATION FINDINGS WORKSHEET
PB/ICB/CCB QUALIFIED SAMPLES

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Reviewer: OR
2nd Reviewer: C

METHOD: Trace metals (EPA SW 864 Method 6010B/6020/7000) Soil preparation factor applied: 100x x MS: 2xdil

Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: 1, 3-5 Reason Code: B

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit	1										
Cd			0.35	0.35	0.29										

Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: 6-13 Reason Code: B

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit	6	7	8	9	11	12	13				
Cd			0.30	0.3	0.20	0.23	0.22	0.067	0.089	0.14	0.10				
Tl			0.10	0.1											

Samples with analyte concentrations within five times the associated ICB, CCB or PB concentration are listed above with the identifications from the Validation Completeness Worksheet. These sample results were qualified as not detected, "U".

Note : a - The listed analyte concentration is the highest ICB, CCB, or PB detected in the analysis of each element.

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 9
SERIAL DILUTIONS
SDG No.: DE084
Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: 6209557BKG Serial Dilution Lab Sample ID: 6209557L
Batch ID(s): P05208B, P05226B
Concentration Units: UG/L

Analyte	Mass	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Diff.	Q	M
Aluminum		133958.7000		145728.8500		9		P
Antimony	121	0.9483	B	1.6085	B	70		MS
Arsenic	75	25.1000		38.0850		52		MS
Barium	137	561.7000		835.5000		49	E	MS
Beryllium	9	3.2200		5.3950		68		MS
Boron		8.9000	U	44.5000	U			P
Calcium		20541.9900		22581.1500		10		P
Chromium	52	94.7400		162.7000		72	E	MS
Cobalt	59	29.7300		49.4200		66	E	MS
Copper	63	48.4600		82.6500		71	E	MS
Iron		173230.3700		173482.7500		0		P
Lead	208	46.1700		70.8500		53	E	MS
Lithium		196.1000		199.6000		2		P
Magnesium		33737.5200		36751.9000		9		P
Manganese		2846.9100		2928.6000		3		P
Molybdenum	98	3.3060		5.3350		61		MS
Nickel	60	62.1800		107.8000		73	E	MS
Phosphorus		3301.6400		3479.0500		5		P
Potassium		28186.3800		30518.4500		8		P
Selenium	78	0.6846	B	1.1500	B	68		MS
Silver	107	0.3152	B	0.4203	B	33		MS
Sodium		725.8200	B	1865.0000	U	100		P
Strontium		182.5400		189.7500		4		P
Tin		23.7700	B	50.0000	U	100		P
Titanium		9915.0700		10465.8000		6		P
Vanadium	51	178.8000		300.0500		68	E	MS
Zinc	66	302.6000		502.0000		66	E	MS
Zirconium		34.3200	B	56.9000	B	66		P

NOTE: An E in column Q indicates the presence of a chemical or physical interference in the matrix when the % difference is greater than 10%. This applies only when (I) is greater than or equal to 50x MDL for ICP, 100x MDL for ICP-MS (6020), 50x MDL for ICP-MS (200.8), or 25x MDL for GFAA.

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry

CONCENTRATION QUALIFIERS: DE084 4668
U= Below MDL
B= Below LOQ
FLAGS:
E = Matrix Effects exist as proven by Serial Dilution or Spiked Dilution

SAMPLE DELIVERY GROUP

DE086

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
18-Feb-2011	SL-049-SA5A-SS-0.0-0.5	6210667	N	3050B	6010B	III
18-Feb-2011	SL-049-SA5A-SS-0.0-0.5	6210667	N	3050B	6020	III
18-Feb-2011	SL-049-SA5A-SS-0.0-0.5	6210667	N	3060A	7199	III
18-Feb-2011	SL-049-SA5A-SS-0.0-0.5	6210667	N	3550B	8081A	III
18-Feb-2011	SL-049-SA5A-SS-0.0-0.5	6210667	N	3550B	8082	III
18-Feb-2011	SL-049-SA5A-SS-0.0-0.5	6210667	N	3550B	8151A	III
18-Feb-2011	SL-049-SA5A-SS-0.0-0.5	6210667	N	3550B	8270C	III
18-Feb-2011	SL-049-SA5A-SS-0.0-0.5	6210667	N	3550B	8270C SIM	III
18-Feb-2011	SL-049-SA5A-SS-0.0-0.5	6210667	N	Gen Prep	9045M	III
18-Feb-2011	SL-049-SA5A-SS-0.0-0.5	6210667	N	METHOD	300.0	III
18-Feb-2011	SL-049-SA5A-SS-0.0-0.5	6210667	N	METHOD	314.0	III
18-Feb-2011	SL-049-SA5A-SS-0.0-0.5	6210667	N	METHOD	7471A	III
18-Feb-2011	SL-100-SA5A-SS-0.0-0.5	6210676	N	3050B	6010B	III
18-Feb-2011	SL-100-SA5A-SS-0.0-0.5	6210676	N	3050B	6020	III
18-Feb-2011	SL-100-SA5A-SS-0.0-0.5	6210676	N	3060A	7199	III
18-Feb-2011	SL-100-SA5A-SS-0.0-0.5	6210676	N	3550B	8081A	III
18-Feb-2011	SL-100-SA5A-SS-0.0-0.5	6210676	N	3550B	8082	III
18-Feb-2011	SL-100-SA5A-SS-0.0-0.5	6210676	N	3550B	8151A	III
18-Feb-2011	SL-100-SA5A-SS-0.0-0.5	6210676	N	3550B	8270C	III
18-Feb-2011	SL-100-SA5A-SS-0.0-0.5	6210676	N	3550B	8270C SIM	III
18-Feb-2011	SL-100-SA5A-SS-0.0-0.5	6210676	N	Gen Prep	9045M	III
18-Feb-2011	SL-100-SA5A-SS-0.0-0.5	6210676	N	METHOD	300.0	III
18-Feb-2011	SL-100-SA5A-SS-0.0-0.5	6210676	N	METHOD	314.0	III
18-Feb-2011	SL-100-SA5A-SS-0.0-0.5	6210676	N	METHOD	7471A	III
18-Feb-2011	SL-100-SA5A-SS-0.0-0.5DUP	P210676D291145A	DUP	Gen Prep	9045M	III
18-Feb-2011	SL-102-SA5A-SS-0.0-0.5	6210678	N	3050B	6010B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
18-Feb-2011	SL-102-SA5A-SS-0.0-0.5	6210678	N	3050B	6020	III
18-Feb-2011	SL-102-SA5A-SS-0.0-0.5	6210678	N	3060A	7199	III
18-Feb-2011	SL-102-SA5A-SS-0.0-0.5	6210678	N	3550B	8081A	III
18-Feb-2011	SL-102-SA5A-SS-0.0-0.5	6210678	N	3550B	8082	III
18-Feb-2011	SL-102-SA5A-SS-0.0-0.5	6210678	N	3550B	8151A	III
18-Feb-2011	SL-102-SA5A-SS-0.0-0.5	6210678	N	3550B	8270C	III
18-Feb-2011	SL-102-SA5A-SS-0.0-0.5	6210678	N	3550B	8270C SIM	III
18-Feb-2011	SL-102-SA5A-SS-0.0-0.5	6210678	N	Gen Prep	9045M	III
18-Feb-2011	SL-102-SA5A-SS-0.0-0.5	6210678	N	METHOD	300.0	III
18-Feb-2011	SL-102-SA5A-SS-0.0-0.5	6210678	N	METHOD	314.0	III
18-Feb-2011	SL-102-SA5A-SS-0.0-0.5	6210678	N	METHOD	7471A	III
18-Feb-2011	SL-101-SA5A-SS-0.0-0.5	6210677	N	3050B	6010B	III
18-Feb-2011	SL-101-SA5A-SS-0.0-0.5	6210677	N	3050B	6020	III
18-Feb-2011	SL-101-SA5A-SS-0.0-0.5	6210677	N	3060A	7199	III
18-Feb-2011	SL-101-SA5A-SS-0.0-0.5	6210677	N	3550B	8081A	III
18-Feb-2011	SL-101-SA5A-SS-0.0-0.5	6210677	N	3550B	8082	III
18-Feb-2011	SL-101-SA5A-SS-0.0-0.5	6210677	N	3550B	8151A	III
18-Feb-2011	SL-101-SA5A-SS-0.0-0.5	6210677	N	3550B	8270C	III
18-Feb-2011	SL-101-SA5A-SS-0.0-0.5	6210677	N	3550B	8270C SIM	III
18-Feb-2011	SL-101-SA5A-SS-0.0-0.5	6210677	N	Gen Prep	9045M	III
18-Feb-2011	SL-101-SA5A-SS-0.0-0.5	6210677	N	METHOD	300.0	III
18-Feb-2011	SL-101-SA5A-SS-0.0-0.5	6210677	N	METHOD	314.0	III
18-Feb-2011	SL-101-SA5A-SS-0.0-0.5	6210677	N	METHOD	7471A	III
18-Feb-2011	DUP01-SA5A-QC-021811	6210666	FD	3050B	6010B	III
18-Feb-2011	DUP01-SA5A-QC-021811	6210666	FD	3050B	6020	III
18-Feb-2011	DUP01-SA5A-QC-021811	6210666	FD	3060A	7199	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
18-Feb-2011	DUP01-SA5A-QC-021811	6210666	FD	3550B	8081A	III
18-Feb-2011	DUP01-SA5A-QC-021811	6210666	FD	3550B	8082	III
18-Feb-2011	DUP01-SA5A-QC-021811	6210666	FD	3550B	8151A	III
18-Feb-2011	DUP01-SA5A-QC-021811	6210666	FD	3550B	8270C	III
18-Feb-2011	DUP01-SA5A-QC-021811	6210666	FD	3550B	8270C SIM	III
18-Feb-2011	DUP01-SA5A-QC-021811	6210666	FD	Gen Prep	9045M	III
18-Feb-2011	DUP01-SA5A-QC-021811	6210666	FD	METHOD	300.0	III
18-Feb-2011	DUP01-SA5A-QC-021811	6210666	FD	METHOD	314.0	III
18-Feb-2011	DUP01-SA5A-QC-021811	6210666	FD	METHOD	7471A	III
18-Feb-2011	SL-099-SA5A-SS-0.0-0.5	6210672	N	3050B	6010B	III
18-Feb-2011	SL-099-SA5A-SS-0.0-0.5	6210672	N	3050B	6020	III
18-Feb-2011	SL-099-SA5A-SS-0.0-0.5	6210672	N	3060A	7199	III
18-Feb-2011	SL-099-SA5A-SS-0.0-0.5	6210672	N	3550B	8081A	III
18-Feb-2011	SL-099-SA5A-SS-0.0-0.5	6210672	N	3550B	8082	III
18-Feb-2011	SL-099-SA5A-SS-0.0-0.5	6210672	N	3550B	8151A	III
18-Feb-2011	SL-099-SA5A-SS-0.0-0.5	6210672	N	3550B	8270C	III
18-Feb-2011	SL-099-SA5A-SS-0.0-0.5	6210672	N	3550B	8270C SIM	III
18-Feb-2011	SL-099-SA5A-SS-0.0-0.5	6210672	N	Gen Prep	9045M	III
18-Feb-2011	SL-099-SA5A-SS-0.0-0.5	6210672	N	METHOD	300.0	III
18-Feb-2011	SL-099-SA5A-SS-0.0-0.5	6210672	N	METHOD	314.0	III
18-Feb-2011	SL-099-SA5A-SS-0.0-0.5	6210672	N	METHOD	6850	III
18-Feb-2011	SL-099-SA5A-SS-0.0-0.5	6210672	N	METHOD	7471A	III
18-Feb-2011	SL-099-SA5A-SS-0.0-0.5MS	6210673	MS	3050B	6010B	III
18-Feb-2011	SL-099-SA5A-SS-0.0-0.5MS	6210673	MS	3050B	6020	III
18-Feb-2011	SL-099-SA5A-SS-0.0-0.5MS	6210673	MS	3060A	7199	III
18-Feb-2011	SL-099-SA5A-SS-0.0-0.5MS	6210673	MS	3550B	8081A	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
18-Feb-2011	SL-099-SA5A-SS-0.0-0.5MS	6210673	MS	3550B	8082	III
18-Feb-2011	SL-099-SA5A-SS-0.0-0.5MS	6210673	MS	3550B	8151A	III
18-Feb-2011	SL-099-SA5A-SS-0.0-0.5MS	6210673	MS	3550B	8270C	III
18-Feb-2011	SL-099-SA5A-SS-0.0-0.5MS	6210673	MS	3550B	8270C SIM	III
18-Feb-2011	SL-099-SA5A-SS-0.0-0.5MS	6210673	MS	METHOD	300.0	III
18-Feb-2011	SL-099-SA5A-SS-0.0-0.5MS	6210673	MS	METHOD	314.0	III
18-Feb-2011	SL-099-SA5A-SS-0.0-0.5MS	6210673	MS	METHOD	6850	III
18-Feb-2011	SL-099-SA5A-SS-0.0-0.5MS	6210673	MS	METHOD	7471A	III
18-Feb-2011	SL-099-SA5A-SS-0.0-0.5MSD	6210674	MSD	3050B	6010B	III
18-Feb-2011	SL-099-SA5A-SS-0.0-0.5MSD	6210674	MSD	3050B	6020	III
18-Feb-2011	SL-099-SA5A-SS-0.0-0.5MSD	6210674	MSD	3550B	8081A	III
18-Feb-2011	SL-099-SA5A-SS-0.0-0.5MSD	6210674	MSD	3550B	8082	III
18-Feb-2011	SL-099-SA5A-SS-0.0-0.5MSD	6210674	MSD	3550B	8151A	III
18-Feb-2011	SL-099-SA5A-SS-0.0-0.5MSD	6210674	MSD	3550B	8270C	III
18-Feb-2011	SL-099-SA5A-SS-0.0-0.5MSD	6210674	MSD	3550B	8270C SIM	III
18-Feb-2011	SL-099-SA5A-SS-0.0-0.5MSD	6210674	MSD	METHOD	6850	III
18-Feb-2011	SL-099-SA5A-SS-0.0-0.5MSD	6210674	MSD	METHOD	7471A	III
18-Feb-2011	SL-099-SA5A-SS-0.0-0.5DUP	6210675	DUP	3050B	6010B	III
18-Feb-2011	SL-099-SA5A-SS-0.0-0.5DUP	6210675	DUP	3050B	6020	III
18-Feb-2011	SL-099-SA5A-SS-0.0-0.5DUP	6210675	DUP	3060A	7199	III
18-Feb-2011	SL-099-SA5A-SS-0.0-0.5DUP	6210675	DUP	Gen Prep	9045M	III
18-Feb-2011	SL-099-SA5A-SS-0.0-0.5DUP	6210675	DUP	METHOD	300.0	III
18-Feb-2011	SL-099-SA5A-SS-0.0-0.5DUP	6210675	DUP	METHOD	314.0	III
18-Feb-2011	SL-099-SA5A-SS-0.0-0.5DUP	6210675	DUP	METHOD	7471A	III
18-Feb-2011	SL-241-SA5A-SS-0.0-0.5	6210679	N	3050B	6010B	III
18-Feb-2011	SL-241-SA5A-SS-0.0-0.5	6210679	N	3050B	6020	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
18-Feb-2011	SL-241-SA5A-SS-0.0-0.5	6210679	N	3060A	7199	III
18-Feb-2011	SL-241-SA5A-SS-0.0-0.5	6210679	N	3550B	8081A	III
18-Feb-2011	SL-241-SA5A-SS-0.0-0.5	6210679	N	3550B	8082	III
18-Feb-2011	SL-241-SA5A-SS-0.0-0.5	6210679	N	3550B	8151A	III
18-Feb-2011	SL-241-SA5A-SS-0.0-0.5	6210679	N	3550B	8270C	III
18-Feb-2011	SL-241-SA5A-SS-0.0-0.5	6210679	N	3550B	8270C SIM	III
18-Feb-2011	SL-241-SA5A-SS-0.0-0.5	6210679	N	Gen Prep	9045M	III
18-Feb-2011	SL-241-SA5A-SS-0.0-0.5	6210679	N	METHOD	300.0	III
18-Feb-2011	SL-241-SA5A-SS-0.0-0.5	6210679	N	METHOD	314.0	III
18-Feb-2011	SL-241-SA5A-SS-0.0-0.5	6210679	N	METHOD	7471A	III
18-Feb-2011	SL-241-SA5A-SS-0.0-0.5DUP	P210679D270626B	DUP	METHOD	314.0	III
18-Feb-2011	SL-241-SA5A-SS-0.0-0.5DUP	P210679D270738B	DUP	METHOD	300.0	III
18-Feb-2011	SL-241-SA5A-SS-0.0-0.5MS	P210679R270650B	MS	METHOD	314.0	III
18-Feb-2011	SL-241-SA5A-SS-0.0-0.5MS	P210679R270753B	MS	METHOD	300.0	III
18-Feb-2011	SL-098-SA5A-SS-0.0-0.5	6210671	N	3050B	6010B	III
18-Feb-2011	SL-098-SA5A-SS-0.0-0.5	6210671	N	3050B	6020	III
18-Feb-2011	SL-098-SA5A-SS-0.0-0.5	6210671	N	3060A	7199	III
18-Feb-2011	SL-098-SA5A-SS-0.0-0.5	6210671	N	3550B	8081A	III
18-Feb-2011	SL-098-SA5A-SS-0.0-0.5	6210671	N	3550B	8082	III
18-Feb-2011	SL-098-SA5A-SS-0.0-0.5	6210671	N	3550B	8151A	III
18-Feb-2011	SL-098-SA5A-SS-0.0-0.5	6210671	N	3550B	8270C	III
18-Feb-2011	SL-098-SA5A-SS-0.0-0.5	6210671	N	3550B	8270C SIM	III
18-Feb-2011	SL-098-SA5A-SS-0.0-0.5	6210671	N	Gen Prep	9045M	III
18-Feb-2011	SL-098-SA5A-SS-0.0-0.5	6210671	N	METHOD	300.0	III
18-Feb-2011	SL-098-SA5A-SS-0.0-0.5	6210671	N	METHOD	314.0	III
18-Feb-2011	SL-098-SA5A-SS-0.0-0.5	6210671	N	METHOD	7471A	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
18-Feb-2011	SL-242-SA5A-SS-0.0-0.5	6210680	N	3050B	6010B	III
18-Feb-2011	SL-242-SA5A-SS-0.0-0.5	6210680	N	3050B	6020	III
18-Feb-2011	SL-242-SA5A-SS-0.0-0.5	6210680	N	3060A	7199	III
18-Feb-2011	SL-242-SA5A-SS-0.0-0.5	6210680	N	3550B	8081A	III
18-Feb-2011	SL-242-SA5A-SS-0.0-0.5	6210680	N	3550B	8082	III
18-Feb-2011	SL-242-SA5A-SS-0.0-0.5	6210680	N	3550B	8151A	III
18-Feb-2011	SL-242-SA5A-SS-0.0-0.5	6210680	N	3550B	8270C	III
18-Feb-2011	SL-242-SA5A-SS-0.0-0.5	6210680	N	3550B	8270C SIM	III
18-Feb-2011	SL-242-SA5A-SS-0.0-0.5	6210680	N	Gen Prep	9045M	III
18-Feb-2011	SL-242-SA5A-SS-0.0-0.5	6210680	N	METHOD	300.0	III
18-Feb-2011	SL-242-SA5A-SS-0.0-0.5	6210680	N	METHOD	314.0	III
18-Feb-2011	SL-242-SA5A-SS-0.0-0.5	6210680	N	METHOD	7471A	III
18-Feb-2011	SL-052-SA5A-SS-0.0-0.5	6210668	N	3050B	6010B	III
18-Feb-2011	SL-052-SA5A-SS-0.0-0.5	6210668	N	3050B	6020	III
18-Feb-2011	SL-052-SA5A-SS-0.0-0.5	6210668	N	3060A	7199	III
18-Feb-2011	SL-052-SA5A-SS-0.0-0.5	6210668	N	3550B	8081A	III
18-Feb-2011	SL-052-SA5A-SS-0.0-0.5	6210668	N	3550B	8082	III
18-Feb-2011	SL-052-SA5A-SS-0.0-0.5	6210668	N	3550B	8151A	III
18-Feb-2011	SL-052-SA5A-SS-0.0-0.5	6210668	N	3550B	8270C	III
18-Feb-2011	SL-052-SA5A-SS-0.0-0.5	6210668	N	3550B	8270C SIM	III
18-Feb-2011	SL-052-SA5A-SS-0.0-0.5	6210668	N	Gen Prep	9045M	III
18-Feb-2011	SL-052-SA5A-SS-0.0-0.5	6210668	N	METHOD	300.0	III
18-Feb-2011	SL-052-SA5A-SS-0.0-0.5	6210668	N	METHOD	314.0	III
18-Feb-2011	SL-052-SA5A-SS-0.0-0.5	6210668	N	METHOD	7471A	III
18-Feb-2011	SL-096-SA5A-SS-0.0-0.5	6210670	N	3050B	6010B	III
18-Feb-2011	SL-096-SA5A-SS-0.0-0.5	6210670	N	3050B	6020	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
18-Feb-2011	SL-096-SA5A-SS-0.0-0.5	6210670	N	3060A	7199	III
18-Feb-2011	SL-096-SA5A-SS-0.0-0.5	6210670	N	3550B	8081A	III
18-Feb-2011	SL-096-SA5A-SS-0.0-0.5	6210670	N	3550B	8082	III
18-Feb-2011	SL-096-SA5A-SS-0.0-0.5	6210670	N	3550B	8151A	III
18-Feb-2011	SL-096-SA5A-SS-0.0-0.5	6210670	N	3550B	8270C	III
18-Feb-2011	SL-096-SA5A-SS-0.0-0.5	6210670	N	3550B	8270C SIM	III
18-Feb-2011	SL-096-SA5A-SS-0.0-0.5	6210670	N	Gen Prep	9045M	III
18-Feb-2011	SL-096-SA5A-SS-0.0-0.5	6210670	N	METHOD	300.0	III
18-Feb-2011	SL-096-SA5A-SS-0.0-0.5	6210670	N	METHOD	314.0	III
18-Feb-2011	SL-096-SA5A-SS-0.0-0.5	6210670	N	METHOD	7471A	III
18-Feb-2011	SL-053-SA5A-SS-0.0-0.5	6210669	N	3050B	6010B	III
18-Feb-2011	SL-053-SA5A-SS-0.0-0.5	6210669	N	3050B	6020	III
18-Feb-2011	SL-053-SA5A-SS-0.0-0.5	6210669	N	3060A	7199	III
18-Feb-2011	SL-053-SA5A-SS-0.0-0.5	6210669	N	3550B	8081A	III
18-Feb-2011	SL-053-SA5A-SS-0.0-0.5	6210669	N	3550B	8082	III
18-Feb-2011	SL-053-SA5A-SS-0.0-0.5	6210669	N	3550B	8151A	III
18-Feb-2011	SL-053-SA5A-SS-0.0-0.5	6210669	N	3550B	8270C	III
18-Feb-2011	SL-053-SA5A-SS-0.0-0.5	6210669	N	3550B	8270C SIM	III
18-Feb-2011	SL-053-SA5A-SS-0.0-0.5	6210669	N	Gen Prep	9045M	III
18-Feb-2011	SL-053-SA5A-SS-0.0-0.5	6210669	N	METHOD	300.0	III
18-Feb-2011	SL-053-SA5A-SS-0.0-0.5	6210669	N	METHOD	314.0	III
18-Feb-2011	SL-053-SA5A-SS-0.0-0.5	6210669	N	METHOD	7471A	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE086 **Laboratory: LL**

EDD Filename: DE086_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: DUP01-SA5A-QC-021811 ***Collected:*** 2/18/2011 10:35:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.5		0.89	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-049-SA5A-SS-0.0-0.5 ***Collected:*** 2/18/2011 8:25:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.4		0.89	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-052-SA5A-SS-0.0-0.5 ***Collected:*** 2/18/2011 11:28:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.6		0.89	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-053-SA5A-SS-0.0-0.5 ***Collected:*** 2/18/2011 1:20:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.5		0.88	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-096-SA5A-SS-0.0-0.5 ***Collected:*** 2/18/2011 12:56:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	0.99	J	0.94	MDL	1.2	PQL	mg/Kg	J	Z, Q

Sample ID: SL-098-SA5A-SS-0.0-0.5 ***Collected:*** 2/18/2011 11:05:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.4		0.91	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-099-SA5A-SS-0.0-0.5 ***Collected:*** 2/18/2011 10:35:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.6		0.88	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-100-SA5A-SS-0.0-0.5 ***Collected:*** 2/18/2011 8:50:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.6		0.95	MDL	1.2	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE086 **Laboratory: LL**

EDD Filename: DE086_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: GENCHEM

Method: 300.0 **Matrix: SO**

Sample ID: SL-101-SA5A-SS-0.0-0.5 *Collected:* 2/18/2011 9:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.5		0.88	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-102-SA5A-SS-0.0-0.5 *Collected:* 2/18/2011 9:18:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.0		0.91	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-241-SA5A-SS-0.0-0.5 *Collected:* 2/18/2011 10:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.7		0.93	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-242-SA5A-SS-0.0-0.5 *Collected:* 2/18/2011 11:18:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.3		0.88	MDL	1.1	PQL	mg/Kg	J	Q

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: DUP01-SA5A-QC-021811 *Collected:* 2/18/2011 10:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.61	J	0.988	MDL	5.55	PQL	mg/Kg	J	Z
POTASSIUM	3260		20.0	MDL	55.5	PQL	mg/Kg	J	Q
SODIUM	80.0	J	41.4	MDL	111	PQL	mg/Kg	J	Z
TIN	2.65	J	1.11	MDL	11.1	PQL	mg/Kg	U	B
Zirconium	3.40	J	0.932	MDL	5.55	PQL	mg/Kg	J	Z

Sample ID: SL-049-SA5A-SS-0.0-0.5 *Collected:* 2/18/2011 8:25:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.87	J	0.976	MDL	5.48	PQL	mg/Kg	J	Z
POTASSIUM	3810		19.7	MDL	54.8	PQL	mg/Kg	J	Q
SODIUM	88.3	J	40.9	MDL	110	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE086 **Laboratory: LL**

EDD Filename: DE086_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: **SL-049-SA5A-SS-0.0-0.5** ***Collected:*** **2/18/2011 8:25:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.45	J	1.10	MDL	11.0	PQL	mg/Kg	U	B
Zirconium	3.25	J	0.921	MDL	5.48	PQL	mg/Kg	J	Z

Sample ID: **SL-052-SA5A-SS-0.0-0.5** ***Collected:*** **2/18/2011 11:28:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.23	J	0.978	MDL	5.49	PQL	mg/Kg	J	Z
POTASSIUM	3910		19.8	MDL	54.9	PQL	mg/Kg	J	Q
SODIUM	93.4	J	41.0	MDL	110	PQL	mg/Kg	J	Z
TIN	2.60	J	1.10	MDL	11.0	PQL	mg/Kg	U	B
Zirconium	3.46	J	0.923	MDL	5.49	PQL	mg/Kg	J	Z

Sample ID: **SL-053-SA5A-SS-0.0-0.5** ***Collected:*** **2/18/2011 1:20:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.18	J	0.946	MDL	5.32	PQL	mg/Kg	J	Z
POTASSIUM	3910		19.1	MDL	53.2	PQL	mg/Kg	J	Q
SODIUM	83.1	J	39.7	MDL	106	PQL	mg/Kg	J	Z
TIN	2.67	J	1.06	MDL	10.6	PQL	mg/Kg	U	B
Zirconium	3.27	J	0.893	MDL	5.32	PQL	mg/Kg	J	Z

Sample ID: **SL-096-SA5A-SS-0.0-0.5** ***Collected:*** **2/18/2011 12:56:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.82	J	1.01	MDL	5.69	PQL	mg/Kg	J	Z
POTASSIUM	3490		20.5	MDL	56.9	PQL	mg/Kg	J	Q
SODIUM	91.3	J	42.5	MDL	114	PQL	mg/Kg	J	Z
TIN	2.72	J	1.14	MDL	11.4	PQL	mg/Kg	U	B
Zirconium	3.10	J	0.956	MDL	5.69	PQL	mg/Kg	J	Z

Sample ID: **SL-098-SA5A-SS-0.0-0.5** ***Collected:*** **2/18/2011 11:05:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.31	J	0.988	MDL	5.55	PQL	mg/Kg	J	Z
POTASSIUM	3370		20.0	MDL	55.5	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE086 **Laboratory: LL**

EDD Filename: DE086_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: **SL-098-SA5A-SS-0.0-0.5** ***Collected:*** **2/18/2011 11:05:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	85.6	J	41.4	MDL	111	PQL	mg/Kg	J	Z
TIN	2.98	J	1.11	MDL	11.1	PQL	mg/Kg	U	B
Zirconium	2.84	J	0.933	MDL	5.55	PQL	mg/Kg	J	Z

Sample ID: **SL-099-SA5A-SS-0.0-0.5** ***Collected:*** **2/18/2011 10:35:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.57	J	0.963	MDL	5.41	PQL	mg/Kg	J	Z
POTASSIUM	3150		19.5	MDL	54.1	PQL	mg/Kg	J	Q
SODIUM	77.2	J	40.4	MDL	108	PQL	mg/Kg	J	Z
TIN	2.62	J	1.08	MDL	10.8	PQL	mg/Kg	U	B
Zirconium	3.42	J	0.909	MDL	5.41	PQL	mg/Kg	J	Z

Sample ID: **SL-100-SA5A-SS-0.0-0.5** ***Collected:*** **2/18/2011 8:50:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.48	J	1.02	MDL	5.74	PQL	mg/Kg	J	Z
POTASSIUM	3660		20.7	MDL	57.4	PQL	mg/Kg	J	Q
SODIUM	84.1	J	42.8	MDL	115	PQL	mg/Kg	J	Z
TIN	2.67	J	1.15	MDL	11.5	PQL	mg/Kg	U	B
Zirconium	2.54	J	0.964	MDL	5.74	PQL	mg/Kg	J	Z

Sample ID: **SL-101-SA5A-SS-0.0-0.5** ***Collected:*** **2/18/2011 9:45:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.50	J	0.956	MDL	5.37	PQL	mg/Kg	J	Z
POTASSIUM	3610		19.3	MDL	53.7	PQL	mg/Kg	J	Q
SODIUM	87.1	J	40.1	MDL	107	PQL	mg/Kg	J	Z
TIN	2.65	J	1.07	MDL	10.7	PQL	mg/Kg	U	B
Zirconium	3.02	J	0.902	MDL	5.37	PQL	mg/Kg	J	Z

Sample ID: **SL-102-SA5A-SS-0.0-0.5** ***Collected:*** **2/18/2011 9:18:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.59	J	0.989	MDL	5.56	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE086 **Laboratory: LL**

EDD Filename: DE086_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-102-SA5A-SS-0.0-0.5 *Collected:* 2/18/2011 9:18:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	3030		20.0	MDL	55.6	PQL	mg/Kg	J	Q
SODIUM	83.3	J	41.5	MDL	111	PQL	mg/Kg	J	Z
TIN	2.45	J	1.11	MDL	11.1	PQL	mg/Kg	U	B
Zirconium	2.72	J	0.934	MDL	5.56	PQL	mg/Kg	J	Z

Sample ID: SL-241-SA5A-SS-0.0-0.5 *Collected:* 2/18/2011 10:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.62	J	1.01	MDL	5.68	PQL	mg/Kg	J	Z
POTASSIUM	3190		20.4	MDL	56.8	PQL	mg/Kg	J	Q
SODIUM	79.9	J	42.4	MDL	114	PQL	mg/Kg	J	Z
TIN	2.67	J	1.14	MDL	11.4	PQL	mg/Kg	U	B
Zirconium	3.13	J	0.954	MDL	5.68	PQL	mg/Kg	J	Z

Sample ID: SL-242-SA5A-SS-0.0-0.5 *Collected:* 2/18/2011 11:18:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.28	J	0.955	MDL	5.36	PQL	mg/Kg	J	Z
POTASSIUM	3820		19.3	MDL	53.6	PQL	mg/Kg	J	Q
SODIUM	94.6	J	40.0	MDL	107	PQL	mg/Kg	J	Z
TIN	2.54	J	1.07	MDL	10.7	PQL	mg/Kg	U	B
Zirconium	3.79	J	0.901	MDL	5.36	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: DUP01-SA5A-QC-021811 *Collected:* 2/18/2011 10:35:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.183	J	0.0444	MDL	0.444	PQL	mg/Kg	U	B

Sample ID: DUP01-SA5A-QC-021811 *Collected:* 2/18/2011 10:35:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.881		0.0555	MDL	0.111	PQL	mg/Kg	J	Q, E

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE086 **Laboratory: LL**

EDD Filename: DE086_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: **DUP01-SA5A-QC-021811** ***Collected:*** **2/18/2011 10:35:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.203	J	0.0666	MDL	0.222	PQL	mg/Kg	UJ	Q, B
ARSENIC	7.14		0.0888	MDL	0.444	PQL	mg/Kg	J	Q
BERYLLIUM	0.942		0.0178	MDL	0.111	PQL	mg/Kg	J	Q
CHROMIUM	26.9		0.133	MDL	0.444	PQL	mg/Kg	J	Q
COBALT	10.4		0.0222	MDL	0.111	PQL	mg/Kg	J	E
COPPER	11.5		0.0733	MDL	0.444	PQL	mg/Kg	J	Q
NICKEL	18.6		0.111	MDL	0.444	PQL	mg/Kg	J	Q
SILVER	0.0822	J	0.0133	MDL	0.111	PQL	mg/Kg	UJ	Q, B
THALLIUM	0.433		0.0333	MDL	0.111	PQL	mg/Kg	UJ	Q, B
VANADIUM	50.7		0.0244	MDL	0.111	PQL	mg/Kg	J	Q

Sample ID: **SL-049-SA5A-SS-0.0-0.5** ***Collected:*** **2/18/2011 8:25:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.152	J	0.0434	MDL	0.434	PQL	mg/Kg	U	B

Sample ID: **SL-049-SA5A-SS-0.0-0.5** ***Collected:*** **2/18/2011 8:25:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.735		0.0543	MDL	0.109	PQL	mg/Kg	J	Q, E

Sample ID: **SL-049-SA5A-SS-0.0-0.5** ***Collected:*** **2/18/2011 8:25:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.137	J	0.0652	MDL	0.217	PQL	mg/Kg	UJ	Q, B
ARSENIC	4.98		0.0869	MDL	0.434	PQL	mg/Kg	J	Q
BERYLLIUM	0.578		0.0174	MDL	0.109	PQL	mg/Kg	J	Q
CHROMIUM	23.0		0.130	MDL	0.434	PQL	mg/Kg	J	Q
COBALT	6.73		0.0217	MDL	0.109	PQL	mg/Kg	J	E
COPPER	12.6		0.0717	MDL	0.434	PQL	mg/Kg	J	Q
NICKEL	16.1		0.109	MDL	0.434	PQL	mg/Kg	J	Q
SILVER	0.0666	J	0.0130	MDL	0.109	PQL	mg/Kg	UJ	Q, B
THALLIUM	0.308		0.0326	MDL	0.109	PQL	mg/Kg	UJ	Q, B
VANADIUM	40.4		0.0239	MDL	0.109	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE086 **Laboratory: LL**

EDD Filename: DE086_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: **SL-052-SA5A-SS-0.0-0.5** ***Collected:*** **2/18/2011 11:28:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.157	J	0.0440	MDL	0.440	PQL	mg/Kg	U	B

Sample ID: **SL-052-SA5A-SS-0.0-0.5** ***Collected:*** **2/18/2011 11:28:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.897		0.0549	MDL	0.110	PQL	mg/Kg	J	Q, E

Sample ID: **SL-052-SA5A-SS-0.0-0.5** ***Collected:*** **2/18/2011 11:28:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.135	J	0.0659	MDL	0.220	PQL	mg/Kg	UJ	Q, B
ARSENIC	6.25		0.0879	MDL	0.440	PQL	mg/Kg	J	Q
BERYLLIUM	0.837		0.0176	MDL	0.110	PQL	mg/Kg	J	Q
CHROMIUM	28.4		0.132	MDL	0.440	PQL	mg/Kg	J	Q
COBALT	8.54		0.0220	MDL	0.110	PQL	mg/Kg	J	E
COPPER	15.6		0.0725	MDL	0.440	PQL	mg/Kg	J	Q
NICKEL	19.8		0.110	MDL	0.440	PQL	mg/Kg	J	Q
SILVER	0.0631	J	0.0132	MDL	0.110	PQL	mg/Kg	UJ	Q, B
THALLIUM	0.393		0.0330	MDL	0.110	PQL	mg/Kg	UJ	Q, B
VANADIUM	49.1		0.0242	MDL	0.110	PQL	mg/Kg	J	Q

Sample ID: **SL-053-SA5A-SS-0.0-0.5** ***Collected:*** **2/18/2011 1:20:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.163	J	0.0421	MDL	0.421	PQL	mg/Kg	U	B

Sample ID: **SL-053-SA5A-SS-0.0-0.5** ***Collected:*** **2/18/2011 1:20:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.739		0.0527	MDL	0.105	PQL	mg/Kg	J	Q, E

Sample ID: **SL-053-SA5A-SS-0.0-0.5** ***Collected:*** **2/18/2011 1:20:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.160	J	0.0632	MDL	0.211	PQL	mg/Kg	UJ	Q, B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE086 **Laboratory: LL**

EDD Filename: DE086_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: **SL-053-SA5A-SS-0.0-0.5** ***Collected:*** **2/18/2011 1:20:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	5.44		0.0843	MDL	0.421	PQL	mg/Kg	J	Q
BERYLLIUM	0.667		0.0169	MDL	0.105	PQL	mg/Kg	J	Q
CHROMIUM	23.8		0.126	MDL	0.421	PQL	mg/Kg	J	Q
COBALT	7.02		0.0211	MDL	0.105	PQL	mg/Kg	J	E
COPPER	13.3		0.0695	MDL	0.421	PQL	mg/Kg	J	Q
NICKEL	17.4		0.105	MDL	0.421	PQL	mg/Kg	J	Q
SILVER	0.0660	J	0.0126	MDL	0.105	PQL	mg/Kg	UJ	Q, B
THALLIUM	0.311		0.0316	MDL	0.105	PQL	mg/Kg	UJ	Q, B
VANADIUM	42.4		0.0232	MDL	0.105	PQL	mg/Kg	J	Q

Sample ID: **SL-096-SA5A-SS-0.0-0.5** ***Collected:*** **2/18/2011 12:56:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.157	J	0.0451	MDL	0.451	PQL	mg/Kg	U	B

Sample ID: **SL-096-SA5A-SS-0.0-0.5** ***Collected:*** **2/18/2011 12:56:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.915		0.0564	MDL	0.113	PQL	mg/Kg	J	Q, E

Sample ID: **SL-096-SA5A-SS-0.0-0.5** ***Collected:*** **2/18/2011 12:56:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.218	J	0.0676	MDL	0.225	PQL	mg/Kg	UJ	Q, B
ARSENIC	6.11		0.0902	MDL	0.451	PQL	mg/Kg	J	Q
BERYLLIUM	0.671		0.0180	MDL	0.113	PQL	mg/Kg	J	Q
CHROMIUM	28.9		0.135	MDL	0.451	PQL	mg/Kg	J	Q
COBALT	10.2		0.0225	MDL	0.113	PQL	mg/Kg	J	E
COPPER	22.2		0.0744	MDL	0.451	PQL	mg/Kg	J	Q
NICKEL	19.5		0.113	MDL	0.451	PQL	mg/Kg	J	Q
SILVER	0.0918	J	0.0135	MDL	0.113	PQL	mg/Kg	UJ	Q, B
THALLIUM	0.357		0.0338	MDL	0.113	PQL	mg/Kg	UJ	Q, B
VANADIUM	51.5		0.0248	MDL	0.113	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE086 **Laboratory: LL**

EDD Filename: DE086_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-098-SA5A-SS-0.0-0.5 *Collected:* 2/18/2011 11:05:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.135	J	0.0444	MDL	0.444	PQL	mg/Kg	U	B

Sample ID: SL-098-SA5A-SS-0.0-0.5 *Collected:* 2/18/2011 11:05:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.830		0.0555	MDL	0.111	PQL	mg/Kg	J	Q, E

Sample ID: SL-098-SA5A-SS-0.0-0.5 *Collected:* 2/18/2011 11:05:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.773		0.0666	MDL	0.222	PQL	mg/Kg	UJ	Q, B
ARSENIC	5.62		0.0888	MDL	0.444	PQL	mg/Kg	J	Q
BERYLLIUM	0.649		0.0178	MDL	0.111	PQL	mg/Kg	J	Q
CHROMIUM	27.3		0.133	MDL	0.444	PQL	mg/Kg	J	Q
COBALT	7.75		0.0222	MDL	0.111	PQL	mg/Kg	J	E
COPPER	15.5		0.0733	MDL	0.444	PQL	mg/Kg	J	Q
NICKEL	18.5		0.111	MDL	0.444	PQL	mg/Kg	J	Q
SILVER	0.251		0.0133	MDL	0.111	PQL	mg/Kg	J	Q
THALLIUM	0.397		0.0333	MDL	0.111	PQL	mg/Kg	UJ	Q, B
VANADIUM	44.7		0.0244	MDL	0.111	PQL	mg/Kg	J	Q

Sample ID: SL-099-SA5A-SS-0.0-0.5 *Collected:* 2/18/2011 10:35:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.159	J	0.0425	MDL	0.425	PQL	mg/Kg	U	B

Sample ID: SL-099-SA5A-SS-0.0-0.5 *Collected:* 2/18/2011 10:35:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.782		0.0531	MDL	0.106	PQL	mg/Kg	J	Q, E

Sample ID: SL-099-SA5A-SS-0.0-0.5 *Collected:* 2/18/2011 10:35:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.124	J	0.0637	MDL	0.212	PQL	mg/Kg	UJ	Q, B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE086 **Laboratory: LL**

EDD Filename: DE086_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: **SL-099-SA5A-SS-0.0-0.5** ***Collected:*** **2/18/2011 10:35:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	6.17		0.0849	MDL	0.425	PQL	mg/Kg	J	Q
BERYLLIUM	0.774		0.0170	MDL	0.106	PQL	mg/Kg	J	Q
CHROMIUM	23.1		0.127	MDL	0.425	PQL	mg/Kg	J	Q
COBALT	17.4		0.0212	MDL	0.106	PQL	mg/Kg	J	E
COPPER	10.2		0.0700	MDL	0.425	PQL	mg/Kg	J	Q
NICKEL	16.7		0.106	MDL	0.425	PQL	mg/Kg	J	Q
SILVER	0.0663	J	0.0127	MDL	0.106	PQL	mg/Kg	UJ	Q, B
THALLIUM	0.334		0.0318	MDL	0.106	PQL	mg/Kg	UJ	Q, B
VANADIUM	42.5		0.0233	MDL	0.106	PQL	mg/Kg	J	Q

Sample ID: **SL-100-SA5A-SS-0.0-0.5** ***Collected:*** **2/18/2011 8:50:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.157	J	0.0468	MDL	0.468	PQL	mg/Kg	U	B

Sample ID: **SL-100-SA5A-SS-0.0-0.5** ***Collected:*** **2/18/2011 8:50:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.789		0.0585	MDL	0.117	PQL	mg/Kg	J	Q, E

Sample ID: **SL-100-SA5A-SS-0.0-0.5** ***Collected:*** **2/18/2011 8:50:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.102	J	0.0702	MDL	0.234	PQL	mg/Kg	UJ	Q, B
ARSENIC	5.23		0.0936	MDL	0.468	PQL	mg/Kg	J	Q
BERYLLIUM	0.602		0.0187	MDL	0.117	PQL	mg/Kg	J	Q
CHROMIUM	22.3		0.140	MDL	0.468	PQL	mg/Kg	J	Q
COBALT	6.94		0.0234	MDL	0.117	PQL	mg/Kg	J	E
COPPER	13.9		0.0772	MDL	0.468	PQL	mg/Kg	J	Q
NICKEL	15.8		0.117	MDL	0.468	PQL	mg/Kg	J	Q
SILVER	0.135		0.0140	MDL	0.117	PQL	mg/Kg	UJ	Q, B
THALLIUM	0.325		0.0351	MDL	0.117	PQL	mg/Kg	UJ	Q, B
VANADIUM	39.4		0.0257	MDL	0.117	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE086 **Laboratory: LL**

EDD Filename: DE086_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-101-SA5A-SS-0.0-0.5 *Collected:* 2/18/2011 9:45:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.146	J	0.0434	MDL	0.434	PQL	mg/Kg	U	B

Sample ID: SL-101-SA5A-SS-0.0-0.5 *Collected:* 2/18/2011 9:45:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.854		0.0542	MDL	0.108	PQL	mg/Kg	J	Q, E

Sample ID: SL-101-SA5A-SS-0.0-0.5 *Collected:* 2/18/2011 9:45:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.123	J	0.0651	MDL	0.217	PQL	mg/Kg	UJ	Q, B
ARSENIC	5.74		0.0868	MDL	0.434	PQL	mg/Kg	J	Q
BERYLLIUM	0.673		0.0174	MDL	0.108	PQL	mg/Kg	J	Q
CHROMIUM	24.9		0.130	MDL	0.434	PQL	mg/Kg	J	Q
COBALT	7.32		0.0217	MDL	0.108	PQL	mg/Kg	J	E
COPPER	12.0		0.0716	MDL	0.434	PQL	mg/Kg	J	Q
NICKEL	16.2		0.108	MDL	0.434	PQL	mg/Kg	J	Q
SILVER	0.0680	J	0.0130	MDL	0.108	PQL	mg/Kg	UJ	Q, B
THALLIUM	0.326		0.0325	MDL	0.108	PQL	mg/Kg	UJ	Q, B
VANADIUM	43.2		0.0239	MDL	0.108	PQL	mg/Kg	J	Q

Sample ID: SL-102-SA5A-SS-0.0-0.5 *Collected:* 2/18/2011 9:18:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.124	J	0.0440	MDL	0.440	PQL	mg/Kg	U	B

Sample ID: SL-102-SA5A-SS-0.0-0.5 *Collected:* 2/18/2011 9:18:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.608		0.0550	MDL	0.110	PQL	mg/Kg	J	Q, E

Sample ID: SL-102-SA5A-SS-0.0-0.5 *Collected:* 2/18/2011 9:18:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.103	J	0.0660	MDL	0.220	PQL	mg/Kg	UJ	Q, B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE086 **Laboratory: LL**

EDD Filename: DE086_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: **SL-102-SA5A-SS-0.0-0.5** ***Collected:*** **2/18/2011 9:18:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	4.92		0.0881	MDL	0.440	PQL	mg/Kg	J	Q
BERYLLIUM	0.625		0.0176	MDL	0.110	PQL	mg/Kg	J	Q
CHROMIUM	19.7		0.132	MDL	0.440	PQL	mg/Kg	J	Q
COBALT	6.30		0.0220	MDL	0.110	PQL	mg/Kg	J	E
COPPER	10.1		0.0727	MDL	0.440	PQL	mg/Kg	J	Q
NICKEL	13.5		0.110	MDL	0.440	PQL	mg/Kg	J	Q
SILVER	0.0872	J	0.0132	MDL	0.110	PQL	mg/Kg	UJ	Q, B
THALLIUM	0.314		0.0330	MDL	0.110	PQL	mg/Kg	UJ	Q, B
VANADIUM	35.6		0.0242	MDL	0.110	PQL	mg/Kg	J	Q

Sample ID: **SL-241-SA5A-SS-0.0-0.5** ***Collected:*** **2/18/2011 10:50:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.234	J	0.0459	MDL	0.459	PQL	mg/Kg	U	B

Sample ID: **SL-241-SA5A-SS-0.0-0.5** ***Collected:*** **2/18/2011 10:50:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.10		0.0574	MDL	0.115	PQL	mg/Kg	J	Q, E

Sample ID: **SL-241-SA5A-SS-0.0-0.5** ***Collected:*** **2/18/2011 10:50:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.276		0.0688	MDL	0.229	PQL	mg/Kg	UJ	Q, B
ARSENIC	9.29		0.0918	MDL	0.459	PQL	mg/Kg	J	Q
BERYLLIUM	0.708		0.0184	MDL	0.115	PQL	mg/Kg	J	Q
CHROMIUM	23.8		0.138	MDL	0.459	PQL	mg/Kg	J	Q
COBALT	7.73		0.0229	MDL	0.115	PQL	mg/Kg	J	E
COPPER	16.7		0.0757	MDL	0.459	PQL	mg/Kg	J	Q
NICKEL	17.4		0.115	MDL	0.459	PQL	mg/Kg	J	Q
SILVER	0.176		0.0138	MDL	0.115	PQL	mg/Kg	J	Q
THALLIUM	0.381		0.0344	MDL	0.115	PQL	mg/Kg	UJ	Q, B
VANADIUM	44.7		0.0252	MDL	0.115	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE086 **Laboratory: LL**

EDD Filename: DE086_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-242-SA5A-SS-0.0-0.5 *Collected:* 2/18/2011 11:18:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.144	J	0.0433	MDL	0.433	PQL	mg/Kg	U	B

Sample ID: SL-242-SA5A-SS-0.0-0.5 *Collected:* 2/18/2011 11:18:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.832		0.0542	MDL	0.108	PQL	mg/Kg	J	Q, E

Sample ID: SL-242-SA5A-SS-0.0-0.5 *Collected:* 2/18/2011 11:18:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0996	J	0.0650	MDL	0.217	PQL	mg/Kg	UJ	Q, B
ARSENIC	5.83		0.0867	MDL	0.433	PQL	mg/Kg	J	Q
BERYLLIUM	0.774		0.0173	MDL	0.108	PQL	mg/Kg	J	Q
CHROMIUM	26.8		0.130	MDL	0.433	PQL	mg/Kg	J	Q
COBALT	8.35		0.0217	MDL	0.108	PQL	mg/Kg	J	E
COPPER	14.9		0.0715	MDL	0.433	PQL	mg/Kg	J	Q
NICKEL	19.6		0.108	MDL	0.433	PQL	mg/Kg	J	Q
SILVER	0.0619	J	0.0130	MDL	0.108	PQL	mg/Kg	UJ	Q, B
THALLIUM	0.382		0.0325	MDL	0.108	PQL	mg/Kg	UJ	Q, B
VANADIUM	47.2		0.0238	MDL	0.108	PQL	mg/Kg	J	Q

Method Category: METALS

Method: 7199 **Matrix: SO**

Sample ID: DUP01-SA5A-QC-021811 *Collected:* 2/18/2011 10:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.27	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-049-SA5A-SS-0.0-0.5 *Collected:* 2/18/2011 8:25:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.34	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE086 **Laboratory: LL**

EDD Filename: DE086_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 7199 **Matrix:** SO

Sample ID: **SL-052-SA5A-SS-0.0-0.5** ***Collected:*** **2/18/2011 11:28:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.71	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: **SL-096-SA5A-SS-0.0-0.5** ***Collected:*** **2/18/2011 12:56:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.99	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: **SL-098-SA5A-SS-0.0-0.5** ***Collected:*** **2/18/2011 11:05:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.67	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: **SL-099-SA5A-SS-0.0-0.5** ***Collected:*** **2/18/2011 10:35:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.58	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: **SL-100-SA5A-SS-0.0-0.5** ***Collected:*** **2/18/2011 8:50:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.44	J	0.24	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: **SL-101-SA5A-SS-0.0-0.5** ***Collected:*** **2/18/2011 9:45:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.60	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: **SL-102-SA5A-SS-0.0-0.5** ***Collected:*** **2/18/2011 9:18:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.51	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: **SL-242-SA5A-SS-0.0-0.5** ***Collected:*** **2/18/2011 11:18:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.36	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE086 **Laboratory: LL**

EDD Filename: DE086_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS
Method: 7199 **Matrix:** SO

Method Category: METALS
Method: 7471A **Matrix:** SO

Sample ID: DUP01-SA5A-QC-021811 *Collected:* 2/18/2011 10:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0030	U	0.0030	MDL	0.105	PQL	mg/Kg	UJ	FD

Sample ID: SL-098-SA5A-SS-0.0-0.5 *Collected:* 2/18/2011 11:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0157	J	0.0032	MDL	0.112	PQL	mg/Kg	J	Z

Sample ID: SL-099-SA5A-SS-0.0-0.5 *Collected:* 2/18/2011 10:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0031	J	0.0030	MDL	0.104	PQL	mg/Kg	J	Z, FD

Sample ID: SL-100-SA5A-SS-0.0-0.5 *Collected:* 2/18/2011 8:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0036	J	0.0033	MDL	0.115	PQL	mg/Kg	J	Z

Sample ID: SL-241-SA5A-SS-0.0-0.5 *Collected:* 2/18/2011 10:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0070	J	0.0032	MDL	0.113	PQL	mg/Kg	J	Z

Method Category: SVOA
Method: 8081A **Matrix:** SO

Sample ID: DUP01-SA5A-QC-021811 *Collected:* 2/18/2011 10:35:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDE	0.14	J	0.073	MDL	0.38	PQL	ug/Kg	J	Z, FD
ENDRIN ALDEHYDE	0.11	J	0.073	MDL	0.38	PQL	ug/Kg	J	Z, FD
ENDRIN KETONE	0.13	J	0.073	MDL	0.38	PQL	ug/Kg	J	Z, FD

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE086 **Laboratory: LL**

EDD Filename: DE086_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8081A **Matrix:** SO

Sample ID: **SL-052-SA5A-SS-0.0-0.5** ***Collected:*** **2/18/2011 11:28:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDE	0.095	J	0.073	MDL	0.38	PQL	ug/Kg	J	Z
4,4'-DDT	0.29	J	0.073	MDL	0.38	PQL	ug/Kg	J	Z
DELTA-BHC	0.11	J	0.040	MDL	0.18	PQL	ug/Kg	J	Z
ENDRIN ALDEHYDE	0.12	J	0.073	MDL	0.38	PQL	ug/Kg	J	Z

Sample ID: **SL-053-SA5A-SS-0.0-0.5** ***Collected:*** **2/18/2011 1:20:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDE	0.13	J	0.072	MDL	0.37	PQL	ug/Kg	J	Z
4,4'-DDT	0.30	J	0.072	MDL	0.37	PQL	ug/Kg	J	Z
ENDRIN ALDEHYDE	0.077	J	0.072	MDL	0.37	PQL	ug/Kg	J	Z

Sample ID: **SL-096-SA5A-SS-0.0-0.5** ***Collected:*** **2/18/2011 12:56:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ENDRIN ALDEHYDE	0.20	J	0.077	MDL	0.40	PQL	ug/Kg	J	Z

Sample ID: **SL-098-SA5A-SS-0.0-0.5** ***Collected:*** **2/18/2011 11:05:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ENDOSULFAN II	0.28	J	0.075	MDL	0.38	PQL	ug/Kg	J	Z

Sample ID: **SL-099-SA5A-SS-0.0-0.5** ***Collected:*** **2/18/2011 10:35:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDE	0.081	J	0.073	MDL	0.37	PQL	ug/Kg	J	Z, Q, FD
4,4'-DDT	0.31	J	0.073	MDL	0.37	PQL	ug/Kg	J	Z, Q
ENDRIN ALDEHYDE	0.073	U	0.073	MDL	0.37	PQL	ug/Kg	UJ	FD
ENDRIN KETONE	0.073	U	0.073	MDL	0.37	PQL	ug/Kg	UJ	FD

Sample ID: **SL-100-SA5A-SS-0.0-0.5** ***Collected:*** **2/18/2011 8:50:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDE	0.44		0.078	MDL	0.40	PQL	ug/Kg	J	S
DELTA-BHC	0.099	J	0.043	MDL	0.20	PQL	ug/Kg	J	Z, S

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE086 **Laboratory: LL**

EDD Filename: DE086_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8081A **Matrix:** SO

Sample ID: **SL-102-SA5A-SS-0.0-0.5** ***Collected:*** **2/18/2011 9:18:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	0.075	U	0.075	MDL	0.39	PQL	ug/Kg	UJ	S
4,4'-DDE	0.075	U	0.075	MDL	0.39	PQL	ug/Kg	UJ	S
4,4'-DDT	0.096	U	0.096	MDL	0.39	PQL	ug/Kg	UJ	S
ALDRIN	0.075	U	0.075	MDL	0.19	PQL	ug/Kg	UJ	S
ALPHA-BHC	0.039	U	0.039	MDL	0.19	PQL	ug/Kg	UJ	S
BETA-BHC	0.068	U	0.068	MDL	0.19	PQL	ug/Kg	UJ	S
Chlordane	0.91	U	0.91	MDL	3.9	PQL	ug/Kg	UJ	S
DELTA-BHC	0.041	U	0.041	MDL	0.19	PQL	ug/Kg	UJ	S
DIELDRIN	0.075	U	0.075	MDL	0.39	PQL	ug/Kg	UJ	S
ENDOSULFAN I	0.050	U	0.050	MDL	0.19	PQL	ug/Kg	UJ	S
ENDOSULFAN II	0.075	U	0.075	MDL	0.39	PQL	ug/Kg	UJ	S
ENDOSULFAN SULFATE	0.075	U	0.075	MDL	0.39	PQL	ug/Kg	UJ	S
ENDRIN	0.075	U	0.075	MDL	0.39	PQL	ug/Kg	UJ	S
ENDRIN ALDEHYDE	0.075	U	0.075	MDL	0.39	PQL	ug/Kg	UJ	S
ENDRIN KETONE	0.075	U	0.075	MDL	0.39	PQL	ug/Kg	UJ	S
gamma-BHC (Lindane)	0.039	U	0.039	MDL	0.19	PQL	ug/Kg	UJ	S
HEPTACHLOR	0.068	U	0.068	MDL	0.19	PQL	ug/Kg	UJ	S
HEPTACHLOR EPOXIDE	0.039	U	0.039	MDL	0.19	PQL	ug/Kg	UJ	S
METHOXYCHLOR	0.39	U	0.39	MDL	1.9	PQL	ug/Kg	UJ	S
MIREX	0.075	U	0.075	MDL	0.39	PQL	ug/Kg	UJ	S
TOXAPHENE	2.5	U	2.5	MDL	7.5	PQL	ug/Kg	UJ	S

Sample ID: **SL-241-SA5A-SS-0.0-0.5** ***Collected:*** **2/18/2011 10:50:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DELTA-BHC	0.068	J	0.042	MDL	0.19	PQL	ug/Kg	J	Z
DIELDRIN	0.23	J	0.076	MDL	0.39	PQL	ug/Kg	J	Z
ENDOSULFAN II	0.18	J	0.076	MDL	0.39	PQL	ug/Kg	J	Z
ENDRIN ALDEHYDE	0.24	J	0.076	MDL	0.39	PQL	ug/Kg	J	Z
MIREX	0.35	J	0.076	MDL	0.39	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE086 **Laboratory: LL**

EDD Filename: DE086_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: DUP01-SA5A-QC-021811 ***Collected:*** 2/18/2011 10:35:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	0.78	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z
AROCLOR 1260	0.56	J	0.43	MDL	1.9	PQL	ug/Kg	J	Z
Aroclor 5432	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L
Aroclor 5460	1.6	J	1.1	MDL	3.7	PQL	ug/Kg	J	Z, L

Sample ID: SL-049-SA5A-SS-0.0-0.5 ***Collected:*** 2/18/2011 8:25:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	0.84	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z
AROCLOR 1260	0.84	J	0.44	MDL	1.9	PQL	ug/Kg	J	Z
Aroclor 5432	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L
Aroclor 5460	1.8	J	1.1	MDL	3.7	PQL	ug/Kg	J	Z, L

Sample ID: SL-052-SA5A-SS-0.0-0.5 ***Collected:*** 2/18/2011 11:28:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	1.2	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z
AROCLOR 1260	1.3	J	0.43	MDL	1.9	PQL	ug/Kg	J	Z
Aroclor 5432	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L
Aroclor 5460	3.0	J	1.1	MDL	3.7	PQL	ug/Kg	J	Z, L

Sample ID: SL-053-SA5A-SS-0.0-0.5 ***Collected:*** 2/18/2011 1:20:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L

Sample ID: SL-096-SA5A-SS-0.0-0.5 ***Collected:*** 2/18/2011 12:56:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	1.2	U	1.2	MDL	3.9	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE086 **Laboratory: LL**

EDD Filename: DE086_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: **SL-096-SA5A-SS-0.0-0.5** ***Collected:*** **2/18/2011 12:56:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5442	1.2	U	1.2	MDL	3.9	PQL	ug/Kg	UJ	L
Aroclor 5460	8.3		1.2	MDL	3.9	PQL	ug/Kg	J	L

Sample ID: **SL-098-SA5A-SS-0.0-0.5** ***Collected:*** **2/18/2011 11:05:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	7.9		0.37	MDL	1.9	PQL	ug/Kg	J	S
AROCLOR 1260	9.1		0.44	MDL	1.9	PQL	ug/Kg	J	S
Aroclor 5432	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L
Aroclor 5460	9.3		1.1	MDL	3.7	PQL	ug/Kg	J	S, L

Sample ID: **SL-099-SA5A-SS-0.0-0.5** ***Collected:*** **2/18/2011 10:35:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	0.75	J	0.36	MDL	1.9	PQL	ug/Kg	J	Z
AROCLOR 1260	0.93	J	0.43	MDL	1.9	PQL	ug/Kg	J	Z
Aroclor 5432	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L
Aroclor 5460	2.0	J	1.1	MDL	3.6	PQL	ug/Kg	J	Z, L

Sample ID: **SL-100-SA5A-SS-0.0-0.5** ***Collected:*** **2/18/2011 8:50:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	1.2	U	1.2	MDL	3.9	PQL	ug/Kg	UJ	L
Aroclor 5442	1.2	U	1.2	MDL	3.9	PQL	ug/Kg	UJ	L
Aroclor 5460	3.8	J	1.2	MDL	3.9	PQL	ug/Kg	J	Z, L

Sample ID: **SL-101-SA5A-SS-0.0-0.5** ***Collected:*** **2/18/2011 9:45:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	1.4	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z
Aroclor 5432	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L
Aroclor 5460	1.5	J	1.1	MDL	3.7	PQL	ug/Kg	J	Z, L

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE086 **Laboratory: LL**

EDD Filename: DE086_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: **SL-102-SA5A-SS-0.0-0.5** ***Collected:*** **2/18/2011 9:18:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L
Aroclor 5460	1.7	J	1.1	MDL	3.7	PQL	ug/Kg	J	Z, L

Sample ID: **SL-241-SA5A-SS-0.0-0.5** ***Collected:*** **2/18/2011 10:50:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	1.2	U	1.2	MDL	3.8	PQL	ug/Kg	UJ	L
Aroclor 5442	1.2	U	1.2	MDL	3.8	PQL	ug/Kg	UJ	L
Aroclor 5460	19		1.2	MDL	3.8	PQL	ug/Kg	J	L

Sample ID: **SL-242-SA5A-SS-0.0-0.5** ***Collected:*** **2/18/2011 11:18:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L

Method Category: SVOA

Method: 8151A **Matrix: SO**

Sample ID: **DUP01-SA5A-QC-021811** ***Collected:*** **2/18/2011 10:35:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MCPA	190	U	190	MDL	280	PQL	ug/Kg	UJ	FD

Sample ID: **SL-052-SA5A-SS-0.0-0.5** ***Collected:*** **2/18/2011 11:28:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DICHLOROPROP	1.3	J	0.89	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: **SL-098-SA5A-SS-0.0-0.5** ***Collected:*** **2/18/2011 11:05:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DICAMBA	0.52	J	0.45	MDL	1.4	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE086 **Laboratory: LL**

EDD Filename: DE086_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8151A **Matrix: SO**

Sample ID: SL-099-SA5A-SS-0.0-0.5 *Collected:* 2/18/2011 10:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MCPA	550		84	MDL	280	PQL	ug/Kg	J	FD

Sample ID: SL-101-SA5A-SS-0.0-0.5 *Collected:* 2/18/2011 9:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DICAMBA	0.86	J	0.44	MDL	1.3	PQL	ug/Kg	J	Z

Sample ID: SL-241-SA5A-SS-0.0-0.5 *Collected:* 2/18/2011 10:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DICAMBA	0.77	J	0.46	MDL	1.4	PQL	ug/Kg	J	Z

Sample ID: SL-242-SA5A-SS-0.0-0.5 *Collected:* 2/18/2011 11:18:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DICAMBA	0.77	J	0.44	MDL	1.3	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8270C **Matrix: SO**

Sample ID: SL-053-SA5A-SS-0.0-0.5 *Collected:* 2/18/2011 1:20:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	27	J	18	MDL	360	PQL	ug/Kg	J	Z, S

Sample ID: SL-096-SA5A-SS-0.0-0.5 *Collected:* 2/18/2011 12:56:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	140	J	19	MDL	190	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	85	J	19	MDL	190	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	66	J	19	MDL	190	PQL	ug/Kg	J	Z
CARBAZOLE	37	J	19	MDL	190	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	22	J	19	MDL	190	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	52	J	19	MDL	190	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE086 **Laboratory: LL**

EDD Filename: DE086_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C **Matrix: SO**

Sample ID: **SL-098-SA5A-SS-0.0-0.5** ***Collected:*** **2/18/2011 11:05:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	150	J	19	MDL	380	PQL	ug/Kg	J	Z
FLUORANTHENE	20	J	19	MDL	190	PQL	ug/Kg	J	Z

Sample ID: **SL-099-SA5A-SS-0.0-0.5** ***Collected:*** **2/18/2011 10:35:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZIDINE	1300	U	1300	MDL	3600	PQL	ug/Kg	R	Q

Sample ID: **SL-241-SA5A-SS-0.0-0.5** ***Collected:*** **2/18/2011 10:50:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	27	J	19	MDL	390	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8270C SIM **Matrix: SO**

Sample ID: **DUP01-SA5A-QC-021811** ***Collected:*** **2/18/2011 10:35:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	1.1	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	0.79	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	13	J	6.7	MDL	20	PQL	ug/Kg	J	Z, FD
Butylbenzylphthalate	9.9	J	6.7	MDL	20	PQL	ug/Kg	J	Z, FD
CHRYSENE	1.1	J	0.37	MDL	1.8	PQL	ug/Kg	J	Z
FLUORANTHENE	1.2	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
PHENANTHRENE	0.82	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z, FD
PYRENE	1.0	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: **SL-049-SA5A-SS-0.0-0.5** ***Collected:*** **2/18/2011 8:25:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)PYRENE	0.76	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	1.8	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	0.81	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
CHRYSENE	1.8	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE086 **Laboratory: LL**

EDD Filename: DE086_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C SIM **Matrix:** SO

Sample ID: **SL-049-SA5A-SS-0.0-0.5** ***Collected:*** **2/18/2011 8:25:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHENANTHRENE	1.2	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
PYRENE	1.6	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: **SL-052-SA5A-SS-0.0-0.5** ***Collected:*** **2/18/2011 11:28:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	11	J	6.7	MDL	20	PQL	ug/Kg	J	Z
Butylbenzylphthalate	9.0	J	6.7	MDL	20	PQL	ug/Kg	J	Z
CHRYSENE	1.5	J	0.37	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: **SL-053-SA5A-SS-0.0-0.5** ***Collected:*** **2/18/2011 1:20:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	0.87	J	0.37	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	1.4	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.6	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
Butylbenzylphthalate	11	J	6.6	MDL	20	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	0.75	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
Di-n-butylphthalate	8.3	J	6.6	MDL	20	PQL	ug/Kg	U	B
Di-n-octylphthalate	8.0	J	6.6	MDL	20	PQL	ug/Kg	J	Z
NAPHTHALENE	1.2	J	0.73	MDL	1.8	PQL	ug/Kg	U	B

Sample ID: **SL-096-SA5A-SS-0.0-0.5** ***Collected:*** **2/18/2011 12:56:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **5**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACENAPHTHYLENE	8.3	J	2.0	MDL	9.8	PQL	ug/Kg	J	Z
Butylbenzylphthalate	51	J	35	MDL	110	PQL	ug/Kg	J	Z
Di-n-butylphthalate	38	J	35	MDL	110	PQL	ug/Kg	U	B
Di-n-octylphthalate	42	J	35	MDL	110	PQL	ug/Kg	J	Z

Sample ID: **SL-098-SA5A-SS-0.0-0.5** ***Collected:*** **2/18/2011 11:05:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **5**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(G,H,I)PERYLENE	4.0	J	3.8	MDL	9.4	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	4.6	J	3.8	MDL	9.4	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE086 **Laboratory: LL**

EDD Filename: DE086_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C SIM **Matrix:** SO

Sample ID: **SL-098-SA5A-SS-0.0-0.5** ***Collected:*** **2/18/2011 11:05:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **5**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Butylbenzylphthalate	57	J	34	MDL	100	PQL	ug/Kg	J	Z
Di-n-butylphthalate	39	J	34	MDL	100	PQL	ug/Kg	U	B
PHENANTHRENE	7.5	J	3.8	MDL	9.4	PQL	ug/Kg	J	Z

Sample ID: **SL-099-SA5A-SS-0.0-0.5** ***Collected:*** **2/18/2011 10:35:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	0.92	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	0.92	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	350		6.6	MDL	20	PQL	ug/Kg	J	FD
Butylbenzylphthalate	6.6	U	6.6	MDL	20	PQL	ug/Kg	UJ	FD
CHRYSENE	1.0	J	0.37	MDL	1.8	PQL	ug/Kg	J	Z
FLUORANTHENE	0.74	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
PHENANTHRENE	0.74	U	0.74	MDL	1.8	PQL	ug/Kg	UJ	FD
PYRENE	0.74	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: **SL-100-SA5A-SS-0.0-0.5** ***Collected:*** **2/18/2011 8:50:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	1.2	J	0.79	MDL	2.0	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.3	J	0.79	MDL	2.0	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.8	J	0.79	MDL	2.0	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	0.99	J	0.79	MDL	2.0	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	17	J	7.1	MDL	21	PQL	ug/Kg	J	Z
Butylbenzylphthalate	12	J	7.1	MDL	21	PQL	ug/Kg	J	Z
FLUORENE	1.2	J	0.79	MDL	2.0	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	1.1	J	0.79	MDL	2.0	PQL	ug/Kg	J	Z

Sample ID: **SL-101-SA5A-SS-0.0-0.5** ***Collected:*** **2/18/2011 9:45:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	0.37	J	0.37	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	1.0	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.1	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	0.94	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE086 **Laboratory: LL**

EDD Filename: DE086_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C SIM **Matrix:** SO

Sample ID: **SL-101-SA5A-SS-0.0-0.5** ***Collected:*** **2/18/2011 9:45:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(K)FLUORANTHENE	0.80	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	15	J	6.6	MDL	20	PQL	ug/Kg	J	Z
Butylbenzylphthalate	10	J	6.6	MDL	20	PQL	ug/Kg	J	Z
FLUORENE	0.92	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	0.92	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: **SL-102-SA5A-SS-0.0-0.5** ***Collected:*** **2/18/2011 9:18:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	0.78	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	0.89	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	0.77	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	14	J	6.8	MDL	20	PQL	ug/Kg	J	Z
CHRYSENE	1.8	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z
PHENANTHRENE	1.4	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
PYRENE	1.8	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: **SL-241-SA5A-SS-0.0-0.5** ***Collected:*** **2/18/2011 10:50:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	0.60	J	0.39	MDL	1.9	PQL	ug/Kg	J	Z
Butylbenzylphthalate	12	J	7.0	MDL	21	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	1.6	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: **SL-242-SA5A-SS-0.0-0.5** ***Collected:*** **2/18/2011 11:18:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	10	J	6.6	MDL	20	PQL	ug/Kg	J	Z
Butylbenzylphthalate	8.9	J	6.6	MDL	20	PQL	ug/Kg	J	Z
Di-n-octylphthalate	7.7	J	6.6	MDL	20	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE086 **Laboratory: LL**

EDD Filename: DE086_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
*#	Professional Judgment
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Verification Correlation Coefficient
C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE086 **Laboratory: LL**

EDD Filename: DE086_v1 **eQAPP Name: CDM_SSFL_110509**

F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation
L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery Lower Estimation

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE086 **Laboratory: LL**

EDD Filename: DE086_v1 **eQAPP Name: CDM_SSFL_110509**

R	Continuing Calibration Verification Percent Recovery Lower Rejection
R	Continuing Calibration Verification Percent Recovery Upper Estimation
R	Continuing Calibration Verification Percent Recovery Upper Rejection
R	Continuing Calibration Verification Relative Response Factor
R	Initial Calibration Relative Response Factor
R	Initial Calibration Verification Percent Recovery Lower Estimation
R	Initial Calibration Verification Percent Recovery Lower Rejection
R	Initial Calibration Verification Percent Recovery Upper Estimation
R	Initial Calibration Verification Percent Recovery Upper Rejection
R	Initial Calibration Verification Relative Response Factor
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control Outlier Reports

DE086

Method Blank Outlier Report

Lab Reporting Batch ID: DE086 **Laboratory: LL**

EDD Filename: DE086_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P05308BB220934	2/23/2011 9:34:00 AM	PHOSPHORUS TIN	1.34 mg/Kg 1.44 mg/Kg	DUP01-SA5A-QC-021811 SL-049-SA5A-SS-0.0-0.5 SL-052-SA5A-SS-0.0-0.5 SL-053-SA5A-SS-0.0-0.5 SL-096-SA5A-SS-0.0-0.5 SL-098-SA5A-SS-0.0-0.5 SL-099-SA5A-SS-0.0-0.5 SL-100-SA5A-SS-0.0-0.5 SL-101-SA5A-SS-0.0-0.5 SL-102-SA5A-SS-0.0-0.5 SL-241-SA5A-SS-0.0-0.5 SL-242-SA5A-SS-0.0-0.5

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
DUP01-SA5A-QC-021811(RES)	TIN	2.65 mg/Kg	2.65U mg/Kg
SL-049-SA5A-SS-0.0-0.5(RES)	TIN	2.45 mg/Kg	2.45U mg/Kg
SL-052-SA5A-SS-0.0-0.5(RES)	TIN	2.60 mg/Kg	2.60U mg/Kg
SL-053-SA5A-SS-0.0-0.5(RES)	TIN	2.67 mg/Kg	2.67U mg/Kg
SL-096-SA5A-SS-0.0-0.5(RES)	TIN	2.72 mg/Kg	2.72U mg/Kg
SL-098-SA5A-SS-0.0-0.5(RES)	TIN	2.98 mg/Kg	2.98U mg/Kg
SL-099-SA5A-SS-0.0-0.5(RES)	TIN	2.62 mg/Kg	2.62U mg/Kg
SL-100-SA5A-SS-0.0-0.5(RES)	TIN	2.67 mg/Kg	2.67U mg/Kg
SL-101-SA5A-SS-0.0-0.5(RES)	TIN	2.65 mg/Kg	2.65U mg/Kg
SL-102-SA5A-SS-0.0-0.5(RES)	TIN	2.45 mg/Kg	2.45U mg/Kg
SL-241-SA5A-SS-0.0-0.5(RES)	TIN	2.67 mg/Kg	2.67U mg/Kg
SL-242-SA5A-SS-0.0-0.5(RES)	TIN	2.54 mg/Kg	2.54U mg/Kg

Method: 6020
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P05326AB221358A	3/3/2011 1:58:00 PM	ANTIMONY BERYLLIUM COBALT COPPER LEAD NICKEL SILVER THALLIUM VANADIUM	0.189 mg/Kg 0.0329 mg/Kg 0.0518 mg/Kg 0.0816 mg/Kg 0.0436 mg/Kg 0.124 mg/Kg 0.0302 mg/Kg 0.0958 mg/Kg 0.0669 mg/Kg	DUP01-SA5A-QC-021811 SL-049-SA5A-SS-0.0-0.5 SL-052-SA5A-SS-0.0-0.5 SL-053-SA5A-SS-0.0-0.5 SL-096-SA5A-SS-0.0-0.5 SL-098-SA5A-SS-0.0-0.5 SL-099-SA5A-SS-0.0-0.5 SL-100-SA5A-SS-0.0-0.5 SL-101-SA5A-SS-0.0-0.5 SL-102-SA5A-SS-0.0-0.5 SL-241-SA5A-SS-0.0-0.5 SL-242-SA5A-SS-0.0-0.5

Method Blank Outlier Report

Lab Reporting Batch ID: DE086 **Laboratory: LL**

EDD Filename: DE086_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **6020**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P05326AB221358B	3/3/2011 1:58:00 PM	SELENIUM	0.0501 mg/Kg	DUP01-SA5A-QC-021811 SL-049-SA5A-SS-0.0-0.5 SL-052-SA5A-SS-0.0-0.5 SL-053-SA5A-SS-0.0-0.5 SL-096-SA5A-SS-0.0-0.5 SL-098-SA5A-SS-0.0-0.5 SL-099-SA5A-SS-0.0-0.5 SL-100-SA5A-SS-0.0-0.5 SL-101-SA5A-SS-0.0-0.5 SL-102-SA5A-SS-0.0-0.5 SL-241-SA5A-SS-0.0-0.5 SL-242-SA5A-SS-0.0-0.5
P05326AB221358C	3/3/2011 1:58:00 PM	MOLYBDENUM	0.0538 mg/Kg	DUP01-SA5A-QC-021811 SL-049-SA5A-SS-0.0-0.5 SL-052-SA5A-SS-0.0-0.5 SL-053-SA5A-SS-0.0-0.5 SL-096-SA5A-SS-0.0-0.5 SL-098-SA5A-SS-0.0-0.5 SL-099-SA5A-SS-0.0-0.5 SL-100-SA5A-SS-0.0-0.5 SL-101-SA5A-SS-0.0-0.5 SL-102-SA5A-SS-0.0-0.5 SL-241-SA5A-SS-0.0-0.5 SL-242-SA5A-SS-0.0-0.5
P05326AB221358D	3/3/2011 1:58:00 PM	BARIUM	0.110 mg/Kg	DUP01-SA5A-QC-021811 SL-049-SA5A-SS-0.0-0.5 SL-052-SA5A-SS-0.0-0.5 SL-053-SA5A-SS-0.0-0.5 SL-096-SA5A-SS-0.0-0.5 SL-098-SA5A-SS-0.0-0.5 SL-099-SA5A-SS-0.0-0.5 SL-100-SA5A-SS-0.0-0.5 SL-101-SA5A-SS-0.0-0.5 SL-102-SA5A-SS-0.0-0.5 SL-241-SA5A-SS-0.0-0.5 SL-242-SA5A-SS-0.0-0.5

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
DUP01-SA5A-QC-021811(REA2)	SELENIUM	0.183 mg/Kg	0.183U mg/Kg
DUP01-SA5A-QC-021811(RES)	ANTIMONY	0.203 mg/Kg	0.203U mg/Kg
DUP01-SA5A-QC-021811(RES)	SILVER	0.0822 mg/Kg	0.0822U mg/Kg
DUP01-SA5A-QC-021811(RES)	THALLIUM	0.433 mg/Kg	0.433U mg/Kg
SL-049-SA5A-SS-0.0-0.5(REA2)	SELENIUM	0.152 mg/Kg	0.152U mg/Kg
SL-049-SA5A-SS-0.0-0.5(RES)	ANTIMONY	0.137 mg/Kg	0.137U mg/Kg
SL-049-SA5A-SS-0.0-0.5(RES)	SILVER	0.0666 mg/Kg	0.0666U mg/Kg
SL-049-SA5A-SS-0.0-0.5(RES)	THALLIUM	0.308 mg/Kg	0.308U mg/Kg
SL-052-SA5A-SS-0.0-0.5(REA2)	SELENIUM	0.157 mg/Kg	0.157U mg/Kg
SL-052-SA5A-SS-0.0-0.5(RES)	ANTIMONY	0.135 mg/Kg	0.135U mg/Kg
SL-052-SA5A-SS-0.0-0.5(RES)	SILVER	0.0631 mg/Kg	0.0631U mg/Kg
SL-052-SA5A-SS-0.0-0.5(RES)	THALLIUM	0.393 mg/Kg	0.393U mg/Kg
SL-053-SA5A-SS-0.0-0.5(REA2)	SELENIUM	0.163 mg/Kg	0.163U mg/Kg

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Method Blank Outlier Report

Lab Reporting Batch ID: DE086 **Laboratory: LL**

EDD Filename: DE086_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **6020**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-053-SA5A-SS-0.0-0.5(RES)	ANTIMONY	0.160 mg/Kg	0.160U mg/Kg
SL-053-SA5A-SS-0.0-0.5(RES)	SILVER	0.0660 mg/Kg	0.0660U mg/Kg
SL-053-SA5A-SS-0.0-0.5(RES)	THALLIUM	0.311 mg/Kg	0.311U mg/Kg
SL-096-SA5A-SS-0.0-0.5(REA2)	SELENIUM	0.157 mg/Kg	0.157U mg/Kg
SL-096-SA5A-SS-0.0-0.5(RES)	ANTIMONY	0.218 mg/Kg	0.218U mg/Kg
SL-096-SA5A-SS-0.0-0.5(RES)	SILVER	0.0918 mg/Kg	0.0918U mg/Kg
SL-096-SA5A-SS-0.0-0.5(RES)	THALLIUM	0.357 mg/Kg	0.357U mg/Kg
SL-098-SA5A-SS-0.0-0.5(REA2)	SELENIUM	0.135 mg/Kg	0.135U mg/Kg
SL-098-SA5A-SS-0.0-0.5(RES)	ANTIMONY	0.773 mg/Kg	0.773U mg/Kg
SL-098-SA5A-SS-0.0-0.5(RES)	THALLIUM	0.397 mg/Kg	0.397U mg/Kg
SL-099-SA5A-SS-0.0-0.5(REA2)	SELENIUM	0.159 mg/Kg	0.159U mg/Kg
SL-099-SA5A-SS-0.0-0.5(RES)	ANTIMONY	0.124 mg/Kg	0.124U mg/Kg
SL-099-SA5A-SS-0.0-0.5(RES)	SILVER	0.0663 mg/Kg	0.0663U mg/Kg
SL-099-SA5A-SS-0.0-0.5(RES)	THALLIUM	0.334 mg/Kg	0.334U mg/Kg
SL-100-SA5A-SS-0.0-0.5(REA2)	SELENIUM	0.157 mg/Kg	0.157U mg/Kg
SL-100-SA5A-SS-0.0-0.5(RES)	ANTIMONY	0.102 mg/Kg	0.102U mg/Kg
SL-100-SA5A-SS-0.0-0.5(RES)	SILVER	0.135 mg/Kg	0.135U mg/Kg
SL-100-SA5A-SS-0.0-0.5(RES)	THALLIUM	0.325 mg/Kg	0.325U mg/Kg
SL-101-SA5A-SS-0.0-0.5(REA2)	SELENIUM	0.146 mg/Kg	0.146U mg/Kg
SL-101-SA5A-SS-0.0-0.5(RES)	ANTIMONY	0.123 mg/Kg	0.123U mg/Kg
SL-101-SA5A-SS-0.0-0.5(RES)	SILVER	0.0680 mg/Kg	0.0680U mg/Kg
SL-101-SA5A-SS-0.0-0.5(RES)	THALLIUM	0.326 mg/Kg	0.326U mg/Kg
SL-102-SA5A-SS-0.0-0.5(REA2)	SELENIUM	0.124 mg/Kg	0.124U mg/Kg
SL-102-SA5A-SS-0.0-0.5(RES)	ANTIMONY	0.103 mg/Kg	0.103U mg/Kg
SL-102-SA5A-SS-0.0-0.5(RES)	SILVER	0.0872 mg/Kg	0.0872U mg/Kg
SL-102-SA5A-SS-0.0-0.5(RES)	THALLIUM	0.314 mg/Kg	0.314U mg/Kg
SL-241-SA5A-SS-0.0-0.5(REA2)	SELENIUM	0.234 mg/Kg	0.234U mg/Kg
SL-241-SA5A-SS-0.0-0.5(RES)	ANTIMONY	0.276 mg/Kg	0.276U mg/Kg
SL-241-SA5A-SS-0.0-0.5(RES)	THALLIUM	0.381 mg/Kg	0.381U mg/Kg
SL-242-SA5A-SS-0.0-0.5(REA2)	SELENIUM	0.144 mg/Kg	0.144U mg/Kg
SL-242-SA5A-SS-0.0-0.5(RES)	ANTIMONY	0.0996 mg/Kg	0.0996U mg/Kg
SL-242-SA5A-SS-0.0-0.5(RES)	SILVER	0.0619 mg/Kg	0.0619U mg/Kg
SL-242-SA5A-SS-0.0-0.5(RES)	THALLIUM	0.382 mg/Kg	0.382U mg/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE086 **Laboratory: LL**

EDD Filename: DE086_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8270C SIM**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKLK05B262220	2/27/2011 10:20:00 PM	Di-n-butylphthalate NAPHTHALENE	6.1 ug/Kg 1.1 ug/Kg	DUP01-SA5A-QC-021811 SL-049-SA5A-SS-0.0-0.5 SL-052-SA5A-SS-0.0-0.5 SL-053-SA5A-SS-0.0-0.5 SL-096-SA5A-SS-0.0-0.5 SL-098-SA5A-SS-0.0-0.5 SL-099-SA5A-SS-0.0-0.5 SL-100-SA5A-SS-0.0-0.5 SL-101-SA5A-SS-0.0-0.5 SL-102-SA5A-SS-0.0-0.5 SL-241-SA5A-SS-0.0-0.5 SL-242-SA5A-SS-0.0-0.5

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-053-SA5A-SS-0.0-0.5(RES)	Di-n-butylphthalate	8.3 ug/Kg	20U ug/Kg
SL-053-SA5A-SS-0.0-0.5(RES)	NAPHTHALENE	1.2 ug/Kg	1.8U ug/Kg
SL-096-SA5A-SS-0.0-0.5(RES)	Di-n-butylphthalate	38 ug/Kg	110U ug/Kg
SL-098-SA5A-SS-0.0-0.5(RES)	Di-n-butylphthalate	39 ug/Kg	100U ug/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE086 **Laboratory: LL**

EDD Filename: DE086_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020

Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-099-SA5A-SS-0.0-0.5MS **SL-099-SA5A-SS-0.0-0.5MSD** (DUP01-SA5A-QC-021811 SL-049-SA5A-SS-0.0-0.5 SL-052-SA5A-SS-0.0-0.5 SL-053-SA5A-SS-0.0-0.5 SL-096-SA5A-SS-0.0-0.5 SL-098-SA5A-SS-0.0-0.5 SL-099-SA5A-SS-0.0-0.5 SL-100-SA5A-SS-0.0-0.5 SL-101-SA5A-SS-0.0-0.5 SL-102-SA5A-SS-0.0-0.5 SL-241-SA5A-SS-0.0-0.5 SL-242-SA5A-SS-0.0-0.5)	ARSENIC BERYLLIUM CHROMIUM COPPER NICKEL SILVER THALLIUM VANADIUM	151 126 152 130 136 134 126 180	- - 134 - 131 128 - 143	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	- - - - - - - -	ARSENIC BERYLLIUM CHROMIUM COPPER NICKEL SILVER THALLIUM VANADIUM	J (all detects)
SL-099-SA5A-SS-0.0-0.5MS **SL-099-SA5A-SS-0.0-0.5MSD** (DUP01-SA5A-QC-021811 SL-049-SA5A-SS-0.0-0.5 SL-052-SA5A-SS-0.0-0.5 SL-053-SA5A-SS-0.0-0.5 SL-096-SA5A-SS-0.0-0.5 SL-098-SA5A-SS-0.0-0.5 SL-099-SA5A-SS-0.0-0.5 SL-100-SA5A-SS-0.0-0.5 SL-101-SA5A-SS-0.0-0.5 SL-102-SA5A-SS-0.0-0.5 SL-241-SA5A-SS-0.0-0.5 SL-242-SA5A-SS-0.0-0.5)	ANTIMONY	46	48	75.00-125.00	-	ANTIMONY	J(all detects) UJ(all non-detects)
SL-099-SA5A-SS-0.0-0.5MS **SL-099-SA5A-SS-0.0-0.5MSD** (DUP01-SA5A-QC-021811 SL-049-SA5A-SS-0.0-0.5 SL-052-SA5A-SS-0.0-0.5 SL-053-SA5A-SS-0.0-0.5 SL-096-SA5A-SS-0.0-0.5 SL-098-SA5A-SS-0.0-0.5 SL-099-SA5A-SS-0.0-0.5 SL-100-SA5A-SS-0.0-0.5 SL-101-SA5A-SS-0.0-0.5 SL-102-SA5A-SS-0.0-0.5 SL-241-SA5A-SS-0.0-0.5 SL-242-SA5A-SS-0.0-0.5)	MOLYBDENUM	133	126	75.00-125.00	-	MOLYBDENUM	J(all detects)
SL-099-SA5A-SS-0.0-0.5MS (DUP01-SA5A-QC-021811 SL-049-SA5A-SS-0.0-0.5 SL-052-SA5A-SS-0.0-0.5 SL-053-SA5A-SS-0.0-0.5 SL-096-SA5A-SS-0.0-0.5 SL-098-SA5A-SS-0.0-0.5 SL-099-SA5A-SS-0.0-0.5 SL-100-SA5A-SS-0.0-0.5 SL-101-SA5A-SS-0.0-0.5 SL-102-SA5A-SS-0.0-0.5 SL-241-SA5A-SS-0.0-0.5 SL-242-SA5A-SS-0.0-0.5)	BARIUM	166	-	75.00-125.00	-	BARIUM	No Qual, >4x

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE086 **Laboratory: LL**

EDD Filename: DE086_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-099-SA5A-SS-0.0-0.5MS **SL-099-SA5A-SS-0.0-0.5MSD** (DUP01-SA5A-QC-021811 SL-049-SA5A-SS-0.0-0.5 SL-052-SA5A-SS-0.0-0.5 SL-053-SA5A-SS-0.0-0.5 SL-096-SA5A-SS-0.0-0.5 SL-098-SA5A-SS-0.0-0.5 SL-099-SA5A-SS-0.0-0.5 SL-100-SA5A-SS-0.0-0.5 SL-101-SA5A-SS-0.0-0.5 SL-102-SA5A-SS-0.0-0.5 SL-241-SA5A-SS-0.0-0.5 SL-242-SA5A-SS-0.0-0.5)	ALUMINUM CALCIUM IRON MAGNESIUM MANGANESE POTASSIUM TITANIUM	2126 170 1931 201 182 128 287	1985 177 1123 210 178 127 278	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	- - - - - - -	ALUMINUM CALCIUM IRON MAGNESIUM MANGANESE POTASSIUM TITANIUM	J(all detects) Al, Ca, Fe, Mg, Mn, Ti No Qual. >4x

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-099-SA5A-SS-0.0-0.5MS **SL-099-SA5A-SS-0.0-0.5MSD** (SL-099-SA5A-SS-0.0-0.5)	BENZIDINE	0	0	35.00-141.00	-	BENZIDINE	J(all detects) R(all non-detects)

Method: 8270C SIM
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-099-SA5A-SS-0.0-0.5MS **SL-099-SA5A-SS-0.0-0.5MSD** (SL-099-SA5A-SS-0.0-0.5)	BIS(2-ETHYLHEXYL)PHTHALAT	-801	-787	39.00-167.00	-	BIS(2-ETHYLHEXYL)PHTHALA	No Qual, >4x

Method: 300.0
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-099-SA5A-SS-0.0-0.5MS (DUP01-SA5A-QC-021811 SL-049-SA5A-SS-0.0-0.5 SL-052-SA5A-SS-0.0-0.5 SL-053-SA5A-SS-0.0-0.5 SL-096-SA5A-SS-0.0-0.5 SL-098-SA5A-SS-0.0-0.5 SL-099-SA5A-SS-0.0-0.5 SL-100-SA5A-SS-0.0-0.5 SL-101-SA5A-SS-0.0-0.5 SL-102-SA5A-SS-0.0-0.5)	FLUORIDE	56	-	80.00-120.00	-	FLUORIDE	J(all detects) UJ(all non-detects)
SL-241-SA5A-SS-0.0-0.5MS (SL-241-SA5A-SS-0.0-0.5 SL-242-SA5A-SS-0.0-0.5)	FLUORIDE	56	-	80.00-120.00	-	FLUORIDE	J(all detects) UJ(all non-detects)

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE086 **Laboratory: LL**

EDD Filename: DE086_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8081A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-099-SA5A-SS-0.0-0.5MSD (SL-099-SA5A-SS-0.0-0.5)	4,4'-DDD	-	-	16.00-163.00	54 (50.00)	4,4'-DDD	J(all detects)
	4,4'-DDE	-	172	18.00-161.00	-	4,4'-DDE	
	4,4'-DDT	-	-	10.00-176.00	52 (50.00)	4,4'-DDT	

Method: 8151A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-099-SA5A-SS-0.0-0.5MSD (SL-099-SA5A-SS-0.0-0.5)	DALAPON	-	-	12.00-86.00	80 (50.00)	DALAPON	J(all detects)
	DINOSEB	-	-	1.00-44.00	63 (35.00)	DINOSEB	

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE086 **Laboratory: LL**

EDD Filename: DE086_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-099-SA5A-SS-0.0-0.5DUP (DUP01-SA5A-QC-021811 SL-049-SA5A-SS-0.0-0.5 SL-052-SA5A-SS-0.0-0.5 SL-053-SA5A-SS-0.0-0.5 SL-096-SA5A-SS-0.0-0.5 SL-098-SA5A-SS-0.0-0.5 SL-099-SA5A-SS-0.0-0.5 SL-100-SA5A-SS-0.0-0.5 SL-101-SA5A-SS-0.0-0.5 SL-102-SA5A-SS-0.0-0.5 SL-241-SA5A-SS-0.0-0.5 SL-242-SA5A-SS-0.0-0.5)	BORON	24	20.00	No Qual OK by difference

Method: 6020
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-099-SA5A-SS-0.0-0.5DUP (DUP01-SA5A-QC-021811 SL-049-SA5A-SS-0.0-0.5 SL-052-SA5A-SS-0.0-0.5 SL-053-SA5A-SS-0.0-0.5 SL-096-SA5A-SS-0.0-0.5 SL-098-SA5A-SS-0.0-0.5 SL-099-SA5A-SS-0.0-0.5 SL-100-SA5A-SS-0.0-0.5 SL-101-SA5A-SS-0.0-0.5 SL-102-SA5A-SS-0.0-0.5 SL-241-SA5A-SS-0.0-0.5 SL-242-SA5A-SS-0.0-0.5)	ANTIMONY	31	20.00	J(all detects) UJ(all non-detects) Sb, Se No Qual OK by difference
	COBALT	84	20.00	
	MOLYBDENUM	22	20.00	
	SELENIUM	31	20.00	

Method: 7471A
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-099-SA5A-SS-0.0-0.5DUP (DUP01-SA5A-QC-021811 SL-049-SA5A-SS-0.0-0.5 SL-052-SA5A-SS-0.0-0.5 SL-053-SA5A-SS-0.0-0.5 SL-096-SA5A-SS-0.0-0.5 SL-098-SA5A-SS-0.0-0.5 SL-099-SA5A-SS-0.0-0.5 SL-100-SA5A-SS-0.0-0.5 SL-101-SA5A-SS-0.0-0.5 SL-102-SA5A-SS-0.0-0.5 SL-241-SA5A-SS-0.0-0.5 SL-242-SA5A-SS-0.0-0.5)	MERCURY	200	20.00	No Qual OK by difference

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE086 **Laboratory: LL**

EDD Filename: DE086_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P05326AQ221401A (DUP01 -SA5A -QC -021811 SL -049 -SA5A -SS -0.0 -0.5 SL -052 -SA5A -SS -0.0 -0.5 SL -053 -SA5A -SS -0.0 -0.5 SL -096 -SA5A -SS -0.0 -0.5 SL -098 -SA5A -SS -0.0 -0.5 SL -099 -SA5A -SS -0.0 -0.5 SL -100 -SA5A -SS -0.0 -0.5 SL -101 -SA5A -SS -0.0 -0.5 SL -102 -SA5A -SS -0.0 -0.5 SL -241 -SA5A -SS -0.0 -0.5 SL -242 -SA5A -SS -0.0 -0.5)	ANTIMONY	73	-	80.00-120.00	-	ANTIMONY	No Qual SRM within QC

Method: 8082
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P10550AQ240849A **P10550AY240830A** (DUP01 -SA5A -QC -021811 SL -049 -SA5A -SS -0.0 -0.5 SL -052 -SA5A -SS -0.0 -0.5 SL -053 -SA5A -SS -0.0 -0.5 SL -096 -SA5A -SS -0.0 -0.5 SL -098 -SA5A -SS -0.0 -0.5 SL -099 -SA5A -SS -0.0 -0.5 SL -100 -SA5A -SS -0.0 -0.5 SL -101 -SA5A -SS -0.0 -0.5 SL -102 -SA5A -SS -0.0 -0.5 SL -241 -SA5A -SS -0.0 -0.5 SL -242 -SA5A -SS -0.0 -0.5)	Aroclor 5442	62	69	75.00-125.00	-	Aroclor 5432, 5442, 5460	J(all detects) UJ(all non-detects)

Surrogate Outlier Report

Lab Reporting Batch ID: DE086 **Laboratory: LL**

EDD Filename: DE086_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8081A
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-100-SA5A-SS-0.0-0.5	DECACHLOROBIPHENYL	183	20.00-120.00	All Target Analytes	J(all detects)
SL-102-SA5A-SS-0.0-0.5	TETRACHLORO-M-XYLENE	26	50.00-130.00	All Target Analytes	J(all detects) UJ(all non-detects)

Method: 8082
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-098-SA5A-SS-0.0-0.5	DECACHLOROBIPHENYL	164	45.00-120.00	All Target Analytes	J(all detects)

Method: 8270C
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-053-SA5A-SS-0.0-0.5	2,4,6-TRIBROMOPHENOL	194	35.00-130.00	All Target Analytes	J (all detects)
	2-FLUOROBIPHENYL	169	45.00-130.00		
	2-FLUOROPHENOL	172	25.00-130.00		
	Nitrobenzene-d5	154	40.00-130.00		
	PHENOL-D6	170	25.00-120.00		
	Terphenyl-d14	158	45.00-135.00		
SL-099-SA5A-SS-0.0-0.5	2,4,6-TRIBROMOPHENOL	147	35.00-130.00	All Target Analytes	J(all detects)
	2-FLUOROBIPHENYL	143	45.00-130.00		
	2-FLUOROPHENOL	143	25.00-130.00		
	PHENOL-D6	138	25.00-120.00		
	Terphenyl-d14	147	45.00-135.00		

Field Duplicate RPD Report

Lab Reporting Batch ID: DE086 **Laboratory: LL**

EDD Filename: DE086_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 160.3M
Matrix: SO

Analyte	Concentration (%) SL-099-SA5A-SS-0.0-0.5	Concentration (%) DUP01-SA5A-QC-021811	Sample RPD	eQAPP RPD	Flag
MOISTURE	9.4	9.9	5		No Qualifiers Applied

Method: 300.0
Matrix: SO

Analyte	Concentration (mg/Kg) SL-099-SA5A-SS-0.0-0.5	Concentration (mg/Kg) DUP01-SA5A-QC-021811	Sample RPD	eQAPP RPD	Flag
FLUORIDE	1.6	1.5	6	50.00	No Qualifiers Applied

Method: 6010B
Matrix: SO

Analyte	Concentration (mg/Kg) SL-099-SA5A-SS-0.0-0.5	Concentration (mg/Kg) DUP01-SA5A-QC-021811	Sample RPD	eQAPP RPD	Flag
ALUMINUM	16300	17700	8	50.00	No Qualifiers Applied
BORON	2.57	2.61	2	50.00	
CALCIUM	2300	2460	7	50.00	
IRON	20200	22100	9	50.00	
LITHIUM	21.8	23.6	8	50.00	
MAGNESIUM	3870	4090	6	50.00	
MANGANESE	298	312	5	50.00	
PHOSPHORUS	333	341	2	50.00	
POTASSIUM	3150	3260	3	50.00	
SODIUM	77.2	80.0	4	50.00	
STRONTIUM	18.8	19.9	6	50.00	
TIN	2.62	2.65	1	50.00	
TITANIUM	988	1070	8	50.00	
Zirconium	3.42	3.40	1	50.00	

Method: 6020
Matrix: SO

Analyte	Concentration (mg/Kg) SL-099-SA5A-SS-0.0-0.5	Concentration (mg/Kg) DUP01-SA5A-QC-021811	Sample RPD	eQAPP RPD	Flag
ANTIMONY	0.124	0.203	48	50.00	No Qualifiers Applied
ARSENIC	6.17	7.14	15	50.00	
BARIUM	126	142	12	50.00	
BERYLLIUM	0.774	0.942	20	50.00	
CADMIUM	0.189	0.220	15	50.00	
CHROMIUM	23.1	26.9	15	50.00	
COBALT	17.4	10.4	50	50.00	
COPPER	10.2	11.5	12	50.00	
LEAD	12.9	13.9	7	50.00	
MOLYBDENUM	0.782	0.881	12	50.00	
NICKEL	16.7	18.6	11	50.00	
SELENIUM	0.159	0.183	14	50.00	
SILVER	0.0663	0.0822	21	50.00	
THALLIUM	0.334	0.433	26	50.00	
VANADIUM	42.5	50.7	18	50.00	
ZINC	54.7	54.1	1	50.00	

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Field Duplicate RPD Report

Lab Reporting Batch ID: DE086 **Laboratory: LL**

EDD Filename: DE086_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7199
Matrix: SO

Analyte	Concentration (mg/Kg) SL-099-SA5A-SS-0.0-0.5	Concentration (mg/Kg) DUP01-SA5A-QC-021811	Sample RPD	eQAPP RPD	Flag
HEXAVALENT CHROMIUM	0.58	0.27	73	50.00	No Qualifiers Applied

Method: 7471A
Matrix: SO

Analyte	Concentration (mg/Kg) SL-099-SA5A-SS-0.0-0.5	Concentration (mg/Kg) DUP01-SA5A-QC-021811	Sample RPD	eQAPP RPD	Flag
MERCURY	0.0031	0.105 U	200	50.00	J(all detects) UJ(all non-detects)

Method: 8081A
Matrix: SO

Analyte	Concentration (ug/Kg) SL-099-SA5A-SS-0.0-0.5	Concentration (ug/Kg) DUP01-SA5A-QC-021811	Sample RPD	eQAPP RPD	Flag
4,4'-DDT	0.31	0.42	30	50.00	No Qualifiers Applied
4,4'-DDE	0.081	0.14	53	50.00	J(all detects) UJ(all non-detects)
ENDRIN ALDEHYDE	0.37 U	0.11	200	50.00	
ENDRIN KETONE	0.37 U	0.13	200	50.00	

Method: 8082
Matrix: SO

Analyte	Concentration (ug/Kg) SL-099-SA5A-SS-0.0-0.5	Concentration (ug/Kg) DUP01-SA5A-QC-021811	Sample RPD	eQAPP RPD	Flag
AROCLOR 1254	0.75	0.78	4	50.00	No Qualifiers Applied
AROCLOR 1260	0.93	0.56	50	50.00	
Aroclor 5460	2.0	1.6	22	50.00	

Method: 8151A
Matrix: SO

Analyte	Concentration (ug/Kg) SL-099-SA5A-SS-0.0-0.5	Concentration (ug/Kg) DUP01-SA5A-QC-021811	Sample RPD	eQAPP RPD	Flag
MCPA	550	280 U	200	50.00	J(all detects) UJ(all non-detects)

Field Duplicate RPD Report

Lab Reporting Batch ID: DE086 **Laboratory: LL**

EDD Filename: DE086_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C SIM
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-099-SA5A-SS-0.0-0.5	DUP01-SA5A-QC-021811			
BENZO(B)FLUORANTHENE	0.92	1.1	18	50.00	No Qualifiers Applied
BENZO(G,H,I)PERYLENE	0.92	0.79	15	50.00	
CHRYSENE	1.0	1.1	10	50.00	
FLUORANTHENE	0.74	1.2	47	50.00	
PYRENE	0.74	1.0	30	50.00	
BIS(2-ETHYLHEXYL)PHTHALATE	350	13	186	50.00	J(all detects) UJ(all non-detects)
Butylbenzylphthalate	20 U	9.9	200	50.00	
PHENANTHRENE	1.8 U	0.82	200	50.00	

Method: 9045M
Matrix: SO

Analyte	Concentration (pH unit)		Sample RPD	eQAPP RPD	Flag
	SL-099-SA5A-SS-0.0-0.5	DUP01-SA5A-QC-021811			
PH	6.93	6.56	5	50.00	No Qualifiers Applied

Method: ASTM D1498
Matrix: SO

Analyte	Concentration (mV)		Sample RPD	eQAPP RPD	Flag
	SL-099-SA5A-SS-0.0-0.5	DUP01-SA5A-QC-021811			
Oxidation Reduction Potential	503	413	20		No Qualifiers Applied

Reporting Limit Outliers

Lab Reporting Batch ID: DE086 **Laboratory: LL**

EDD Filename: DE086_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 300.0
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-096-SA5A-SS-0.0-0.5	FLUORIDE	J	0.99	1.2	PQL	mg/Kg	J (all detects)

Method: 6010B
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP01-SA5A-QC-021811	BORON	J	2.61	5.55	PQL	mg/Kg	J (all detects)
	SODIUM	J	80.0	111	PQL	mg/Kg	
	TIN	J	2.65	11.1	PQL	mg/Kg	
	Zirconium	J	3.40	5.55	PQL	mg/Kg	
SL-049-SA5A-SS-0.0-0.5	BORON	J	1.87	5.48	PQL	mg/Kg	J (all detects)
	SODIUM	J	88.3	110	PQL	mg/Kg	
	TIN	J	2.45	11.0	PQL	mg/Kg	
	Zirconium	J	3.25	5.48	PQL	mg/Kg	
SL-052-SA5A-SS-0.0-0.5	BORON	J	2.23	5.49	PQL	mg/Kg	J (all detects)
	SODIUM	J	93.4	110	PQL	mg/Kg	
	TIN	J	2.60	11.0	PQL	mg/Kg	
	Zirconium	J	3.46	5.49	PQL	mg/Kg	
SL-053-SA5A-SS-0.0-0.5	BORON	J	2.18	5.32	PQL	mg/Kg	J (all detects)
	SODIUM	J	83.1	106	PQL	mg/Kg	
	TIN	J	2.67	10.6	PQL	mg/Kg	
	Zirconium	J	3.27	5.32	PQL	mg/Kg	
SL-096-SA5A-SS-0.0-0.5	BORON	J	2.82	5.69	PQL	mg/Kg	J (all detects)
	SODIUM	J	91.3	114	PQL	mg/Kg	
	TIN	J	2.72	11.4	PQL	mg/Kg	
	Zirconium	J	3.10	5.69	PQL	mg/Kg	
SL-098-SA5A-SS-0.0-0.5	BORON	J	2.31	5.55	PQL	mg/Kg	J (all detects)
	SODIUM	J	85.6	111	PQL	mg/Kg	
	TIN	J	2.98	11.1	PQL	mg/Kg	
	Zirconium	J	2.84	5.55	PQL	mg/Kg	
SL-099-SA5A-SS-0.0-0.5	BORON	J	2.57	5.41	PQL	mg/Kg	J (all detects)
	SODIUM	J	77.2	108	PQL	mg/Kg	
	TIN	J	2.62	10.8	PQL	mg/Kg	
	Zirconium	J	3.42	5.41	PQL	mg/Kg	
SL-100-SA5A-SS-0.0-0.5	BORON	J	2.48	5.74	PQL	mg/Kg	J (all detects)
	SODIUM	J	84.1	115	PQL	mg/Kg	
	TIN	J	2.67	11.5	PQL	mg/Kg	
	Zirconium	J	2.54	5.74	PQL	mg/Kg	
SL-101-SA5A-SS-0.0-0.5	BORON	J	2.50	5.37	PQL	mg/Kg	J (all detects)
	SODIUM	J	87.1	107	PQL	mg/Kg	
	TIN	J	2.65	10.7	PQL	mg/Kg	
	Zirconium	J	3.02	5.37	PQL	mg/Kg	
SL-102-SA5A-SS-0.0-0.5	BORON	J	2.59	5.56	PQL	mg/Kg	J (all detects)
	SODIUM	J	83.3	111	PQL	mg/Kg	
	TIN	J	2.45	11.1	PQL	mg/Kg	
	Zirconium	J	2.72	5.56	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE086 **Laboratory: LL**

EDD Filename: DE086_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-241-SA5A-SS-0.0-0.5	BORON	J	2.62	5.68	PQL	mg/Kg	J (all detects)
	SODIUM	J	79.9	114	PQL	mg/Kg	
	TIN	J	2.67	11.4	PQL	mg/Kg	
	Zirconium	J	3.13	5.68	PQL	mg/Kg	
SL-242-SA5A-SS-0.0-0.5	BORON	J	2.28	5.36	PQL	mg/Kg	J (all detects)
	SODIUM	J	94.6	107	PQL	mg/Kg	
	TIN	J	2.54	10.7	PQL	mg/Kg	
	Zirconium	J	3.79	5.36	PQL	mg/Kg	

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP01-SA5A-QC-021811	ANTIMONY	J	0.203	0.222	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.183	0.444	PQL	mg/Kg	
	SILVER	J	0.0822	0.111	PQL	mg/Kg	
SL-049-SA5A-SS-0.0-0.5	ANTIMONY	J	0.137	0.217	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.152	0.434	PQL	mg/Kg	
	SILVER	J	0.0666	0.109	PQL	mg/Kg	
SL-052-SA5A-SS-0.0-0.5	ANTIMONY	J	0.135	0.220	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.157	0.440	PQL	mg/Kg	
	SILVER	J	0.0631	0.110	PQL	mg/Kg	
SL-053-SA5A-SS-0.0-0.5	ANTIMONY	J	0.160	0.211	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.163	0.421	PQL	mg/Kg	
	SILVER	J	0.0660	0.105	PQL	mg/Kg	
SL-096-SA5A-SS-0.0-0.5	ANTIMONY	J	0.218	0.225	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.157	0.451	PQL	mg/Kg	
	SILVER	J	0.0918	0.113	PQL	mg/Kg	
SL-098-SA5A-SS-0.0-0.5	SELENIUM	J	0.135	0.444	PQL	mg/Kg	J (all detects)
SL-099-SA5A-SS-0.0-0.5	ANTIMONY	J	0.124	0.212	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.159	0.425	PQL	mg/Kg	
	SILVER	J	0.0663	0.106	PQL	mg/Kg	
SL-100-SA5A-SS-0.0-0.5	ANTIMONY	J	0.102	0.234	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.157	0.468	PQL	mg/Kg	
SL-101-SA5A-SS-0.0-0.5	ANTIMONY	J	0.123	0.217	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.146	0.434	PQL	mg/Kg	
	SILVER	J	0.0680	0.108	PQL	mg/Kg	
SL-102-SA5A-SS-0.0-0.5	ANTIMONY	J	0.103	0.220	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.124	0.440	PQL	mg/Kg	
	SILVER	J	0.0872	0.110	PQL	mg/Kg	
SL-241-SA5A-SS-0.0-0.5	SELENIUM	J	0.234	0.459	PQL	mg/Kg	J (all detects)
SL-242-SA5A-SS-0.0-0.5	ANTIMONY	J	0.0996	0.217	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.144	0.433	PQL	mg/Kg	
	SILVER	J	0.0619	0.108	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE086 **Laboratory: LL**

EDD Filename: DE086_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP01-SA5A-QC-021811	HEXAVALENT CHROMIUM	J	0.27	1.1	PQL	mg/Kg	J (all detects)
SL-049-SA5A-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.34	1.1	PQL	mg/Kg	J (all detects)
SL-052-SA5A-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.71	1.1	PQL	mg/Kg	J (all detects)
SL-096-SA5A-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.99	1.2	PQL	mg/Kg	J (all detects)
SL-098-SA5A-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.67	1.1	PQL	mg/Kg	J (all detects)
SL-099-SA5A-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.58	1.1	PQL	mg/Kg	J (all detects)
SL-100-SA5A-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.44	1.2	PQL	mg/Kg	J (all detects)
SL-101-SA5A-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.60	1.1	PQL	mg/Kg	J (all detects)
SL-102-SA5A-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.51	1.1	PQL	mg/Kg	J (all detects)
SL-242-SA5A-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.36	1.1	PQL	mg/Kg	J (all detects)

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-098-SA5A-SS-0.0-0.5	MERCURY	J	0.0157	0.112	PQL	mg/Kg	J (all detects)
SL-099-SA5A-SS-0.0-0.5	MERCURY	J	0.0031	0.104	PQL	mg/Kg	J (all detects)
SL-100-SA5A-SS-0.0-0.5	MERCURY	J	0.0036	0.115	PQL	mg/Kg	J (all detects)
SL-241-SA5A-SS-0.0-0.5	MERCURY	J	0.0070	0.113	PQL	mg/Kg	J (all detects)

Method: 8081A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP01-SA5A-QC-021811	4,4'-DDE	J	0.14	0.38	PQL	ug/Kg	J (all detects)
	ENDRIN ALDEHYDE	J	0.11	0.38	PQL	ug/Kg	
	ENDRIN KETONE	J	0.13	0.38	PQL	ug/Kg	
SL-052-SA5A-SS-0.0-0.5	4,4'-DDE	J	0.095	0.38	PQL	ug/Kg	J (all detects)
	4,4'-DDT	J	0.29	0.38	PQL	ug/Kg	
	DELTA-BHC	J	0.11	0.18	PQL	ug/Kg	
	ENDRIN ALDEHYDE	J	0.12	0.38	PQL	ug/Kg	
SL-053-SA5A-SS-0.0-0.5	4,4'-DDE	J	0.13	0.37	PQL	ug/Kg	J (all detects)
	4,4'-DDT	J	0.30	0.37	PQL	ug/Kg	
	ENDRIN ALDEHYDE	J	0.077	0.37	PQL	ug/Kg	
SL-096-SA5A-SS-0.0-0.5	ENDRIN ALDEHYDE	J	0.20	0.40	PQL	ug/Kg	J (all detects)
SL-098-SA5A-SS-0.0-0.5	ENDOSULFAN II	J	0.28	0.38	PQL	ug/Kg	J (all detects)
SL-099-SA5A-SS-0.0-0.5	4,4'-DDE	J	0.081	0.37	PQL	ug/Kg	J (all detects)
	4,4'-DDT	J	0.31	0.37	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE086 **Laboratory: LL**

EDD Filename: DE086_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8081A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-100-SA5A-SS-0.0-0.5	DELTA-BHC	J	0.099	0.20	PQL	ug/Kg	J (all detects)
SL-241-SA5A-SS-0.0-0.5	DELTA-BHC	J	0.068	0.19	PQL	ug/Kg	J (all detects)
	DIELDRIN	J	0.23	0.39	PQL	ug/Kg	
	ENDOSULFAN II	J	0.18	0.39	PQL	ug/Kg	
	ENDRIN ALDEHYDE	J	0.24	0.39	PQL	ug/Kg	
	MIREX	J	0.35	0.39	PQL	ug/Kg	

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP01-SA5A-QC-021811	AROCLOR 1254	J	0.78	1.9	PQL	ug/Kg	J (all detects)
	AROCLOR 1260	J	0.56	1.9	PQL	ug/Kg	
	Aroclor 5460	J	1.6	3.7	PQL	ug/Kg	
SL-049-SA5A-SS-0.0-0.5	AROCLOR 1254	J	0.84	1.9	PQL	ug/Kg	J (all detects)
	AROCLOR 1260	J	0.84	1.9	PQL	ug/Kg	
	Aroclor 5460	J	1.8	3.7	PQL	ug/Kg	
SL-052-SA5A-SS-0.0-0.5	AROCLOR 1254	J	1.2	1.9	PQL	ug/Kg	J (all detects)
	AROCLOR 1260	J	1.3	1.9	PQL	ug/Kg	
	Aroclor 5460	J	3.0	3.7	PQL	ug/Kg	
SL-099-SA5A-SS-0.0-0.5	AROCLOR 1254	J	0.75	1.9	PQL	ug/Kg	J (all detects)
	AROCLOR 1260	J	0.93	1.9	PQL	ug/Kg	
	Aroclor 5460	J	2.0	3.6	PQL	ug/Kg	
SL-100-SA5A-SS-0.0-0.5	Aroclor 5460	J	3.8	3.9	PQL	ug/Kg	J (all detects)
SL-101-SA5A-SS-0.0-0.5	AROCLOR 1254	J	1.4	1.9	PQL	ug/Kg	J (all detects)
	Aroclor 5460	J	1.5	3.7	PQL	ug/Kg	
SL-102-SA5A-SS-0.0-0.5	Aroclor 5460	J	1.7	3.7	PQL	ug/Kg	J (all detects)

Method: 8151A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-052-SA5A-SS-0.0-0.5	DICHLOROPROP	J	1.3	1.9	PQL	ug/Kg	J (all detects)
SL-098-SA5A-SS-0.0-0.5	DICAMBA	J	0.52	1.4	PQL	ug/Kg	J (all detects)
SL-101-SA5A-SS-0.0-0.5	DICAMBA	J	0.86	1.3	PQL	ug/Kg	J (all detects)
SL-241-SA5A-SS-0.0-0.5	DICAMBA	J	0.77	1.4	PQL	ug/Kg	J (all detects)
SL-242-SA5A-SS-0.0-0.5	DICAMBA	J	0.77	1.3	PQL	ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE086 **Laboratory: LL**

EDD Filename: DE086_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-053-SA5A-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	27	360	PQL	ug/Kg	J (all detects)
SL-096-SA5A-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	140	190	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	85	190	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	66	190	PQL	ug/Kg	
	CARBAZOLE	J	37	190	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	22	190	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	52	190	PQL	ug/Kg	
SL-098-SA5A-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	150	380	PQL	ug/Kg	J (all detects)
	FLUORANTHENE	J	20	190	PQL	ug/Kg	
SL-241-SA5A-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	27	390	PQL	ug/Kg	J (all detects)

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP01-SA5A-QC-021811	BENZO(B)FLUORANTHENE	J	1.1	1.8	PQL	ug/Kg	J (all detects)
	BENZO(G,H,I)PERYLENE	J	0.79	1.8	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	13	20	PQL	ug/Kg	
	Butylbenzylphthalate	J	9.9	20	PQL	ug/Kg	
	CHRYSENE	J	1.1	1.8	PQL	ug/Kg	
	FLUORANTHENE	J	1.2	1.8	PQL	ug/Kg	
	PHENANTHRENE	J	0.82	1.8	PQL	ug/Kg	
	PYRENE	J	1.0	1.8	PQL	ug/Kg	
SL-049-SA5A-SS-0.0-0.5	BENZO(A)PYRENE	J	0.76	1.9	PQL	ug/Kg	J (all detects)
	BENZO(B)FLUORANTHENE	J	1.8	1.9	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	0.81	1.9	PQL	ug/Kg	
	CHRYSENE	J	1.8	1.9	PQL	ug/Kg	
	PHENANTHRENE	J	1.2	1.9	PQL	ug/Kg	
	PYRENE	J	1.6	1.9	PQL	ug/Kg	
SL-052-SA5A-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	11	20	PQL	ug/Kg	J (all detects)
	Butylbenzylphthalate	J	9.0	20	PQL	ug/Kg	
	CHRYSENE	J	1.5	1.8	PQL	ug/Kg	
SL-053-SA5A-SS-0.0-0.5	ANTHRACENE	J	0.87	1.8	PQL	ug/Kg	J (all detects)
	BENZO(A)ANTHRACENE	J	1.4	1.8	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	1.6	1.8	PQL	ug/Kg	
	Butylbenzylphthalate	J	11	20	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	0.75	1.8	PQL	ug/Kg	
	Di-n-butylphthalate	J	8.3	20	PQL	ug/Kg	
	Di-n-octylphthalate	J	8.0	20	PQL	ug/Kg	
	NAPHTHALENE	J	1.2	1.8	PQL	ug/Kg	
SL-096-SA5A-SS-0.0-0.5	ACENAPHTHYLENE	J	8.3	9.8	PQL	ug/Kg	J (all detects)
	Butylbenzylphthalate	J	51	110	PQL	ug/Kg	
	Di-n-butylphthalate	J	38	110	PQL	ug/Kg	
	Di-n-octylphthalate	J	42	110	PQL	ug/Kg	
SL-098-SA5A-SS-0.0-0.5	BENZO(G,H,I)PERYLENE	J	4.0	9.4	PQL	ug/Kg	J (all detects)
	BENZO(K)FLUORANTHENE	J	4.6	9.4	PQL	ug/Kg	
	Butylbenzylphthalate	J	57	100	PQL	ug/Kg	
	Di-n-butylphthalate	J	39	100	PQL	ug/Kg	
	PHENANTHRENE	J	7.5	9.4	PQL	ug/Kg	

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Reporting Limit Outliers

Lab Reporting Batch ID: DE086 **Laboratory: LL**

EDD Filename: DE086_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-099-SA5A-SS-0.0-0.5	BENZO(B)FLUORANTHENE	J	0.92	1.8	PQL	ug/Kg	J (all detects)
	BENZO(G,H,I)PERYLENE	J	0.92	1.8	PQL	ug/Kg	
	CHRYSENE	J	1.0	1.8	PQL	ug/Kg	
	FLUORANTHENE	J	0.74	1.8	PQL	ug/Kg	
	PYRENE	J	0.74	1.8	PQL	ug/Kg	
SL-100-SA5A-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	1.2	2.0	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	1.3	2.0	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.8	2.0	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	0.99	2.0	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	17	21	PQL	ug/Kg	
	Butylbenzylphthalate	J	12	21	PQL	ug/Kg	
	FLUORENE	J	1.2	2.0	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.1	2.0	PQL	ug/Kg	
SL-101-SA5A-SS-0.0-0.5	ANTHRACENE	J	0.37	1.8	PQL	ug/Kg	J (all detects)
	BENZO(A)ANTHRACENE	J	1.0	1.8	PQL	ug/Kg	
	BENZO(A)PYRENE	J	1.1	1.8	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	0.94	1.8	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	0.80	1.8	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	15	20	PQL	ug/Kg	
	Butylbenzylphthalate	J	10	20	PQL	ug/Kg	
	FLUORENE	J	0.92	1.8	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	0.92	1.8	PQL	ug/Kg	
SL-102-SA5A-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	0.78	1.9	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	0.89	1.9	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	0.77	1.9	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	14	20	PQL	ug/Kg	
	CHRYSENE	J	1.8	1.9	PQL	ug/Kg	
	PHENANTHRENE	J	1.4	1.9	PQL	ug/Kg	
	PYRENE	J	1.8	1.9	PQL	ug/Kg	
SL-241-SA5A-SS-0.0-0.5	ANTHRACENE	J	0.60	1.9	PQL	ug/Kg	J (all detects)
	Butylbenzylphthalate	J	12	21	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.6	1.9	PQL	ug/Kg	
SL-242-SA5A-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	10	20	PQL	ug/Kg	J (all detects)
	Butylbenzylphthalate	J	8.9	20	PQL	ug/Kg	
	Di-n-octylphthalate	J	7.7	20	PQL	ug/Kg	

LDC #: 25764M4 **VALIDATION COMPLETENESS WORKSHEET** Date: 7/6/11
SDG #: DE086 ADR Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: Metals (EPA SW 846 Method 6010B/6020A/7000)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	N	Sampling dates:
II.	ICP/MS Tune	—	
III.	Calibration	—	
IV.	Blanks	A	ICB/CCB hits → No Qual
V.	ICP Interference Check Sample (ICS) Analysis	N	
VI.	Matrix Spike Analysis	N	MS/D(Al, Ba, Ca, Fe, Mg, Mn, Ti, ~~Zn~~ >4x)
VII.	Duplicate Sample Analysis	N	Dup(Sb, B, Hg, Se <5xRL)
VIII.	Laboratory Control Samples (LCS)	A	LCS
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	A	
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	—	
XV	Field Blanks	—	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: Soil

1	DUP01-SA5A-QC-021811	11	SL-241-SA5A-SS-0.0-0.05	21		31	
2	SL-049-SA5A-SS-0.0-0.05	12	SL-242-SA5A-SS-0.0-0.05	22		32	
3	SL-052-SA5A-SS-0.0-0.05	13	SL-099-SA5A-SS-0.0-0.05MS	23		33	
4	SL-053-SA5A-SS-0.0-0.05	14	SL-099-SA5A-SS-0.0-0.05MSD	24		34	
5	SL-096-SA5A-SS-0.0-0.05	15	SL-099-SA5A-SS-0.0-0.05DUP	25		35	
6	SL-098-SA5A-SS-0.0-0.05	16		26		36	
7	SL-099-SA5A-SS-0.0-0.05	17		27		37	
8	SL-100-SA5A-SS-0.0-0.05	18		28		38	
9	SL-101-SA5A-SS-0.0-0.05	19		29		39	
10	SL-102-SA5A-SS-0.0-0.05	20		30		40	

Notes:

SAMPLE DELIVERY GROUP

DX087

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
21-Feb-2011	SL-062-SA5A-SS-0.0-0.5	6211471	N	3050B	6010B	III
21-Feb-2011	SL-062-SA5A-SS-0.0-0.5	6211471	N	3050B	6020	III
21-Feb-2011	SL-062-SA5A-SS-0.0-0.5	6211471	N	3060A	7199	III
21-Feb-2011	SL-062-SA5A-SS-0.0-0.5	6211471	N	3550B	8081A	III
21-Feb-2011	SL-062-SA5A-SS-0.0-0.5	6211471	N	3550B	8082	III
21-Feb-2011	SL-062-SA5A-SS-0.0-0.5	6211471	N	3550B	8151A	III
21-Feb-2011	SL-062-SA5A-SS-0.0-0.5	6211471	N	3550B	8270C	III
21-Feb-2011	SL-062-SA5A-SS-0.0-0.5	6211471	N	3550B	8270C SIM	III
21-Feb-2011	SL-062-SA5A-SS-0.0-0.5	6211471	N	Gen Prep	9045M	III
21-Feb-2011	SL-062-SA5A-SS-0.0-0.5	6211471	N	METHOD	300.0	III
21-Feb-2011	SL-062-SA5A-SS-0.0-0.5	6211471	N	METHOD	314.0	III
21-Feb-2011	SL-062-SA5A-SS-0.0-0.5	6211471	N	METHOD	7471A	III
21-Feb-2011	SL-064-SA5A-SS-0.0-0.5	6211473	N	3050B	6010B	III
21-Feb-2011	SL-064-SA5A-SS-0.0-0.5	6211473	N	3050B	6020	III
21-Feb-2011	SL-064-SA5A-SS-0.0-0.5	6211473	N	3060A	7199	III
21-Feb-2011	SL-064-SA5A-SS-0.0-0.5	6211473	N	3550B	8081A	III
21-Feb-2011	SL-064-SA5A-SS-0.0-0.5	6211473	N	3550B	8082	III
21-Feb-2011	SL-064-SA5A-SS-0.0-0.5	6211473	N	3550B	8151A	III
21-Feb-2011	SL-064-SA5A-SS-0.0-0.5	6211473	N	3550B	8270C	III
21-Feb-2011	SL-064-SA5A-SS-0.0-0.5	6211473	N	3550B	8270C SIM	III
21-Feb-2011	SL-064-SA5A-SS-0.0-0.5	6211473	N	Gen Prep	9045M	III
21-Feb-2011	SL-064-SA5A-SS-0.0-0.5	6211473	N	METHOD	300.0	III
21-Feb-2011	SL-064-SA5A-SS-0.0-0.5	6211473	N	METHOD	314.0	III
21-Feb-2011	SL-064-SA5A-SS-0.0-0.5	6211473	N	METHOD	7471A	III
21-Feb-2011	SL-064-SA5A-SS-0.0-0.5DUP	P211473D270047B	DUP	METHOD	314.0	III
21-Feb-2011	SL-064-SA5A-SS-0.0-0.5DUP	P211473D270920B	DUP	METHOD	300.0	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
21-Feb-2011	SL-064-SA5A-SS-0.0-0.5MS	P211473R270111B	MS	METHOD	314.0	III
21-Feb-2011	SL-064-SA5A-SS-0.0-0.5MS	P211473R270934B	MS	METHOD	300.0	III
21-Feb-2011	SL-063-SA5A-SS-0.0-0.5	6211472	N	3050B	6010B	III
21-Feb-2011	SL-063-SA5A-SS-0.0-0.5	6211472	N	3050B	6020	III
21-Feb-2011	SL-063-SA5A-SS-0.0-0.5	6211472	N	3060A	7199	III
21-Feb-2011	SL-063-SA5A-SS-0.0-0.5	6211472	N	3550B	8081A	III
21-Feb-2011	SL-063-SA5A-SS-0.0-0.5	6211472	N	3550B	8082	III
21-Feb-2011	SL-063-SA5A-SS-0.0-0.5	6211472	N	3550B	8151A	III
21-Feb-2011	SL-063-SA5A-SS-0.0-0.5	6211472	N	3550B	8270C	III
21-Feb-2011	SL-063-SA5A-SS-0.0-0.5	6211472	N	3550B	8270C SIM	III
21-Feb-2011	SL-063-SA5A-SS-0.0-0.5	6211472	N	Gen Prep	9045M	III
21-Feb-2011	SL-063-SA5A-SS-0.0-0.5	6211472	N	METHOD	300.0	III
21-Feb-2011	SL-063-SA5A-SS-0.0-0.5	6211472	N	METHOD	314.0	III
21-Feb-2011	SL-063-SA5A-SS-0.0-0.5	6211472	N	METHOD	6850	III
21-Feb-2011	SL-063-SA5A-SS-0.0-0.5	6211472	N	METHOD	7471A	III
21-Feb-2011	SL-063-SA5A-SS-0.0-0.5DUP	P211472D291230B	DUP	Gen Prep	9045M	III
21-Feb-2011	SL-028-SA5A-SB-3.5-4.5	6211476	N	3050B	6010B	III
21-Feb-2011	SL-028-SA5A-SB-3.5-4.5	6211476	N	3050B	6020	III
21-Feb-2011	SL-028-SA5A-SB-3.5-4.5	6211476	N	3060A	7199	III
21-Feb-2011	SL-028-SA5A-SB-3.5-4.5	6211476	N	3546	1625C	III
21-Feb-2011	SL-028-SA5A-SB-3.5-4.5	6211476	N	3550B	8015B	III
21-Feb-2011	SL-028-SA5A-SB-3.5-4.5	6211476	N	3550B	8015M	III
21-Feb-2011	SL-028-SA5A-SB-3.5-4.5	6211476	N	3550B	8082	III
21-Feb-2011	SL-028-SA5A-SB-3.5-4.5	6211476	N	3550B	8270C	III
21-Feb-2011	SL-028-SA5A-SB-3.5-4.5	6211476	N	3550B	8270C SIM	III *
21-Feb-2011	SL-028-SA5A-SB-3.5-4.5	6211476	N	5035	8015M	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
21-Feb-2011	SL-028-SA5A-SB-3.5-4.5	6211476	N	5035	8260B	III
21-Feb-2011	SL-028-SA5A-SB-3.5-4.5	6211476	N	5035	8260B SIM	III
21-Feb-2011	SL-028-SA5A-SB-3.5-4.5	6211476	N	8330	8330A	III
21-Feb-2011	SL-028-SA5A-SB-3.5-4.5	6211476	N	Gen Prep	9045M	III
21-Feb-2011	SL-028-SA5A-SB-3.5-4.5	6211476	N	METHOD	300.0	III
21-Feb-2011	SL-028-SA5A-SB-3.5-4.5	6211476	N	METHOD	314.0	III
21-Feb-2011	SL-028-SA5A-SB-3.5-4.5	6211476	N	METHOD	7471A	III
21-Feb-2011	SL-028-SA5A-SB-3.5-4.5	6211476	N	METHOD	8015B	III
21-Feb-2011	SL-028-SA5A-SB-3.5-4.5	6211476	N	METHOD	8015M	III
21-Feb-2011	SL-028-SA5A-SB-3.5-4.5	6211476	N	METHOD	8315A	III
21-Feb-2011	SL-028-SA5A-SB-3.5-4.5	6211476	N	METHOD	9012B	III
21-Feb-2011	SL-061-SA5A-SS-0.0-0.5	6211470	N	3050B	6010B	III
21-Feb-2011	SL-061-SA5A-SS-0.0-0.5	6211470	N	3050B	6020	III
21-Feb-2011	SL-061-SA5A-SS-0.0-0.5	6211470	N	3060A	7199	III
21-Feb-2011	SL-061-SA5A-SS-0.0-0.5	6211470	N	3550B	8081A	III
21-Feb-2011	SL-061-SA5A-SS-0.0-0.5	6211470	N	3550B	8082	III
21-Feb-2011	SL-061-SA5A-SS-0.0-0.5	6211470	N	3550B	8151A	III
21-Feb-2011	SL-061-SA5A-SS-0.0-0.5	6211470	N	3550B	8270C	III
21-Feb-2011	SL-061-SA5A-SS-0.0-0.5	6211470	N	3550B	8270C SIM	III
21-Feb-2011	SL-061-SA5A-SS-0.0-0.5	6211470	N	Gen Prep	9045M	III
21-Feb-2011	SL-061-SA5A-SS-0.0-0.5	6211470	N	METHOD	300.0	III
21-Feb-2011	SL-061-SA5A-SS-0.0-0.5	6211470	N	METHOD	314.0	III
21-Feb-2011	SL-061-SA5A-SS-0.0-0.5	6211470	N	METHOD	7471A	III
21-Feb-2011	SL-060-SA5A-SS-0.0-0.5	6211469	N	3050B	6010B	III
21-Feb-2011	SL-060-SA5A-SS-0.0-0.5	6211469	N	3050B	6020	III
21-Feb-2011	SL-060-SA5A-SS-0.0-0.5	6211469	N	3060A	7199	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
21-Feb-2011	SL-060-SA5A-SS-0.0-0.5	6211469	N	3550B	8081A	III
21-Feb-2011	SL-060-SA5A-SS-0.0-0.5	6211469	N	3550B	8082	III
21-Feb-2011	SL-060-SA5A-SS-0.0-0.5	6211469	N	3550B	8151A	III
21-Feb-2011	SL-060-SA5A-SS-0.0-0.5	6211469	N	3550B	8270C	III
21-Feb-2011	SL-060-SA5A-SS-0.0-0.5	6211469	N	3550B.	8270C SIM	III
21-Feb-2011	SL-060-SA5A-SS-0.0-0.5	6211469	N	Gen Prep	9045M	III
21-Feb-2011	SL-060-SA5A-SS-0.0-0.5	6211469	N	METHOD	300.0	III
21-Feb-2011	SL-060-SA5A-SS-0.0-0.5	6211469	N	METHOD	314.0	III
21-Feb-2011	SL-060-SA5A-SS-0.0-0.5	6211469	N	METHOD	7471A	III
21-Feb-2011	SL-059-SA5A-SS-0.0-0.5	6211468	N	3050B	6010B	III
21-Feb-2011	SL-059-SA5A-SS-0.0-0.5	6211468	N	3050B	6020	III
21-Feb-2011	SL-059-SA5A-SS-0.0-0.5	6211468	N	3060A	7199	III
21-Feb-2011	SL-059-SA5A-SS-0.0-0.5	6211468	N	3550B	8081A	III
21-Feb-2011	SL-059-SA5A-SS-0.0-0.5	6211468	N	3550B	8082	III
21-Feb-2011	SL-059-SA5A-SS-0.0-0.5	6211468	N	3550B	8151A	III
21-Feb-2011	SL-059-SA5A-SS-0.0-0.5	6211468	N	3550B	8270C	III
21-Feb-2011	SL-059-SA5A-SS-0.0-0.5	6211468	N	3550B	8270C SIM	III
21-Feb-2011	SL-059-SA5A-SS-0.0-0.5	6211468	N	Gen Prep	9045M	III
21-Feb-2011	SL-059-SA5A-SS-0.0-0.5	6211468	N	METHOD	300.0	III
21-Feb-2011	SL-059-SA5A-SS-0.0-0.5	6211468	N	METHOD	314.0	III
21-Feb-2011	SL-059-SA5A-SS-0.0-0.5	6211468	N	METHOD	7471A	III
21-Feb-2011	SL-025-SA5A-SB-4.5-5.5	6211475	N	3050B	6010B	III
21-Feb-2011	SL-025-SA5A-SB-4.5-5.5	6211475	N	3050B	6020	III
21-Feb-2011	SL-025-SA5A-SB-4.5-5.5	6211475	N	3060A	7199	III
21-Feb-2011	SL-025-SA5A-SB-4.5-5.5	6211475	N	3546	1625C	III
21-Feb-2011	SL-025-SA5A-SB-4.5-5.5	6211475	N	3550B	8015B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
21-Feb-2011	SL-025-SA5A-SB-4.5-5.5	6211475	N	3550B	8015M	III
21-Feb-2011	SL-025-SA5A-SB-4.5-5.5	6211475	N	3550B	8082	III
21-Feb-2011	SL-025-SA5A-SB-4.5-5.5	6211475	N	3550B	8270C	III
21-Feb-2011	SL-025-SA5A-SB-4.5-5.5	6211475	N	3550B	8270C SIM	III
21-Feb-2011	SL-025-SA5A-SB-4.5-5.5	6211475	N	5035	8015M	III
21-Feb-2011	SL-025-SA5A-SB-4.5-5.5	6211475	N	5035	8260B	III
21-Feb-2011	SL-025-SA5A-SB-4.5-5.5	6211475	N	5035	8260B SIM	III
21-Feb-2011	SL-025-SA5A-SB-4.5-5.5	6211475	N	8330	8330A	III
21-Feb-2011	SL-025-SA5A-SB-4.5-5.5	6211475	N	Gen Prep	9045M	III
21-Feb-2011	SL-025-SA5A-SB-4.5-5.5	6211475	N	METHOD	300.0	III
21-Feb-2011	SL-025-SA5A-SB-4.5-5.5	6211475	N	METHOD	314.0	III
21-Feb-2011	SL-025-SA5A-SB-4.5-5.5	6211475	N	METHOD	7471A	III
21-Feb-2011	SL-025-SA5A-SB-4.5-5.5	6211475	N	METHOD	8015B	III
21-Feb-2011	SL-025-SA5A-SB-4.5-5.5	6211475	N	METHOD	8015M	III
21-Feb-2011	SL-025-SA5A-SB-4.5-5.5	6211475	N	METHOD	8315A	III
21-Feb-2011	SL-025-SA5A-SB-4.5-5.5	6211475	N	METHOD	9012B	III
21-Feb-2011	SL-025-SA5A-SB-4.5-5.5MSD	P211475M241947A	MSD	METHOD	8315A	III
21-Feb-2011	SL-025-SA5A-SB-4.5-5.5MSD	P211475M261626	MSD	3546	1625C	III
21-Feb-2011	SL-025-SA5A-SB-4.5-5.5MSD	P211475M321615A	MSD	METHOD	8015M	III
21-Feb-2011	SL-025-SA5A-SB-4.5-5.5MS	P211475R241937A	MS	METHOD	8315A	III
21-Feb-2011	SL-025-SA5A-SB-4.5-5.5MS	P211475R261609	MS	3546	1625C	III
21-Feb-2011	SL-025-SA5A-SB-4.5-5.5MS	P211475R321557A	MS	METHOD	8015M	III
21-Feb-2011	SL-057-SA5A-SS-0.0-0.5	6211466	N	3050B	6010B	III
21-Feb-2011	SL-057-SA5A-SS-0.0-0.5	6211466	N	3050B	6020	III
21-Feb-2011	SL-057-SA5A-SS-0.0-0.5	6211466	N	3060A	7199	III
21-Feb-2011	SL-057-SA5A-SS-0.0-0.5	6211466	N	3550B	8081A	III

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Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
21-Feb-2011	SL-057-SA5A-SS-0.0-0.5	6211466	N	3550B	8082	III
21-Feb-2011	SL-057-SA5A-SS-0.0-0.5	6211466	N	3550B	8151A	III
21-Feb-2011	SL-057-SA5A-SS-0.0-0.5	6211466	N	3550B	8270C	III
21-Feb-2011	SL-057-SA5A-SS-0.0-0.5	6211466	N	3550B	8270C SIM	III
21-Feb-2011	SL-057-SA5A-SS-0.0-0.5	6211466	N	Gen Prep	9045M	III
21-Feb-2011	SL-057-SA5A-SS-0.0-0.5	6211466	N	METHOD	300.0	III
21-Feb-2011	SL-057-SA5A-SS-0.0-0.5	6211466	N	METHOD	314.0	III
21-Feb-2011	SL-057-SA5A-SS-0.0-0.5	6211466	N	METHOD	7471A	III
21-Feb-2011	SL-058-SA5A-SS-0.0-0.5	6211467	N	3050B	6010B	III
21-Feb-2011	SL-058-SA5A-SS-0.0-0.5	6211467	N	3050B	6020	III
21-Feb-2011	SL-058-SA5A-SS-0.0-0.5	6211467	N	3060A	7199	III
21-Feb-2011	SL-058-SA5A-SS-0.0-0.5	6211467	N	3550B	8081A	III
21-Feb-2011	SL-058-SA5A-SS-0.0-0.5	6211467	N	3550B	8082	III
21-Feb-2011	SL-058-SA5A-SS-0.0-0.5	6211467	N	3550B	8151A	III
21-Feb-2011	SL-058-SA5A-SS-0.0-0.5	6211467	N	3550B	8270C	III
21-Feb-2011	SL-058-SA5A-SS-0.0-0.5	6211467	N	3550B	8270C SIM	III
21-Feb-2011	SL-058-SA5A-SS-0.0-0.5	6211467	N	Gen Prep	9045M	III
21-Feb-2011	SL-058-SA5A-SS-0.0-0.5	6211467	N	METHOD	300.0	III
21-Feb-2011	SL-058-SA5A-SS-0.0-0.5	6211467	N	METHOD	314.0	III
21-Feb-2011	SL-058-SA5A-SS-0.0-0.5	6211467	N	METHOD	7471A	III
21-Feb-2011	SL-056-SA5A-SS-0.0-0.5	6211465	N	3050B	6010B	III
21-Feb-2011	SL-056-SA5A-SS-0.0-0.5	6211465	N	3050B	6020	III
21-Feb-2011	SL-056-SA5A-SS-0.0-0.5	6211465	N	3060A	7199	III
21-Feb-2011	SL-056-SA5A-SS-0.0-0.5	6211465	N	3550B	8081A	III
21-Feb-2011	SL-056-SA5A-SS-0.0-0.5	6211465	N	3550B	8082	III
21-Feb-2011	SL-056-SA5A-SS-0.0-0.5	6211465	N	3550B	8151A	III

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IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
21-Feb-2011	SL-056-SA5A-SS-0.0-0.5	6211465	N	3550B	8270C	III
21-Feb-2011	SL-056-SA5A-SS-0.0-0.5	6211465	N	3550B	8270C SIM	III
21-Feb-2011	SL-056-SA5A-SS-0.0-0.5	6211465	N	Gen Prep	9045M	III
21-Feb-2011	SL-056-SA5A-SS-0.0-0.5	6211465	N	METHOD	300.0	III
21-Feb-2011	SL-056-SA5A-SS-0.0-0.5	6211465	N	METHOD	314.0	III
21-Feb-2011	SL-056-SA5A-SS-0.0-0.5	6211465	N	METHOD	7471A	III
21-Feb-2011	SL-055-SA5A-SS-0.0-0.5	6211464	N	3050B	6010B	III
21-Feb-2011	SL-055-SA5A-SS-0.0-0.5	6211464	N	3050B	6020	III
21-Feb-2011	SL-055-SA5A-SS-0.0-0.5	6211464	N	3060A	7199	III
21-Feb-2011	SL-055-SA5A-SS-0.0-0.5	6211464	N	3550B	8081A	III
21-Feb-2011	SL-055-SA5A-SS-0.0-0.5	6211464	N	3550B	8082	III
21-Feb-2011	SL-055-SA5A-SS-0.0-0.5	6211464	N	3550B	8151A	III
21-Feb-2011	SL-055-SA5A-SS-0.0-0.5	6211464	N	3550B	8270C	III
21-Feb-2011	SL-055-SA5A-SS-0.0-0.5	6211464	N	3550B	8270C SIM	III
21-Feb-2011	SL-055-SA5A-SS-0.0-0.5	6211464	N	Gen Prep	9045M	III
21-Feb-2011	SL-055-SA5A-SS-0.0-0.5	6211464	N	METHOD	300.0	III
21-Feb-2011	SL-055-SA5A-SS-0.0-0.5	6211464	N	METHOD	314.0	III
21-Feb-2011	SL-055-SA5A-SS-0.0-0.5	6211464	N	METHOD	6850	III
21-Feb-2011	SL-055-SA5A-SS-0.0-0.5	6211464	N	METHOD	7471A	III
21-Feb-2011	SL-054-SA5A-SS-0.0-0.5	6211463	N	3050B	6010B	III
21-Feb-2011	SL-054-SA5A-SS-0.0-0.5	6211463	N	3050B	6020	III
21-Feb-2011	SL-054-SA5A-SS-0.0-0.5	6211463	N	3060A	7199	III
21-Feb-2011	SL-054-SA5A-SS-0.0-0.5	6211463	N	3550B	8081A	III
21-Feb-2011	SL-054-SA5A-SS-0.0-0.5	6211463	N	3550B	8082	III
21-Feb-2011	SL-054-SA5A-SS-0.0-0.5	6211463	N	3550B	8151A	III
21-Feb-2011	SL-054-SA5A-SS-0.0-0.5	6211463	N	3550B	8270C	III

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Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
21-Feb-2011	SL-054-SA5A-SS-0.0-0.5	6211463	N	3550B	8270C SIM	III
21-Feb-2011	SL-054-SA5A-SS-0.0-0.5	6211463	N	Gen Prep	9045M	III
21-Feb-2011	SL-054-SA5A-SS-0.0-0.5	6211463	N	METHOD	300.0	III
21-Feb-2011	SL-054-SA5A-SS-0.0-0.5	6211463	N	METHOD	314.0	III
21-Feb-2011	SL-054-SA5A-SS-0.0-0.5	6211463	N	METHOD	7471A	III
21-Feb-2011	SL-054-SA5A-SS-0.0-0.5DUP	P211463D220848	DUP	METHOD	7471A	III
21-Feb-2011	SL-054-SA5A-SS-0.0-0.5DUP	P211463D221509A	DUP	3050B	6020	III
21-Feb-2011	SL-054-SA5A-SS-0.0-0.5DUP	P211463D221536B	DUP	3050B	6020	III
21-Feb-2011	SL-054-SA5A-SS-0.0-0.5DUP	P211463D221536C	DUP	3050B	6020	III
21-Feb-2011	SL-054-SA5A-SS-0.0-0.5DUP	P211463D221536D	DUP	3050B	6020	III
21-Feb-2011	SL-054-SA5A-SS-0.0-0.5DUP	P211463D222343	DUP	3050B	6010B	III
21-Feb-2011	SL-054-SA5A-SS-0.0-0.5DUP	P211463D270532A	DUP	METHOD	300.0	III
21-Feb-2011	SL-054-SA5A-SS-0.0-0.5DUP	P211463D271934A	DUP	METHOD	314.0	III
21-Feb-2011	SL-054-SA5A-SS-0.0-0.5DUP	P211463D291230A	DUP	Gen Prep	9045M	III
21-Feb-2011	SL-054-SA5A-SS-0.0-0.5MSD	P211463M220852	MSD	METHOD	7471A	III
21-Feb-2011	SL-054-SA5A-SS-0.0-0.5MSD	P211463M221513A	MSD	3050B	6020	III
21-Feb-2011	SL-054-SA5A-SS-0.0-0.5MSD	P211463M221542B	MSD	3050B	6020	III
21-Feb-2011	SL-054-SA5A-SS-0.0-0.5MSD	P211463M221542C	MSD	3050B	6020	III
21-Feb-2011	SL-054-SA5A-SS-0.0-0.5MSD	P211463M221542D	MSD	3050B	6020	III
21-Feb-2011	SL-054-SA5A-SS-0.0-0.5MSD	P211463M222352	MSD	3050B	6010B	III
21-Feb-2011	SL-054-SA5A-SS-0.0-0.5MSD	P211463M240403A	MSD	3550B	8151A	III
21-Feb-2011	SL-054-SA5A-SS-0.0-0.5MSD	P211463M240809A	MSD	3550B	8081A	III
21-Feb-2011	SL-054-SA5A-SS-0.0-0.5MSD	P211463M241132A	MSD	3550B	8082	III
21-Feb-2011	SL-054-SA5A-SS-0.0-0.5MSD	P211463M260435	MSD	3550B	8270C	III
21-Feb-2011	SL-054-SA5A-SS-0.0-0.5MSD	P211463M262115	MSD	3550B	8270C SIM	III
21-Feb-2011	SL-054-SA5A-SS-0.0-0.5MS	P211463R220851	MS	METHOD	7471A	III

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Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
21-Feb-2011	SL-054-SA5A-SS-0.0-0.5MS	P211463R221511A	MS	3050B	6020	III
21-Feb-2011	SL-054-SA5A-SS-0.0-0.5MS	P211463R221539B	MS	3050B	6020	III
21-Feb-2011	SL-054-SA5A-SS-0.0-0.5MS	P211463R221539C	MS	3050B	6020	III
21-Feb-2011	SL-054-SA5A-SS-0.0-0.5MS	P211463R221539D	MS	3050B	6020	III
21-Feb-2011	SL-054-SA5A-SS-0.0-0.5MS	P211463R222348	MS	3050B	6010B	III
21-Feb-2011	SL-054-SA5A-SS-0.0-0.5MS	P211463R240336A	MS	3550B	8151A	III
21-Feb-2011	SL-054-SA5A-SS-0.0-0.5MS	P211463R240755A	MS	3550B	8081A	III
21-Feb-2011	SL-054-SA5A-SS-0.0-0.5MS	P211463R241114A	MS	3550B	8082	III
21-Feb-2011	SL-054-SA5A-SS-0.0-0.5MS	P211463R260410	MS	3550B	8270C	III
21-Feb-2011	SL-054-SA5A-SS-0.0-0.5MS	P211463R260454	MS	3550B	8270C SIM	III
21-Feb-2011	SL-054-SA5A-SS-0.0-0.5MS	P211463R270615A	MS	METHOD	300.0	III
21-Feb-2011	SL-054-SA5A-SS-0.0-0.5MS	P211463R271958A	MS	METHOD	314.0	III
21-Feb-2011	SL-029-SA5A-SB-3.0-4.0	6211477	N	3050B	6010B	III
21-Feb-2011	SL-029-SA5A-SB-3.0-4.0	6211477	N	3050B	6020	III
21-Feb-2011	SL-029-SA5A-SB-3.0-4.0	6211477	N	3060A	7199	III
21-Feb-2011	SL-029-SA5A-SB-3.0-4.0	6211477	N	3546	1625C	III
21-Feb-2011	SL-029-SA5A-SB-3.0-4.0	6211477	N	3550B	8015B	III
21-Feb-2011	SL-029-SA5A-SB-3.0-4.0	6211477	N	3550B	8015M	III
21-Feb-2011	SL-029-SA5A-SB-3.0-4.0	6211477	N	3550B	8082	III
21-Feb-2011	SL-029-SA5A-SB-3.0-4.0	6211477	N	3550B	8270C	III
21-Feb-2011	SL-029-SA5A-SB-3.0-4.0	6211477	N	3550B	8270C SIM	III
21-Feb-2011	SL-029-SA5A-SB-3.0-4.0	6211477	N	5035	8015M	III
21-Feb-2011	SL-029-SA5A-SB-3.0-4.0	6211477	N	5035	8260B	III
21-Feb-2011	SL-029-SA5A-SB-3.0-4.0	6211477	N	5035	8260B SIM	III
21-Feb-2011	SL-029-SA5A-SB-3.0-4.0	6211477	N	8330	8330A	III
21-Feb-2011	SL-029-SA5A-SB-3.0-4.0	6211477	N	Gen Prep	9045M	III

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Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
21-Feb-2011	SL-029-SA5A-SB-3.0-4.0	6211477	N	METHOD	300.0	III
21-Feb-2011	SL-029-SA5A-SB-3.0-4.0	6211477	N	METHOD	314.0	III
21-Feb-2011	SL-029-SA5A-SB-3.0-4.0	6211477	N	METHOD	7471A	III
21-Feb-2011	SL-029-SA5A-SB-3.0-4.0	6211477	N	METHOD	8015B	III
21-Feb-2011	SL-029-SA5A-SB-3.0-4.0	6211477	N	METHOD	8015M	III
21-Feb-2011	SL-029-SA5A-SB-3.0-4.0	6211477	N	METHOD	8315A	III
21-Feb-2011	SL-029-SA5A-SB-3.0-4.0	6211477	N	METHOD	9012B	III
21-Feb-2011	SL-095-SA5A-SS-0.0-0.5	6211474	N	3050B	6010B	III
21-Feb-2011	SL-095-SA5A-SS-0.0-0.5	6211474	N	3050B	6020	III
21-Feb-2011	SL-095-SA5A-SS-0.0-0.5	6211474	N	3060A	7199	III
21-Feb-2011	SL-095-SA5A-SS-0.0-0.5	6211474	N	3550B	8081A	III
21-Feb-2011	SL-095-SA5A-SS-0.0-0.5	6211474	N	3550B	8082	III
21-Feb-2011	SL-095-SA5A-SS-0.0-0.5	6211474	N	3550B	8151A	III
21-Feb-2011	SL-095-SA5A-SS-0.0-0.5	6211474	N	3550B	8270C	III
21-Feb-2011	SL-095-SA5A-SS-0.0-0.5	6211474	N	3550B	8270C SIM	III
21-Feb-2011	SL-095-SA5A-SS-0.0-0.5	6211474	N	Gen Prep	9045M	III
21-Feb-2011	SL-095-SA5A-SS-0.0-0.5	6211474	N	METHOD	300.0	III
21-Feb-2011	SL-095-SA5A-SS-0.0-0.5	6211474	N	METHOD	314.0	III
21-Feb-2011	SL-095-SA5A-SS-0.0-0.5	6211474	N	METHOD	7471A	III
21-Feb-2011	TB-022111	6211479	TB	5030B	8015M	III
21-Feb-2011	TB-022111	6211479	TB	5030B	8260B	III
21-Feb-2011	TB-022111	6211479	TB	5030B	8260B SIM	III

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Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE087 | Laboratory: LL

EDD Filename: DE087_v2 | eQAPP Name: CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: SL-025-SA5A-SB-4.5-5.5 *Collected:* 2/21/2011 11:44:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.4		0.92	MDL	1.1	PQL	mg/Kg	J	Q
Nitrate-NO3	1.2	J	0.92	MDL	1.7	PQL	mg/Kg	J	Z

Sample ID: SL-028-SA5A-SB-3.5-4.5 *Collected:* 2/21/2011 10:20:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	5.6		0.89	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-029-SA5A-SB-3.0-4.0 *Collected:* 2/21/2011 2:48:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	8.7		0.86	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-054-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 2:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	0.97	J	0.94	MDL	1.2	PQL	mg/Kg	J	Z, Q

Sample ID: SL-055-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 2:27:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	0.94	U	0.94	MDL	1.2	PQL	mg/Kg	UJ	Q

Sample ID: SL-056-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 2:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.4		0.94	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-057-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 12:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.2		0.94	MDL	1.2	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE087 | Laboratory: LL

EDD Filename: DE087_v2 | eQAPP Name: CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: SL-058-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 1:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.3		0.94	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-059-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 11:20:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.1	J	0.96	MDL	1.2	PQL	mg/Kg	J	Z, Q

Sample ID: SL-060-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 10:55:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.8		0.93	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-061-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 10:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.4		0.94	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-062-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 9:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.1	J	0.94	MDL	1.2	PQL	mg/Kg	J	Z, Q

Sample ID: SL-063-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 9:58:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	0.94	U	0.94	MDL	1.2	PQL	mg/Kg	UJ	Q

Sample ID: SL-064-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 9:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.2		0.93	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-095-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 3:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.1	J	0.98	MDL	1.2	PQL	mg/Kg	J	Z, Q

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE087 | Laboratory: LL

EDD Filename: DE087_v2 | eQAPP Name: CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-025-SA5A-SB-4.5-5.5 *Collected:* 2/21/2011 11:44:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	683		20.0	MDL	55.7	PQL	mg/Kg	J	Q
TIN	2.57	J	1.11	MDL	11.1	PQL	mg/Kg	U	B
Zirconium	1.15	J	0.935	MDL	5.57	PQL	mg/Kg	J	Z

Sample ID: SL-028-SA5A-SB-3.5-4.5 *Collected:* 2/21/2011 10:20:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	1060		19.7	MDL	54.6	PQL	mg/Kg	J	Q
TIN	3.06	J	1.09	MDL	10.9	PQL	mg/Kg	U	B
Zirconium	1.42	J	0.917	MDL	5.46	PQL	mg/Kg	J	Z

Sample ID: SL-029-SA5A-SB-3.0-4.0 *Collected:* 2/21/2011 2:48:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	1780		18.6	MDL	51.7	PQL	mg/Kg	J	Q
TIN	2.73	J	1.03	MDL	10.3	PQL	mg/Kg	U	B
Zirconium	1.65	J	0.868	MDL	5.17	PQL	mg/Kg	J	Z

Sample ID: SL-054-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 2:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.62	J	1.03	MDL	5.81	PQL	mg/Kg	J	Z
POTASSIUM	3680		20.9	MDL	58.1	PQL	mg/Kg	J	Q
SODIUM	77.0	J	43.3	MDL	116	PQL	mg/Kg	J	Z
TIN	2.97	J	1.16	MDL	11.6	PQL	mg/Kg	U	B
Zirconium	2.05	J	0.976	MDL	5.81	PQL	mg/Kg	J	Z

Sample ID: SL-055-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 2:27:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.50	J	1.03	MDL	5.79	PQL	mg/Kg	J	Z
POTASSIUM	3980		20.8	MDL	57.9	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE087 Laboratory: LL

EDD Filename: DE087_v2 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-055-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 2:27:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	70.5	J	43.2	MDL	116	PQL	mg/Kg	J	Z
TIN	2.59	J	1.16	MDL	11.6	PQL	mg/Kg	U	B
Zirconium	1.80	J	0.972	MDL	5.79	PQL	mg/Kg	J	Z

Sample ID: SL-056-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 2:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.51	J	1.03	MDL	5.80	PQL	mg/Kg	J	Z
POTASSIUM	3560		20.9	MDL	58.0	PQL	mg/Kg	J	Q
SODIUM	72.5	J	43.2	MDL	116	PQL	mg/Kg	J	Z
TIN	2.69	J	1.16	MDL	11.6	PQL	mg/Kg	U	B
Zirconium	1.24	J	0.974	MDL	5.80	PQL	mg/Kg	J	Z

Sample ID: SL-057-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 12:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.92	J	1.02	MDL	5.75	PQL	mg/Kg	J	Z
POTASSIUM	3770		20.7	MDL	57.5	PQL	mg/Kg	J	Q
SODIUM	86.7	J	42.9	MDL	115	PQL	mg/Kg	J	Z
TIN	2.88	J	1.15	MDL	11.5	PQL	mg/Kg	U	B
Zirconium	1.40	J	0.967	MDL	5.75	PQL	mg/Kg	J	Z

Sample ID: SL-058-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 1:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.86	J	1.03	MDL	5.77	PQL	mg/Kg	J	Z
POTASSIUM	3900		20.8	MDL	57.7	PQL	mg/Kg	J	Q
SODIUM	73.4	J	43.0	MDL	115	PQL	mg/Kg	J	Z
TIN	2.92	J	1.15	MDL	11.5	PQL	mg/Kg	U	B
Zirconium	1.43	J	0.969	MDL	5.77	PQL	mg/Kg	J	Z

Sample ID: SL-059-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 11:20:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.88	J	1.04	MDL	5.83	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE087 | Laboratory: LL

EDD Filename: DE087_v2 | eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-059-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 11:20:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	4210		21.0	MDL	58.3	PQL	mg/Kg	J	Q
SODIUM	67.3	J	43.5	MDL	117	PQL	mg/Kg	J	Z
TIN	2.91	J	1.17	MDL	11.7	PQL	mg/Kg	U	B
Zirconium	1.52	J	0.979	MDL	5.83	PQL	mg/Kg	J	Z

Sample ID: SL-060-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 10:55:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.92	J	0.992	MDL	5.57	PQL	mg/Kg	J	Z
POTASSIUM	4020		20.1	MDL	55.7	PQL	mg/Kg	J	Q
SODIUM	72.6	J	41.6	MDL	111	PQL	mg/Kg	J	Z
TIN	2.97	J	1.11	MDL	11.1	PQL	mg/Kg	U	B
Zirconium	1.77	J	0.936	MDL	5.57	PQL	mg/Kg	J	Z

Sample ID: SL-061-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 10:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.98	J	1.03	MDL	5.76	PQL	mg/Kg	J	Z
POTASSIUM	4000		20.7	MDL	57.6	PQL	mg/Kg	J	Q
SODIUM	79.2	J	43.0	MDL	115	PQL	mg/Kg	J	Z
TIN	2.97	J	1.15	MDL	11.5	PQL	mg/Kg	U	B
Zirconium	1.40	J	0.968	MDL	5.76	PQL	mg/Kg	J	Z

Sample ID: SL-062-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 9:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.53	J	1.01	MDL	5.70	PQL	mg/Kg	J	Z
POTASSIUM	3270		20.5	MDL	57.0	PQL	mg/Kg	J	Q
SODIUM	91.1	J	42.5	MDL	114	PQL	mg/Kg	J	Z
TIN	3.05	J	1.14	MDL	11.4	PQL	mg/Kg	U	B
Zirconium	1.32	J	0.957	MDL	5.70	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE087 | Laboratory: LL

EDD Filename: DE087_v2 | eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-063-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 9:58:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.86	J	1.03	MDL	5.80	PQL	mg/Kg	J	Z
POTASSIUM	4070		20.9	MDL	58.0	PQL	mg/Kg	J	Q
SODIUM	77.8	J	43.3	MDL	116	PQL	mg/Kg	J	Z
TIN	3.17	J	1.16	MDL	11.6	PQL	mg/Kg	U	B
Zirconium	1.50	J	0.975	MDL	5.80	PQL	mg/Kg	J	Z

Sample ID: SL-064-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 9:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.88	J	1.01	MDL	5.69	PQL	mg/Kg	J	Z
POTASSIUM	4000		20.5	MDL	56.9	PQL	mg/Kg	J	Q
SODIUM	65.6	J	42.4	MDL	114	PQL	mg/Kg	J	Z
TIN	3.00	J	1.14	MDL	11.4	PQL	mg/Kg	U	B
Zirconium	1.29	J	0.955	MDL	5.69	PQL	mg/Kg	J	Z

Sample ID: SL-095-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 3:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.00	J	1.06	MDL	5.96	PQL	mg/Kg	J	Z
POTASSIUM	3170		21.4	MDL	59.6	PQL	mg/Kg	J	Q
SODIUM	70.0	J	44.4	MDL	119	PQL	mg/Kg	J	Z
TIN	2.82	J	1.19	MDL	11.9	PQL	mg/Kg	U	B
Zirconium	1.32	J	1.00	MDL	5.96	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-025-SA5A-SB-4.5-5.5 *Collected:* 2/21/2011 11:44:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.100	J	0.0450	MDL	0.450	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE087 | Laboratory: LL

EDD Filename: DE087_v2 | eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-025-SA5A-SB-4.5-5.5 *Collected:* 2/21/2011 11:44:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.433		0.0562	MDL	0.112	PQL	mg/Kg	J	E

Sample ID: SL-025-SA5A-SB-4.5-5.5 *Collected:* 2/21/2011 11:44:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0907	J	0.0675	MDL	0.225	PQL	mg/Kg	J	Z, Q
ARSENIC	4.68		0.0899	MDL	0.450	PQL	mg/Kg	J	E, Q
COPPER	3.82		0.0742	MDL	0.450	PQL	mg/Kg	J	A
LEAD	6.23		0.0117	MDL	0.225	PQL	mg/Kg	J	Q, E
NICKEL	6.48		0.112	MDL	0.450	PQL	mg/Kg	J	A
SILVER	0.0242	J	0.0135	MDL	0.112	PQL	mg/Kg	J	Z
VANADIUM	31.2		0.0247	MDL	0.112	PQL	mg/Kg	J	Q, E

Sample ID: SL-028-SA5A-SB-3.5-4.5 *Collected:* 2/21/2011 10:20:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0929	J	0.0432	MDL	0.432	PQL	mg/Kg	J	Z

Sample ID: SL-028-SA5A-SB-3.5-4.5 *Collected:* 2/21/2011 10:20:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.578		0.0541	MDL	0.108	PQL	mg/Kg	J	E

Sample ID: SL-028-SA5A-SB-3.5-4.5 *Collected:* 2/21/2011 10:20:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0922	J	0.0649	MDL	0.216	PQL	mg/Kg	J	Z, Q
ARSENIC	5.47		0.0865	MDL	0.432	PQL	mg/Kg	J	E, Q
CADMIUM	0.0719	J	0.0432	MDL	0.108	PQL	mg/Kg	J	Z
COPPER	5.73		0.0714	MDL	0.432	PQL	mg/Kg	J	A
LEAD	6.16		0.0112	MDL	0.216	PQL	mg/Kg	J	Q, E
NICKEL	10.3		0.108	MDL	0.432	PQL	mg/Kg	J	A
SILVER	0.0456	J	0.0130	MDL	0.108	PQL	mg/Kg	J	Z
VANADIUM	37.6		0.0238	MDL	0.108	PQL	mg/Kg	J	Q, E

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE087 | Laboratory: LL

EDD Filename: DE087_v2 | eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-029-SA5A-SB-3.0-4.0 *Collected:* 2/21/2011 2:48:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.146	J	0.0418	MDL	0.418	PQL	mg/Kg	J	Z

Sample ID: SL-029-SA5A-SB-3.0-4.0 *Collected:* 2/21/2011 2:48:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.839		0.0522	MDL	0.104	PQL	mg/Kg	J	E

Sample ID: SL-029-SA5A-SB-3.0-4.0 *Collected:* 2/21/2011 2:48:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.103	J	0.0626	MDL	0.209	PQL	mg/Kg	J	Z, Q
ARSENIC	8.78		0.0835	MDL	0.418	PQL	mg/Kg	J	E, Q
CADMIUM	0.0423	J	0.0418	MDL	0.104	PQL	mg/Kg	J	Z
COPPER	7.22		0.0689	MDL	0.418	PQL	mg/Kg	J	A
LEAD	7.82		0.0109	MDL	0.209	PQL	mg/Kg	J	Q, E
NICKEL	9.65		0.104	MDL	0.418	PQL	mg/Kg	J	A
SILVER	0.0318	J	0.0125	MDL	0.104	PQL	mg/Kg	J	Z
VANADIUM	46.8		0.0230	MDL	0.104	PQL	mg/Kg	J	Q, E

Sample ID: SL-054-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 2:45:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.239	J	0.0451	MDL	0.451	PQL	mg/Kg	J	Z

Sample ID: SL-054-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 2:45:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.13		0.0564	MDL	0.113	PQL	mg/Kg	J	E

Sample ID: SL-054-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 2:45:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.449		0.0677	MDL	0.226	PQL	mg/Kg	J	Q
ARSENIC	8.05		0.0903	MDL	0.451	PQL	mg/Kg	J	E, Q
COPPER	10.1		0.0745	MDL	0.451	PQL	mg/Kg	J	A

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE087 | Laboratory: LL

EDD Filename: DE087_v2 | eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-054-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 2:45:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	12.6		0.0117	MDL	0.226	PQL	mg/Kg	J	Q, E
NICKEL	15.0		0.113	MDL	0.451	PQL	mg/Kg	J	A
SILVER	0.0599	J	0.0135	MDL	0.113	PQL	mg/Kg	J	Z
VANADIUM	41.9		0.0248	MDL	0.113	PQL	mg/Kg	J	Q, E

Sample ID: SL-055-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 2:27:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.122	J	0.0458	MDL	0.459	PQL	mg/Kg	J	Z

Sample ID: SL-055-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 2:27:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.562		0.0573	MDL	0.115	PQL	mg/Kg	J	E

Sample ID: SL-055-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 2:27:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.106	J	0.0688	MDL	0.229	PQL	mg/Kg	J	Z, Q
ARSENIC	4.34		0.0917	MDL	0.459	PQL	mg/Kg	J	E, Q
COPPER	11.0		0.0757	MDL	0.459	PQL	mg/Kg	J	A
LEAD	21.8		0.0119	MDL	0.229	PQL	mg/Kg	J	Q, E
NICKEL	13.6		0.115	MDL	0.459	PQL	mg/Kg	J	A
SILVER	0.0528	J	0.0138	MDL	0.115	PQL	mg/Kg	J	Z
VANADIUM	34.5		0.0252	MDL	0.115	PQL	mg/Kg	J	Q, E

Sample ID: SL-056-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 2:00:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.137	J	0.0468	MDL	0.468	PQL	mg/Kg	J	Z

Sample ID: SL-056-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 2:00:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.609		0.0585	MDL	0.117	PQL	mg/Kg	J	E

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE087 | Laboratory: LL

EDD Filename: DE087_v2 | eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-056-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 2:00:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.109	J	0.0703	MDL	0.234	PQL	mg/Kg	J	Z, Q
ARSENIC	4.65		0.0937	MDL	0.468	PQL	mg/Kg	J	E, Q
COPPER	9.70		0.0773	MDL	0.468	PQL	mg/Kg	J	A
LEAD	10.1		0.0122	MDL	0.234	PQL	mg/Kg	J	Q, E
NICKEL	12.3		0.117	MDL	0.468	PQL	mg/Kg	J	A
SILVER	0.0505	J	0.0141	MDL	0.117	PQL	mg/Kg	J	Z
VANADIUM	33.0		0.0258	MDL	0.117	PQL	mg/Kg	J	Q, E

Sample ID: SL-057-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 12:00:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.154	J	0.0460	MDL	0.460	PQL	mg/Kg	J	Z

Sample ID: SL-057-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 12:00:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.731		0.0575	MDL	0.115	PQL	mg/Kg	J	E

Sample ID: SL-057-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 12:00:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.157	J	0.0690	MDL	0.230	PQL	mg/Kg	J	Z, Q
ARSENIC	6.52		0.0921	MDL	0.460	PQL	mg/Kg	J	E, Q
COPPER	12.6		0.0759	MDL	0.460	PQL	mg/Kg	J	A
LEAD	12.7		0.0120	MDL	0.230	PQL	mg/Kg	J	Q, E
NICKEL	17.6		0.115	MDL	0.460	PQL	mg/Kg	J	A
SILVER	0.0667	J	0.0138	MDL	0.115	PQL	mg/Kg	J	Z
VANADIUM	41.4		0.0253	MDL	0.115	PQL	mg/Kg	J	Q, E

Sample ID: SL-058-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 1:40:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.146	J	0.0461	MDL	0.461	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE087 Laboratory: LL

EDD Filename: DE087_v2 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-058-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 1:40:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.565		0.0577	MDL	0.115	PQL	mg/Kg	J	E

Sample ID: SL-058-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 1:40:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.124	J	0.0692	MDL	0.231	PQL	mg/Kg	J	Z, Q
ARSENIC	5.75		0.0923	MDL	0.461	PQL	mg/Kg	J	E, Q
COPPER	11.7		0.0761	MDL	0.461	PQL	mg/Kg	J	A
LEAD	9.40		0.0120	MDL	0.231	PQL	mg/Kg	J	Q, E
NICKEL	15.3		0.115	MDL	0.461	PQL	mg/Kg	J	A
SILVER	0.0432	J	0.0138	MDL	0.115	PQL	mg/Kg	J	Z
VANADIUM	37.3		0.0254	MDL	0.115	PQL	mg/Kg	J	Q, E

Sample ID: SL-059-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 11:20:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.157	J	0.0475	MDL	0.475	PQL	mg/Kg	J	Z

Sample ID: SL-059-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 11:20:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.586		0.0594	MDL	0.119	PQL	mg/Kg	J	E

Sample ID: SL-059-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 11:20:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.122	J	0.0713	MDL	0.238	PQL	mg/Kg	J	Z, Q
ARSENIC	5.33		0.0951	MDL	0.475	PQL	mg/Kg	J	E, Q
COPPER	11.6		0.0784	MDL	0.475	PQL	mg/Kg	J	A
LEAD	10.8		0.0124	MDL	0.238	PQL	mg/Kg	J	Q, E
NICKEL	15.1		0.119	MDL	0.475	PQL	mg/Kg	J	A
SILVER	0.0711	J	0.0143	MDL	0.119	PQL	mg/Kg	J	Z
VANADIUM	36.4		0.0261	MDL	0.119	PQL	mg/Kg	J	Q, E

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE087 | Laboratory: LL

EDD Filename: DE087_v2 | eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-060-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 10:55:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.159	J	0.0459	MDL	0.459	PQL	mg/Kg	J	Z

Sample ID: SL-060-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 10:55:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.762		0.0574	MDL	0.115	PQL	mg/Kg	J	E

Sample ID: SL-060-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 10:55:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.152	J	0.0688	MDL	0.229	PQL	mg/Kg	J	Z, Q
ARSENIC	6.62		0.0918	MDL	0.459	PQL	mg/Kg	J	E, Q
COPPER	11.9		0.0757	MDL	0.459	PQL	mg/Kg	J	A
LEAD	11.2		0.0119	MDL	0.229	PQL	mg/Kg	J	Q, E
NICKEL	17.3		0.115	MDL	0.459	PQL	mg/Kg	J	A
SILVER	0.0630	J	0.0138	MDL	0.115	PQL	mg/Kg	J	Z
VANADIUM	46.4		0.0252	MDL	0.115	PQL	mg/Kg	J	Q, E

Sample ID: SL-061-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 10:35:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.163	J	0.0461	MDL	0.461	PQL	mg/Kg	J	Z

Sample ID: SL-061-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 10:35:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.528		0.0576	MDL	0.115	PQL	mg/Kg	J	E

Sample ID: SL-061-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 10:35:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.154	J	0.0691	MDL	0.230	PQL	mg/Kg	J	Z, Q
ARSENIC	6.68		0.0922	MDL	0.461	PQL	mg/Kg	J	E, Q
COPPER	12.3		0.0760	MDL	0.461	PQL	mg/Kg	J	A
LEAD	9.43		0.0120	MDL	0.230	PQL	mg/Kg	J	Q, E

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE087 | Laboratory: LL

EDD Filename: DE087_v2 | eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-061-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 10:35:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NICKEL	16.6		0.115	MDL	0.461	PQL	mg/Kg	J	A
SILVER	0.0482	J	0.0138	MDL	0.115	PQL	mg/Kg	J	Z
VANADIUM	41.3		0.0253	MDL	0.115	PQL	mg/Kg	J	Q, E

Sample ID: SL-062-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 9:05:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.247	J	0.0456	MDL	0.456	PQL	mg/Kg	J	Z

Sample ID: SL-062-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 9:05:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.591		0.0570	MDL	0.114	PQL	mg/Kg	J	E

Sample ID: SL-062-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 9:05:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.160	J	0.0684	MDL	0.228	PQL	mg/Kg	J	Z, Q
ARSENIC	7.41		0.0912	MDL	0.456	PQL	mg/Kg	J	E, Q
COPPER	15.2		0.0752	MDL	0.456	PQL	mg/Kg	J	A
LEAD	13.0		0.0119	MDL	0.228	PQL	mg/Kg	J	Q, E
NICKEL	20.6		0.114	MDL	0.456	PQL	mg/Kg	J	A
SILVER	0.0599	J	0.0137	MDL	0.114	PQL	mg/Kg	J	Z
VANADIUM	45.8		0.0251	MDL	0.114	PQL	mg/Kg	J	Q, E

Sample ID: SL-063-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 9:58:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.158	J	0.0464	MDL	0.464	PQL	mg/Kg	J	Z

Sample ID: SL-063-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 9:58:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.757		0.0580	MDL	0.116	PQL	mg/Kg	J	E

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE087 | Laboratory: LL

EDD Filename: DE087_v2 | eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-063-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 9:58:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.115	J	0.0696	MDL	0.232	PQL	mg/Kg	J	Z, Q
ARSENIC	6.66		0.0929	MDL	0.464	PQL	mg/Kg	J	E, Q
COPPER	12.5		0.0766	MDL	0.464	PQL	mg/Kg	J	A
LEAD	14.8		0.0121	MDL	0.232	PQL	mg/Kg	J	Q, E
NICKEL	18.4		0.116	MDL	0.464	PQL	mg/Kg	J	A
SILVER	0.0772	J	0.0139	MDL	0.116	PQL	mg/Kg	J	Z
VANADIUM	41.1		0.0255	MDL	0.116	PQL	mg/Kg	J	Q, E

Sample ID: SL-064-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 9:35:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.120	J	0.0451	MDL	0.451	PQL	mg/Kg	J	Z

Sample ID: SL-064-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 9:35:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.529		0.0563	MDL	0.113	PQL	mg/Kg	J	E

Sample ID: SL-064-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 9:35:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.118	J	0.0676	MDL	0.225	PQL	mg/Kg	J	Z, Q
ARSENIC	5.90		0.0901	MDL	0.451	PQL	mg/Kg	J	E, Q
COPPER	10.8		0.0743	MDL	0.451	PQL	mg/Kg	J	A
LEAD	10.0		0.0117	MDL	0.225	PQL	mg/Kg	J	Q, E
NICKEL	15.1		0.113	MDL	0.451	PQL	mg/Kg	J	A
SILVER	0.0517	J	0.0135	MDL	0.113	PQL	mg/Kg	J	Z
VANADIUM	36.1		0.0248	MDL	0.113	PQL	mg/Kg	J	Q, E

Sample ID: SL-095-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 3:00:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.157	J	0.0486	MDL	0.486	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE087 | Laboratory: LL

EDD Filename: DE087_v2 | eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-095-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 3:00:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.709		0.0607	MDL	0.121	PQL	mg/Kg	J	E

Sample ID: SL-095-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 3:00:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.149	J	0.0729	MDL	0.243	PQL	mg/Kg	J	Z, Q
ARSENIC	4.76		0.0972	MDL	0.486	PQL	mg/Kg	J	E, Q
COPPER	12.0		0.0802	MDL	0.486	PQL	mg/Kg	J	A
LEAD	29.4		0.0126	MDL	0.243	PQL	mg/Kg	J	Q, E
NICKEL	13.9		0.121	MDL	0.486	PQL	mg/Kg	J	A
SILVER	0.0876	J	0.0146	MDL	0.121	PQL	mg/Kg	J	Z
VANADIUM	37.4		0.0267	MDL	0.121	PQL	mg/Kg	J	Q, E

Method Category: METALS

Method: 7199 **Matrix:** SO

Sample ID: SL-025-SA5A-SB-4.5-5.5 *Collected:* 2/21/2011 11:44:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.31	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-028-SA5A-SB-3.5-4.5 *Collected:* 2/21/2011 10:20:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.36	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-029-SA5A-SB-3.0-4.0 *Collected:* 2/21/2011 2:48:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.96	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-054-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 2:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.72	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE087 | Laboratory: LL

EDD Filename: DE087_v2 | eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 7199 **Matrix:** SO

Sample ID: SL-055-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 2:27:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.50	J	0.24	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-057-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 12:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.43	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-058-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 1:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.62	J	0.24	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-059-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 11:20:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.54	J	0.24	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-060-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 10:55:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.46	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-061-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 10:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.62	J	0.24	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-062-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 9:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.53	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-063-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 9:58:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.63	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE087 | Laboratory: LL

EDD Filename: DE087_v2 | eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 7199 **Matrix:** SO

Sample ID: SL-064-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 9:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.36	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-095-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 3:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.50	J	0.25	MDL	1.2	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 7471A **Matrix:** SO

Sample ID: SL-028-SA5A-SB-3.5-4.5 *Collected:* 2/21/2011 10:20:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0042	J	0.0032	MDL	0.111	PQL	mg/Kg	J	Z

Sample ID: SL-029-SA5A-SB-3.0-4.0 *Collected:* 2/21/2011 2:48:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0054	J	0.0029	MDL	0.101	PQL	mg/Kg	J	Z

Sample ID: SL-055-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 2:27:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0105	J	0.0032	MDL	0.112	PQL	mg/Kg	J	Z

Sample ID: SL-056-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 2:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0062	J	0.0032	MDL	0.113	PQL	mg/Kg	J	Z

Sample ID: SL-057-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 12:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0094	J	0.0033	MDL	0.115	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE087 | Laboratory: LL

EDD Filename: DE087_v2 | eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 7471A **Matrix:** SO

Sample ID: SL-058-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 1:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0071	J	0.0033	MDL	0.116	PQL	mg/Kg	J	Z

Sample ID: SL-059-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 11:20:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0134	J	0.0032	MDL	0.113	PQL	mg/Kg	J	Z

Sample ID: SL-060-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 10:55:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0132	J	0.0032	MDL	0.111	PQL	mg/Kg	J	Z

Sample ID: SL-061-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 10:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0056	J	0.0032	MDL	0.113	PQL	mg/Kg	J	Z

Sample ID: SL-062-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 9:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0105	J	0.0033	MDL	0.114	PQL	mg/Kg	J	Z

Sample ID: SL-063-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 9:58:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0138	J	0.0033	MDL	0.117	PQL	mg/Kg	J	Z

Sample ID: SL-064-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 9:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0099	J	0.0032	MDL	0.112	PQL	mg/Kg	J	Z

Sample ID: SL-095-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 3:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0232	J	0.0033	MDL	0.115	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE087 | Laboratory: LL

EDD Filename: DE087_v2 | eQAPP Name: CDM_SSFL_110509

Method Category: METALS
Method: 7471A **Matrix:** SO

Method Category: SVOA
Method: 8015M **Matrix:** SO

Sample ID: SL-025-SA5A-SB-4.5-5.5 *Collected:* 2/21/2011 11:44:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	0.48	J	0.46	MDL	1.4	PQL	mg/Kg	J	Z

Sample ID: SL-028-SA5A-SB-3.5-4.5 *Collected:* 2/21/2011 10:20:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	0.48	J	0.45	MDL	1.3	PQL	mg/Kg	J	Z

Sample ID: SL-029-SA5A-SB-3.0-4.0 *Collected:* 2/21/2011 2:48:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C8-C11)	0.59	J	0.43	MDL	1.3	PQL	mg/Kg	J	Z

Method Category: SVOA
Method: 8081A **Matrix:** SO

Sample ID: SL-054-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 2:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDE	0.22	J	0.077	MDL	0.40	PQL	ug/Kg	J	Z
4,4'-DDT	0.32	J	0.077	MDL	0.40	PQL	ug/Kg	J	Z
MIREX	0.14	J	0.077	MDL	0.40	PQL	ug/Kg	J	Z

Sample ID: SL-055-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 2:27:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDE	0.086	J	0.078	MDL	0.40	PQL	ug/Kg	J	Z
4,4'-DDT	0.24	J	0.078	MDL	0.40	PQL	ug/Kg	J	Z
MIREX	0.17	J	0.078	MDL	0.40	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE087 | Laboratory: LL

EDD Filename: DE087_v2 | eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8081A **Matrix:** SO

Sample ID: SL-056-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 2:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDE	0.13	J	0.077	MDL	0.40	PQL	ug/Kg	J	Z
4,4'-DDT	0.38	J	0.077	MDL	0.40	PQL	ug/Kg	J	Z
ENDRIN ALDEHYDE	0.11	J	0.077	MDL	0.40	PQL	ug/Kg	J	Z

Sample ID: SL-057-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 12:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDE	0.38	J	0.077	MDL	0.40	PQL	ug/Kg	J	Z
ENDRIN KETONE	0.11	J	0.077	MDL	0.40	PQL	ug/Kg	J	Z

Sample ID: SL-058-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 1:40:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDE	0.087	J	0.078	MDL	0.40	PQL	ug/Kg	J	Z
4,4'-DDT	0.22	J	0.078	MDL	0.40	PQL	ug/Kg	J	Z

Sample ID: SL-059-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 11:20:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDE	0.30	J	0.079	MDL	0.41	PQL	ug/Kg	J	Z
4,4'-DDT	0.38	J	0.079	MDL	0.41	PQL	ug/Kg	J	Z
ENDRIN ALDEHYDE	0.14	J	0.079	MDL	0.41	PQL	ug/Kg	J	Z

Sample ID: SL-060-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 10:55:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ENDRIN ALDEHYDE	0.15	J	0.076	MDL	0.39	PQL	ug/Kg	J	Z
ENDRIN KETONE	0.083	J	0.076	MDL	0.39	PQL	ug/Kg	J	Z
MIREX	0.079	J	0.076	MDL	0.39	PQL	ug/Kg	J	Z

Sample ID: SL-061-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 10:35:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDT	0.36	J	0.078	MDL	0.40	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE087 | Laboratory: LL

EDD Filename: DE087_v2 | eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8081A **Matrix:** SO

Sample ID: SL-062-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 9:05:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDE	0.094	J	0.077	MDL	0.40	PQL	ug/Kg	J	Z
4,4'-DDT	0.28	J	0.077	MDL	0.40	PQL	ug/Kg	J	Z

Sample ID: SL-063-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 9:58:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDE	0.37	J	0.077	MDL	0.40	PQL	ug/Kg	J	Z
ENDRIN ALDEHYDE	0.16	J	0.077	MDL	0.40	PQL	ug/Kg	J	Z

Sample ID: SL-064-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 9:35:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDE	0.15	J	0.077	MDL	0.39	PQL	ug/Kg	J	Z
4,4'-DDT	0.35	J	0.077	MDL	0.39	PQL	ug/Kg	J	Z
ENDRIN ALDEHYDE	0.10	J	0.077	MDL	0.39	PQL	ug/Kg	J	Z

Sample ID: SL-095-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 3:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ENDRIN ALDEHYDE	0.19	J	0.081	MDL	0.42	PQL	ug/Kg	J	Z
ENDRIN KETONE	0.24	J	0.081	MDL	0.42	PQL	ug/Kg	J	Z
gamma-BHC (Lindane)	0.15	J	0.042	MDL	0.20	PQL	ug/Kg	J	Z
HEPTACHLOR EPOXIDE	0.053	J	0.042	MDL	0.20	PQL	ug/Kg	J	Z
MIREX	0.20	J	0.081	MDL	0.42	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: SL-054-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 2:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	0.72	J	0.39	MDL	2.0	PQL	ug/Kg	J	Z
AROCLOR 1260	1.0	J	0.46	MDL	2.0	PQL	ug/Kg	J	Z
Aroclor 5460	2.9	J	1.2	MDL	3.9	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE087 Laboratory: LL

EDD Filename: DE087_v2 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: SL-055-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 2:27:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1016	0.39	U	0.39	MDL	2.0	PQL	ug/Kg	UJ	S
AROCLOR 1221	0.39	U	0.39	MDL	2.0	PQL	ug/Kg	UJ	S
AROCLOR 1232	0.39	U	0.39	MDL	2.0	PQL	ug/Kg	UJ	S
AROCLOR 1242	0.39	U	0.39	MDL	2.0	PQL	ug/Kg	UJ	S
AROCLOR 1248	0.39	U	0.39	MDL	2.0	PQL	ug/Kg	UJ	S
AROCLOR 1254	1.8	J	0.39	MDL	2.0	PQL	ug/Kg	J	Z, S
AROCLOR 1260	1.8	J	0.46	MDL	2.0	PQL	ug/Kg	J	Z, S
Aroclor 1262	0.39	U	0.39	MDL	2.0	PQL	ug/Kg	UJ	S
Aroclor 1268	0.39	U	0.39	MDL	2.0	PQL	ug/Kg	UJ	S
Aroclor 5432	1.2	U	1.2	MDL	3.9	PQL	ug/Kg	UJ	S
Aroclor 5442	1.2	U	1.2	MDL	3.9	PQL	ug/Kg	UJ	S
Aroclor 5460	3.6	J	1.2	MDL	3.9	PQL	ug/Kg	J	Z, S

Sample ID: SL-056-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 2:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	1.4	J	0.46	MDL	2.0	PQL	ug/Kg	J	Z
Aroclor 5460	2.0	J	1.2	MDL	3.9	PQL	ug/Kg	J	Z

Sample ID: SL-058-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 1:40:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	1.1	J	0.46	MDL	2.0	PQL	ug/Kg	J	Z
Aroclor 5460	2.5	J	1.2	MDL	3.9	PQL	ug/Kg	J	Z

Sample ID: SL-059-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 11:20:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	1.7	J	0.47	MDL	2.0	PQL	ug/Kg	J	Z
Aroclor 5460	3.7	J	1.2	MDL	4.0	PQL	ug/Kg	J	Z

Sample ID: SL-060-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 10:55:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	1.3	J	0.45	MDL	2.0	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE087 | Laboratory: LL

EDD Filename: DE087_v2 | eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: SL-060-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 10:55:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5460	1.8	J	1.2	MDL	3.8	PQL	ug/Kg	J	Z

Sample ID: SL-061-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 10:35:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	0.58	J	0.46	MDL	2.0	PQL	ug/Kg	J	Z
Aroclor 5460	3.3	J	1.2	MDL	3.9	PQL	ug/Kg	J	Z

Sample ID: SL-062-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 9:05:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	1.5	J	0.46	MDL	2.0	PQL	ug/Kg	J	Z

Sample ID: SL-064-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 9:35:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	0.54	J	0.38	MDL	2.0	PQL	ug/Kg	J	Z
AROCLOR 1260	0.72	J	0.45	MDL	2.0	PQL	ug/Kg	J	Z
Aroclor 5460	1.6	J	1.2	MDL	3.8	PQL	ug/Kg	J	Z

Sample ID: SL-095-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 3:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	4.9		0.81	MDL	4.2	PQL	ug/Kg	J	S
AROCLOR 1260	5.5		0.96	MDL	4.2	PQL	ug/Kg	J	S
Aroclor 5460	12		2.5	MDL	8.1	PQL	ug/Kg	J	S

Method Category: SVOA

Method: 8151A **Matrix:** SO

Sample ID: SL-055-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 2:27:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DICAMBA	0.69	J	0.47	MDL	1.4	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE087 Laboratory: LL

EDD Filename: DE087_v2 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8151A **Matrix:** SO

Sample ID: SL-056-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 2:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DICAMBA	0.47	J	0.47	MDL	1.4	PQL	ug/Kg	J	Z

Sample ID: SL-058-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 1:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DICAMBA	0.50	J	0.47	MDL	1.4	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SL-028-SA5A-SB-3.5-4.5 *Collected:* 2/21/2011 10:20:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	20	J	18	MDL	370	PQL	ug/Kg	J	Z

Sample ID: SL-054-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 2:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZIDINE	1400	U	1400	MDL	3900	PQL	ug/Kg	R	Q
BIS(2-ETHYLHEXYL)PHTHALATE	29	J	19	MDL	390	PQL	ug/Kg	J	Z

Sample ID: SL-055-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 2:27:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	32	J	20	MDL	390	PQL	ug/Kg	J	Z

Sample ID: SL-056-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 2:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	31	J	19	MDL	390	PQL	ug/Kg	J	Z

Sample ID: SL-057-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 12:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	25	J	19	MDL	390	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE087 | Laboratory: LL

EDD Filename: DE087_v2 | eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SL-059-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 11:20:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	26	J	20	MDL	400	PQL	ug/Kg	J	Z

Sample ID: SL-060-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 10:55:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	28	J	19	MDL	390	PQL	ug/Kg	J	Z

Sample ID: SL-061-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 10:35:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	130	J	20	MDL	390	PQL	ug/Kg	J	Z
Butylbenzylphthalate	29	J	20	MDL	200	PQL	ug/Kg	J	Z

Sample ID: SL-063-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 9:58:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	33	J	19	MDL	390	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8270C SIM **Matrix:** SO

Sample ID: SL-025-SA5A-SB-4.5-5.5 *Collected:* 2/21/2011 11:44:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	9.6	J	6.9	MDL	21	PQL	ug/Kg	J	Z
Di-n-octylphthalate	11	J	6.9	MDL	21	PQL	ug/Kg	J	Z

Sample ID: SL-028-SA5A-SB-3.5-4.5 *Collected:* 2/21/2011 10:20:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Di-n-octylphthalate	11	J	6.7	MDL	20	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE087 Laboratory: LL

EDD Filename: DE087_v2 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8270C SIM **Matrix:** SO

Sample ID: SL-029-SA5A-SB-3.0-4.0 *Collected:* 2/21/2011 2:48:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	11	J	6.5	MDL	19	PQL	ug/Kg	J	Z
Di-n-octylphthalate	11	J	6.5	MDL	19	PQL	ug/Kg	J	Z

Sample ID: SL-055-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 2:27:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-METHYLNAPHTHALENE	0.96	J	0.79	MDL	2.0	PQL	ug/Kg	J	Z
ACENAPHTHYLENE	0.79	J	0.39	MDL	2.0	PQL	ug/Kg	J	Z
ANTHRACENE	0.58	J	0.39	MDL	2.0	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	0.79	J	0.79	MDL	2.0	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	0.95	J	0.79	MDL	2.0	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.2	J	0.79	MDL	2.0	PQL	ug/Kg	J	Z
Di-n-octylphthalate	12	J	7.1	MDL	21	PQL	ug/Kg	J	Z
NAPHTHALENE	1.0	J	0.79	MDL	2.0	PQL	ug/Kg	J	Z

Sample ID: SL-056-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 2:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACENAPHTHYLENE	0.54	J	0.39	MDL	2.0	PQL	ug/Kg	J	Z
ANTHRACENE	0.46	J	0.39	MDL	2.0	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	1.7	J	0.78	MDL	2.0	PQL	ug/Kg	J	Z
Di-n-octylphthalate	12	J	7.0	MDL	21	PQL	ug/Kg	J	Z

Sample ID: SL-057-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 12:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Di-n-octylphthalate	12	J	7.0	MDL	21	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	1.8	J	0.78	MDL	2.0	PQL	ug/Kg	J	Z
NAPHTHALENE	1.1	J	0.78	MDL	2.0	PQL	ug/Kg	J	Z

Sample ID: SL-058-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 1:40:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	1.5	J	0.78	MDL	2.0	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.5	J	0.78	MDL	2.0	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE087 | Laboratory: LL

EDD Filename: DE087_v2 | eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8270C SIM **Matrix:** SO

Sample ID: SL-058-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 1:40:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHRYSENE	1.8	J	0.39	MDL	2.0	PQL	ug/Kg	J	Z

Sample ID: SL-059-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 11:20:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHRYSENE	0.51	J	0.40	MDL	2.0	PQL	ug/Kg	J	Z
Di-n-octylphthalate	12	J	7.2	MDL	22	PQL	ug/Kg	J	Z
FLUORANTHENE	0.84	J	0.80	MDL	2.0	PQL	ug/Kg	J	Z

Sample ID: SL-060-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 10:55:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-METHYLNAPHTHALENE	0.78	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
ACENAPHTHYLENE	1.6	J	0.39	MDL	1.9	PQL	ug/Kg	J	Z
ANTHRACENE	1.3	J	0.39	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	1.2	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.1	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.0	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
Di-n-octylphthalate	11	J	7.0	MDL	21	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	0.89	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
NAPHTHALENE	1.3	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-061-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 10:35:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-METHYLNAPHTHALENE	0.82	J	0.78	MDL	2.0	PQL	ug/Kg	J	Z
ACENAPHTHYLENE	1.5	J	0.39	MDL	2.0	PQL	ug/Kg	J	Z
ANTHRACENE	1.0	J	0.39	MDL	2.0	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	0.94	J	0.78	MDL	2.0	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	0.84	J	0.78	MDL	2.0	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.0	J	0.78	MDL	2.0	PQL	ug/Kg	J	Z
Di-n-octylphthalate	11	J	7.1	MDL	21	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	1.0	J	0.78	MDL	2.0	PQL	ug/Kg	J	Z
NAPHTHALENE	1.0	J	0.78	MDL	2.0	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE087 | Laboratory: LL

EDD Filename: DE087_v2 | eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8270C SIM **Matrix:** SO

Sample ID: SL-062-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 9:05:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	10	J	7.0	MDL	21	PQL	ug/Kg	J	Z
Di-n-octylphthalate	11	J	7.0	MDL	21	PQL	ug/Kg	J	Z

Sample ID: SL-063-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 9:58:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACENAPHTHYLENE	1.3	J	0.39	MDL	2.0	PQL	ug/Kg	J	Z
ANTHRACENE	0.57	J	0.39	MDL	2.0	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	1.8	J	0.78	MDL	2.0	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.8	J	0.78	MDL	2.0	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.5	J	0.78	MDL	2.0	PQL	ug/Kg	J	Z
Di-n-octylphthalate	12	J	7.0	MDL	21	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	1.2	J	0.78	MDL	2.0	PQL	ug/Kg	J	Z
NAPHTHALENE	0.90	J	0.78	MDL	2.0	PQL	ug/Kg	J	Z

Sample ID: SL-064-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 9:35:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACENAPHTHENE	0.95	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
ACENAPHTHYLENE	0.46	J	0.39	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	1.6	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	0.80	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
CHRYSENE	1.6	J	0.39	MDL	1.9	PQL	ug/Kg	J	Z
Di-n-octylphthalate	12	J	7.0	MDL	21	PQL	ug/Kg	J	Z
PHENANTHRENE	1.2	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
PYRENE	1.6	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-095-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 3:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-METHYLNAPHTHALENE	0.83	J	0.82	MDL	2.0	PQL	ug/Kg	J	Z
ACENAPHTHYLENE	0.97	J	0.41	MDL	2.0	PQL	ug/Kg	J	Z
ANTHRACENE	1.9	J	0.41	MDL	2.0	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	1.9	J	0.82	MDL	2.0	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	1.7	J	0.82	MDL	2.0	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE087 | Laboratory: LL

EDD Filename: DE087_v2 | eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8270C SIM **Matrix:** SO

Sample ID: SL-095-SA5A-SS-0.0-0.5 *Collected:* 2/21/2011 3:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Di-n-octylphthalate	13	J	7.4	MDL	22	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	1.5	J	0.82	MDL	2.0	PQL	ug/Kg	J	Z
NAPHTHALENE	1.6	J	0.82	MDL	2.0	PQL	ug/Kg	J	Z

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: SL-025-SA5A-SB-4.5-5.5 *Collected:* 2/21/2011 11:44:00 *Analysis Type:* RES *Dilution:* 0.89

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	1.1	J	0.25	MDL	4.1	PQL	ug/Kg	U	B
TOLUENE	0.1	J	0.08	MDL	4.1	PQL	ug/Kg	J	Z

Sample ID: SL-028-SA5A-SB-3.5-4.5 *Collected:* 2/21/2011 10:20:00 *Analysis Type:* RES *Dilution:* 0.93

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	1.2	J	0.25	MDL	4.1	PQL	ug/Kg	U	B
TOLUENE	0.1	J	0.08	MDL	4.1	PQL	ug/Kg	J	Z

Sample ID: SL-029-SA5A-SB-3.0-4.0 *Collected:* 2/21/2011 2:48:00 *Analysis Type:* RES *Dilution:* 0.83

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.75	J	0.21	MDL	3.6	PQL	ug/Kg	U	B
TOLUENE	0.08	J	0.07	MDL	3.6	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE087 | Laboratory: LL

EDD Filename: DE087_v2 | eQAPP Name: CDM_SSFL_110509

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
*#	Professional Judgment
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Verification Correlation Coefficient
C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE087 **Laboratory: LL**

EDD Filename: DE087_v2 **eQAPP Name: CDM_SSFL_110509**

F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation
L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery Lower Estimation

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE087 **Laboratory: LL**

EDD Filename: DE087_v2 **eQAPP Name: CDM_SSFL_110509**

R	Continuing Calibration Verification Percent Recovery Lower Rejection
R	Continuing Calibration Verification Percent Recovery Upper Estimation
R	Continuing Calibration Verification Percent Recovery Upper Rejection
R	Continuing Calibration Verification Relative Response Factor
R	Initial Calibration Relative Response Factor
R	Initial Calibration Verification Percent Recovery Lower Estimation
R	Initial Calibration Verification Percent Recovery Lower Rejection
R	Initial Calibration Verification Percent Recovery Upper Estimation
R	Initial Calibration Verification Percent Recovery Upper Rejection
R	Initial Calibration Verification Relative Response Factor
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control Outlier Reports

DE087

Method Blank Outlier Report

Lab Reporting Batch ID: DE087 | Laboratory: LL

EDD Filename: DE087_v2 | eQAPP Name: CDM_SSFL_110509

Method: 6010B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P05408CB222324	3/1/2011 11:24:00 PM	PHOSPHORUS TIN	1.26 mg/Kg 1.60 mg/Kg	SL-025-SA5A-SB-4.5-5.5 SL-028-SA5A-SB-3.5-4.5 SL-029-SA5A-SB-3.0-4.0 SL-054-SA5A-SS-0.0-0.5 SL-055-SA5A-SS-0.0-0.5 SL-056-SA5A-SS-0.0-0.5 SL-057-SA5A-SS-0.0-0.5 SL-058-SA5A-SS-0.0-0.5 SL-059-SA5A-SS-0.0-0.5 SL-060-SA5A-SS-0.0-0.5 SL-061-SA5A-SS-0.0-0.5 SL-062-SA5A-SS-0.0-0.5 SL-063-SA5A-SS-0.0-0.5 SL-064-SA5A-SS-0.0-0.5 SL-095-SA5A-SS-0.0-0.5

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-025-SA5A-SB-4.5-5.5(RES)	TIN	2.57 mg/Kg	2.57U mg/Kg
SL-028-SA5A-SB-3.5-4.5(RES)	TIN	3.06 mg/Kg	3.06U mg/Kg
SL-029-SA5A-SB-3.0-4.0(RES)	TIN	2.73 mg/Kg	2.73U mg/Kg
SL-054-SA5A-SS-0.0-0.5(RES)	TIN	2.97 mg/Kg	2.97U mg/Kg
SL-055-SA5A-SS-0.0-0.5(RES)	TIN	2.59 mg/Kg	2.59U mg/Kg
SL-056-SA5A-SS-0.0-0.5(RES)	TIN	2.69 mg/Kg	2.69U mg/Kg
SL-057-SA5A-SS-0.0-0.5(RES)	TIN	2.88 mg/Kg	2.88U mg/Kg
SL-058-SA5A-SS-0.0-0.5(RES)	TIN	2.92 mg/Kg	2.92U mg/Kg
SL-059-SA5A-SS-0.0-0.5(RES)	TIN	2.91 mg/Kg	2.91U mg/Kg
SL-060-SA5A-SS-0.0-0.5(RES)	TIN	2.97 mg/Kg	2.97U mg/Kg
SL-061-SA5A-SS-0.0-0.5(RES)	TIN	2.97 mg/Kg	2.97U mg/Kg
SL-062-SA5A-SS-0.0-0.5(RES)	TIN	3.05 mg/Kg	3.05U mg/Kg
SL-063-SA5A-SS-0.0-0.5(RES)	TIN	3.17 mg/Kg	3.17U mg/Kg
SL-064-SA5A-SS-0.0-0.5(RES)	TIN	3.00 mg/Kg	3.00U mg/Kg
SL-095-SA5A-SS-0.0-0.5(RES)	TIN	2.82 mg/Kg	2.82U mg/Kg

Method: 8260B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB78B210235A	2/25/2011 2:35:00 AM	METHYLENE CHLORIDE	0.60 ug/Kg	SL-025-SA5A-SB-4.5-5.5 SL-028-SA5A-SB-3.5-4.5 SL-029-SA5A-SB-3.0-4.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-025-SA5A-SB-4.5-5.5(RES)	METHYLENE CHLORIDE	1.1 ug/Kg	4.1U ug/Kg
SL-028-SA5A-SB-3.5-4.5(RES)	METHYLENE CHLORIDE	1.2 ug/Kg	4.1U ug/Kg
SL-029-SA5A-SB-3.0-4.0(RES)	METHYLENE CHLORIDE	0.75 ug/Kg	3.6U ug/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE087 | Laboratory: LL

EDD Filename: DE087_v2 | eQAPP Name: CDM_SSFL_110509

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-054-SA5A-SS-0.0-0.5MS **SL-054-SA5A-SS-0.0-0.5MSD** (SL-025-SA5A-SB-4.5-5.5 SL -028-SA5A-SB-3.5-4.5 SL -029-SA5A-SB-3.0-4.0 SL -054-SA5A-SS-0.0-0.5 SL -055-SA5A-SS-0.0-0.5 SL -056-SA5A-SS-0.0-0.5 SL -057-SA5A-SS-0.0-0.5 SL -058-SA5A-SS-0.0-0.5 SL -059-SA5A-SS-0.0-0.5 SL -060-SA5A-SS-0.0-0.5 SL -061-SA5A-SS-0.0-0.5 SL -062-SA5A-SS-0.0-0.5 SL -063-SA5A-SS-0.0-0.5 SL -064-SA5A-SS-0.0-0.5 SL -095-SA5A-SS-0.0-0.5)	ANTIMONY ARSENIC VANADIUM	2 -64 26	3 -65 26	75.00-125.00 75.00-125.00 75.00-125.00	- - -	ANTIMONY ARSENIC VANADIUM	J (all detects) R (all non-detects) Sb, As J (all detects) UJ (all non-detects) Post Spike = (Sb) 85% and (As) 109%
SL-054-SA5A-SS-0.0-0.5MS **SL-054-SA5A-SS-0.0-0.5MSD** (SL-025-SA5A-SB-4.5-5.5 SL -028-SA5A-SB-3.5-4.5 SL -029-SA5A-SB-3.0-4.0 SL -054-SA5A-SS-0.0-0.5 SL -055-SA5A-SS-0.0-0.5 SL -056-SA5A-SS-0.0-0.5 SL -057-SA5A-SS-0.0-0.5 SL -058-SA5A-SS-0.0-0.5 SL -059-SA5A-SS-0.0-0.5 SL -060-SA5A-SS-0.0-0.5 SL -061-SA5A-SS-0.0-0.5 SL -062-SA5A-SS-0.0-0.5 SL -063-SA5A-SS-0.0-0.5 SL -064-SA5A-SS-0.0-0.5 SL -095-SA5A-SS-0.0-0.5)	LEAD ZINC	39 -	43 62	75.00-125.00 75.00-125.00	- -	LEAD ZINC	J(all detects) UJ(all non-detects) Zn No Qual, >4x
SL-054-SA5A-SS-0.0-0.5MS **SL-054-SA5A-SS-0.0-0.5MSD** (SL-025-SA5A-SB-4.5-5.5 SL -028-SA5A-SB-3.5-4.5 SL -029-SA5A-SB-3.0-4.0 SL -054-SA5A-SS-0.0-0.5 SL -055-SA5A-SS-0.0-0.5 SL -056-SA5A-SS-0.0-0.5 SL -057-SA5A-SS-0.0-0.5 SL -058-SA5A-SS-0.0-0.5 SL -059-SA5A-SS-0.0-0.5 SL -060-SA5A-SS-0.0-0.5 SL -061-SA5A-SS-0.0-0.5 SL -062-SA5A-SS-0.0-0.5 SL -063-SA5A-SS-0.0-0.5 SL -064-SA5A-SS-0.0-0.5 SL -095-SA5A-SS-0.0-0.5)	BARIUM	57	57	75.00-125.00	-	BARIUM	No Qual, >4x

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE087 | Laboratory: LL

EDD Filename: DE087_v2 | eQAPP Name: CDM_SSFL_110509

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-054-SA5A-SS-0.0-0.5MS SL-054-SA5A-SS-0.0-0.5MSD (SL-025-SA5A-SB-4.5-5.5 SL -028-SA5A-SB-3.5-4.5 SL -029-SA5A-SB-3.0-4.0 SL -054-SA5A-SS-0.0-0.5 SL -055-SA5A-SS-0.0-0.5 SL -056-SA5A-SS-0.0-0.5 SL -057-SA5A-SS-0.0-0.5 SL -058-SA5A-SS-0.0-0.5 SL -059-SA5A-SS-0.0-0.5 SL -060-SA5A-SS-0.0-0.5 SL -061-SA5A-SS-0.0-0.5 SL -062-SA5A-SS-0.0-0.5 SL -063-SA5A-SS-0.0-0.5 SL -064-SA5A-SS-0.0-0.5 SL -095-SA5A-SS-0.0-0.5)	ALUMINUM CALCIUM IRON MAGNESIUM POTASSIUM TITANIUM	1896 185 1028 191 143 366	1556 158 524 153 - 258	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	- - - - - -	ALUMINUM CALCIUM IRON MAGNESIUM POTASSIUM TITANIUM	J(all detects) Al, Ca, Fe, Mg, Ti No Qual, >4x

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-054-SA5A-SS-0.0-0.5MSD (SL-054-SA5A-SS-0.0-0.5)	ANILINE	-	-	35.00-95.00	47 (30.00)	ANILINE	J(all detects)
SL-054-SA5A-SS-0.0-0.5MS SL-054-SA5A-SS-0.0-0.5MSD (SL-054-SA5A-SS-0.0-0.5)	BENZIDINE	0	0	35.00-141.00	-	BENZIDINE	J(all detects) R(all non-detects)

Method: 300.0
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-054-SA5A-SS-0.0-0.5MS (SL-054-SA5A-SS-0.0-0.5 SL -055-SA5A-SS-0.0-0.5 SL -056-SA5A-SS-0.0-0.5 SL -057-SA5A-SS-0.0-0.5 SL -058-SA5A-SS-0.0-0.5 SL -059-SA5A-SS-0.0-0.5 SL -060-SA5A-SS-0.0-0.5 SL -061-SA5A-SS-0.0-0.5 SL -062-SA5A-SS-0.0-0.5 SL -063-SA5A-SS-0.0-0.5)	FLUORIDE	44	-	80.00-120.00	-	FLUORIDE	J(all detects) UJ(all non-detects)
SL-064-SA5A-SS-0.0-0.5MS (SL-025-SA5A-SB-4.5-5.5 SL -028-SA5A-SB-3.5-4.5 SL -029-SA5A-SB-3.0-4.0 SL -064-SA5A-SS-0.0-0.5 SL -095-SA5A-SS-0.0-0.5)	FLUORIDE	56	-	80.00-120.00	-	FLUORIDE	J(all detects) UJ(all non-detects)

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE087 | Laboratory: LL

EDD Filename: DE087_v2 | eQAPP Name: CDM_SSFL_110509

Method: 314.0
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-054-SA5A-SS-0.0-0.5MS (SL-054-SA5A-SS-0.0-0.5 SL-055-SA5A-SS-0.0-0.5 SL-056-SA5A-SS-0.0-0.5 SL-057-SA5A-SS-0.0-0.5 SL-058-SA5A-SS-0.0-0.5 SL-059-SA5A-SS-0.0-0.5 SL-060-SA5A-SS-0.0-0.5 SL-061-SA5A-SS-0.0-0.5 SL-062-SA5A-SS-0.0-0.5 SL-063-SA5A-SS-0.0-0.5)	PERCHLORATE	121	-	80.00-120.00	-	PERCHLORATE	J(all detects)

Method: 8151A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-054-SA5A-SS-0.0-0.5MSD (SL-054-SA5A-SS-0.0-0.5)	MCPP	-	-	10.00-184.00	68 (50.00)	MCPP	J(all detects)

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE087 | Laboratory: LL

EDD Filename: DE087_v2 | eQAPP Name: CDM_SSFL_110509

Method: 300.0
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-064-SA5A-SS-0.0-0.5DUP (SL-025-SA5A-SB-4.5-5.5 SL -028-SA5A-SB-3.5-4.5 SL -029-SA5A-SB-3.0-4.0 SL -064-SA5A-SS-0.0-0.5 SL -095-SA5A-SS-0.0-0.5)	FLUORIDE	200	20.00	No Qual OK by difference
SL-054-SA5A-SS-0.0-0.5DUP (SL-054-SA5A-SS-0.0-0.5 SL -055-SA5A-SS-0.0-0.5 SL -056-SA5A-SS-0.0-0.5 SL -057-SA5A-SS-0.0-0.5 SL -058-SA5A-SS-0.0-0.5 SL -059-SA5A-SS-0.0-0.5 SL -060-SA5A-SS-0.0-0.5 SL -061-SA5A-SS-0.0-0.5 SL -062-SA5A-SS-0.0-0.5 SL -063-SA5A-SS-0.0-0.5)	FLUORIDE	200	20.00	No Qual OK by difference

Method: 6020
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-054-SA5A-SS-0.0-0.5DUP (SL-025-SA5A-SB-4.5-5.5 SL -028-SA5A-SB-3.5-4.5 SL -029-SA5A-SB-3.0-4.0 SL -054-SA5A-SS-0.0-0.5 SL -055-SA5A-SS-0.0-0.5 SL -056-SA5A-SS-0.0-0.5 SL -057-SA5A-SS-0.0-0.5 SL -058-SA5A-SS-0.0-0.5 SL -059-SA5A-SS-0.0-0.5 SL -060-SA5A-SS-0.0-0.5 SL -061-SA5A-SS-0.0-0.5 SL -062-SA5A-SS-0.0-0.5 SL -063-SA5A-SS-0.0-0.5 SL -064-SA5A-SS-0.0-0.5 SL -095-SA5A-SS-0.0-0.5)	ANTIMONY ARSENIC CADMIUM LEAD MOLYBDENUM SELENIUM SILVER VANADIUM	137 62 39 26 63 70 26 24	20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00	J(all detects) UJ(all non-detects) Sb, Cd, Se, Ag No Qual OK by difference

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE087 | Laboratory: LL

EDD Filename: DE087_v2 | eQAPP Name: CDM_SSFL_110509

Method: 8151A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P10598AQ240241A (SL-054-SA5A-SS-0.0-0.5 SL-055-SA5A-SS-0.0-0.5 SL-056-SA5A-SS-0.0-0.5 SL-057-SA5A-SS-0.0-0.5 SL-058-SA5A-SS-0.0-0.5 SL-059-SA5A-SS-0.0-0.5 SL-060-SA5A-SS-0.0-0.5 SL-061-SA5A-SS-0.0-0.5 SL-062-SA5A-SS-0.0-0.5 SL-063-SA5A-SS-0.0-0.5 SL-064-SA5A-SS-0.0-0.5 SL-095-SA5A-SS-0.0-0.5)	DINOSEB	39	-	10.00-36.00	-	DINOSEB	J (all detects)

Surrogate Outlier Report

Lab Reporting Batch ID: DE087 | Laboratory: LL

EDD Filename: DE087_v2 | eQAPP Name: CDM_SSFL_110509

Method: 8082
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-055-SA5A-SS-0.0-0.5	DECACHLOROBIPHENYL TETRACHLORO-M-XYLENE	40 37	45.00-120.00 53.00-139.00	All Target Analytes	J (all detects) UJ (all non-detects)
SL-095-SA5A-SS-0.0-0.5	DECACHLOROBIPHENYL TETRACHLORO-M-XYLENE	151 150	45.00-120.00 53.00-139.00	All Target Analytes	J(all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE087 | Laboratory: LL

EDD Filename: DE087_v2 | eQAPP Name: CDM_SSFL_110509

Method: 300.0

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-025-SA5A-SB-4.5-5.5	Nitrate-NO3	J	1.2	1.7	PQL	mg/Kg	J (all detects)
SL-054-SA5A-SS-0.0-0.5	FLUORIDE	J	0.97	1.2	PQL	mg/Kg	J (all detects)
SL-059-SA5A-SS-0.0-0.5	FLUORIDE	J	1.1	1.2	PQL	mg/Kg	J (all detects)
SL-062-SA5A-SS-0.0-0.5	FLUORIDE	J	1.1	1.2	PQL	mg/Kg	J (all detects)
SL-095-SA5A-SS-0.0-0.5	FLUORIDE	J	1.1	1.2	PQL	mg/Kg	J (all detects)

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-025-SA5A-SB-4.5-5.5	TIN	J	2.57	11.1	PQL	mg/Kg	J (all detects)
	Zirconium	J	1.15	5.57	PQL	mg/Kg	
SL-028-SA5A-SB-3.5-4.5	TIN	J	3.06	10.9	PQL	mg/Kg	J (all detects)
	Zirconium	J	1.42	5.46	PQL	mg/Kg	
SL-029-SA5A-SB-3.0-4.0	TIN	J	2.73	10.3	PQL	mg/Kg	J (all detects)
	Zirconium	J	1.65	5.17	PQL	mg/Kg	
SL-054-SA5A-SS-0.0-0.5	BORON	J	2.62	5.81	PQL	mg/Kg	J (all detects)
	SODIUM	J	77.0	116	PQL	mg/Kg	
	TIN	J	2.97	11.6	PQL	mg/Kg	
	Zirconium	J	2.05	5.81	PQL	mg/Kg	
SL-055-SA5A-SS-0.0-0.5	BORON	J	2.50	5.79	PQL	mg/Kg	J (all detects)
	SODIUM	J	70.5	116	PQL	mg/Kg	
	TIN	J	2.59	11.6	PQL	mg/Kg	
	Zirconium	J	1.80	5.79	PQL	mg/Kg	
SL-056-SA5A-SS-0.0-0.5	BORON	J	3.51	5.80	PQL	mg/Kg	J (all detects)
	SODIUM	J	72.5	116	PQL	mg/Kg	
	TIN	J	2.69	11.6	PQL	mg/Kg	
	Zirconium	J	1.24	5.80	PQL	mg/Kg	
SL-057-SA5A-SS-0.0-0.5	BORON	J	1.92	5.75	PQL	mg/Kg	J (all detects)
	SODIUM	J	86.7	115	PQL	mg/Kg	
	TIN	J	2.88	11.5	PQL	mg/Kg	
	Zirconium	J	1.40	5.75	PQL	mg/Kg	
SL-058-SA5A-SS-0.0-0.5	BORON	J	1.86	5.77	PQL	mg/Kg	J (all detects)
	SODIUM	J	73.4	115	PQL	mg/Kg	
	TIN	J	2.92	11.5	PQL	mg/Kg	
	Zirconium	J	1.43	5.77	PQL	mg/Kg	
SL-059-SA5A-SS-0.0-0.5	BORON	J	1.88	5.83	PQL	mg/Kg	J (all detects)
	SODIUM	J	67.3	117	PQL	mg/Kg	
	TIN	J	2.91	11.7	PQL	mg/Kg	
	Zirconium	J	1.52	5.83	PQL	mg/Kg	
SL-060-SA5A-SS-0.0-0.5	BORON	J	1.92	5.57	PQL	mg/Kg	J (all detects)
	SODIUM	J	72.6	111	PQL	mg/Kg	
	TIN	J	2.97	11.1	PQL	mg/Kg	
	Zirconium	J	1.77	5.57	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE087 | Laboratory: LL

EDD Filename: DE087_v2 | eQAPP Name: CDM_SSFL_110509

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-061-SA5A-SS-0.0-0.5	BORON	J	1.98	5.76	PQL	mg/Kg	J (all detects)
	SODIUM	J	79.2	115	PQL	mg/Kg	
	TIN	J	2.97	11.5	PQL	mg/Kg	
	Zirconium	J	1.40	5.76	PQL	mg/Kg	
SL-062-SA5A-SS-0.0-0.5	BORON	J	1.53	5.70	PQL	mg/Kg	J (all detects)
	SODIUM	J	91.1	114	PQL	mg/Kg	
	TIN	J	3.05	11.4	PQL	mg/Kg	
	Zirconium	J	1.32	5.70	PQL	mg/Kg	
SL-063-SA5A-SS-0.0-0.5	BORON	J	1.86	5.80	PQL	mg/Kg	J (all detects)
	SODIUM	J	77.8	116	PQL	mg/Kg	
	TIN	J	3.17	11.6	PQL	mg/Kg	
	Zirconium	J	1.50	5.80	PQL	mg/Kg	
SL-064-SA5A-SS-0.0-0.5	BORON	J	1.88	5.69	PQL	mg/Kg	J (all detects)
	SODIUM	J	65.6	114	PQL	mg/Kg	
	TIN	J	3.00	11.4	PQL	mg/Kg	
	Zirconium	J	1.29	5.69	PQL	mg/Kg	
SL-095-SA5A-SS-0.0-0.5	BORON	J	2.00	5.96	PQL	mg/Kg	J (all detects)
	SODIUM	J	70.0	119	PQL	mg/Kg	
	TIN	J	2.82	11.9	PQL	mg/Kg	
	Zirconium	J	1.32	5.96	PQL	mg/Kg	

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-025-SA5A-SB-4.5-5.5	ANTIMONY	J	0.0907	0.225	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.100	0.450	PQL	mg/Kg	
	SILVER	J	0.0242	0.112	PQL	mg/Kg	
SL-028-SA5A-SB-3.5-4.5	ANTIMONY	J	0.0922	0.216	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0719	0.108	PQL	mg/Kg	
	SELENIUM	J	0.0929	0.432	PQL	mg/Kg	
	SILVER	J	0.0456	0.108	PQL	mg/Kg	
SL-029-SA5A-SB-3.0-4.0	ANTIMONY	J	0.103	0.209	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0423	0.104	PQL	mg/Kg	
	SELENIUM	J	0.146	0.418	PQL	mg/Kg	
	SILVER	J	0.0318	0.104	PQL	mg/Kg	
SL-054-SA5A-SS-0.0-0.5	SELENIUM	J	0.239	0.451	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0599	0.113	PQL	mg/Kg	
SL-055-SA5A-SS-0.0-0.5	ANTIMONY	J	0.106	0.229	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.122	0.459	PQL	mg/Kg	
	SILVER	J	0.0528	0.115	PQL	mg/Kg	
SL-056-SA5A-SS-0.0-0.5	ANTIMONY	J	0.109	0.234	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.137	0.468	PQL	mg/Kg	
	SILVER	J	0.0505	0.117	PQL	mg/Kg	
SL-057-SA5A-SS-0.0-0.5	ANTIMONY	J	0.157	0.230	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.154	0.460	PQL	mg/Kg	
	SILVER	J	0.0667	0.115	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE087 **Laboratory: LL**

EDD Filename: DE087_v2 **eQAPP Name: CDM_SSFL_110509**

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-058-SA5A-SS-0.0-0.5	ANTIMONY	J	0.124	0.231	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.146	0.461	PQL	mg/Kg	
	SILVER	J	0.0432	0.115	PQL	mg/Kg	
SL-059-SA5A-SS-0.0-0.5	ANTIMONY	J	0.122	0.238	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.157	0.475	PQL	mg/Kg	
	SILVER	J	0.0711	0.119	PQL	mg/Kg	
SL-060-SA5A-SS-0.0-0.5	ANTIMONY	J	0.152	0.229	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.159	0.459	PQL	mg/Kg	
	SILVER	J	0.0630	0.115	PQL	mg/Kg	
SL-061-SA5A-SS-0.0-0.5	ANTIMONY	J	0.154	0.230	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.163	0.461	PQL	mg/Kg	
	SILVER	J	0.0482	0.115	PQL	mg/Kg	
SL-062-SA5A-SS-0.0-0.5	ANTIMONY	J	0.160	0.228	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.247	0.456	PQL	mg/Kg	
	SILVER	J	0.0599	0.114	PQL	mg/Kg	
SL-063-SA5A-SS-0.0-0.5	ANTIMONY	J	0.115	0.232	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.158	0.464	PQL	mg/Kg	
	SILVER	J	0.0772	0.116	PQL	mg/Kg	
SL-064-SA5A-SS-0.0-0.5	ANTIMONY	J	0.118	0.225	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.120	0.451	PQL	mg/Kg	
	SILVER	J	0.0517	0.113	PQL	mg/Kg	
SL-095-SA5A-SS-0.0-0.5	ANTIMONY	J	0.149	0.243	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.157	0.486	PQL	mg/Kg	
	SILVER	J	0.0876	0.121	PQL	mg/Kg	

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-025-SA5A-SB-4.5-5.5	HEXAVALENT CHROMIUM	J	0.31	1.1	PQL	mg/Kg	J (all detects)
SL-028-SA5A-SB-3.5-4.5	HEXAVALENT CHROMIUM	J	0.36	1.1	PQL	mg/Kg	J (all detects)
SL-029-SA5A-SB-3.0-4.0	HEXAVALENT CHROMIUM	J	0.96	1.1	PQL	mg/Kg	J (all detects)
SL-054-SA5A-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.72	1.2	PQL	mg/Kg	J (all detects)
SL-055-SA5A-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.50	1.2	PQL	mg/Kg	J (all detects)
SL-057-SA5A-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.43	1.2	PQL	mg/Kg	J (all detects)
SL-058-SA5A-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.62	1.2	PQL	mg/Kg	J (all detects)
SL-059-SA5A-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.54	1.2	PQL	mg/Kg	J (all detects)
SL-060-SA5A-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.46	1.2	PQL	mg/Kg	J (all detects)
SL-061-SA5A-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.62	1.2	PQL	mg/Kg	J (all detects)
SL-062-SA5A-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.53	1.2	PQL	mg/Kg	J (all detects)
SL-063-SA5A-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.63	1.2	PQL	mg/Kg	J (all detects)
SL-064-SA5A-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.36	1.2	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE087 | Laboratory: LL

EDD Filename: DE087_v2 | eQAPP Name: CDM_SSFL_110509

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-095-SA5A-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.50	1.2	PQL	mg/Kg	J (all detects)

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-028-SA5A-SB-3.5-4.5	MERCURY	J	0.0042	0.111	PQL	mg/Kg	J (all detects)
SL-029-SA5A-SB-3.0-4.0	MERCURY	J	0.0054	0.101	PQL	mg/Kg	J (all detects)
SL-055-SA5A-SS-0.0-0.5	MERCURY	J	0.0105	0.112	PQL	mg/Kg	J (all detects)
SL-056-SA5A-SS-0.0-0.5	MERCURY	J	0.0062	0.113	PQL	mg/Kg	J (all detects)
SL-057-SA5A-SS-0.0-0.5	MERCURY	J	0.0094	0.115	PQL	mg/Kg	J (all detects)
SL-058-SA5A-SS-0.0-0.5	MERCURY	J	0.0071	0.116	PQL	mg/Kg	J (all detects)
SL-059-SA5A-SS-0.0-0.5	MERCURY	J	0.0134	0.113	PQL	mg/Kg	J (all detects)
SL-060-SA5A-SS-0.0-0.5	MERCURY	J	0.0132	0.111	PQL	mg/Kg	J (all detects)
SL-061-SA5A-SS-0.0-0.5	MERCURY	J	0.0056	0.113	PQL	mg/Kg	J (all detects)
SL-062-SA5A-SS-0.0-0.5	MERCURY	J	0.0105	0.114	PQL	mg/Kg	J (all detects)
SL-063-SA5A-SS-0.0-0.5	MERCURY	J	0.0138	0.117	PQL	mg/Kg	J (all detects)
SL-064-SA5A-SS-0.0-0.5	MERCURY	J	0.0099	0.112	PQL	mg/Kg	J (all detects)
SL-095-SA5A-SS-0.0-0.5	MERCURY	J	0.0232	0.115	PQL	mg/Kg	J (all detects)

Method: 8015M

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-025-SA5A-SB-4.5-5.5	EFH (C30-C40)	J	0.48	1.4	PQL	mg/Kg	J (all detects)
SL-028-SA5A-SB-3.5-4.5	EFH (C30-C40)	J	0.48	1.3	PQL	mg/Kg	J (all detects)
SL-029-SA5A-SB-3.0-4.0	EFH (C8-C11)	J	0.59	1.3	PQL	mg/Kg	J (all detects)

Method: 8081A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-054-SA5A-SS-0.0-0.5	4,4'-DDE	J	0.22	0.40	PQL	ug/Kg	J (all detects)
	4,4'-DDT	J	0.32	0.40	PQL	ug/Kg	
	MIREX	J	0.14	0.40	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE087 **Laboratory: LL**

EDD Filename: DE087_v2 **eQAPP Name: CDM_SSFL_110509**

Method: 8081A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-055-SA5A-SS-0.0-0.5	4,4'-DDE	J	0.086	0.40	PQL	ug/Kg	J (all detects)
	4,4'-DDT	J	0.24	0.40	PQL	ug/Kg	
	MIREX	J	0.17	0.40	PQL	ug/Kg	
SL-056-SA5A-SS-0.0-0.5	4,4'-DDE	J	0.13	0.40	PQL	ug/Kg	J (all detects)
	4,4'-DDT	J	0.38	0.40	PQL	ug/Kg	
	ENDRIN ALDEHYDE	J	0.11	0.40	PQL	ug/Kg	
SL-057-SA5A-SS-0.0-0.5	4,4'-DDE	J	0.38	0.40	PQL	ug/Kg	J (all detects)
	ENDRIN KETONE	J	0.11	0.40	PQL	ug/Kg	
SL-058-SA5A-SS-0.0-0.5	4,4'-DDE	J	0.087	0.40	PQL	ug/Kg	J (all detects)
	4,4'-DDT	J	0.22	0.40	PQL	ug/Kg	
SL-059-SA5A-SS-0.0-0.5	4,4'-DDE	J	0.30	0.41	PQL	ug/Kg	J (all detects)
	4,4'-DDT	J	0.38	0.41	PQL	ug/Kg	
	ENDRIN ALDEHYDE	J	0.14	0.41	PQL	ug/Kg	
SL-060-SA5A-SS-0.0-0.5	ENDRIN ALDEHYDE	J	0.15	0.39	PQL	ug/Kg	J (all detects)
	ENDRIN KETONE	J	0.083	0.39	PQL	ug/Kg	
	MIREX	J	0.079	0.39	PQL	ug/Kg	
SL-061-SA5A-SS-0.0-0.5	4,4'-DDT	J	0.36	0.40	PQL	ug/Kg	J (all detects)
SL-062-SA5A-SS-0.0-0.5	4,4'-DDE	J	0.094	0.40	PQL	ug/Kg	J (all detects)
	4,4'-DDT	J	0.28	0.40	PQL	ug/Kg	
SL-063-SA5A-SS-0.0-0.5	4,4'-DDE	J	0.37	0.40	PQL	ug/Kg	J (all detects)
	ENDRIN ALDEHYDE	J	0.16	0.40	PQL	ug/Kg	
SL-064-SA5A-SS-0.0-0.5	4,4'-DDE	J	0.15	0.39	PQL	ug/Kg	J (all detects)
	4,4'-DDT	J	0.35	0.39	PQL	ug/Kg	
	ENDRIN ALDEHYDE	J	0.10	0.39	PQL	ug/Kg	
SL-095-SA5A-SS-0.0-0.5	ENDRIN ALDEHYDE	J	0.19	0.42	PQL	ug/Kg	J (all detects)
	ENDRIN KETONE	J	0.24	0.42	PQL	ug/Kg	
	gamma-BHC (Lindane)	J	0.15	0.20	PQL	ug/Kg	
	HEPTACHLOR EPOXIDE	J	0.053	0.20	PQL	ug/Kg	
	MIREX	J	0.20	0.42	PQL	ug/Kg	

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-054-SA5A-SS-0.0-0.5	AROCLOR 1254	J	0.72	2.0	PQL	ug/Kg	J (all detects)
	AROCLOR 1260	J	1.0	2.0	PQL	ug/Kg	
	Aroclor 5460	J	2.9	3.9	PQL	ug/Kg	
SL-055-SA5A-SS-0.0-0.5	AROCLOR 1254	J	1.8	2.0	PQL	ug/Kg	J (all detects)
	AROCLOR 1260	J	1.8	2.0	PQL	ug/Kg	
	Aroclor 5460	J	3.6	3.9	PQL	ug/Kg	
SL-056-SA5A-SS-0.0-0.5	AROCLOR 1260	J	1.4	2.0	PQL	ug/Kg	J (all detects)
	Aroclor 5460	J	2.0	3.9	PQL	ug/Kg	
SL-058-SA5A-SS-0.0-0.5	AROCLOR 1260	J	1.1	2.0	PQL	ug/Kg	J (all detects)
	Aroclor 5460	J	2.5	3.9	PQL	ug/Kg	
SL-059-SA5A-SS-0.0-0.5	AROCLOR 1260	J	1.7	2.0	PQL	ug/Kg	J (all detects)
	Aroclor 5460	J	3.7	4.0	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE087 | Laboratory: LL

EDD Filename: DE087_v2 | eQAPP Name: CDM_SSFL_110509

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-060-SA5A-SS-0.0-0.5	AROCLOR 1260 Aroclor 5460	J J	1.3 1.8	2.0 3.8	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-061-SA5A-SS-0.0-0.5	AROCLOR 1260 Aroclor 5460	J J	0.58 3.3	2.0 3.9	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-062-SA5A-SS-0.0-0.5	AROCLOR 1260	J	1.5	2.0	PQL	ug/Kg	J (all detects)
SL-064-SA5A-SS-0.0-0.5	AROCLOR 1254 AROCLOR 1260 Aroclor 5460	J J J	0.54 0.72 1.6	2.0 2.0 3.8	PQL PQL PQL	ug/Kg ug/Kg ug/Kg	J (all detects)

Method: 8151A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-055-SA5A-SS-0.0-0.5	DICAMBA	J	0.69	1.4	PQL	ug/Kg	J (all detects)
SL-056-SA5A-SS-0.0-0.5	DICAMBA	J	0.47	1.4	PQL	ug/Kg	J (all detects)
SL-058-SA5A-SS-0.0-0.5	DICAMBA	J	0.50	1.4	PQL	ug/Kg	J (all detects)

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-025-SA5A-SB-4.5-5.5	METHYLENE CHLORIDE TOLUENE	J J	1.1 0.1	4.1 4.1	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-028-SA5A-SB-3.5-4.5	METHYLENE CHLORIDE TOLUENE	J J	1.2 0.1	4.1 4.1	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-029-SA5A-SB-3.0-4.0	METHYLENE CHLORIDE TOLUENE	J J	0.75 0.08	3.6 3.6	PQL PQL	ug/Kg ug/Kg	J (all detects)

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-028-SA5A-SB-3.5-4.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	20	370	PQL	ug/Kg	J (all detects)
SL-054-SA5A-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	29	390	PQL	ug/Kg	J (all detects)
SL-055-SA5A-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	32	390	PQL	ug/Kg	J (all detects)
SL-056-SA5A-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	31	390	PQL	ug/Kg	J (all detects)
SL-057-SA5A-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	25	390	PQL	ug/Kg	J (all detects)
SL-059-SA5A-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	26	400	PQL	ug/Kg	J (all detects)
SL-060-SA5A-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	28	390	PQL	ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE087 | Laboratory: LL

EDD Filename: DE087_v2 | eQAPP Name: CDM_SSFL_110509

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-061-SA5A-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	130	390	PQL	ug/Kg	J (all detects)
	Butylbenzylphthalate	J	29	200	PQL	ug/Kg	
SL-063-SA5A-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	33	390	PQL	ug/Kg	J (all detects)

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-025-SA5A-SB-4.5-5.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	9.6	21	PQL	ug/Kg	J (all detects)
	Di-n-octylphthalate	J	11	21	PQL	ug/Kg	
SL-028-SA5A-SB-3.5-4.5	Di-n-octylphthalate	J	11	20	PQL	ug/Kg	J (all detects)
SL-029-SA5A-SB-3.0-4.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	11	19	PQL	ug/Kg	J (all detects)
	Di-n-octylphthalate	J	11	19	PQL	ug/Kg	
SL-055-SA5A-SS-0.0-0.5	2-METHYLNAPHTHALENE	J	0.96	2.0	PQL	ug/Kg	J (all detects)
	ACENAPHTHYLENE	J	0.79	2.0	PQL	ug/Kg	
	ANTHRACENE	J	0.58	2.0	PQL	ug/Kg	
	BENZO(A)ANTHRACENE	J	0.79	2.0	PQL	ug/Kg	
	BENZO(A)PYRENE	J	0.95	2.0	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	1.2	2.0	PQL	ug/Kg	
	Di-n-octylphthalate	J	12	21	PQL	ug/Kg	
	NAPHTHALENE	J	1.0	2.0	PQL	ug/Kg	
SL-056-SA5A-SS-0.0-0.5	ACENAPHTHYLENE	J	0.54	2.0	PQL	ug/Kg	J (all detects)
	ANTHRACENE	J	0.46	2.0	PQL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	1.7	2.0	PQL	ug/Kg	
	Di-n-octylphthalate	J	12	21	PQL	ug/Kg	
SL-057-SA5A-SS-0.0-0.5	Di-n-octylphthalate	J	12	21	PQL	ug/Kg	J (all detects)
	INDENO(1,2,3-CD)PYRENE	J	1.8	2.0	PQL	ug/Kg	
	NAPHTHALENE	J	1.1	2.0	PQL	ug/Kg	
SL-058-SA5A-SS-0.0-0.5	BENZO(B)FLUORANTHENE	J	1.5	2.0	PQL	ug/Kg	J (all detects)
	BENZO(G,H,I)PERYLENE	J	1.5	2.0	PQL	ug/Kg	
	CHRYSENE	J	1.8	2.0	PQL	ug/Kg	
SL-059-SA5A-SS-0.0-0.5	CHRYSENE	J	0.51	2.0	PQL	ug/Kg	J (all detects)
	Di-n-octylphthalate	J	12	22	PQL	ug/Kg	
	FLUORANTHENE	J	0.84	2.0	PQL	ug/Kg	
SL-060-SA5A-SS-0.0-0.5	2-METHYLNAPHTHALENE	J	0.78	1.9	PQL	ug/Kg	J (all detects)
	ACENAPHTHYLENE	J	1.6	1.9	PQL	ug/Kg	
	ANTHRACENE	J	1.3	1.9	PQL	ug/Kg	
	BENZO(A)ANTHRACENE	J	1.2	1.9	PQL	ug/Kg	
	BENZO(A)PYRENE	J	1.1	1.9	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	1.0	1.9	PQL	ug/Kg	
	Di-n-octylphthalate	J	11	21	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	0.89	1.9	PQL	ug/Kg	
	NAPHTHALENE	J	1.3	1.9	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE087 | Laboratory: LL

EDD Filename: DE087_v2 | eQAPP Name: CDM_SSFL_110509

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-061-SA5A-SS-0.0-0.5	2-METHYLNAPHTHALENE	J	0.82	2.0	PQL	ug/Kg	J (all detects)
	ACENAPHTHYLENE	J	1.5	2.0	PQL	ug/Kg	
	ANTHRACENE	J	1.0	2.0	PQL	ug/Kg	
	BENZO(A)ANTHRACENE	J	0.94	2.0	PQL	ug/Kg	
	BENZO(A)PYRENE	J	0.84	2.0	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	1.0	2.0	PQL	ug/Kg	
	Di-n-octylphthalate	J	11	21	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.0	2.0	PQL	ug/Kg	
	NAPHTHALENE	J	1.0	2.0	PQL	ug/Kg	
SL-062-SA5A-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	10	21	PQL	ug/Kg	J (all detects)
	Di-n-octylphthalate	J	11	21	PQL	ug/Kg	
SL-063-SA5A-SS-0.0-0.5	ACENAPHTHYLENE	J	1.3	2.0	PQL	ug/Kg	J (all detects)
	ANTHRACENE	J	0.57	2.0	PQL	ug/Kg	
	BENZO(A)ANTHRACENE	J	1.8	2.0	PQL	ug/Kg	
	BENZO(A)PYRENE	J	1.8	2.0	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	1.5	2.0	PQL	ug/Kg	
	Di-n-octylphthalate	J	12	21	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.2	2.0	PQL	ug/Kg	
	NAPHTHALENE	J	0.90	2.0	PQL	ug/Kg	
SL-064-SA5A-SS-0.0-0.5	ACENAPHTHENE	J	0.95	1.9	PQL	ug/Kg	J (all detects)
	ACENAPHTHYLENE	J	0.46	1.9	PQL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	1.6	1.9	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	0.80	1.9	PQL	ug/Kg	
	CHRYSENE	J	1.6	1.9	PQL	ug/Kg	
	Di-n-octylphthalate	J	12	21	PQL	ug/Kg	
	PHENANTHRENE	J	1.2	1.9	PQL	ug/Kg	
	PYRENE	J	1.6	1.9	PQL	ug/Kg	
SL-095-SA5A-SS-0.0-0.5	2-METHYLNAPHTHALENE	J	0.83	2.0	PQL	ug/Kg	J (all detects)
	ACENAPHTHYLENE	J	0.97	2.0	PQL	ug/Kg	
	ANTHRACENE	J	1.9	2.0	PQL	ug/Kg	
	BENZO(A)ANTHRACENE	J	1.9	2.0	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	1.7	2.0	PQL	ug/Kg	
	Di-n-octylphthalate	J	13	22	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.5	2.0	PQL	ug/Kg	
	NAPHTHALENE	J	1.6	2.0	PQL	ug/Kg	

LDC #: 25911A4 **VALIDATION COMPLETENESS WORKSHEET** Date: 8/25/1

SDG #: DE087 ADR

Laboratory: Lancaster Laboratories

Reviewer:

2nd Reviewer:

METHOD: Metals (EPA SW 846 Method 6010B/6020A/7000)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	N	Sampling dates:
II.	ICP/MS Tune	N	
III.	Calibration	N	
IV.	Blanks	A	No qual by MB/CCB
V.	ICP Interference Check Sample (ICS) Analysis	N	
VI.	Matrix Spike Analysis	N	Al, Ba, Ca, Fe, Mg, Ti, Zn >4X.
VII.	Duplicate Sample Analysis	N	Sb, Cd, Se, Ag, <5XRL.
VIII.	Laboratory Control Samples (LCS)	N A	
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	SW	Cu, Ni. U/UJ
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	N	
XV	Field Blanks	N	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: ϕ

1	SL-054-SA5A-SS-0.0-0.5	11	SL-064-SA5A-SS-0.0-0.5	21		31	
2	SL-055-SA5A-SS-0.0-0.5	12	SL-095-SA5A-SS-0.0-0.5	22		32	
3	SL-056-SA5A-SS-0.0-0.5	13	SL-025-SA5A-SS-4.5-5.5	23		33	
4	SL-057-SA5A-SS-0.0-0.5	14	SL-028-SA5A-SS-3.5-4.5	24		34	
5	SL-058-SA5A-SS-0.0-0.5	15	SL-029-SA5A-SS-3.0-4.0	25		35	
6	SL-059-SA5A-SS-0.0-0.5	16		26		36	
7	SL-060-SA5A-SS-0.0-0.5	17		27		37	
8	SL-061-SA5A-SS-0.0-0.5	18		28		38	
9	SL-062-SA5A-SS-0.0-0.5	19		29		39	
10	SL-063-SA5A-SS-0.0-0.5	20		30		40	

Notes:

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 5A(MS/MSD)
MATRIX SPIKE/MATRIX SPIKE DUPLICATE
SDG No.: DE087
Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: 6211463BKG Matrix Spike Lab Sample ID: 6211463MS Matrix Spike Duplicate Lab Sample ID: 6211463MSD
% Solids for Sample: 85.2
Batch Id(s): P05408C, P05426A, P05411B

Analyte	Mass	BKG Sample Result	C	MS Sample Result	C	MSD Sample Result	C	MS Spike Added	MSD Spike Added	Units	MS %R	Q	MSD %R	Q	RPD	Q	Control Limit %R	Control Limit RPD	M
Aluminum		14262.8527		18626.9194		17809.0547		230.1390	227.9046	MG/KG	1896		1556		4			20	P
Antimony	121	0.4489		0.4832		0.4930		1.3945	1.3945	MG/KG	2	N	3	N	2		75 - 125	20	MS
Arsenic	75	8.0534		6.5728		6.5449		2.3242	2.3242	MG/KG	-64	N	-65	N	0		75 - 125	20	MS
Barium	137	119.1766		125.8309		125.8077		11.6209	11.6209	MG/KG	57		57		0			20	MS
Beryllium	9	0.6697		1.4503		1.4742		0.9297	0.9297	MG/KG	84		87		2		75 - 125	20	MS
Boron		2.6228	B	234.5531		228.9735		230.1390	227.9046	MG/KG	101		99		2		84 - 115	20	P
Cadmium	111	0.2630		1.3499		1.3796		1.1621	1.1621	MG/KG	94		96		2		75 - 125	20	MS
Calcium		2351.8152		3203.0747		3072.5477		460.2780	455.8093	MG/KG	185		158		4			20	P
Chromium	52	20.7024		30.2143		30.3073		11.6209	11.6209	MG/KG	82		83		0		75 - 125	20	MS
Cobalt	59	6.4215		56.5007		56.2218		58.1044	58.1044	MG/KG	86		86		0		75 - 125	20	MS
Copper	63	10.0623		20.9757		20.6247		11.6209	11.6209	MG/KG	94		91		2		75 - 125	20	MS
Iron		19020.1099		20203.4187		19617.3925		115.0695	113.9523	MG/KG	1028		524		3			20	P
Lead	208	12.6196		13.9915		14.1287		3.4863	3.4863	MG/KG	39	N	43	N	1		75 - 125	20	MS
Lithium		19.5545		136.5679		134.2666		115.0695	113.9523	MG/KG	102		101		2		82 - 114	20	P
Magnesium		3886.8870		4325.4660		4235.4768		230.1390	227.9046	MG/KG	191		153		2			20	P
Manganese		356.5786		419.2454		404.3256		57.5348	56.9762	MG/KG	109		84		4			20	P
Mercury		0.0035	U	0.2264		0.2010		0.1919	0.1914	MG/KG	118		105		12		65 - 135	20	CV
Molybdenum	98	1.1268		11.8510		11.5093		11.6209	11.6209	MG/KG	92		89		3		75 - 125	20	MS
Nickel	60	15.0302		24.2644		24.2876		11.6209	11.6209	MG/KG	79		80		0		75 - 125	20	MS
Phosphorus		352.0813		481.0354		475.9082		115.0695	113.9523	MG/KG	112		109		1		75 - 125	20	P
Potassium		3678.7745		5328.8974		5065.3368		1150.6950	1139.5232	MG/KG	143	N	122		5		75 - 125	20	P
Selenium	78	0.2395	B	2.3567		2.3590		2.3242	2.3242	MG/KG	91		91		0		75 - 125	20	MS
Silver	107	0.0599	B	11.8510		11.6116		11.6209	11.6209	MG/KG	101		99		2		75 - 125	20	MS
Sodium		76.9639	B	1218.2397		1196.2977		1150.6950	1139.5232	MG/KG	99		98		2		75 - 125	20	P
Strontium		22.5189		139.0811		134.4672		115.0695	113.9523	MG/KG	101		98		3		75 - 115	20	P
Thallium	203	0.2871		0.7256		0.7370		0.4648	0.4648	MG/KG	94		97		2		75 - 125	20	MS
Tin		2.9668	B	414.4401		409.3897		460.2780	455.8093	MG/KG	89		89		1		80 - 110	20	P
Titanium		1071.6009		1492.7345		1365.7699		115.0695	113.9523	MG/KG	366		258		9			20	P
Vanadium	51	41.8698		44.8566		44.9263		11.6209	11.6209	MG/KG	26	N	26	N	0		75 - 125	20	MS
Zinc	66	54.0132		63.3338		61.2188		11.6209	11.6209	MG/KG	80		62		3			20	MS
Zirconium		2.0511	B	109.7257		108.5384		115.0695	113.9523	MG/KG	94		93		1		75 - 125	20	P

METHODS:
P = ICP Atomic Emission Spectrometer CV = Cold Vapor
MS = ICP Mass Spectrometry AF = Cold Vapor Atomic Fluorescence

CONCENTRATION QUALIFIERS:
U= Below MDL, B= Below LOQ
FLAGS:
N = Matrix Spike OOS, * = Duplicate OOS

Sb: Post Spike 85% J/UJ V: J/R

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 6
DUPLICATES
SDG No.: DE087
Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: 6211463BKG
% Solids for Duplicate: 85.2
Batch ID(s): P05408C, P05426A, P05411B
Concentration Units: MG/KG

Duplicate Lab Sample ID: 6211463DUP
% Solids for Sample: 85.2

Analyte	Mass	Control Limit	Samples (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum			14262.8527		13924.5026		2		P
Antimony	121	0.2	0.4489		0.0832	B	137	*	MS
Arsenic	75		8.0534		4.2346		62	*	MS
Barium	137		119.1766		108.1423		10		MS
Beryllium	9	0.1	0.6697		0.5519		19		MS
Boron			2.6228	B	2.3044	B	13		P
Cadmium	111	0.1	0.2630		0.1772		39		MS
Calcium			2351.8152		2341.8840		0		P
Chromium	52		20.7024		18.8645		9		MS
Cobalt	59		6.4215		5.5740		14		MS
Copper	63		10.0623		9.8799		2		MS
Iron			19020.1099		18834.0062		1		P
Lead	208		12.6196		9.7648		26	*	MS
Lithium			19.5545		18.5353		5		P
Magnesium			3886.8870		3764.7945		3		P
Manganese			356.5786		364.4482		2		P
Mercury			0.0035	U	0.0035	U			CV
Molybdenum	98		1.1268		0.5839		63	*	MS
Nickel	60		15.0302		13.0627		14		MS
Phosphorus			352.0813		363.1444		3		P
Potassium			3678.7745		3593.6097		2		P
Selenium	78		0.2395	B	0.1149	B	70		MS
Silver	107		0.0599	B	0.0460	B	26		MS
Sodium			76.9639	B	74.6223	B	3		P
Strontium			22.5189		22.1262		2		P
Thallium	203	0.1	0.2871		0.2633		9		MS
Tin			2.9668	B	2.6205	B	12		P
Titanium			1071.6009		1036.2537		3		P
Vanadium	51		41.8698		32.7948		24	*	MS
Zinc	66		54.0132		51.4591		5		MS
Zirconium			2.0511	B	2.0720	B	1		P

NOTE: An asterisk (*) in column "Q" indicates poor duplicate precision (RPD > 20% OR |(S) - (D)| > LOQ for values < 5x LOQ).
The data are considered to be valid because the laboratory control sample is within the control limits. See the Laboratory Control Sample.

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METHODS:	CONCENTRATION QUALIFIERS:
P = ICP Atomic Emission Spectrometer	U= Below MDL
MS = ICP Mass Spectrometry	B= Below LOQ
CV = Cold Vapor	FLAGS:
AF = Cold Vapor Atomic Fluorescence	* = Duplicate Out of Spec

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 9
SERIAL DILUTIONS
SDG No.: DE087
Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: 6211463BKG Serial Dilution Lab Sample ID: 6211463L
Batch ID(s): P05408C, P05426A
Concentration Units: UG/L

Analyte	Mass	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Diff.	Q	M
Aluminum		122734.7000		122724.7500		0		P
Antimony	121	1.9890		1.5595	B	22		MS
Arsenic	75	35.6800		32.1650		10		MS
Barium	137	528.0000		527.0000		0		MS
Beryllium	9	2.9670		3.0745		4		MS
Boron		22.5700	B	44.5000	U	100		P
Cadmium	111	1.1650		1.0425	B	11		MS
Calcium		20237.8400		21178.4500		5		P
Chromium	52	91.7200		101.2500		10		MS
Cobalt	59	28.4500		29.3750		3		MS
Copper	63	44.5800		50.5000		13	E	MS
Iron		163671.8500		170754.0000		4		P
Lead	208	55.9100		57.5000		3		MS
Lithium		168.2700		175.8000		4		P
Magnesium		33447.4400		34624.2500		4		P
Manganese		3068.4300		3217.3500		5		P
Molybdenum	98	4.9920		5.1900		4		MS
Nickel	60	66.5900		75.7000		14	E	MS
Phosphorus		3029.7300		3112.9000		3		P
Potassium		31656.5900		33098.1500		5		P
Selenium	78	1.0610	B	1.3025	B	23		MS
Silver	107	0.2653	B	0.3000	U	100		MS
Sodium		662.2900	B	1865.0000	U	100		P
Strontium		193.7800		201.5500		4		P
Thallium	203	1.2720		1.1015	B	13		MS
Tin		25.5300	B	50.0000	U	100		P
Titanium		9221.3400		9716.6500		5		P
Vanadium	51	185.5000		202.1500		9		MS
Zinc	66	239.3000		240.7000		1		MS
Zirconium		17.6500	B	42.0000	U	100		P

NOTE: An E in column Q indicates the presence of a chemical or physical interference in the matrix when the % difference is greater than 10%. This applies only when (I) is greater than or equal to 50x MDL for ICP, 100x MDL for ICP-MS (6020), 50x MDL for ICP-MS (200.8), or 25x MDL for GFAA.

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry

CONCENTRATION QUALIFIERS:
U= Below MDL
B= Below LOQ

FLAGS:
E = Matrix Effects exist as proven by Serial Dilution or Spiked Dilution

DE087 5025

SAMPLE DELIVERY GROUP

DE088

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
22-Feb-2011	SL-196-SA5A-SS-0.0-0.5	6213421	N	3050B	6010B	III
22-Feb-2011	SL-196-SA5A-SS-0.0-0.5	6213421	N	3050B	6020	III
22-Feb-2011	SL-196-SA5A-SS-0.0-0.5	6213421	N	3060A	7199	III
22-Feb-2011	SL-196-SA5A-SS-0.0-0.5	6213421	N	3550B	8081A	III
22-Feb-2011	SL-196-SA5A-SS-0.0-0.5	6213421	N	3550B	8082	III
22-Feb-2011	SL-196-SA5A-SS-0.0-0.5	6213421	N	3550B	8151A	III
22-Feb-2011	SL-196-SA5A-SS-0.0-0.5	6213421	N	3550B	8270C	III
22-Feb-2011	SL-196-SA5A-SS-0.0-0.5	6213421	N	3550B	8270C SIM	III
22-Feb-2011	SL-196-SA5A-SS-0.0-0.5	6213421	N	Gen Prep	9045M	III
22-Feb-2011	SL-196-SA5A-SS-0.0-0.5	6213421	N	METHOD	300.0	III
22-Feb-2011	SL-196-SA5A-SS-0.0-0.5	6213421	N	METHOD	314.0	III
22-Feb-2011	SL-196-SA5A-SS-0.0-0.5	6213421	N	METHOD	7471A	III
22-Feb-2011	SL-031-SA5A-SB-4.0-5.0	6213432	N	3050B	6010B	III
22-Feb-2011	SL-031-SA5A-SB-4.0-5.0	6213432	N	3050B	6020	III
22-Feb-2011	SL-031-SA5A-SB-4.0-5.0	6213432	N	3060A	7199	III
22-Feb-2011	SL-031-SA5A-SB-4.0-5.0	6213432	N	3550B	8082	III
22-Feb-2011	SL-031-SA5A-SB-4.0-5.0	6213432	N	3550B	8270C	III
22-Feb-2011	SL-031-SA5A-SB-4.0-5.0	6213432	N	3550B	8270C SIM	III
22-Feb-2011	SL-031-SA5A-SB-4.0-5.0	6213432	N	5035	8260B	III
22-Feb-2011	SL-031-SA5A-SB-4.0-5.0	6213432	N	5035	8260B SIM	III
22-Feb-2011	SL-031-SA5A-SB-4.0-5.0	6213432	N	Gen Prep	9045M	III
22-Feb-2011	SL-031-SA5A-SB-4.0-5.0	6213432	N	METHOD	300.0	III
22-Feb-2011	SL-031-SA5A-SB-4.0-5.0	6213432	N	METHOD	314.0	III
22-Feb-2011	SL-031-SA5A-SB-4.0-5.0	6213432	N	METHOD	7471A	III
22-Feb-2011	SL-197-SA5A-SS-0.0-0.5	6213422	N	3050B	6010B	III
22-Feb-2011	SL-197-SA5A-SS-0.0-0.5	6213422	N	3050B	6020	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
22-Feb-2011	SL-197-SA5A-SS-0.0-0.5	6213422	N	3060A	7199	III
22-Feb-2011	SL-197-SA5A-SS-0.0-0.5	6213422	N	3550B	8081A	III
22-Feb-2011	SL-197-SA5A-SS-0.0-0.5	6213422	N	3550B	8082	III
22-Feb-2011	SL-197-SA5A-SS-0.0-0.5	6213422	N	3550B	8151A	III
22-Feb-2011	SL-197-SA5A-SS-0.0-0.5	6213422	N	3550B	8270C	III
22-Feb-2011	SL-197-SA5A-SS-0.0-0.5	6213422	N	3550B	8270C SIM	III
22-Feb-2011	SL-197-SA5A-SS-0.0-0.5	6213422	N	Gen Prep	9045M	III
22-Feb-2011	SL-197-SA5A-SS-0.0-0.5	6213422	N	METHOD	300.0	III
22-Feb-2011	SL-197-SA5A-SS-0.0-0.5	6213422	N	METHOD	314.0	III
22-Feb-2011	SL-197-SA5A-SS-0.0-0.5	6213422	N	METHOD	7471A	III
22-Feb-2011	SL-175-SA5A-SS-0.0-0.3	6213415	N	3050B	6010B	III
22-Feb-2011	SL-175-SA5A-SS-0.0-0.3	6213415	N	3050B	6020	III
22-Feb-2011	SL-175-SA5A-SS-0.0-0.3	6213415	N	3060A	7199	III
22-Feb-2011	SL-175-SA5A-SS-0.0-0.3	6213415	N	3550B	8081A	III
22-Feb-2011	SL-175-SA5A-SS-0.0-0.3	6213415	N	3550B	8082	III
22-Feb-2011	SL-175-SA5A-SS-0.0-0.3	6213415	N	3550B	8151A	III
22-Feb-2011	SL-175-SA5A-SS-0.0-0.3	6213415	N	3550B	8270C	III
22-Feb-2011	SL-175-SA5A-SS-0.0-0.3	6213415	N	3550B	8270C SIM	III
22-Feb-2011	SL-175-SA5A-SS-0.0-0.3	6213415	N	Gen Prep	9045M	III
22-Feb-2011	SL-175-SA5A-SS-0.0-0.3	6213415	N	METHOD	300.0	III
22-Feb-2011	SL-175-SA5A-SS-0.0-0.3	6213415	N	METHOD	314.0	III
22-Feb-2011	SL-175-SA5A-SS-0.0-0.3	6213415	N	METHOD	6850	III
22-Feb-2011	SL-175-SA5A-SS-0.0-0.3	6213415	N	METHOD	7471A	III
22-Feb-2011	DUP-02-SA5A-QC-022211	6213414	FD	3050B	6010B	III
22-Feb-2011	DUP-02-SA5A-QC-022211	6213414	FD	3050B	6020	III
22-Feb-2011	DUP-02-SA5A-QC-022211	6213414	FD	3060A	7199	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
22-Feb-2011	DUP-02-SA5A-QC-022211	6213414	FD	3550B	8081A	III
22-Feb-2011	DUP-02-SA5A-QC-022211	6213414	FD	3550B	8082	III
22-Feb-2011	DUP-02-SA5A-QC-022211	6213414	FD	3550B	8151A	III
22-Feb-2011	DUP-02-SA5A-QC-022211	6213414	FD	3550B	8270C	III
22-Feb-2011	DUP-02-SA5A-QC-022211	6213414	FD	3550B	8270C SIM	III
22-Feb-2011	DUP-02-SA5A-QC-022211	6213414	FD	Gen Prep	9045M	III
22-Feb-2011	DUP-02-SA5A-QC-022211	6213414	FD	METHOD	300.0	III
22-Feb-2011	DUP-02-SA5A-QC-022211	6213414	FD	METHOD	314.0	III
22-Feb-2011	DUP-02-SA5A-QC-022211	6213414	FD	METHOD	7471A	III
22-Feb-2011	SL-181-SA5A-SS-0.0-0.5	6213417	N	3050B	6010B	III
22-Feb-2011	SL-181-SA5A-SS-0.0-0.5	6213417	N	3050B	6020	III
22-Feb-2011	SL-181-SA5A-SS-0.0-0.5	6213417	N	3060A	7199	III
22-Feb-2011	SL-181-SA5A-SS-0.0-0.5	6213417	N	3550B	8081A	III
22-Feb-2011	SL-181-SA5A-SS-0.0-0.5	6213417	N	3550B	8082	III
22-Feb-2011	SL-181-SA5A-SS-0.0-0.5	6213417	N	3550B	8151A	III
22-Feb-2011	SL-181-SA5A-SS-0.0-0.5	6213417	N	3550B	8270C	III
22-Feb-2011	SL-181-SA5A-SS-0.0-0.5	6213417	N	3550B	8270C SIM	III
22-Feb-2011	SL-181-SA5A-SS-0.0-0.5	6213417	N	Gen Prep	9045M	III
22-Feb-2011	SL-181-SA5A-SS-0.0-0.5	6213417	N	METHOD	300.0	III
22-Feb-2011	SL-181-SA5A-SS-0.0-0.5	6213417	N	METHOD	314.0	III
22-Feb-2011	SL-181-SA5A-SS-0.0-0.5	6213417	N	METHOD	7471A	III
22-Feb-2011	SL-181-SA5A-SS-0.0-0.5MS	6213418	MS	3050B	6010B	III
22-Feb-2011	SL-181-SA5A-SS-0.0-0.5MS	6213418	MS	3050B	6020	III
22-Feb-2011	SL-181-SA5A-SS-0.0-0.5MS	6213418	MS	3060A	7199	III
22-Feb-2011	SL-181-SA5A-SS-0.0-0.5MS	6213418	MS	3550B	8081A	III
22-Feb-2011	SL-181-SA5A-SS-0.0-0.5MS	6213418	MS	3550B	8082	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
22-Feb-2011	SL-181-SA5A-SS-0.0-0.5MS	6213418	MS	3550B	8151A	III
22-Feb-2011	SL-181-SA5A-SS-0.0-0.5MS	6213418	MS	3550B	8270C	III
22-Feb-2011	SL-181-SA5A-SS-0.0-0.5MS	6213418	MS	3550B	8270C SIM	III
22-Feb-2011	SL-181-SA5A-SS-0.0-0.5MS	6213418	MS	METHOD	300.0	III
22-Feb-2011	SL-181-SA5A-SS-0.0-0.5MS	6213418	MS	METHOD	314.0	III
22-Feb-2011	SL-181-SA5A-SS-0.0-0.5MS	6213418	MS	METHOD	7471A	III
22-Feb-2011	SL-181-SA5A-SS-0.0-0.5MSD	6213419	MSD	3050B	6010B	III
22-Feb-2011	SL-181-SA5A-SS-0.0-0.5MSD	6213419	MSD	3050B	6020	III
22-Feb-2011	SL-181-SA5A-SS-0.0-0.5MSD	6213419	MSD	3550B	8081A	III
22-Feb-2011	SL-181-SA5A-SS-0.0-0.5MSD	6213419	MSD	3550B	8082	III
22-Feb-2011	SL-181-SA5A-SS-0.0-0.5MSD	6213419	MSD	3550B	8151A	III
22-Feb-2011	SL-181-SA5A-SS-0.0-0.5MSD	6213419	MSD	3550B	8270C	III
22-Feb-2011	SL-181-SA5A-SS-0.0-0.5MSD	6213419	MSD	3550B	8270C SIM	III
22-Feb-2011	SL-181-SA5A-SS-0.0-0.5MSD	6213419	MSD	METHOD	7471A	III
22-Feb-2011	SL-181-SA5A-SS-0.0-0.5DUP	6213420	DUP	3050B	6010B	III
22-Feb-2011	SL-181-SA5A-SS-0.0-0.5DUP	6213420	DUP	3050B	6020	III
22-Feb-2011	SL-181-SA5A-SS-0.0-0.5DUP	6213420	DUP	3060A	7199	III
22-Feb-2011	SL-181-SA5A-SS-0.0-0.5DUP	6213420	DUP	Gen Prep	9045M	III
22-Feb-2011	SL-181-SA5A-SS-0.0-0.5DUP	6213420	DUP	METHOD	300.0	III
22-Feb-2011	SL-181-SA5A-SS-0.0-0.5DUP	6213420	DUP	METHOD	314.0	III
22-Feb-2011	SL-181-SA5A-SS-0.0-0.5DUP	6213420	DUP	METHOD	7471A	III
22-Feb-2011	SL-180-SA5A-SS-0.0-0.5	6213416	N	3050B	6010B	III
22-Feb-2011	SL-180-SA5A-SS-0.0-0.5	6213416	N	3050B	6020	III
22-Feb-2011	SL-180-SA5A-SS-0.0-0.5	6213416	N	3060A	7199	III
22-Feb-2011	SL-180-SA5A-SS-0.0-0.5	6213416	N	3550B	8081A	III
22-Feb-2011	SL-180-SA5A-SS-0.0-0.5	6213416	N	3550B	8082	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
22-Feb-2011	SL-180-SA5A-SS-0.0-0.5	6213416	N	3550B	8151A	III
22-Feb-2011	SL-180-SA5A-SS-0.0-0.5	6213416	N	3550B	8270C	III
22-Feb-2011	SL-180-SA5A-SS-0.0-0.5	6213416	N	3550B	8270C SIM	III
22-Feb-2011	SL-180-SA5A-SS-0.0-0.5	6213416	N	Gen Prep	9045M	III
22-Feb-2011	SL-180-SA5A-SS-0.0-0.5	6213416	N	METHOD	300.0	III
22-Feb-2011	SL-180-SA5A-SS-0.0-0.5	6213416	N	METHOD	314.0	III
22-Feb-2011	SL-180-SA5A-SS-0.0-0.5	6213416	N	METHOD	7471A	III
22-Feb-2011	SL-026-SA5A-SB-3.5-4.5	6213431	N	3050B	6010B	III
22-Feb-2011	SL-026-SA5A-SB-3.5-4.5	6213431	N	3050B	6020	III
22-Feb-2011	SL-026-SA5A-SB-3.5-4.5	6213431	N	3060A	7199	III
22-Feb-2011	SL-026-SA5A-SB-3.5-4.5	6213431	N	3546	1625C	III
22-Feb-2011	SL-026-SA5A-SB-3.5-4.5	6213431	N	3550B	8015B	III
22-Feb-2011	SL-026-SA5A-SB-3.5-4.5	6213431	N	3550B	8015M	III
22-Feb-2011	SL-026-SA5A-SB-3.5-4.5	6213431	N	3550B	8082	III
22-Feb-2011	SL-026-SA5A-SB-3.5-4.5	6213431	N	3550B	8270C	III
22-Feb-2011	SL-026-SA5A-SB-3.5-4.5	6213431	N	3550B	8270C SIM	III
22-Feb-2011	SL-026-SA5A-SB-3.5-4.5	6213431	N	5035	8015M	III
22-Feb-2011	SL-026-SA5A-SB-3.5-4.5	6213431	N	5035	8260B	III
22-Feb-2011	SL-026-SA5A-SB-3.5-4.5	6213431	N	5035	8260B SIM	III
22-Feb-2011	SL-026-SA5A-SB-3.5-4.5	6213431	N	8330	8330A	III
22-Feb-2011	SL-026-SA5A-SB-3.5-4.5	6213431	N	Gen Prep	9045M	III
22-Feb-2011	SL-026-SA5A-SB-3.5-4.5	6213431	N	METHOD	300.0	III
22-Feb-2011	SL-026-SA5A-SB-3.5-4.5	6213431	N	METHOD	314.0	III
22-Feb-2011	SL-026-SA5A-SB-3.5-4.5	6213431	N	METHOD	6850	III
22-Feb-2011	SL-026-SA5A-SB-3.5-4.5	6213431	N	METHOD	7471A	III
22-Feb-2011	SL-026-SA5A-SB-3.5-4.5	6213431	N	METHOD	8015B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
22-Feb-2011	SL-026-SA5A-SB-3.5-4.5	6213431	N	METHOD	8015M	III
22-Feb-2011	SL-026-SA5A-SB-3.5-4.5	6213431	N	METHOD	8315A	III
22-Feb-2011	SL-026-SA5A-SB-3.5-4.5	6213431	N	METHOD	9012B	III
22-Feb-2011	SL-214-SA5A-SS-0.0-0.5	6213426	N	3050B	6010B	III
22-Feb-2011	SL-214-SA5A-SS-0.0-0.5	6213426	N	3050B	6020	III
22-Feb-2011	SL-214-SA5A-SS-0.0-0.5	6213426	N	3060A	7199	III
22-Feb-2011	SL-214-SA5A-SS-0.0-0.5	6213426	N	3550B	8081A	III
22-Feb-2011	SL-214-SA5A-SS-0.0-0.5	6213426	N	3550B	8082	III
22-Feb-2011	SL-214-SA5A-SS-0.0-0.5	6213426	N	3550B	8151A	III
22-Feb-2011	SL-214-SA5A-SS-0.0-0.5	6213426	N	3550B	8270C	III
22-Feb-2011	SL-214-SA5A-SS-0.0-0.5	6213426	N	3550B	8270C SIM	III
22-Feb-2011	SL-214-SA5A-SS-0.0-0.5	6213426	N	Gen Prep	9045M	III
22-Feb-2011	SL-214-SA5A-SS-0.0-0.5	6213426	N	METHOD	300.0	III
22-Feb-2011	SL-214-SA5A-SS-0.0-0.5	6213426	N	METHOD	314.0	III
22-Feb-2011	SL-214-SA5A-SS-0.0-0.5	6213426	N	METHOD	6850	III
22-Feb-2011	SL-214-SA5A-SS-0.0-0.5	6213426	N	METHOD	7471A	III
22-Feb-2011	SL-214-SA5A-SS-0.0-0.5DUP	P213426D291320B	DUP	Gen Prep	9045M	III
22-Feb-2011	SL-024-SA5A-SB-2.5-3.5	6213430	N	3050B	6010B	III
22-Feb-2011	SL-024-SA5A-SB-2.5-3.5	6213430	N	3050B	6020	III
22-Feb-2011	SL-024-SA5A-SB-2.5-3.5	6213430	N	3060A	7199	III
22-Feb-2011	SL-024-SA5A-SB-2.5-3.5	6213430	N	3550B	8082	III
22-Feb-2011	SL-024-SA5A-SB-2.5-3.5	6213430	N	3550B	8270C	III
22-Feb-2011	SL-024-SA5A-SB-2.5-3.5	6213430	N	3550B	8270C SIM	III
22-Feb-2011	SL-024-SA5A-SB-2.5-3.5	6213430	N	5035	8260B	III
22-Feb-2011	SL-024-SA5A-SB-2.5-3.5	6213430	N	5035	8260B SIM	III
22-Feb-2011	SL-024-SA5A-SB-2.5-3.5	6213430	N	Gen Prep	9045M	III

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IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
22-Feb-2011	SL-024-SA5A-SB-2.5-3.5	6213430	N	METHOD	300.0	III
22-Feb-2011	SL-024-SA5A-SB-2.5-3.5	6213430	N	METHOD	314.0	III
22-Feb-2011	SL-024-SA5A-SB-2.5-3.5	6213430	N	METHOD	7471A	III
22-Feb-2011	SL-215-SA5A-SS-0.0-0.5	6213427	N	3050B	6010B	III
22-Feb-2011	SL-215-SA5A-SS-0.0-0.5	6213427	N	3050B	6020	III
22-Feb-2011	SL-215-SA5A-SS-0.0-0.5	6213427	N	3060A	7199	III
22-Feb-2011	SL-215-SA5A-SS-0.0-0.5	6213427	N	3550B	8081A	III
22-Feb-2011	SL-215-SA5A-SS-0.0-0.5	6213427	N	3550B	8082	III
22-Feb-2011	SL-215-SA5A-SS-0.0-0.5	6213427	N	3550B	8151A	III
22-Feb-2011	SL-215-SA5A-SS-0.0-0.5	6213427	N	3550B	8270C	III
22-Feb-2011	SL-215-SA5A-SS-0.0-0.5	6213427	N	3550B	8270C SIM	III
22-Feb-2011	SL-215-SA5A-SS-0.0-0.5	6213427	N	Gen Prep	9045M	III
22-Feb-2011	SL-215-SA5A-SS-0.0-0.5	6213427	N	METHOD	300.0	III
22-Feb-2011	SL-215-SA5A-SS-0.0-0.5	6213427	N	METHOD	314.0	III
22-Feb-2011	SL-215-SA5A-SS-0.0-0.5	6213427	N	METHOD	7471A	III
22-Feb-2011	SL-215-SA5A-SS-0.0-0.5DUP	P213427D271533B	DUP	METHOD	300.0	III
22-Feb-2011	SL-215-SA5A-SS-0.0-0.5DUP	P213427D271827B	DUP	METHOD	314.0	III
22-Feb-2011	SL-215-SA5A-SS-0.0-0.5MS	P213427R271548B	MS	METHOD	300.0	III
22-Feb-2011	SL-215-SA5A-SS-0.0-0.5MS	P213427R271851B	MS	METHOD	314.0	III
22-Feb-2011	SL-210-SA5A-SS-0.0-0.5	6213423	N	3050B	6010B	III
22-Feb-2011	SL-210-SA5A-SS-0.0-0.5	6213423	N	3050B	6020	III
22-Feb-2011	SL-210-SA5A-SS-0.0-0.5	6213423	N	3060A	7199	III
22-Feb-2011	SL-210-SA5A-SS-0.0-0.5	6213423	N	3550B	8081A	III
22-Feb-2011	SL-210-SA5A-SS-0.0-0.5	6213423	N	3550B	8082	III
22-Feb-2011	SL-210-SA5A-SS-0.0-0.5	6213423	N	3550B	8151A	III
22-Feb-2011	SL-210-SA5A-SS-0.0-0.5	6213423	N	3550B	8270C	III

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Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
22-Feb-2011	SL-210-SA5A-SS-0.0-0.5	6213423	N	3550B	8270C SIM	III
22-Feb-2011	SL-210-SA5A-SS-0.0-0.5	6213423	N	Gen Prep	9045M	III
22-Feb-2011	SL-210-SA5A-SS-0.0-0.5	6213423	N	METHOD	300.0	III
22-Feb-2011	SL-210-SA5A-SS-0.0-0.5	6213423	N	METHOD	314.0	III
22-Feb-2011	SL-210-SA5A-SS-0.0-0.5	6213423	N	METHOD	7471A	III
22-Feb-2011	SL-211-SA5A-SS-0.0-0.5	6213424	N	3050B	6010B	III
22-Feb-2011	SL-211-SA5A-SS-0.0-0.5	6213424	N	3050B	6020	III
22-Feb-2011	SL-211-SA5A-SS-0.0-0.5	6213424	N	3060A	7199	III
22-Feb-2011	SL-211-SA5A-SS-0.0-0.5	6213424	N	3550B	8081A	III
22-Feb-2011	SL-211-SA5A-SS-0.0-0.5	6213424	N	3550B	8082	III
22-Feb-2011	SL-211-SA5A-SS-0.0-0.5	6213424	N	3550B	8151A	III
22-Feb-2011	SL-211-SA5A-SS-0.0-0.5	6213424	N	3550B	8270C	III
22-Feb-2011	SL-211-SA5A-SS-0.0-0.5	6213424	N	3550B	8270C SIM	III
22-Feb-2011	SL-211-SA5A-SS-0.0-0.5	6213424	N	Gen Prep	9045M	III
22-Feb-2011	SL-211-SA5A-SS-0.0-0.5	6213424	N	METHOD	300.0	III
22-Feb-2011	SL-211-SA5A-SS-0.0-0.5	6213424	N	METHOD	314.0	III
22-Feb-2011	SL-211-SA5A-SS-0.0-0.5	6213424	N	METHOD	7471A	III
22-Feb-2011	SL-212-SA5A-SS-0.0-0.5	6213425	N	3050B	6010B	III
22-Feb-2011	SL-212-SA5A-SS-0.0-0.5	6213425	N	3050B	6020	III
22-Feb-2011	SL-212-SA5A-SS-0.0-0.5	6213425	N	3060A	7199	III
22-Feb-2011	SL-212-SA5A-SS-0.0-0.5	6213425	N	3550B	8081A	III
22-Feb-2011	SL-212-SA5A-SS-0.0-0.5	6213425	N	3550B	8082	III
22-Feb-2011	SL-212-SA5A-SS-0.0-0.5	6213425	N	3550B	8151A	III
22-Feb-2011	SL-212-SA5A-SS-0.0-0.5	6213425	N	3550B	8270C	III
22-Feb-2011	SL-212-SA5A-SS-0.0-0.5	6213425	N	3550B	8270C SIM	III
22-Feb-2011	SL-212-SA5A-SS-0.0-0.5	6213425	N	Gen Prep	9045M	III

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IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
22-Feb-2011	SL-212-SA5A-SS-0.0-0.5	6213425	N	METHOD	300.0	III
22-Feb-2011	SL-212-SA5A-SS-0.0-0.5	6213425	N	METHOD	314.0	III
22-Feb-2011	SL-212-SA5A-SS-0.0-0.5	6213425	N	METHOD	7471A	III
22-Feb-2011	SL-217-SA5A-SS-0.0-0.5	6213428	N	3050B	6010B	III
22-Feb-2011	SL-217-SA5A-SS-0.0-0.5	6213428	N	3050B	6020	III
22-Feb-2011	SL-217-SA5A-SS-0.0-0.5	6213428	N	3060A	7199	III
22-Feb-2011	SL-217-SA5A-SS-0.0-0.5	6213428	N	3550B	8081A	III
22-Feb-2011	SL-217-SA5A-SS-0.0-0.5	6213428	N	3550B	8082	III
22-Feb-2011	SL-217-SA5A-SS-0.0-0.5	6213428	N	3550B	8151A	III
22-Feb-2011	SL-217-SA5A-SS-0.0-0.5	6213428	N	3550B	8270C	III
22-Feb-2011	SL-217-SA5A-SS-0.0-0.5	6213428	N	3550B	8270C SIM	III
22-Feb-2011	SL-217-SA5A-SS-0.0-0.5	6213428	N	Gen Prep	9045M	III
22-Feb-2011	SL-217-SA5A-SS-0.0-0.5	6213428	N	METHOD	300.0	III
22-Feb-2011	SL-217-SA5A-SS-0.0-0.5	6213428	N	METHOD	314.0	III
22-Feb-2011	SL-217-SA5A-SS-0.0-0.5	6213428	N	METHOD	7471A	III
22-Feb-2011	SL-218-SA5A-SS-0.0-0.5	6213429	N	3050B	6010B	III
22-Feb-2011	SL-218-SA5A-SS-0.0-0.5	6213429	N	3050B	6020	III
22-Feb-2011	SL-218-SA5A-SS-0.0-0.5	6213429	N	3060A	7199	III
22-Feb-2011	SL-218-SA5A-SS-0.0-0.5	6213429	N	3550B	8081A	III
22-Feb-2011	SL-218-SA5A-SS-0.0-0.5	6213429	N	3550B	8082	III
22-Feb-2011	SL-218-SA5A-SS-0.0-0.5	6213429	N	3550B	8151A	III
22-Feb-2011	SL-218-SA5A-SS-0.0-0.5	6213429	N	3550B	8270C	III
22-Feb-2011	SL-218-SA5A-SS-0.0-0.5	6213429	N	3550B	8270C SIM	III
22-Feb-2011	SL-218-SA5A-SS-0.0-0.5	6213429	N	Gen Prep	9045M	III
22-Feb-2011	SL-218-SA5A-SS-0.0-0.5	6213429	N	METHOD	300.0	III
22-Feb-2011	SL-218-SA5A-SS-0.0-0.5	6213429	N	METHOD	314.0	III

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Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
22-Feb-2011	SL-218-SA5A-SS-0.0-0.5	6213429	N	METHOD	7471A	III
22-Feb-2011	SL-035-SA5A-SB-4.0-5.0	6213433	N	3050B	6010B	III
22-Feb-2011	SL-035-SA5A-SB-4.0-5.0	6213433	N	3050B	6020	III
22-Feb-2011	SL-035-SA5A-SB-4.0-5.0	6213433	N	3060A	7199	III
22-Feb-2011	SL-035-SA5A-SB-4.0-5.0	6213433	N	3546	1625C	III
22-Feb-2011	SL-035-SA5A-SB-4.0-5.0	6213433	N	3550B	8015B	III
22-Feb-2011	SL-035-SA5A-SB-4.0-5.0	6213433	N	3550B	8015M	III
22-Feb-2011	SL-035-SA5A-SB-4.0-5.0	6213433	N	3550B	8082	III
22-Feb-2011	SL-035-SA5A-SB-4.0-5.0	6213433	N	3550B	8270C	III
22-Feb-2011	SL-035-SA5A-SB-4.0-5.0	6213433	N	3550B	8270C SIM	III
22-Feb-2011	SL-035-SA5A-SB-4.0-5.0	6213433	N	5035	8015M	III
22-Feb-2011	SL-035-SA5A-SB-4.0-5.0	6213433	N	5035	8260B	III
22-Feb-2011	SL-035-SA5A-SB-4.0-5.0	6213433	N	5035	8260B SIM	III
22-Feb-2011	SL-035-SA5A-SB-4.0-5.0	6213433	N	8330	8330A	III
22-Feb-2011	SL-035-SA5A-SB-4.0-5.0	6213433	N	Gen Prep	9045M	III
22-Feb-2011	SL-035-SA5A-SB-4.0-5.0	6213433	N	METHOD	300.0	III
22-Feb-2011	SL-035-SA5A-SB-4.0-5.0	6213433	N	METHOD	314.0	III
22-Feb-2011	SL-035-SA5A-SB-4.0-5.0	6213433	N	METHOD	6850	III
22-Feb-2011	SL-035-SA5A-SB-4.0-5.0	6213433	N	METHOD	7471A	III
22-Feb-2011	SL-035-SA5A-SB-4.0-5.0	6213433	N	METHOD	8015B	III
22-Feb-2011	SL-035-SA5A-SB-4.0-5.0	6213433	N	METHOD	8015M	III
22-Feb-2011	SL-035-SA5A-SB-4.0-5.0	6213433	N	METHOD	8315A	III
22-Feb-2011	SL-035-SA5A-SB-4.0-5.0	6213433	N	METHOD	9012B	III
22-Feb-2011	TB-022211	6213434	TB	5030B	8015M	III
22-Feb-2011	TB-022211	6213434	TB	5030B	8260B	III
22-Feb-2011	TB-022211	6213434	TB	5030B	8260B SIM	III

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Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE088 **Laboratory: LL**

EDD Filename: DE088_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: **DUP-02-SA5A-QC-022211** ***Collected:*** **2/22/2011 10:10:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.3		0.92	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: **SL-024-SA5A-SB-2.5-3.5** ***Collected:*** **2/22/2011 12:35:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.2		0.89	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: **SL-026-SA5A-SB-3.5-4.5** ***Collected:*** **2/22/2011 11:19:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	4.8		0.84	MDL	1.0	PQL	mg/Kg	J	Q

Sample ID: **SL-031-SA5A-SB-4.0-5.0** ***Collected:*** **2/22/2011 9:04:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	16.2		0.88	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: **SL-035-SA5A-SB-4.0-5.0** ***Collected:*** **2/22/2011 4:15:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	9.3		0.88	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: **SL-175-SA5A-SS-0.0-0.3** ***Collected:*** **2/22/2011 9:52:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	0.98	J	0.92	MDL	1.1	PQL	mg/Kg	J	Z, Q

Sample ID: **SL-180-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 10:35:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	4.6		0.92	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: **SL-181-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 10:10:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.3		0.93	MDL	1.2	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE088 **Laboratory: LL**

EDD Filename: DE088_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: **SL-196-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 8:40:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.5		0.90	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: **SL-197-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 9:08:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.6		0.95	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: **SL-210-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 1:13:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.3		0.87	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: **SL-211-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 1:36:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.1		0.88	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: **SL-212-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 2:14:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	5.2		0.94	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: **SL-214-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 12:28:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	4.2		0.88	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: **SL-215-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 12:55:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	3.6		0.91	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: **SL-217-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 2:46:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.6		0.94	MDL	1.2	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE088 **Laboratory: LL**

EDD Filename: DE088_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: **SL-218-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 3:10:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.6		0.95	MDL	1.2	PQL	mg/Kg	J	Q

Method Category: GENCHEM

Method: 314.0 **Matrix:** SO

Sample ID: **SL-035-SA5A-SB-4.0-5.0** ***Collected:*** **2/22/2011 4:15:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PERCHLORATE	25.7	J	9.9	MDL	33.1	PQL	ug/Kg	J	Z

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: **DUP-02-SA5A-QC-022211** ***Collected:*** **2/22/2011 10:10:00** ***Analysis Type:*** **REA** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LITHIUM	22.7		0.25	MDL	2.3	PQL	mg/Kg	J	A
PHOSPHORUS	518		0.632	MDL	11.3	PQL	mg/Kg	J	Q, E
Zirconium	3.38	J	0.948	MDL	5.64	PQL	mg/Kg	J	Z

Sample ID: **DUP-02-SA5A-QC-022211** ***Collected:*** **2/22/2011 10:10:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.80	J	1.00	MDL	5.64	PQL	mg/Kg	J	Z
TIN	3.53	J	1.13	MDL	11.3	PQL	mg/Kg	U	B

Sample ID: **SL-024-SA5A-SB-2.5-3.5** ***Collected:*** **2/22/2011 12:35:00** ***Analysis Type:*** **REA** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LITHIUM	38.4		0.24	MDL	2.2	PQL	mg/Kg	J	A
PHOSPHORUS	210		0.613	MDL	10.9	PQL	mg/Kg	J	Q, E
Zirconium	4.44	J	0.919	MDL	5.47	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE088 **Laboratory: LL**

EDD Filename: DE088_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: **SL-024-SA5A-SB-2.5-3.5** ***Collected:*** **2/22/2011 12:35:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.27	J	0.955	MDL	5.37	PQL	mg/Kg	J	Z
TIN	3.58	J	1.07	MDL	10.7	PQL	mg/Kg	U	B

Sample ID: **SL-026-SA5A-SB-3.5-4.5** ***Collected:*** **2/22/2011 11:19:00** ***Analysis Type:*** **REA** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LITHIUM	26.5		0.23	MDL	2.1	PQL	mg/Kg	J	A
PHOSPHORUS	105		0.586	MDL	10.5	PQL	mg/Kg	J	Q, E
Zirconium	4.42	J	0.880	MDL	5.24	PQL	mg/Kg	J	Z

Sample ID: **SL-026-SA5A-SB-3.5-4.5** ***Collected:*** **2/22/2011 11:19:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	3.10	J	1.05	MDL	10.5	PQL	mg/Kg	U	B

Sample ID: **SL-031-SA5A-SB-4.0-5.0** ***Collected:*** **2/22/2011 9:04:00** ***Analysis Type:*** **REA** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LITHIUM	29.7		0.24	MDL	2.1	PQL	mg/Kg	J	A
PHOSPHORUS	124		0.599	MDL	10.7	PQL	mg/Kg	J	Q, E
Zirconium	5.08	J	0.899	MDL	5.35	PQL	mg/Kg	J	Z

Sample ID: **SL-031-SA5A-SB-4.0-5.0** ***Collected:*** **2/22/2011 9:04:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.35	J	0.981	MDL	5.51	PQL	mg/Kg	J	Z
TIN	3.47	J	1.10	MDL	11.0	PQL	mg/Kg	U	B

Sample ID: **SL-035-SA5A-SB-4.0-5.0** ***Collected:*** **2/22/2011 4:15:00** ***Analysis Type:*** **REA** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LITHIUM	28.7		0.24	MDL	2.1	PQL	mg/Kg	J	A
PHOSPHORUS	156		0.600	MDL	10.7	PQL	mg/Kg	J	Q, E
Zirconium	5.09	J	0.900	MDL	5.36	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE088 **Laboratory: LL**

EDD Filename: DE088_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: **SL-035-SA5A-SB-4.0-5.0** ***Collected:*** **2/22/2011 4:15:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.82	J	0.973	MDL	5.46	PQL	mg/Kg	J	Z
TIN	3.25	J	1.09	MDL	10.9	PQL	mg/Kg	U	B

Sample ID: **SL-175-SA5A-SS-0.0-0.3** ***Collected:*** **2/22/2011 9:52:00** ***Analysis Type:*** **REA** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LITHIUM	10.5		0.25	MDL	2.2	PQL	mg/Kg	J	A
PHOSPHORUS	506		0.628	MDL	11.2	PQL	mg/Kg	J	Q, E
Zirconium	4.46	J	0.942	MDL	5.61	PQL	mg/Kg	J	Z

Sample ID: **SL-175-SA5A-SS-0.0-0.3** ***Collected:*** **2/22/2011 9:52:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.71	J	0.998	MDL	5.61	PQL	mg/Kg	J	Z
TIN	3.33	J	1.12	MDL	11.2	PQL	mg/Kg	U	B

Sample ID: **SL-180-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 10:35:00** ***Analysis Type:*** **REA** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LITHIUM	27.0		0.24	MDL	2.2	PQL	mg/Kg	J	A
PHOSPHORUS	366		0.621	MDL	11.1	PQL	mg/Kg	J	Q, E
Zirconium	4.64	J	0.932	MDL	5.55	PQL	mg/Kg	J	Z

Sample ID: **SL-180-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 10:35:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.77	J	0.997	MDL	5.60	PQL	mg/Kg	J	Z
SODIUM	106	J	41.8	MDL	112	PQL	mg/Kg	J	Z
TIN	3.53	J	1.12	MDL	11.2	PQL	mg/Kg	U	B

Sample ID: **SL-181-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 10:10:00** ***Analysis Type:*** **REA** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LITHIUM	19.4		0.26	MDL	2.3	PQL	mg/Kg	J	A
PHOSPHORUS	438		0.653	MDL	11.7	PQL	mg/Kg	J	Q, E

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE088 **Laboratory: LL**

EDD Filename: DE088_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: **SL-181-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 10:10:00** ***Analysis Type:*** **REA** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	4.41	J	0.979	MDL	5.83	PQL	mg/Kg	J	Z

Sample ID: **SL-181-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 10:10:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.28	J	1.03	MDL	5.77	PQL	mg/Kg	J	Z
SODIUM	101	J	43.0	MDL	115	PQL	mg/Kg	J	Z
TIN	3.80	J	1.15	MDL	11.5	PQL	mg/Kg	U	B

Sample ID: **SL-196-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 8:40:00** ***Analysis Type:*** **REA** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LITHIUM	20.3		0.24	MDL	2.2	PQL	mg/Kg	J	A
PHOSPHORUS	308		0.603	MDL	10.8	PQL	mg/Kg	J	Q, E
Zirconium	4.85	J	0.904	MDL	5.38	PQL	mg/Kg	J	Z

Sample ID: **SL-196-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 8:40:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.26	J	0.968	MDL	5.44	PQL	mg/Kg	J	Z
SODIUM	67.5	J	40.6	MDL	109	PQL	mg/Kg	J	Z
TIN	2.91	J	1.09	MDL	10.9	PQL	mg/Kg	U	B

Sample ID: **SL-197-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 9:08:00** ***Analysis Type:*** **REA** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LITHIUM	18.5		0.26	MDL	2.4	PQL	mg/Kg	J	A
PHOSPHORUS	456		0.660	MDL	11.8	PQL	mg/Kg	J	Q, E
Zirconium	4.88	J	0.990	MDL	5.89	PQL	mg/Kg	J	Z

Sample ID: **SL-197-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 9:08:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	3.17	J	1.14	MDL	11.4	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE088 **Laboratory: LL**

EDD Filename: DE088_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: **SL-210-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 1:13:00** ***Analysis Type:*** **REA** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LITHIUM	23.7		0.23	MDL	2.1	PQL	mg/Kg	J	A
PHOSPHORUS	404		0.594	MDL	10.6	PQL	mg/Kg	J	Q, E
Zirconium	3.99	J	0.891	MDL	5.31	PQL	mg/Kg	J	Z

Sample ID: **SL-210-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 1:13:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.82	J	0.944	MDL	5.31	PQL	mg/Kg	J	Z
SODIUM	103	J	39.6	MDL	106	PQL	mg/Kg	J	Z
TIN	3.00	J	1.06	MDL	10.6	PQL	mg/Kg	U	B

Sample ID: **SL-211-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 1:36:00** ***Analysis Type:*** **REA** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LITHIUM	23.2		0.23	MDL	2.1	PQL	mg/Kg	J	A
PHOSPHORUS	431		0.597	MDL	10.7	PQL	mg/Kg	J	Q, E
Zirconium	3.61	J	0.895	MDL	5.33	PQL	mg/Kg	J	Z

Sample ID: **SL-211-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 1:36:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.56	J	0.967	MDL	5.43	PQL	mg/Kg	J	Z
TIN	3.04	J	1.09	MDL	10.9	PQL	mg/Kg	U	B

Sample ID: **SL-212-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 2:14:00** ***Analysis Type:*** **REA** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LITHIUM	32.9		0.25	MDL	2.3	PQL	mg/Kg	J	A
PHOSPHORUS	562		0.648	MDL	11.6	PQL	mg/Kg	J	Q, E
Zirconium	5.08	J	0.973	MDL	5.79	PQL	mg/Kg	J	Z

Sample ID: **SL-212-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 2:14:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.41	J	1.01	MDL	5.68	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE088 **Laboratory: LL**

EDD Filename: DE088_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: **SL-212-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 2:14:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	3.62	J	1.14	MDL	11.4	PQL	mg/Kg	U	B

Sample ID: **SL-214-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 12:28:00** ***Analysis Type:*** **REA** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LITHIUM	23.9		0.24	MDL	2.2	PQL	mg/Kg	J	A
PHOSPHORUS	509		0.606	MDL	10.8	PQL	mg/Kg	J	Q, E
Zirconium	4.09	J	0.909	MDL	5.41	PQL	mg/Kg	J	Z

Sample ID: **SL-214-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 12:28:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.48	J	0.963	MDL	5.41	PQL	mg/Kg	J	Z
TIN	2.87	J	1.08	MDL	10.8	PQL	mg/Kg	U	B

Sample ID: **SL-215-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 12:55:00** ***Analysis Type:*** **REA** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LITHIUM	25.5		0.24	MDL	2.2	PQL	mg/Kg	J	A
PHOSPHORUS	367		0.614	MDL	11.0	PQL	mg/Kg	J	Q, E
Zirconium	4.58	J	0.921	MDL	5.48	PQL	mg/Kg	J	Z

Sample ID: **SL-215-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 12:55:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.84	J	1.00	MDL	5.64	PQL	mg/Kg	J	Z
SODIUM	89.0	J	42.1	MDL	113	PQL	mg/Kg	J	Z
TIN	3.09	J	1.13	MDL	11.3	PQL	mg/Kg	U	B

Sample ID: **SL-217-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 2:46:00** ***Analysis Type:*** **REA** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LITHIUM	25.1		0.25	MDL	2.3	PQL	mg/Kg	J	A
PHOSPHORUS	467		0.636	MDL	11.4	PQL	mg/Kg	J	Q, E
Zirconium	5.02	J	0.954	MDL	5.68	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE088 **Laboratory: LL**

EDD Filename: DE088_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: **SL-217-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 2:46:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.01	J	1.00	MDL	5.62	PQL	mg/Kg	J	Z
SODIUM	99.0	J	41.9	MDL	112	PQL	mg/Kg	J	Z
TIN	3.08	J	1.12	MDL	11.2	PQL	mg/Kg	U	B

Sample ID: **SL-218-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 3:10:00** ***Analysis Type:*** **REA** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LITHIUM	22.8		0.26	MDL	2.3	PQL	mg/Kg	J	A
PHOSPHORUS	385		0.656	MDL	11.7	PQL	mg/Kg	J	Q, E
Zirconium	4.29	J	0.984	MDL	5.86	PQL	mg/Kg	J	Z

Sample ID: **SL-218-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 3:10:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.93	J	1.03	MDL	5.80	PQL	mg/Kg	J	Z
SODIUM	84.2	J	43.3	MDL	116	PQL	mg/Kg	J	Z
TIN	3.37	J	1.16	MDL	11.6	PQL	mg/Kg	U	B

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: **DUP-02-SA5A-QC-022211** ***Collected:*** **2/22/2011 10:10:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COBALT	5.79		0.0223	MDL	0.112	PQL	mg/Kg	J	A

Sample ID: **DUP-02-SA5A-QC-022211** ***Collected:*** **2/22/2011 10:10:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.144	J	0.0447	MDL	0.447	PQL	mg/Kg	J	Z

Sample ID: **DUP-02-SA5A-QC-022211** ***Collected:*** **2/22/2011 10:10:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.216	J	0.0670	MDL	0.223	PQL	mg/Kg	J	Z, E, Q

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE088 **Laboratory: LL**

EDD Filename: DE088_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: **DUP-02-SA5A-QC-022211** ***Collected:*** **2/22/2011 10:10:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	4.95		0.0894	MDL	0.447	PQL	mg/Kg	J	Q
CHROMIUM	20.4		0.134	MDL	0.447	PQL	mg/Kg	J	Q
LEAD	12.4		0.0116	MDL	0.223	PQL	mg/Kg	J	Q, E
NICKEL	12.4		0.112	MDL	0.447	PQL	mg/Kg	J	A
VANADIUM	36.4		0.0246	MDL	0.112	PQL	mg/Kg	J	Q

Sample ID: **SL-024-SA5A-SB-2.5-3.5** ***Collected:*** **2/22/2011 12:35:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COBALT	6.31		0.0221	MDL	0.111	PQL	mg/Kg	J	A

Sample ID: **SL-024-SA5A-SB-2.5-3.5** ***Collected:*** **2/22/2011 12:35:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.159	J	0.0442	MDL	0.442	PQL	mg/Kg	J	Z

Sample ID: **SL-024-SA5A-SB-2.5-3.5** ***Collected:*** **2/22/2011 12:35:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0694	J	0.0663	MDL	0.221	PQL	mg/Kg	J	Z, E, Q
ARSENIC	7.37		0.0884	MDL	0.442	PQL	mg/Kg	J	Q
CHROMIUM	23.3		0.133	MDL	0.442	PQL	mg/Kg	J	Q
LEAD	8.29		0.0115	MDL	0.221	PQL	mg/Kg	J	Q, E
NICKEL	13.6		0.111	MDL	0.442	PQL	mg/Kg	J	A
SILVER	0.0159	J	0.0133	MDL	0.111	PQL	mg/Kg	J	Z
VANADIUM	41.9		0.0243	MDL	0.111	PQL	mg/Kg	J	Q

Sample ID: **SL-026-SA5A-SB-3.5-4.5** ***Collected:*** **2/22/2011 11:19:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COBALT	5.16		0.0209	MDL	0.105	PQL	mg/Kg	J	A

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE088 **Laboratory: LL**

EDD Filename: DE088_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: **SL-026-SA5A-SB-3.5-4.5** ***Collected:*** **2/22/2011 11:19:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.107	J	0.0419	MDL	0.419	PQL	mg/Kg	J	Z

Sample ID: **SL-026-SA5A-SB-3.5-4.5** ***Collected:*** **2/22/2011 11:19:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0628	U	0.0628	MDL	0.209	PQL	mg/Kg	UJ	E, Q
ARSENIC	5.58		0.0838	MDL	0.419	PQL	mg/Kg	J	Q
CHROMIUM	15.2		0.126	MDL	0.419	PQL	mg/Kg	J	Q
LEAD	4.94		0.0109	MDL	0.209	PQL	mg/Kg	J	Q, E
NICKEL	8.37		0.105	MDL	0.419	PQL	mg/Kg	J	A
VANADIUM	27.0		0.0230	MDL	0.105	PQL	mg/Kg	J	Q

Sample ID: **SL-031-SA5A-SB-4.0-5.0** ***Collected:*** **2/22/2011 9:04:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COBALT	4.01		0.0214	MDL	0.107	PQL	mg/Kg	J	A

Sample ID: **SL-031-SA5A-SB-4.0-5.0** ***Collected:*** **2/22/2011 9:04:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.135	J	0.0428	MDL	0.428	PQL	mg/Kg	J	Z

Sample ID: **SL-031-SA5A-SB-4.0-5.0** ***Collected:*** **2/22/2011 9:04:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0854	J	0.0642	MDL	0.214	PQL	mg/Kg	J	Z, E, Q
ARSENIC	5.88		0.0856	MDL	0.428	PQL	mg/Kg	J	Q
CHROMIUM	24.2		0.128	MDL	0.428	PQL	mg/Kg	J	Q
LEAD	6.72		0.0111	MDL	0.214	PQL	mg/Kg	J	Q, E
NICKEL	10.8		0.107	MDL	0.428	PQL	mg/Kg	J	A
VANADIUM	41.4		0.0235	MDL	0.107	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE088 **Laboratory: LL**

EDD Filename: DE088_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: **SL-035-SA5A-SB-4.0-5.0** ***Collected:*** **2/22/2011 4:15:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COBALT	6.37		0.0219	MDL	0.109	PQL	mg/Kg	J	A

Sample ID: **SL-035-SA5A-SB-4.0-5.0** ***Collected:*** **2/22/2011 4:15:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0835	J	0.0437	MDL	0.437	PQL	mg/Kg	J	Z

Sample ID: **SL-035-SA5A-SB-4.0-5.0** ***Collected:*** **2/22/2011 4:15:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0984	J	0.0656	MDL	0.219	PQL	mg/Kg	J	Z, E, Q
ARSENIC	5.10		0.0874	MDL	0.437	PQL	mg/Kg	J	Q
CADMIUM	0.0459	J	0.0437	MDL	0.109	PQL	mg/Kg	J	Z
CHROMIUM	21.3		0.131	MDL	0.437	PQL	mg/Kg	J	Q
LEAD	5.91		0.0114	MDL	0.219	PQL	mg/Kg	J	Q, E
NICKEL	11.4		0.109	MDL	0.437	PQL	mg/Kg	J	A
SILVER	0.0429	J	0.0131	MDL	0.109	PQL	mg/Kg	J	Z
VANADIUM	40.2		0.0240	MDL	0.109	PQL	mg/Kg	J	Q

Sample ID: **SL-175-SA5A-SS-0.0-0.3** ***Collected:*** **2/22/2011 9:52:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COBALT	4.49		0.0229	MDL	0.114	PQL	mg/Kg	J	A

Sample ID: **SL-175-SA5A-SS-0.0-0.3** ***Collected:*** **2/22/2011 9:52:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.131	J	0.0458	MDL	0.458	PQL	mg/Kg	J	Z

Sample ID: **SL-175-SA5A-SS-0.0-0.3** ***Collected:*** **2/22/2011 9:52:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.247		0.0686	MDL	0.229	PQL	mg/Kg	J	E, Q
ARSENIC	3.28		0.0915	MDL	0.458	PQL	mg/Kg	J	Q
CHROMIUM	25.8		0.137	MDL	0.458	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE088 **Laboratory: LL**

EDD Filename: DE088_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: **SL-175-SA5A-SS-0.0-0.3** ***Collected:*** **2/22/2011 9:52:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	27.1		0.0119	MDL	0.229	PQL	mg/Kg	J	Q, E
NICKEL	18.7		0.114	MDL	0.458	PQL	mg/Kg	J	A
VANADIUM	27.3		0.0252	MDL	0.114	PQL	mg/Kg	J	Q

Sample ID: **SL-180-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 10:35:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COBALT	6.18		0.0224	MDL	0.112	PQL	mg/Kg	J	A

Sample ID: **SL-180-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 10:35:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.168	J	0.0448	MDL	0.448	PQL	mg/Kg	J	Z

Sample ID: **SL-180-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 10:35:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.117	J	0.0672	MDL	0.224	PQL	mg/Kg	J	Z, E, Q
ARSENIC	4.70		0.0896	MDL	0.448	PQL	mg/Kg	J	Q
CHROMIUM	21.8		0.134	MDL	0.448	PQL	mg/Kg	J	Q
LEAD	12.3		0.0116	MDL	0.224	PQL	mg/Kg	J	Q, E
NICKEL	13.2		0.112	MDL	0.448	PQL	mg/Kg	J	A
VANADIUM	38.9		0.0246	MDL	0.112	PQL	mg/Kg	J	Q

Sample ID: **SL-181-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 10:10:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COBALT	5.50		0.0231	MDL	0.115	PQL	mg/Kg	J	A

Sample ID: **SL-181-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 10:10:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.136	J	0.0462	MDL	0.462	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE088 **Laboratory: LL**

EDD Filename: DE088_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-181-SA5A-SS-0.0-0.5 ***Collected:*** 2/22/2011 10:10:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.191	J	0.0692	MDL	0.231	PQL	mg/Kg	J	Z, E, Q
ARSENIC	4.54		0.0923	MDL	0.462	PQL	mg/Kg	J	Q
CHROMIUM	22.7		0.138	MDL	0.462	PQL	mg/Kg	J	Q
LEAD	12.7		0.0120	MDL	0.231	PQL	mg/Kg	J	Q, E
NICKEL	12.5		0.115	MDL	0.462	PQL	mg/Kg	J	A
VANADIUM	35.4		0.0254	MDL	0.115	PQL	mg/Kg	J	Q

Sample ID: SL-196-SA5A-SS-0.0-0.5 ***Collected:*** 2/22/2011 8:40:00 ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COBALT	5.83		0.0224	MDL	0.112	PQL	mg/Kg	J	A

Sample ID: SL-196-SA5A-SS-0.0-0.5 ***Collected:*** 2/22/2011 8:40:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.134	J	0.0448	MDL	0.448	PQL	mg/Kg	J	Z

Sample ID: SL-196-SA5A-SS-0.0-0.5 ***Collected:*** 2/22/2011 8:40:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0911	J	0.0672	MDL	0.224	PQL	mg/Kg	J	Z, E, Q
ARSENIC	4.92		0.0896	MDL	0.448	PQL	mg/Kg	J	Q
CHROMIUM	18.1		0.134	MDL	0.448	PQL	mg/Kg	J	Q
LEAD	14.0		0.0116	MDL	0.224	PQL	mg/Kg	J	Q, E
NICKEL	12.1		0.112	MDL	0.448	PQL	mg/Kg	J	A
SILVER	0.0496	J	0.0134	MDL	0.112	PQL	mg/Kg	J	Z
VANADIUM	36.8		0.0246	MDL	0.112	PQL	mg/Kg	J	Q

Sample ID: SL-197-SA5A-SS-0.0-0.5 ***Collected:*** 2/22/2011 9:08:00 ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COBALT	7.08		0.0233	MDL	0.117	PQL	mg/Kg	J	A

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE088 **Laboratory: LL**

EDD Filename: DE088_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: **SL-197-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 9:08:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.183	J	0.0467	MDL	0.467	PQL	mg/Kg	J	Z

Sample ID: **SL-197-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 9:08:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0822	J	0.0700	MDL	0.233	PQL	mg/Kg	J	Z, E, Q
ARSENIC	3.46		0.0934	MDL	0.467	PQL	mg/Kg	J	Q
CHROMIUM	20.2		0.140	MDL	0.467	PQL	mg/Kg	J	Q
LEAD	12.2		0.0121	MDL	0.233	PQL	mg/Kg	J	Q, E
NICKEL	16.8		0.117	MDL	0.467	PQL	mg/Kg	J	A
VANADIUM	42.2		0.0257	MDL	0.117	PQL	mg/Kg	J	Q

Sample ID: **SL-210-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 1:13:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COBALT	5.88		0.0216	MDL	0.108	PQL	mg/Kg	J	A

Sample ID: **SL-210-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 1:13:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.152	J	0.0433	MDL	0.433	PQL	mg/Kg	J	Z

Sample ID: **SL-210-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 1:13:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0649	U	0.0649	MDL	0.216	PQL	mg/Kg	UJ	E, Q
ARSENIC	4.57		0.0866	MDL	0.433	PQL	mg/Kg	J	Q
CHROMIUM	18.5		0.130	MDL	0.433	PQL	mg/Kg	J	Q
LEAD	7.51		0.0113	MDL	0.216	PQL	mg/Kg	J	Q, E
NICKEL	11.9		0.108	MDL	0.433	PQL	mg/Kg	J	A
SILVER	0.0235	J	0.0130	MDL	0.108	PQL	mg/Kg	J	Z
VANADIUM	36.3		0.0238	MDL	0.108	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE088 **Laboratory: LL**

EDD Filename: DE088_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-211-SA5A-SS-0.0-0.5 *Collected:* 2/22/2011 1:36:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COBALT	6.25		0.0213	MDL	0.107	PQL	mg/Kg	J	A

Sample ID: SL-211-SA5A-SS-0.0-0.5 *Collected:* 2/22/2011 1:36:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.110	J	0.0426	MDL	0.426	PQL	mg/Kg	J	Z

Sample ID: SL-211-SA5A-SS-0.0-0.5 *Collected:* 2/22/2011 1:36:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0639	U	0.0639	MDL	0.213	PQL	mg/Kg	UJ	E, Q
ARSENIC	5.14		0.0853	MDL	0.426	PQL	mg/Kg	J	Q
CADMIUM	0.105	J	0.0426	MDL	0.107	PQL	mg/Kg	J	Z
CHROMIUM	18.6		0.128	MDL	0.426	PQL	mg/Kg	J	Q
LEAD	6.56		0.0111	MDL	0.213	PQL	mg/Kg	J	Q, E
NICKEL	12.0		0.107	MDL	0.426	PQL	mg/Kg	J	A
SILVER	0.0374	J	0.0128	MDL	0.107	PQL	mg/Kg	J	Z
VANADIUM	42.1		0.0234	MDL	0.107	PQL	mg/Kg	J	Q

Sample ID: SL-212-SA5A-SS-0.0-0.5 *Collected:* 2/22/2011 2:14:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COBALT	6.90		0.0229	MDL	0.115	PQL	mg/Kg	J	A

Sample ID: SL-212-SA5A-SS-0.0-0.5 *Collected:* 2/22/2011 2:14:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.176	J	0.0459	MDL	0.459	PQL	mg/Kg	J	Z

Sample ID: SL-212-SA5A-SS-0.0-0.5 *Collected:* 2/22/2011 2:14:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.121	J	0.0688	MDL	0.229	PQL	mg/Kg	J	Z, E, Q
ARSENIC	8.73		0.0917	MDL	0.459	PQL	mg/Kg	J	Q
CADMIUM	0.0767	J	0.0459	MDL	0.115	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE088 **Laboratory: LL**

EDD Filename: DE088_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: **SL-212-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 2:14:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHROMIUM	33.3		0.138	MDL	0.459	PQL	mg/Kg	J	Q
LEAD	23.1		0.0119	MDL	0.229	PQL	mg/Kg	J	Q, E
NICKEL	17.2		0.115	MDL	0.459	PQL	mg/Kg	J	A
SILVER	0.0563	J	0.0138	MDL	0.115	PQL	mg/Kg	J	Z
VANADIUM	49.9		0.0252	MDL	0.115	PQL	mg/Kg	J	Q

Sample ID: **SL-214-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 12:28:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COBALT	6.34		0.0216	MDL	0.108	PQL	mg/Kg	J	A

Sample ID: **SL-214-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 12:28:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.105	J	0.0433	MDL	0.433	PQL	mg/Kg	J	Z

Sample ID: **SL-214-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 12:28:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0649	U	0.0649	MDL	0.216	PQL	mg/Kg	UJ	E, Q
ARSENIC	3.90		0.0866	MDL	0.433	PQL	mg/Kg	J	Q
CADMIUM	0.0996	J	0.0433	MDL	0.108	PQL	mg/Kg	J	Z
CHROMIUM	17.5		0.130	MDL	0.433	PQL	mg/Kg	J	Q
LEAD	4.98		0.0113	MDL	0.216	PQL	mg/Kg	J	Q, E
NICKEL	11.6		0.108	MDL	0.433	PQL	mg/Kg	J	A
SILVER	0.0343	J	0.0130	MDL	0.108	PQL	mg/Kg	J	Z
VANADIUM	39.5		0.0238	MDL	0.108	PQL	mg/Kg	J	Q

Sample ID: **SL-215-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 12:55:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COBALT	5.68		0.0228	MDL	0.114	PQL	mg/Kg	J	A

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE088 **Laboratory: LL**

EDD Filename: DE088_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: **SL-215-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 12:55:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.148	J	0.0456	MDL	0.456	PQL	mg/Kg	J	Z

Sample ID: **SL-215-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 12:55:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0684	U	0.0684	MDL	0.228	PQL	mg/Kg	UJ	E, Q
ARSENIC	4.93		0.0912	MDL	0.456	PQL	mg/Kg	J	Q
CHROMIUM	20.5		0.137	MDL	0.456	PQL	mg/Kg	J	Q
LEAD	6.64		0.0119	MDL	0.228	PQL	mg/Kg	J	Q, E
NICKEL	12.5		0.114	MDL	0.456	PQL	mg/Kg	J	A
SILVER	0.0326	J	0.0137	MDL	0.114	PQL	mg/Kg	J	Z
VANADIUM	40.2		0.0251	MDL	0.114	PQL	mg/Kg	J	Q

Sample ID: **SL-217-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 2:46:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COBALT	7.42		0.0227	MDL	0.114	PQL	mg/Kg	J	A

Sample ID: **SL-217-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 2:46:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.140	J	0.0454	MDL	0.454	PQL	mg/Kg	J	Z

Sample ID: **SL-217-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 2:46:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.109	J	0.0681	MDL	0.227	PQL	mg/Kg	J	Z, E, Q
ARSENIC	6.22		0.0908	MDL	0.454	PQL	mg/Kg	J	Q
CHROMIUM	25.0		0.136	MDL	0.454	PQL	mg/Kg	J	Q
LEAD	54.3		0.0118	MDL	0.227	PQL	mg/Kg	J	Q, E
NICKEL	14.8		0.114	MDL	0.454	PQL	mg/Kg	J	A
SILVER	0.0948	J	0.0136	MDL	0.114	PQL	mg/Kg	J	Z
VANADIUM	40.4		0.0250	MDL	0.114	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE088 **Laboratory: LL**

EDD Filename: DE088_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-218-SA5A-SS-0.0-0.5 *Collected:* 2/22/2011 3:10:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COBALT	4.86		0.0234	MDL	0.117	PQL	mg/Kg	J	A

Sample ID: SL-218-SA5A-SS-0.0-0.5 *Collected:* 2/22/2011 3:10:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.123	J	0.0469	MDL	0.469	PQL	mg/Kg	J	Z

Sample ID: SL-218-SA5A-SS-0.0-0.5 *Collected:* 2/22/2011 3:10:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0920	J	0.0703	MDL	0.234	PQL	mg/Kg	J	Z, E, Q
ARSENIC	4.56		0.0937	MDL	0.469	PQL	mg/Kg	J	Q
CHROMIUM	18.1		0.141	MDL	0.469	PQL	mg/Kg	J	Q
LEAD	18.2		0.0122	MDL	0.234	PQL	mg/Kg	J	Q, E
NICKEL	11.2		0.117	MDL	0.469	PQL	mg/Kg	J	A
SILVER	0.0401	J	0.0141	MDL	0.117	PQL	mg/Kg	J	Z
VANADIUM	36.2		0.0258	MDL	0.117	PQL	mg/Kg	J	Q

Method Category: METALS

Method: 7199 **Matrix: SO**

Sample ID: DUP-02-SA5A-QC-022211 *Collected:* 2/22/2011 10:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	2.3		0.23	MDL	1.2	PQL	mg/Kg	J	FD

Sample ID: SL-026-SA5A-SB-3.5-4.5 *Collected:* 2/22/2011 11:19:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.54	J	0.21	MDL	1.0	PQL	mg/Kg	J	Z

Sample ID: SL-031-SA5A-SB-4.0-5.0 *Collected:* 2/22/2011 9:04:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.27	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE088 **Laboratory: LL**

EDD Filename: DE088_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 7199 **Matrix: SO**

Sample ID: **SL-035-SA5A-SB-4.0-5.0** ***Collected:*** **2/22/2011 4:15:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.56	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: **SL-180-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 10:35:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.59	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: **SL-181-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 10:10:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.42	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z, FD

Sample ID: **SL-196-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 8:40:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.40	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: **SL-210-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 1:13:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.32	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: **SL-211-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 1:36:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.30	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: **SL-212-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 2:14:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.57	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: **SL-214-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 12:28:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.26	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE088 **Laboratory: LL**

EDD Filename: DE088_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 7199 **Matrix: SO**

Sample ID: SL-215-SA5A-SS-0.0-0.5 *Collected:* 2/22/2011 12:55:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.28	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-218-SA5A-SS-0.0-0.5 *Collected:* 2/22/2011 3:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.32	J	0.24	MDL	1.2	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 7471A **Matrix: SO**

Sample ID: DUP-02-SA5A-QC-022211 *Collected:* 2/22/2011 10:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0576	J	0.0032	MDL	0.112	PQL	mg/Kg	J	Z

Sample ID: SL-035-SA5A-SB-4.0-5.0 *Collected:* 2/22/2011 4:15:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0037	J	0.0030	MDL	0.105	PQL	mg/Kg	J	Z

Sample ID: SL-180-SA5A-SS-0.0-0.5 *Collected:* 2/22/2011 10:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0152	J	0.0033	MDL	0.114	PQL	mg/Kg	J	Z

Sample ID: SL-181-SA5A-SS-0.0-0.5 *Collected:* 2/22/2011 10:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0595	J	0.0031	MDL	0.110	PQL	mg/Kg	J	Z

Sample ID: SL-197-SA5A-SS-0.0-0.5 *Collected:* 2/22/2011 9:08:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0041	J	0.0034	MDL	0.118	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE088 **Laboratory: LL**

EDD Filename: DE088_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 7471A **Matrix: SO**

Sample ID: SL-212-SA5A-SS-0.0-0.5 *Collected:* 2/22/2011 2:14:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0064	J	0.0031	MDL	0.110	PQL	mg/Kg	J	Z

Sample ID: SL-217-SA5A-SS-0.0-0.5 *Collected:* 2/22/2011 2:46:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0143	J	0.0033	MDL	0.116	PQL	mg/Kg	J	Z

Sample ID: SL-218-SA5A-SS-0.0-0.5 *Collected:* 2/22/2011 3:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0413	J	0.0033	MDL	0.114	PQL	mg/Kg	J	Z

Method Category: SVOA

Method: 8015M **Matrix: SO**

Sample ID: SL-035-SA5A-SB-4.0-5.0 *Collected:* 2/22/2011 4:15:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C21-C30)	0.54	J	0.44	MDL	1.3	PQL	mg/Kg	J	Z

Method Category: SVOA

Method: 8081A **Matrix: SO**

Sample ID: SL-181-SA5A-SS-0.0-0.5 *Collected:* 2/22/2011 10:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BETA-BHC	0.26		0.070	MDL	0.19	PQL	ug/Kg	J	Q
ENDOSULFAN I	0.051	U	0.051	MDL	0.19	PQL	ug/Kg	R	Q
ENDRIN	0.077	U	0.077	MDL	0.40	PQL	ug/Kg	R	Q

Sample ID: SL-197-SA5A-SS-0.0-0.5 *Collected:* 2/22/2011 9:08:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BETA-BHC	0.68	J	0.36	MDL	0.99	PQL	ug/Kg	J	Z
HEPTACHLOR EPOXIDE	0.58	J	0.20	MDL	0.99	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE088 **Laboratory: LL**

EDD Filename: DE088_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8081A **Matrix:** SO

Sample ID: **SL-211-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 1:36:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	0.18	J	0.072	MDL	0.37	PQL	ug/Kg	J	Z, S
4,4'-DDT	0.61		0.072	MDL	0.37	PQL	ug/Kg	J	S
DIELDRIN	0.085	J	0.072	MDL	0.37	PQL	ug/Kg	J	Z, S
ENDOSULFAN SULFATE	0.15	J	0.072	MDL	0.37	PQL	ug/Kg	J	Z, S

Sample ID: **SL-212-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 2:14:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDT	0.39	J	0.077	MDL	0.40	PQL	ug/Kg	J	Z
ENDRIN KETONE	0.25	J	0.077	MDL	0.40	PQL	ug/Kg	J	Z

Sample ID: **SL-214-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 12:28:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	0.24	J	0.073	MDL	0.38	PQL	ug/Kg	J	Z
4,4'-DDT	0.29	J	0.073	MDL	0.38	PQL	ug/Kg	J	Z

Sample ID: **SL-215-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 12:55:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	0.094	J	0.075	MDL	0.39	PQL	ug/Kg	J	Z
DIELDRIN	0.11	J	0.075	MDL	0.39	PQL	ug/Kg	J	Z

Sample ID: **SL-218-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 3:10:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DIELDRIN	0.18	J	0.078	MDL	0.40	PQL	ug/Kg	J	Z
ENDRIN ALDEHYDE	0.21	J	0.078	MDL	0.40	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE088 **Laboratory: LL**

EDD Filename: DE088_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: **DUP-02-SA5A-QC-022211** ***Collected:*** **2/22/2011 10:10:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	35		1.9	MDL	9.8	PQL	ug/Kg	J	S
AROCLOR 1260	21		2.2	MDL	9.8	PQL	ug/Kg	J	S
Aroclor 5432	5.8	U	5.8	MDL	19	PQL	ug/Kg	UJ	L
Aroclor 5442	5.8	U	5.8	MDL	19	PQL	ug/Kg	UJ	L
Aroclor 5460	200		5.8	MDL	19	PQL	ug/Kg	J	S, FD, L

Sample ID: **SL-175-SA5A-SS-0.0-0.3** ***Collected:*** **2/22/2011 9:52:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1248	3.8	J	0.94	MDL	4.9	PQL	ug/Kg	J	Z, S
AROCLOR 1254	38		0.94	MDL	4.9	PQL	ug/Kg	J	S
AROCLOR 1260	33		1.1	MDL	4.9	PQL	ug/Kg	J	S
Aroclor 5432	2.9	U	2.9	MDL	9.4	PQL	ug/Kg	UJ	L
Aroclor 5442	2.9	U	2.9	MDL	9.4	PQL	ug/Kg	UJ	L
Aroclor 5460	16		2.9	MDL	9.4	PQL	ug/Kg	J	S, L

Sample ID: **SL-180-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 10:35:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	14		0.38	MDL	2.0	PQL	ug/Kg	J	L
AROCLOR 1260	7.5		0.45	MDL	2.0	PQL	ug/Kg	J	L

Sample ID: **SL-181-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 10:10:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	28		0.77	MDL	4.0	PQL	ug/Kg	J	L
AROCLOR 1260	17		0.91	MDL	4.0	PQL	ug/Kg	J	L
Aroclor 5460	21		2.3	MDL	7.7	PQL	ug/Kg	J	FD

Sample ID: **SL-196-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 8:40:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	3.8		0.44	MDL	1.9	PQL	ug/Kg	J	L, S
Aroclor 5460	10		1.1	MDL	3.7	PQL	ug/Kg	J	S

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE088 **Laboratory: LL**

EDD Filename: DE088_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: **SL-197-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 9:08:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	3.0	U	3.0	MDL	9.8	PQL	ug/Kg	UJ	L
Aroclor 5442	3.0	U	3.0	MDL	9.8	PQL	ug/Kg	UJ	L
Aroclor 5460	3.0	U	3.0	MDL	9.8	PQL	ug/Kg	UJ	L

Sample ID: **SL-210-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 1:13:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	0.75	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z, S, L
AROCLOR 1260	1.7	J	0.42	MDL	1.8	PQL	ug/Kg	J	Z, L, S
Aroclor 5460	3.8		1.1	MDL	3.6	PQL	ug/Kg	J	S

Sample ID: **SL-211-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 1:36:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1016	0.36	U	0.36	MDL	1.9	PQL	ug/Kg	UJ	S
AROCLOR 1221	0.36	U	0.36	MDL	1.9	PQL	ug/Kg	UJ	S
AROCLOR 1232	0.36	U	0.36	MDL	1.9	PQL	ug/Kg	UJ	S
AROCLOR 1242	0.36	U	0.36	MDL	1.9	PQL	ug/Kg	UJ	S
AROCLOR 1248	0.36	U	0.36	MDL	1.9	PQL	ug/Kg	UJ	S
AROCLOR 1254	0.36	U	0.36	MDL	1.9	PQL	ug/Kg	UJ	S
AROCLOR 1260	0.43	U	0.43	MDL	1.9	PQL	ug/Kg	UJ	S
Aroclor 1262	0.36	U	0.36	MDL	1.9	PQL	ug/Kg	UJ	S
Aroclor 1268	0.36	U	0.36	MDL	1.9	PQL	ug/Kg	UJ	S
Aroclor 5432	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	S
Aroclor 5442	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	S
Aroclor 5460	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	S

Sample ID: **SL-212-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 2:14:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	1.0	J	0.39	MDL	2.0	PQL	ug/Kg	J	Z, L
AROCLOR 1260	0.51	J	0.46	MDL	2.0	PQL	ug/Kg	J	Z, L

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE088 **Laboratory: LL**

EDD Filename: DE088_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: SL-215-SA5A-SS-0.0-0.5 *Collected:* 2/22/2011 12:55:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	0.62	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z, L
AROCLOR 1260	0.59	J	0.44	MDL	1.9	PQL	ug/Kg	J	Z, L

Sample ID: SL-217-SA5A-SS-0.0-0.5 *Collected:* 2/22/2011 2:46:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	62		3.9	MDL	20	PQL	ug/Kg	J	L
AROCLOR 1260	53		4.6	MDL	20	PQL	ug/Kg	J	L

Sample ID: SL-218-SA5A-SS-0.0-0.5 *Collected:* 2/22/2011 3:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	3.0	U	3.0	MDL	9.8	PQL	ug/Kg	UJ	L
Aroclor 5442	3.0	U	3.0	MDL	9.8	PQL	ug/Kg	UJ	L
Aroclor 5460	22		3.0	MDL	9.8	PQL	ug/Kg	J	L

Method Category: SVOA

Method: 8151A **Matrix: SO**

Sample ID: SL-181-SA5A-SS-0.0-0.5 *Collected:* 2/22/2011 10:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MCPA	1300		88	MDL	290	PQL	ug/Kg	J	Q
MCPP	87	U	87	MDL	290	PQL	ug/Kg	R	Q

Sample ID: SL-211-SA5A-SS-0.0-0.5 *Collected:* 2/22/2011 1:36:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DB	1.1	J	0.68	MDL	1.9	PQL	ug/Kg	J	Z
MCPA	110	J	83	MDL	270	PQL	ug/Kg	J	Z

Sample ID: SL-217-SA5A-SS-0.0-0.5 *Collected:* 2/22/2011 2:46:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4,5-T	0.17	J	0.095	MDL	0.20	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE088 **Laboratory: LL**

EDD Filename: DE088_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: **DUP-02-SA5A-QC-022211** ***Collected:*** **2/22/2011 10:10:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-CHLORONAPHTHALENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
BENZO(A)ANTHRACENE	32	J	19	MDL	190	PQL	ug/Kg	J	Z, FD
BENZO(G,H,I)PERYLENE	34	J	19	MDL	190	PQL	ug/Kg	J	Z, FD
BIS(2-ETHYLHEXYL)PHTHALATE	44	J	19	MDL	380	PQL	ug/Kg	J	Z
CHRYSENE	44	J	19	MDL	190	PQL	ug/Kg	J	Z, FD
DIBENZO(A,H)ANTHRACENE	21	J	19	MDL	190	PQL	ug/Kg	J	Z
FLUORANTHENE	58	J	19	MDL	190	PQL	ug/Kg	J	Z, FD
INDENO(1,2,3-CD)PYRENE	28	J	19	MDL	190	PQL	ug/Kg	J	Z, FD
PHENANTHRENE	36	J	19	MDL	190	PQL	ug/Kg	J	Z, FD
PYRENE	62	J	19	MDL	190	PQL	ug/Kg	J	Z, FD

Sample ID: **SL-024-SA5A-SB-2.5-3.5** ***Collected:*** **2/22/2011 12:35:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-CHLORONAPHTHALENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	21	J	19	MDL	370	PQL	ug/Kg	J	Z

Sample ID: **SL-026-SA5A-SB-3.5-4.5** ***Collected:*** **2/22/2011 11:19:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-CHLORONAPHTHALENE	17	U	17	MDL	170	PQL	ug/Kg	UJ	L

Sample ID: **SL-031-SA5A-SB-4.0-5.0** ***Collected:*** **2/22/2011 9:04:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-CHLORONAPHTHALENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	19	J	18	MDL	370	PQL	ug/Kg	J	Z

Sample ID: **SL-035-SA5A-SB-4.0-5.0** ***Collected:*** **2/22/2011 4:15:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-CHLORONAPHTHALENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE088 **Laboratory: LL**

EDD Filename: DE088_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: **SL-175-SA5A-SS-0.0-0.3** ***Collected:*** **2/22/2011 9:52:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-CHLORONAPHTHALENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
PYRENE	140	J	19	MDL	190	PQL	ug/Kg	J	Z

Sample ID: **SL-180-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 10:35:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-CHLORONAPHTHALENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L

Sample ID: **SL-181-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 10:10:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-CHLORONAPHTHALENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
BENZO(A)ANTHRACENE	82	J	19	MDL	190	PQL	ug/Kg	J	Z, FD
BENZO(A)PYRENE	85	J	19	MDL	190	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	110	J	19	MDL	190	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	74	J	19	MDL	190	PQL	ug/Kg	J	Z, FD
BENZO(K)FLUORANTHENE	50	J	19	MDL	190	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	45	J	19	MDL	380	PQL	ug/Kg	J	Z
CHRYSENE	120	J	19	MDL	190	PQL	ug/Kg	J	Z, FD
DIBENZO(A,H)ANTHRACENE	22	J	19	MDL	190	PQL	ug/Kg	J	Z
FLUORANTHENE	210		19	MDL	190	PQL	ug/Kg	J	FD
INDENO(1,2,3-CD)PYRENE	56	J	19	MDL	190	PQL	ug/Kg	J	Z, FD
PHENANTHRENE	140	J	19	MDL	190	PQL	ug/Kg	J	Z, FD
PYRENE	190		19	MDL	190	PQL	ug/Kg	J	FD

Sample ID: **SL-196-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 8:40:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-CHLORONAPHTHALENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	25	J	19	MDL	370	PQL	ug/Kg	J	Z

Sample ID: **SL-197-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 9:08:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-CHLORONAPHTHALENE	20	U	20	MDL	200	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE088 **Laboratory: LL**

EDD Filename: DE088_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: **SL-197-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 9:08:00** ***Analysis Type:*** **RES-ACID** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZOIC ACID	320	J	200	MDL	590	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	99	J	20	MDL	390	PQL	ug/Kg	J	Z
DIBENZOFURAN	77	J	20	MDL	200	PQL	ug/Kg	J	Z

Sample ID: **SL-210-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 1:13:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-CHLORONAPHTHALENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L

Sample ID: **SL-211-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 1:36:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-CHLORONAPHTHALENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L

Sample ID: **SL-212-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 2:14:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-CHLORONAPHTHALENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L

Sample ID: **SL-214-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 12:28:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-CHLORONAPHTHALENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L

Sample ID: **SL-215-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 12:55:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-CHLORONAPHTHALENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	27	J	19	MDL	380	PQL	ug/Kg	J	Z

Sample ID: **SL-217-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 2:46:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-CHLORONAPHTHALENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
BENZO(B)FLUORANTHENE	22	J	19	MDL	190	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	29	J	19	MDL	190	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE088 **Laboratory: LL**

EDD Filename: DE088_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: **SL-217-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 2:46:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHRYSENE	34	J	19	MDL	190	PQL	ug/Kg	J	Z
FLUORANTHENE	40	J	19	MDL	190	PQL	ug/Kg	J	Z
PYRENE	34	J	19	MDL	190	PQL	ug/Kg	J	Z

Sample ID: **SL-218-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 3:10:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-CHLORONAPHTHALENE	20	U	20	MDL	200	PQL	ug/Kg	UJ	L

Method Category: SVOA

Method: 8270C SIM **Matrix:** SO

Sample ID: **DUP-02-SA5A-QC-022211** ***Collected:*** **2/22/2011 10:10:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	1.0	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	1.3	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
ACENAPHTHENE	1.6	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
Dimethylphthalate	6.9	U	6.9	MDL	21	PQL	ug/Kg	UJ	FD
FLUORENE	0.77	U	0.77	MDL	1.9	PQL	ug/Kg	UJ	FD
NAPHTHALENE	1.7	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: **SL-175-SA5A-SS-0.0-0.3** ***Collected:*** **2/22/2011 9:52:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACENAPHTHYLENE	8.3	J	1.9	MDL	9.5	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	90	J	34	MDL	100	PQL	ug/Kg	J	Z
NAPHTHALENE	6.9	J	3.8	MDL	9.5	PQL	ug/Kg	J	Z

Sample ID: **SL-180-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 10:35:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACENAPHTHYLENE	1.3	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z
ANTHRACENE	1.8	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z
Dimethylphthalate	8.0	J	6.8	MDL	20	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE088 **Laboratory: LL**

EDD Filename: DE088_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C SIM **Matrix:** SO

Sample ID: **SL-180-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 10:35:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Di-n-butylphthalate	13	J	6.8	MDL	20	PQL	ug/Kg	J	Z

Sample ID: **SL-181-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 10:10:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	1.2	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	1.6	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
ACENAPHTHENE	1.4	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
Butylbenzylphthalate	25		7.0	MDL	21	PQL	ug/Kg	J	Q, Q
Dimethylphthalate	15	J	7.0	MDL	21	PQL	ug/Kg	J	Z, Q, FD
Di-n-butylphthalate	99		7.0	MDL	21	PQL	ug/Kg	J	Q, Q, Q
FLUORENE	2.7		0.77	MDL	1.9	PQL	ug/Kg	J	FD
NAPHTHALENE	1.4	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: **SL-196-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 8:40:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	1.2	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	0.91	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z
Di-n-octylphthalate	15	J	6.7	MDL	20	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	0.96	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: **SL-197-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 9:08:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Di-n-butylphthalate	10	J	7.1	MDL	21	PQL	ug/Kg	J	Z

Sample ID: **SL-210-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 1:13:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACENAPHTHYLENE	0.39	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z
ANTHRACENE	0.68	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.3	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.3	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
Butylbenzylphthalate	7.9	J	6.5	MDL	19	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE088 **Laboratory: LL**

EDD Filename: DE088_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C SIM **Matrix:** SO

Sample ID: **SL-210-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 1:13:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHRYSENE	1.2	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z
Di-n-butylphthalate	13	J	6.5	MDL	19	PQL	ug/Kg	J	Z
FLUORANTHENE	1.4	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
NAPHTHALENE	1.1	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
PHENANTHRENE	0.98	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
PYRENE	1.5	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: **SL-211-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 1:36:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACENAPHTHYLENE	0.70	J	0.37	MDL	1.8	PQL	ug/Kg	J	Z
ANTHRACENE	1.0	J	0.37	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.1	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	7.6	J	6.6	MDL	20	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	1.6	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
NAPHTHALENE	1.2	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: **SL-212-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 2:14:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	1.7	J	0.78	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.3	J	0.78	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	0.84	J	0.78	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.0	J	0.78	MDL	1.9	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	13	J	7.0	MDL	21	PQL	ug/Kg	J	Z
CHRYSENE	1.3	J	0.39	MDL	1.9	PQL	ug/Kg	J	Z
PYRENE	1.4	J	0.78	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: **SL-214-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 12:28:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACENAPHTHYLENE	0.41	J	0.37	MDL	1.8	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	12	J	6.6	MDL	20	PQL	ug/Kg	J	Z
NAPHTHALENE	1.1	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE088 **Laboratory: LL**

EDD Filename: DE088_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C SIM **Matrix:** SO

Sample ID: SL-215-SA5A-SS-0.0-0.5 **Collected:** 2/22/2011 12:55:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACENAPHTHYLENE	0.71	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z
ANTHRACENE	0.66	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z
NAPHTHALENE	1.5	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-217-SA5A-SS-0.0-0.5 **Collected:** 2/22/2011 2:46:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	0.84	J	0.78	MDL	1.9	PQL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	0.94	J	0.78	MDL	1.9	PQL	ug/Kg	J	Z
ACENAPHTHYLENE	1.1	J	0.39	MDL	1.9	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	1.1	J	0.78	MDL	1.9	PQL	ug/Kg	J	Z
NAPHTHALENE	1.3	J	0.78	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-218-SA5A-SS-0.0-0.5 **Collected:** 2/22/2011 3:10:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACENAPHTHYLENE	0.44	J	0.39	MDL	2.0	PQL	ug/Kg	J	Z
ANTHRACENE	1.0	J	0.39	MDL	2.0	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	0.89	J	0.79	MDL	2.0	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.3	J	0.79	MDL	2.0	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.2	J	0.79	MDL	2.0	PQL	ug/Kg	J	Z
PHENANTHRENE	1.4	J	0.79	MDL	2.0	PQL	ug/Kg	J	Z

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: SL-024-SA5A-SB-2.5-3.5 **Collected:** 2/22/2011 12:35:00 **Analysis Type:** RES **Dilution:** 0.96

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ETHYLBENZENE	0.12	J	0.06	MDL	4.3	PQL	ug/Kg	J	Z
m,p-Xylene	0.37	J	0.18	MDL	4.3	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	2.9	J	0.26	MDL	4.3	PQL	ug/Kg	U	B
TOLUENE	0.10	J	0.08	MDL	4.3	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE088 **Laboratory: LL**

EDD Filename: DE088_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: VOA

Method: 8260B **Matrix: SO**

Sample ID: **SL-026-SA5A-SB-3.5-4.5** ***Collected:*** **2/22/2011 11:19:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ETHYLBENZENE	0.13	J	0.06	MDL	4.2	PQL	ug/Kg	J	Z
m,p-Xylene	0.42	J	0.18	MDL	4.2	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	1.4	J	0.25	MDL	4.2	PQL	ug/Kg	U	B
TOLUENE	0.10	J	0.08	MDL	4.2	PQL	ug/Kg	J	Z

Sample ID: **SL-031-SA5A-SB-4.0-5.0** ***Collected:*** **2/22/2011 9:04:00** ***Analysis Type:*** **RES** ***Dilution:*** **1.06**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	1.6	J	0.28	MDL	4.7	PQL	ug/Kg	U	B
TOLUENE	0.1	J	0.09	MDL	4.7	PQL	ug/Kg	J	Z

Sample ID: **SL-035-SA5A-SB-4.0-5.0** ***Collected:*** **2/22/2011 4:15:00** ***Analysis Type:*** **RES** ***Dilution:*** **0.92**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ETHYLBENZENE	0.17	J	0.06	MDL	4.1	PQL	ug/Kg	J	Z
m,p-Xylene	0.59	J	0.17	MDL	4.1	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	1.9	J	0.24	MDL	4.1	PQL	ug/Kg	U	B
TOLUENE	0.11	J	0.08	MDL	4.1	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE088 **Laboratory: LL**

EDD Filename: DE088_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
*#	Professional Judgment
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Verification Correlation Coefficient
C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE088 **Laboratory: LL**

EDD Filename: DE088_v1 **eQAPP Name: CDM_SSFL_110509**

F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation
L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery Lower Estimation

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE088 **Laboratory: LL**

EDD Filename: DE088_v1 **eQAPP Name: CDM_SSFL_110509**

R	Continuing Calibration Verification Percent Recovery Lower Rejection
R	Continuing Calibration Verification Percent Recovery Upper Estimation
R	Continuing Calibration Verification Percent Recovery Upper Rejection
R	Continuing Calibration Verification Relative Response Factor
R	Initial Calibration Relative Response Factor
R	Initial Calibration Verification Percent Recovery Lower Estimation
R	Initial Calibration Verification Percent Recovery Lower Rejection
R	Initial Calibration Verification Percent Recovery Upper Estimation
R	Initial Calibration Verification Percent Recovery Upper Rejection
R	Initial Calibration Verification Relative Response Factor
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control Outlier Reports

DE088

Method Blank Outlier Report

Lab Reporting Batch ID: DE088 **Laboratory: LL**

EDD Filename: DE088_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **6010B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P05608DB222255	3/3/2011 10:55:00 PM	CALCIUM TIN	6.00 mg/Kg 1.83 mg/Kg	DUP-02-SA5A-QC-022211 SL-024-SA5A-SB-2.5-3.5 SL-026-SA5A-SB-3.5-4.5 SL-031-SA5A-SB-4.0-5.0 SL-035-SA5A-SB-4.0-5.0 SL-175-SA5A-SS-0.0-0.3 SL-180-SA5A-SS-0.0-0.5 SL-181-SA5A-SS-0.0-0.5 SL-196-SA5A-SS-0.0-0.5 SL-197-SA5A-SS-0.0-0.5 SL-210-SA5A-SS-0.0-0.5 SL-211-SA5A-SS-0.0-0.5 SL-212-SA5A-SS-0.0-0.5 SL-214-SA5A-SS-0.0-0.5 SL-215-SA5A-SS-0.0-0.5 SL-217-SA5A-SS-0.0-0.5 SL-218-SA5A-SS-0.0-0.5
P06308BB220727	3/7/2011 7:27:00 AM	PHOSPHORUS	1.28 mg/Kg	DUP-02-SA5A-QC-022211 SL-024-SA5A-SB-2.5-3.5 SL-026-SA5A-SB-3.5-4.5 SL-031-SA5A-SB-4.0-5.0 SL-035-SA5A-SB-4.0-5.0 SL-175-SA5A-SS-0.0-0.3 SL-180-SA5A-SS-0.0-0.5 SL-181-SA5A-SS-0.0-0.5 SL-196-SA5A-SS-0.0-0.5 SL-197-SA5A-SS-0.0-0.5 SL-210-SA5A-SS-0.0-0.5 SL-211-SA5A-SS-0.0-0.5 SL-212-SA5A-SS-0.0-0.5 SL-214-SA5A-SS-0.0-0.5 SL-215-SA5A-SS-0.0-0.5 SL-217-SA5A-SS-0.0-0.5 SL-218-SA5A-SS-0.0-0.5

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
DUP-02-SA5A-QC-022211(RES)	TIN	3.53 mg/Kg	3.53U mg/Kg
SL-024-SA5A-SB-2.5-3.5(RES)	TIN	3.58 mg/Kg	3.58U mg/Kg
SL-026-SA5A-SB-3.5-4.5(RES)	TIN	3.10 mg/Kg	3.10U mg/Kg
SL-031-SA5A-SB-4.0-5.0(RES)	TIN	3.47 mg/Kg	3.47U mg/Kg
SL-035-SA5A-SB-4.0-5.0(RES)	TIN	3.25 mg/Kg	3.25U mg/Kg
SL-175-SA5A-SS-0.0-0.3(RES)	TIN	3.33 mg/Kg	3.33U mg/Kg
SL-180-SA5A-SS-0.0-0.5(RES)	TIN	3.53 mg/Kg	3.53U mg/Kg
SL-181-SA5A-SS-0.0-0.5(RES)	TIN	3.80 mg/Kg	3.80U mg/Kg
SL-196-SA5A-SS-0.0-0.5(RES)	TIN	2.91 mg/Kg	2.91U mg/Kg
SL-197-SA5A-SS-0.0-0.5(RES)	TIN	3.17 mg/Kg	3.17U mg/Kg
SL-210-SA5A-SS-0.0-0.5(RES)	TIN	3.00 mg/Kg	3.00U mg/Kg
SL-211-SA5A-SS-0.0-0.5(RES)	TIN	3.04 mg/Kg	3.04U mg/Kg
SL-212-SA5A-SS-0.0-0.5(RES)	TIN	3.62 mg/Kg	3.62U mg/Kg
SL-214-SA5A-SS-0.0-0.5(RES)	TIN	2.87 mg/Kg	2.87U mg/Kg
SL-215-SA5A-SS-0.0-0.5(RES)	TIN	3.09 mg/Kg	3.09U mg/Kg

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Method Blank Outlier Report

Lab Reporting Batch ID: DE088 **Laboratory: LL**

EDD Filename: DE088_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **6010B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-217-SA5A-SS-0.0-0.5(RES)	TIN	3.08 mg/Kg	3.08U mg/Kg
SL-218-SA5A-SS-0.0-0.5(RES)	TIN	3.37 mg/Kg	3.37U mg/Kg

Method: **6020**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P05626AB221748A	3/5/2011 5:48:00 PM	COPPER	0.0698 mg/Kg	DUP-02-SA5A-QC-022211 SL-024-SA5A-SB-2.5-3.5 SL-026-SA5A-SB-3.5-4.5 SL-031-SA5A-SB-4.0-5.0 SL-035-SA5A-SB-4.0-5.0 SL-175-SA5A-SS-0.0-0.3 SL-180-SA5A-SS-0.0-0.5 SL-181-SA5A-SS-0.0-0.5 SL-196-SA5A-SS-0.0-0.5 SL-197-SA5A-SS-0.0-0.5 SL-210-SA5A-SS-0.0-0.5 SL-211-SA5A-SS-0.0-0.5 SL-212-SA5A-SS-0.0-0.5 SL-214-SA5A-SS-0.0-0.5 SL-215-SA5A-SS-0.0-0.5 SL-217-SA5A-SS-0.0-0.5 SL-218-SA5A-SS-0.0-0.5

Method: **8260B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB78B210235A	2/25/2011 2:35:00 AM	METHYLENE CHLORIDE	0.60 ug/Kg	SL-024-SA5A-SB-2.5-3.5 SL-026-SA5A-SB-3.5-4.5 SL-031-SA5A-SB-4.0-5.0 SL-035-SA5A-SB-4.0-5.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-024-SA5A-SB-2.5-3.5(RES)	METHYLENE CHLORIDE	2.9 ug/Kg	4.3U ug/Kg
SL-026-SA5A-SB-3.5-4.5(RES)	METHYLENE CHLORIDE	1.4 ug/Kg	4.2U ug/Kg
SL-031-SA5A-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.6 ug/Kg	4.7U ug/Kg
SL-035-SA5A-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.9 ug/Kg	4.1U ug/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE088 **Laboratory: LL**

EDD Filename: DE088_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-181-SA5A-SS-0.0-0.5MS	2,4-DINITROPHENOL	-	-	20.00-143.00	78 (30.00)	2,4-DINITROPHENOL	
SL-181-SA5A-SS-0.0-0.5MSD	2-CHLORONAPHTHALENE	157	-	50.00-141.00	64 (30.00)	2-CHLORONAPHTHALENE	J (all detects)
(SL-181-SA5A-SS-0.0-0.5)	4,6-DINITRO-2-METHYLPHENOL	-	-	24.00-116.00	59 (30.00)	4,6-DINITRO-2-METHYLPHEN	

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-181-SA5A-SS-0.0-0.5MS	ARSENIC	200	129	75.00-125.00	-	ARSENIC	
SL-181-SA5A-SS-0.0-0.5MSD	CHROMIUM	146	-	75.00-125.00	-	CHROMIUM	
(DUP-02-SA5A-QC-022211	VANADIUM	136	-	75.00-125.00	-	VANADIUM	
SL -024-SA5A-SB-2.5-3.5							
SL -026-SA5A-SB-3.5-4.5							
SL -031-SA5A-SB-4.0-5.0							
SL -035-SA5A-SB-4.0-5.0							
SL -175-SA5A-SS-0.0-0.3							
SL -180-SA5A-SS-0.0-0.5							
SL -181-SA5A-SS-0.0-0.5							J(all detects)
SL -196-SA5A-SS-0.0-0.5							
SL -197-SA5A-SS-0.0-0.5							
SL -210-SA5A-SS-0.0-0.5							
SL -211-SA5A-SS-0.0-0.5							
SL -212-SA5A-SS-0.0-0.5							
SL -214-SA5A-SS-0.0-0.5							
SL -215-SA5A-SS-0.0-0.5							
SL -217-SA5A-SS-0.0-0.5							
SL -218-SA5A-SS-0.0-0.5)							
SL-181-SA5A-SS-0.0-0.5MS	ANTIMONY	20	28	75.00-125.00	22 (20.00)	ANTIMONY	
SL-181-SA5A-SS-0.0-0.5MSD							
(DUP-02-SA5A-QC-022211							
SL -024-SA5A-SB-2.5-3.5							
SL -026-SA5A-SB-3.5-4.5							
SL -031-SA5A-SB-4.0-5.0							
SL -035-SA5A-SB-4.0-5.0							
SL -175-SA5A-SS-0.0-0.3							
SL -180-SA5A-SS-0.0-0.5							
SL -181-SA5A-SS-0.0-0.5							J(all detects)
SL -196-SA5A-SS-0.0-0.5							UJ(all non-detects)
SL -197-SA5A-SS-0.0-0.5							
SL -210-SA5A-SS-0.0-0.5							Post Spike = 85%
SL -211-SA5A-SS-0.0-0.5							
SL -212-SA5A-SS-0.0-0.5							
SL -214-SA5A-SS-0.0-0.5							
SL -215-SA5A-SS-0.0-0.5							
SL -217-SA5A-SS-0.0-0.5							
SL -218-SA5A-SS-0.0-0.5)							

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE088 **Laboratory: LL**

EDD Filename: DE088_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020

Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-181-SA5A-SS-0.0-0.5MS **SL-181-SA5A-SS-0.0-0.5MSD** (DUP-02-SA5A-QC-022211 SL -024-SA5A-SB-2.5-3.5 SL -026-SA5A-SB-3.5-4.5 SL -031-SA5A-SB-4.0-5.0 SL -035-SA5A-SB-4.0-5.0 SL -175-SA5A-SS-0.0-0.3 SL -180-SA5A-SS-0.0-0.5 SL -181-SA5A-SS-0.0-0.5 SL -196-SA5A-SS-0.0-0.5 SL -197-SA5A-SS-0.0-0.5 SL -210-SA5A-SS-0.0-0.5 SL -211-SA5A-SS-0.0-0.5 SL -212-SA5A-SS-0.0-0.5 SL -214-SA5A-SS-0.0-0.5 SL -215-SA5A-SS-0.0-0.5 SL -217-SA5A-SS-0.0-0.5 SL -218-SA5A-SS-0.0-0.5)	LEAD ZINC	1202 47	- 64	75.00-125.00 75.00-125.00	104 (20.00) -	LEAD ZINC	J(all detects) UJ(all non-detects) Zn No Qual, >4x
SL-181-SA5A-SS-0.0-0.5MS **SL-181-SA5A-SS-0.0-0.5MSD** (DUP-02-SA5A-QC-022211 SL -024-SA5A-SB-2.5-3.5 SL -026-SA5A-SB-3.5-4.5 SL -031-SA5A-SB-4.0-5.0 SL -035-SA5A-SB-4.0-5.0 SL -175-SA5A-SS-0.0-0.3 SL -180-SA5A-SS-0.0-0.5 SL -181-SA5A-SS-0.0-0.5 SL -196-SA5A-SS-0.0-0.5 SL -197-SA5A-SS-0.0-0.5 SL -210-SA5A-SS-0.0-0.5 SL -211-SA5A-SS-0.0-0.5 SL -212-SA5A-SS-0.0-0.5 SL -214-SA5A-SS-0.0-0.5 SL -215-SA5A-SS-0.0-0.5 SL -217-SA5A-SS-0.0-0.5 SL -218-SA5A-SS-0.0-0.5)	BARIUM	155	149	75.00-125.00	-	BARIUM	No Qual, >4x

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE088 **Laboratory: LL**

EDD Filename: DE088_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B

Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-181-SA5A-SS-0.0-0.5MS **SL-181-SA5A-SS-0.0-0.5MSD** (DUP-02-SA5A-QC-022211 SL-024-SA5A-SB-2.5-3.5 SL-026-SA5A-SB-3.5-4.5 SL-031-SA5A-SB-4.0-5.0 SL-035-SA5A-SB-4.0-5.0 SL-175-SA5A-SS-0.0-0.3 SL-180-SA5A-SS-0.0-0.5 SL-181-SA5A-SS-0.0-0.5 SL-196-SA5A-SS-0.0-0.5 SL-197-SA5A-SS-0.0-0.5 SL-210-SA5A-SS-0.0-0.5 SL-211-SA5A-SS-0.0-0.5 SL-212-SA5A-SS-0.0-0.5 SL-214-SA5A-SS-0.0-0.5 SL-215-SA5A-SS-0.0-0.5 SL-217-SA5A-SS-0.0-0.5 SL-218-SA5A-SS-0.0-0.5)	ALUMINUM TITANIUM	557 137	677 139	75.00-125.00 75.00-125.00	- -	ALUMINUM TITANIUM	No Qual, >4x
SL-181-SA5A-SS-0.0-0.5MS **SL-181-SA5A-SS-0.0-0.5MSD** (DUP-02-SA5A-QC-022211 SL-024-SA5A-SB-2.5-3.5 SL-026-SA5A-SB-3.5-4.5 SL-031-SA5A-SB-4.0-5.0 SL-035-SA5A-SB-4.0-5.0 SL-175-SA5A-SS-0.0-0.3 SL-180-SA5A-SS-0.0-0.5 SL-181-SA5A-SS-0.0-0.5 SL-196-SA5A-SS-0.0-0.5 SL-197-SA5A-SS-0.0-0.5 SL-210-SA5A-SS-0.0-0.5 SL-211-SA5A-SS-0.0-0.5 SL-212-SA5A-SS-0.0-0.5 SL-214-SA5A-SS-0.0-0.5 SL-215-SA5A-SS-0.0-0.5 SL-217-SA5A-SS-0.0-0.5 SL-218-SA5A-SS-0.0-0.5)	IRON MAGNESIUM MANGANESE	517 32 7	-1387 -76 37	75.00-125.00 75.00-125.00 75.00-125.00	- - -	IRON MAGNESIUM MANGANESE	No Qual, >4x
SL-181-SA5A-SS-0.0-0.5MS **SL-181-SA5A-SS-0.0-0.5MSD** (DUP-02-SA5A-QC-022211 SL-024-SA5A-SB-2.5-3.5 SL-026-SA5A-SB-3.5-4.5 SL-031-SA5A-SB-4.0-5.0 SL-035-SA5A-SB-4.0-5.0 SL-175-SA5A-SS-0.0-0.3 SL-180-SA5A-SS-0.0-0.5 SL-181-SA5A-SS-0.0-0.5 SL-196-SA5A-SS-0.0-0.5 SL-197-SA5A-SS-0.0-0.5 SL-210-SA5A-SS-0.0-0.5 SL-211-SA5A-SS-0.0-0.5 SL-212-SA5A-SS-0.0-0.5 SL-214-SA5A-SS-0.0-0.5 SL-215-SA5A-SS-0.0-0.5 SL-217-SA5A-SS-0.0-0.5 SL-218-SA5A-SS-0.0-0.5)	CALCIUM	161	69	75.00-125.00	-	CALCIUM	No Qual, >4x

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE088 **Laboratory: LL**

EDD Filename: DE088_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C SIM
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-181-SA5A-SS-0.0-0.5MS **SL-181-SA5A-SS-0.0-0.5MSD** (SL-181-SA5A-SS-0.0-0.5)	BENZO(B)FLUORANTHENE Butylbenzylphthalate Dimethylphthalate FLUORANTHENE	- 1654 132 195	162 150 - 169	43.00-155.00 73.00-140.00 74.00-118.00 26.00-166.00	- 156 (30.00) - -	BENZO(B)FLUORANTHENE Butylbenzylphthalate Dimethylphthalate FLUORANTHENE	J(all detects)
SL-181-SA5A-SS-0.0-0.5MS **SL-181-SA5A-SS-0.0-0.5MSD** (SL-181-SA5A-SS-0.0-0.5)	Di-n-butylphthalate	-31	435	78.00-160.00	102 (30.00)	Di-n-butylphthalate	J(all detects) R(all non-detects)

Method: 300.0
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-181-SA5A-SS-0.0-0.5MS (DUP-02-SA5A-QC-022211 SL-175-SA5A-SS-0.0-0.3 SL-180-SA5A-SS-0.0-0.5 SL-181-SA5A-SS-0.0-0.5 SL-196-SA5A-SS-0.0-0.5 SL-197-SA5A-SS-0.0-0.5 SL-210-SA5A-SS-0.0-0.5 SL-211-SA5A-SS-0.0-0.5 SL-212-SA5A-SS-0.0-0.5 SL-214-SA5A-SS-0.0-0.5)	FLUORIDE	57	-	80.00-120.00	-	FLUORIDE	J(all detects) UJ(all non-detects)
SL-215-SA5A-SS-0.0-0.5MS (SL-024-SA5A-SB-2.5-3.5 SL-026-SA5A-SB-3.5-4.5 SL-031-SA5A-SB-4.0-5.0 SL-035-SA5A-SB-4.0-5.0 SL-215-SA5A-SS-0.0-0.5 SL-217-SA5A-SS-0.0-0.5 SL-218-SA5A-SS-0.0-0.5)	FLUORIDE	66	-	80.00-120.00	-	FLUORIDE	J(all detects) UJ(all non-detects)

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-181-SA5A-SS-0.0-0.5MS **SL-181-SA5A-SS-0.0-0.5MSD** (DUP-02-SA5A-QC-022211 SL-024-SA5A-SB-2.5-3.5 SL-026-SA5A-SB-3.5-4.5 SL-031-SA5A-SB-4.0-5.0 SL-035-SA5A-SB-4.0-5.0 SL-175-SA5A-SS-0.0-0.3 SL-180-SA5A-SS-0.0-0.5 SL-181-SA5A-SS-0.0-0.5 SL-196-SA5A-SS-0.0-0.5 SL-197-SA5A-SS-0.0-0.5 SL-210-SA5A-SS-0.0-0.5 SL-211-SA5A-SS-0.0-0.5 SL-212-SA5A-SS-0.0-0.5 SL-214-SA5A-SS-0.0-0.5 SL-215-SA5A-SS-0.0-0.5 SL-217-SA5A-SS-0.0-0.5 SL-218-SA5A-SS-0.0-0.5)	PHOSPHORUS	288	-	75.00-125.00	32 (20.00)	PHOSPHORUS	J(all detects) UJ(all non-detects)

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE088 **Laboratory: LL**

EDD Filename: DE088_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8081A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-181-SA5A-SS-0.0-0.5MS **SL-181-SA5A-SS-0.0-0.5MSD** (SL-181-SA5A-SS-0.0-0.5)	4,4'-DDD 4,4'-DDT BETA-BHC ENDOSULFAN II ENDOSULFAN SULFATE	- 422 - - -	228 391 - 174 -	16.00-163.00 10.00-176.00 14.00-147.00 28.00-154.00 21.00-160.00	100 (50.00) - 60 (50.00) 76 (50.00) 60 (50.00)	4,4'-DDD 4,4'-DDT BETA-BHC ENDOSULFAN II ENDOSULFAN SULFATE	J(all detects)
SL-181-SA5A-SS-0.0-0.5MS **SL-181-SA5A-SS-0.0-0.5MSD** (SL-181-SA5A-SS-0.0-0.5)	ENDOSULFAN I ENDRIN	0 0	0 0	16.00-137.00 11.00-149.00	- -	ENDOSULFAN I ENDRIN	J(all detects) R(all non-detects)

Method: 8151A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-181-SA5A-SS-0.0-0.5MSD (SL-181-SA5A-SS-0.0-0.5)	2,4,5-T 2,4,5-TP (Silvex) DALAPON DINOSEB	- - - -	- - - -	25.00-132.00 10.00-183.00 12.00-86.00 1.00-44.00	37 (35.00) 119 (35.00) 77 (50.00) 72 (35.00)	2,4,5-T 2,4,5-TP (Silvex) DALAPON DINOSEB	J(all detects)
SL-181-SA5A-SS-0.0-0.5MS **SL-181-SA5A-SS-0.0-0.5MSD** (SL-181-SA5A-SS-0.0-0.5)	MCPP	0	-	16.00-174.00	200 (50.00)	MCPP	J(all detects) R(all non-detects)
SL-181-SA5A-SS-0.0-0.5MSD (SL-181-SA5A-SS-0.0-0.5)	MCPA	-	15	31.00-184.00	-	MCPA	J(all detects) UJ(all non-detects)

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE088 **Laboratory: LL**

EDD Filename: DE088_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 60108
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-181-SA5A-SS-0.0-0.5DUP (DUP-02-SA5A-QC-022211 SL -024-SA5A-SB-2.5-3.5 SL -026-SA5A-SB-3.5-4.5 SL -031-SA5A-SB-4.0-5.0 SL -035-SA5A-SB-4.0-5.0 SL -175-SA5A-SS-0.0-0.3 SL -180-SA5A-SS-0.0-0.5 SL -181-SA5A-SS-0.0-0.5 SL -196-SA5A-SS-0.0-0.5 SL -197-SA5A-SS-0.0-0.5 SL -210-SA5A-SS-0.0-0.5 SL -211-SA5A-SS-0.0-0.5 SL -212-SA5A-SS-0.0-0.5 SL -214-SA5A-SS-0.0-0.5 SL -215-SA5A-SS-0.0-0.5 SL -217-SA5A-SS-0.0-0.5 SL -218-SA5A-SS-0.0-0.5)	Zirconium	21	20.00	No Qual OK by difference

Method: 6020
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-181-SA5A-SS-0.0-0.5DUP (DUP-02-SA5A-QC-022211 SL -024-SA5A-SB-2.5-3.5 SL -026-SA5A-SB-3.5-4.5 SL -031-SA5A-SB-4.0-5.0 SL -035-SA5A-SB-4.0-5.0 SL -175-SA5A-SS-0.0-0.3 SL -180-SA5A-SS-0.0-0.5 SL -181-SA5A-SS-0.0-0.5 SL -196-SA5A-SS-0.0-0.5 SL -197-SA5A-SS-0.0-0.5 SL -210-SA5A-SS-0.0-0.5 SL -211-SA5A-SS-0.0-0.5 SL -212-SA5A-SS-0.0-0.5 SL -214-SA5A-SS-0.0-0.5 SL -215-SA5A-SS-0.0-0.5 SL -217-SA5A-SS-0.0-0.5 SL -218-SA5A-SS-0.0-0.5)	ANTIMONY SELENIUM THALLIUM	24 27 21	20.00 20.00 20.00	No Qual OK by difference

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE088 **Laboratory: LL**

EDD Filename: DE088_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7199
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-181-SA5A-SS-0.0-0.5DUP (DUP-02-SA5A-QC-022211 SL -024-SA5A-SB-2.5-3.5 SL -026-SA5A-SB-3.5-4.5 SL -031-SA5A-SB-4.0-5.0 SL -035-SA5A-SB-4.0-5.0 SL -175-SA5A-SS-0.0-0.3 SL -180-SA5A-SS-0.0-0.5 SL -181-SA5A-SS-0.0-0.5 SL -196-SA5A-SS-0.0-0.5 SL -197-SA5A-SS-0.0-0.5 SL -210-SA5A-SS-0.0-0.5 SL -211-SA5A-SS-0.0-0.5 SL -212-SA5A-SS-0.0-0.5 SL -214-SA5A-SS-0.0-0.5 SL -215-SA5A-SS-0.0-0.5 SL -217-SA5A-SS-0.0-0.5 SL -218-SA5A-SS-0.0-0.5)	HEXAVALENT CHROMIUM	22	20.00	No Qual OK by difference

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE088 **Laboratory: LL**

EDD Filename: DE088_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P5LCLCSQ261203 (DUP-02-SA5A-QC-022211 SL-024-SA5A-SB-2.5-3.5 SL-026-SA5A-SB-3.5-4.5 SL-031-SA5A-SB-4.0-5.0 SL-035-SA5A-SB-4.0-5.0 SL-175-SA5A-SS-0.0-0.3 SL-180-SA5A-SS-0.0-0.5 SL-181-SA5A-SS-0.0-0.5 SL-196-SA5A-SS-0.0-0.5 SL-197-SA5A-SS-0.0-0.5 SL-210-SA5A-SS-0.0-0.5 SL-211-SA5A-SS-0.0-0.5 SL-212-SA5A-SS-0.0-0.5 SL-214-SA5A-SS-0.0-0.5 SL-215-SA5A-SS-0.0-0.5 SL-217-SA5A-SS-0.0-0.5 SL-218-SA5A-SS-0.0-0.5)	2-CHLORONAPHTHALENE	64	-	67.00-127.00	-	2-CHLORONAPHTHALENE	J (all detects) UJ (all non-detects)

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P05626AQ221751A (DUP-02-SA5A-QC-022211 SL-024-SA5A-SB-2.5-3.5 SL-026-SA5A-SB-3.5-4.5 SL-031-SA5A-SB-4.0-5.0 SL-035-SA5A-SB-4.0-5.0 SL-175-SA5A-SS-0.0-0.3 SL-180-SA5A-SS-0.0-0.5 SL-181-SA5A-SS-0.0-0.5 SL-196-SA5A-SS-0.0-0.5 SL-197-SA5A-SS-0.0-0.5 SL-210-SA5A-SS-0.0-0.5 SL-211-SA5A-SS-0.0-0.5 SL-212-SA5A-SS-0.0-0.5 SL-214-SA5A-SS-0.0-0.5 SL-215-SA5A-SS-0.0-0.5 SL-217-SA5A-SS-0.0-0.5 SL-218-SA5A-SS-0.0-0.5)	ANTIMONY	57	-	80.00-120.00	-	ANTIMONY	No Qual SRM within QC limits

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE088 **Laboratory: LL**

EDD Filename: DE088_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8082

Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P10569AQ240211A (SL-024-SA5A-SB-2.5-3.5 SL -026-SA5A-SB-3.5-4.5 SL -031-SA5A-SB-4.0-5.0 SL -035-SA5A-SB-4.0-5.0 SL -180-SA5A-SS-0.0-0.5 SL -181-SA5A-SS-0.0-0.5 SL -196-SA5A-SS-0.0-0.5 SL -210-SA5A-SS-0.0-0.5 SL -211-SA5A-SS-0.0-0.5 SL -212-SA5A-SS-0.0-0.5 SL -214-SA5A-SS-0.0-0.5 SL -215-SA5A-SS-0.0-0.5 SL -217-SA5A-SS-0.0-0.5)	AROCLOR 1016 AROCLOR 1260	127 150	- -	72.00-120.00 65.00-137.00	- -	AROCLOR 1016, 1221, 1232 AROCLOR 1242, 1248, 1254, 1260	J(all detects)
P10594AQ242228A **P10594AY241653A** (DUP-02-SA5A-QC-022211 SL -175-SA5A-SS-0.0-0.3 SL -197-SA5A-SS-0.0-0.5 SL -218-SA5A-SS-0.0-0.5)	Aroclor 5442	67	67	75.00-125.00	-	Aroclor 5432, 5442, 5460	J(all detects) UJ(all non-detects)

Surrogate Outlier Report

Lab Reporting Batch ID: DE088 **Laboratory: LL**

EDD Filename: DE088_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8081A
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-175-SA5A-SS-0.0-0.3	DECACHLOROBIPHENYL	676	20.00-120.00	All Target Analytes	No Qual Diluted Out
SL-197-SA5A-SS-0.0-0.5	TETRACHLORO-M-XYLENE	149	50.00-130.00	All Target Analytes	No Qual Diluted Out
SL-211-SA5A-SS-0.0-0.5	DECACHLOROBIPHENYL	122	20.00-120.00	All Target Analytes	J(all detects)

Method: 8082
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
DUP-02-SA5A-QC-022211	DECACHLOROBIPHENYL	158	45.00-120.00	All Target Analytes	J (all detects)
SL-026-SA5A-SB-3.5-4.5	DECACHLOROBIPHENYL	129	45.00-120.00	All Target Analytes	J(all detects)
SL-031-SA5A-SB-4.0-5.0	DECACHLOROBIPHENYL TETRACHLORO-M-XYLENE	162 157	45.00-120.00 53.00-139.00	All Target Analytes	J(all detects)
SL-035-SA5A-SB-4.0-5.0	DECACHLOROBIPHENYL	137	45.00-120.00	All Target Analytes	J(all detects)
SL-175-SA5A-SS-0.0-0.3	DECACHLOROBIPHENYL	123	45.00-120.00	All Target Analytes	J(all detects)
SL-196-SA5A-SS-0.0-0.5	DECACHLOROBIPHENYL TETRACHLORO-M-XYLENE	142 147	45.00-120.00 53.00-139.00	All Target Analytes	J(all detects)
SL-210-SA5A-SS-0.0-0.5	TETRACHLORO-M-XYLENE	178	53.00-139.00	All Target Analytes	J(all detects)
SL-211-SA5A-SS-0.0-0.5	DECACHLOROBIPHENYL TETRACHLORO-M-XYLENE	40 36	45.00-120.00 53.00-139.00	All Target Analytes	J(all detects) UJ(all non-detects)
SL-217-SA5A-SS-0.0-0.5	DECACHLOROBIPHENYL	139	45.00-120.00	All Target Analytes	No Qual Diluted Out

Field Duplicate RPD Report

Lab Reporting Batch ID: DE088 **Laboratory: LL**

EDD Filename: DE088_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 160.3M
Matrix: SO

Analyte	Concentration (%) SL-181-SA5A-SS-0.0-0.5	Concentration (%) DUP-02-SA5A-QC-022211	Sample RPD	eQAPP RPD	Flag
MOISTURE	14.2	13.1	8		No Qualifiers Applied

Method: 300.0
Matrix: SO

Analyte	Concentration (mg/Kg) SL-181-SA5A-SS-0.0-0.5	Concentration (mg/Kg) DUP-02-SA5A-QC-022211	Sample RPD	eQAPP RPD	Flag
FLUORIDE	1.3	1.3	0	50.00	No Qualifiers Applied

Method: 6010B
Matrix: SO

Analyte	Concentration (mg/Kg) SL-181-SA5A-SS-0.0-0.5	Concentration (mg/Kg) DUP-02-SA5A-QC-022211	Sample RPD	eQAPP RPD	Flag
ALUMINUM	15500	13500	14	50.00	No Qualifiers Applied
BORON	3.28	2.80	16	50.00	
CALCIUM	4390	4260	3	50.00	
IRON	20900	18700	11	50.00	
LITHIUM	19.4	22.7	16	50.00	
MAGNESIUM	4870	4160	16	50.00	
MANGANESE	312	294	6	50.00	
PHOSPHORUS	438	518	17	50.00	
POTASSIUM	3030	2580	16	50.00	
SODIUM	101	113	11	50.00	
STRONTIUM	23.2	24.9	7	50.00	
TIN	3.80	3.53	7	50.00	
TITANIUM	1090	965	12	50.00	
Zirconium	4.41	3.38	26	50.00	

Method: 6020
Matrix: SO

Analyte	Concentration (mg/Kg) SL-181-SA5A-SS-0.0-0.5	Concentration (mg/Kg) DUP-02-SA5A-QC-022211	Sample RPD	eQAPP RPD	Flag
ANTIMONY	0.191	0.216	12	50.00	No Qualifiers Applied
ARSENIC	4.54	4.95	9	50.00	
BARIUM	100	107	7	50.00	
BERYLLIUM	0.555	0.523	6	50.00	
CADMIUM	0.540	0.625	15	50.00	
CHROMIUM	22.7	20.4	11	50.00	
COBALT	5.50	5.79	5	50.00	
COPPER	12.9	12.8	1	50.00	
LEAD	12.7	12.4	2	50.00	
MOLYBDENUM	0.481	0.463	4	50.00	
NICKEL	12.5	12.4	1	50.00	
SELENIUM	0.136	0.144	6	50.00	
SILVER	0.186	0.183	2	50.00	
THALLIUM	0.267	0.238	11	50.00	
VANADIUM	35.4	36.4	3	50.00	
ZINC	85.9	79.0	8	50.00	

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Field Duplicate RPD Report

Lab Reporting Batch ID: DE088 **Laboratory: LL**

EDD Filename: DE088_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7199
Matrix: SO

Analyte	Concentration (mg/Kg) SL-181-SA5A-SS-0.0-0.5	Concentration (mg/Kg) DUP-02-SA5A-QC-022211	Sample RPD	eQAPP RPD	Flag
HEXAVALENT CHROMIUM	0.42	2.3	138	50.00	J(all detects)

Method: 7471A
Matrix: SO

Analyte	Concentration (mg/Kg) SL-181-SA5A-SS-0.0-0.5	Concentration (mg/Kg) DUP-02-SA5A-QC-022211	Sample RPD	eQAPP RPD	Flag
MERCURY	0.0595	0.0576	3	50.00	No Qualifiers Applied

Method: 8081A
Matrix: SO

Analyte	Concentration (ug/Kg) SL-181-SA5A-SS-0.0-0.5	Concentration (ug/Kg) DUP-02-SA5A-QC-022211	Sample RPD	eQAPP RPD	Flag
BETA-BHC	0.26	0.24	8	50.00	No Qualifiers Applied

Method: 8082
Matrix: SO

Analyte	Concentration (ug/Kg) SL-181-SA5A-SS-0.0-0.5	Concentration (ug/Kg) DUP-02-SA5A-QC-022211	Sample RPD	eQAPP RPD	Flag
AROCLOR 1254	28	35	22	50.00	No Qualifiers Applied
AROCLOR 1260	17	21	21	50.00	
Aroclor 5460	21	200	162	50.00	J(all detects)

Method: 8151A
Matrix: SO

Analyte	Concentration (ug/Kg) SL-181-SA5A-SS-0.0-0.5	Concentration (ug/Kg) DUP-02-SA5A-QC-022211	Sample RPD	eQAPP RPD	Flag
MCPA	1300	1400	7	50.00	No Qualifiers Applied

Method: 8270C SIM
Matrix: SO

Analyte	Concentration (ug/Kg) SL-181-SA5A-SS-0.0-0.5	Concentration (ug/Kg) DUP-02-SA5A-QC-022211	Sample RPD	eQAPP RPD	Flag
1-METHYLNAPHTHALENE	1.2	1.0	18	50.00	No Qualifiers Applied
2-METHYLNAPHTHALENE	1.6	1.3	21	50.00	
ACENAPHTHENE	1.4	1.6	13	50.00	
ACENAPHTHYLENE	2.7	2.4	12	50.00	
ANTHRACENE	6.5	5.2	22	50.00	
Butylbenzylphthalate	25	30	18	50.00	
Di-n-butylphthalate	99	110	11	50.00	
NAPHTHALENE	1.4	1.7	19	50.00	
Dimethylphthalate	15	21 U	200	50.00	J(all detects)
FLUORENE	2.7	1.9 U	200	50.00	UJ(all non-detects)

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Field Duplicate RPD Report

Lab Reporting Batch ID: DE088 **Laboratory: LL**

EDD Filename: DE088_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C
Matrix: SO

Analyte	Concentration (ug/Kg) SL-181-SA5A-SS-0.0-0.5	Concentration (ug/Kg) DUP-02-SA5A-QC-022211	Sample RPD	eQAPP RPD	Flag
BIS(2-ETHYLHEXYL)PHTHALATE	45	44	2	50.00	No Qualifiers Applied
DIBENZO(A,H)ANTHRACENE	22	21	5	50.00	
BENZO(A)ANTHRACENE	82	32	88	50.00	J(all detects)
BENZO(G,H,I)PERYLENE	74	34	74	50.00	
CHRYSENE	120	44	93	50.00	
FLUORANTHENE	210	58	113	50.00	
INDENO(1,2,3-CD)PYRENE	56	28	67	50.00	
PHENANTHRENE	140	36	118	50.00	
PYRENE	190	62	102	50.00	

Method: 9045M
Matrix: SO

Analyte	Concentration (pH unit) SL-181-SA5A-SS-0.0-0.5	Concentration (pH unit) DUP-02-SA5A-QC-022211	Sample RPD	eQAPP RPD	Flag
PH	7.85	7.71	2	50.00	No Qualifiers Applied

Method: ASTM D1498
Matrix: SO

Analyte	Concentration (mV) SL-181-SA5A-SS-0.0-0.5	Concentration (mV) DUP-02-SA5A-QC-022211	Sample RPD	eQAPP RPD	Flag
Oxidation Reduction Potential	338	318	6		No Qualifiers Applied

Reporting Limit Outliers

Lab Reporting Batch ID: DE088 **Laboratory: LL**

EDD Filename: DE088_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 300.0

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-175-SA5A-SS-0.0-0.3	FLUORIDE	J	0.98	1.1	PQL	mg/Kg	J (all detects)

Method: 314.0

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-035-SA5A-SB-4.0-5.0	PERCHLORATE	J	25.7	33.1	PQL	ug/Kg	J (all detects)

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-02-SA5A-QC-022211	BORON	J	2.80	5.64	PQL	mg/Kg	J (all detects)
	TIN	J	3.53	11.3	PQL	mg/Kg	
	Zirconium	J	3.38	5.64	PQL	mg/Kg	
SL-024-SA5A-SB-2.5-3.5	BORON	J	1.27	5.37	PQL	mg/Kg	J (all detects)
	TIN	J	3.58	10.7	PQL	mg/Kg	
	Zirconium	J	4.44	5.47	PQL	mg/Kg	
SL-026-SA5A-SB-3.5-4.5	TIN	J	3.10	10.5	PQL	mg/Kg	J (all detects)
	Zirconium	J	4.42	5.24	PQL	mg/Kg	
SL-031-SA5A-SB-4.0-5.0	BORON	J	1.35	5.51	PQL	mg/Kg	J (all detects)
	TIN	J	3.47	11.0	PQL	mg/Kg	
	Zirconium	J	5.08	5.35	PQL	mg/Kg	
SL-035-SA5A-SB-4.0-5.0	BORON	J	1.82	5.46	PQL	mg/Kg	J (all detects)
	TIN	J	3.25	10.9	PQL	mg/Kg	
	Zirconium	J	5.09	5.36	PQL	mg/Kg	
SL-175-SA5A-SS-0.0-0.3	BORON	J	3.71	5.61	PQL	mg/Kg	J (all detects)
	TIN	J	3.33	11.2	PQL	mg/Kg	
	Zirconium	J	4.46	5.61	PQL	mg/Kg	
SL-180-SA5A-SS-0.0-0.5	BORON	J	3.77	5.60	PQL	mg/Kg	J (all detects)
	SODIUM	J	106	112	PQL	mg/Kg	
	TIN	J	3.53	11.2	PQL	mg/Kg	
	Zirconium	J	4.64	5.55	PQL	mg/Kg	
SL-181-SA5A-SS-0.0-0.5	BORON	J	3.28	5.77	PQL	mg/Kg	J (all detects)
	SODIUM	J	101	115	PQL	mg/Kg	
	TIN	J	3.80	11.5	PQL	mg/Kg	
	Zirconium	J	4.41	5.83	PQL	mg/Kg	
SL-196-SA5A-SS-0.0-0.5	BORON	J	2.26	5.44	PQL	mg/Kg	J (all detects)
	SODIUM	J	67.5	109	PQL	mg/Kg	
	TIN	J	2.91	10.9	PQL	mg/Kg	
	Zirconium	J	4.85	5.38	PQL	mg/Kg	
SL-197-SA5A-SS-0.0-0.5	TIN	J	3.17	11.4	PQL	mg/Kg	J (all detects)
	Zirconium	J	4.88	5.89	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE088 **Laboratory: LL**

EDD Filename: DE088_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-210-SA5A-SS-0.0-0.5	BORON	J	2.82	5.31	PQL	mg/Kg	J (all detects)
	SODIUM	J	103	106	PQL	mg/Kg	
	TIN	J	3.00	10.6	PQL	mg/Kg	
	Zirconium	J	3.99	5.31	PQL	mg/Kg	
SL-211-SA5A-SS-0.0-0.5	BORON	J	2.56	5.43	PQL	mg/Kg	J (all detects)
	TIN	J	3.04	10.9	PQL	mg/Kg	
	Zirconium	J	3.61	5.33	PQL	mg/Kg	
SL-212-SA5A-SS-0.0-0.5	BORON	J	3.41	5.68	PQL	mg/Kg	J (all detects)
	TIN	J	3.62	11.4	PQL	mg/Kg	
	Zirconium	J	5.08	5.79	PQL	mg/Kg	
SL-214-SA5A-SS-0.0-0.5	BORON	J	2.48	5.41	PQL	mg/Kg	J (all detects)
	TIN	J	2.87	10.8	PQL	mg/Kg	
	Zirconium	J	4.09	5.41	PQL	mg/Kg	
SL-215-SA5A-SS-0.0-0.5	BORON	J	2.84	5.64	PQL	mg/Kg	J (all detects)
	SODIUM	J	89.0	113	PQL	mg/Kg	
	TIN	J	3.09	11.3	PQL	mg/Kg	
	Zirconium	J	4.58	5.48	PQL	mg/Kg	
SL-217-SA5A-SS-0.0-0.5	BORON	J	3.01	5.62	PQL	mg/Kg	J (all detects)
	SODIUM	J	99.0	112	PQL	mg/Kg	
	TIN	J	3.08	11.2	PQL	mg/Kg	
	Zirconium	J	5.02	5.68	PQL	mg/Kg	
SL-218-SA5A-SS-0.0-0.5	BORON	J	1.93	5.80	PQL	mg/Kg	J (all detects)
	SODIUM	J	84.2	116	PQL	mg/Kg	
	TIN	J	3.37	11.6	PQL	mg/Kg	
	Zirconium	J	4.29	5.86	PQL	mg/Kg	

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-02-SA5A-QC-022211	ANTIMONY	J	0.216	0.223	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.144	0.447	PQL	mg/Kg	
SL-024-SA5A-SB-2.5-3.5	ANTIMONY	J	0.0694	0.221	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.159	0.442	PQL	mg/Kg	
	SILVER	J	0.0159	0.111	PQL	mg/Kg	
SL-026-SA5A-SB-3.5-4.5	SELENIUM	J	0.107	0.419	PQL	mg/Kg	J (all detects)
SL-031-SA5A-SB-4.0-5.0	ANTIMONY	J	0.0854	0.214	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.135	0.428	PQL	mg/Kg	
SL-035-SA5A-SB-4.0-5.0	ANTIMONY	J	0.0984	0.219	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0459	0.109	PQL	mg/Kg	
	SELENIUM	J	0.0835	0.437	PQL	mg/Kg	
	SILVER	J	0.0429	0.109	PQL	mg/Kg	
SL-175-SA5A-SS-0.0-0.3	SELENIUM	J	0.131	0.458	PQL	mg/Kg	J (all detects)
SL-180-SA5A-SS-0.0-0.5	ANTIMONY	J	0.117	0.224	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.168	0.448	PQL	mg/Kg	
SL-181-SA5A-SS-0.0-0.5	ANTIMONY	J	0.191	0.231	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.136	0.462	PQL	mg/Kg	

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Reporting Limit Outliers

Lab Reporting Batch ID: DE088 **Laboratory: LL**

EDD Filename: DE088_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-196-SA5A-SS-0.0-0.5	ANTIMONY	J	0.0911	0.224	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.134	0.448	PQL	mg/Kg	
	SILVER	J	0.0496	0.112	PQL	mg/Kg	
SL-197-SA5A-SS-0.0-0.5	ANTIMONY	J	0.0822	0.233	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.183	0.467	PQL	mg/Kg	
SL-210-SA5A-SS-0.0-0.5	SELENIUM	J	0.152	0.433	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0235	0.108	PQL	mg/Kg	
SL-211-SA5A-SS-0.0-0.5	CADMIUM	J	0.105	0.107	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.110	0.426	PQL	mg/Kg	
	SILVER	J	0.0374	0.107	PQL	mg/Kg	
SL-212-SA5A-SS-0.0-0.5	ANTIMONY	J	0.121	0.229	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0767	0.115	PQL	mg/Kg	
	SELENIUM	J	0.176	0.459	PQL	mg/Kg	
	SILVER	J	0.0563	0.115	PQL	mg/Kg	
SL-214-SA5A-SS-0.0-0.5	CADMIUM	J	0.0996	0.108	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.105	0.433	PQL	mg/Kg	
	SILVER	J	0.0343	0.108	PQL	mg/Kg	
SL-215-SA5A-SS-0.0-0.5	SELENIUM	J	0.148	0.456	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0326	0.114	PQL	mg/Kg	
SL-217-SA5A-SS-0.0-0.5	ANTIMONY	J	0.109	0.227	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.140	0.454	PQL	mg/Kg	
	SILVER	J	0.0948	0.114	PQL	mg/Kg	
SL-218-SA5A-SS-0.0-0.5	ANTIMONY	J	0.0920	0.234	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.123	0.469	PQL	mg/Kg	
	SILVER	J	0.0401	0.117	PQL	mg/Kg	

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-026-SA5A-SB-3.5-4.5	HEXAVALENT CHROMIUM	J	0.54	1.0	PQL	mg/Kg	J (all detects)
SL-031-SA5A-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.27	1.1	PQL	mg/Kg	J (all detects)
SL-035-SA5A-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.56	1.1	PQL	mg/Kg	J (all detects)
SL-180-SA5A-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.59	1.2	PQL	mg/Kg	J (all detects)
SL-181-SA5A-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.42	1.2	PQL	mg/Kg	J (all detects)
SL-196-SA5A-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.40	1.1	PQL	mg/Kg	J (all detects)
SL-210-SA5A-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.32	1.1	PQL	mg/Kg	J (all detects)
SL-211-SA5A-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.30	1.1	PQL	mg/Kg	J (all detects)
SL-212-SA5A-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.57	1.2	PQL	mg/Kg	J (all detects)
SL-214-SA5A-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.26	1.1	PQL	mg/Kg	J (all detects)
SL-215-SA5A-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.28	1.1	PQL	mg/Kg	J (all detects)
SL-218-SA5A-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.32	1.2	PQL	mg/Kg	J (all detects)

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Reporting Limit Outliers

Lab Reporting Batch ID: DE088 **Laboratory: LL**

EDD Filename: DE088_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7471A
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-02-SA5A-QC-022211	MERCURY	J	0.0576	0.112	PQL	mg/Kg	J (all detects)
SL-035-SA5A-SB-4.0-5.0	MERCURY	J	0.0037	0.105	PQL	mg/Kg	J (all detects)
SL-180-SA5A-SS-0.0-0.5	MERCURY	J	0.0152	0.114	PQL	mg/Kg	J (all detects)
SL-181-SA5A-SS-0.0-0.5	MERCURY	J	0.0595	0.110	PQL	mg/Kg	J (all detects)
SL-197-SA5A-SS-0.0-0.5	MERCURY	J	0.0041	0.118	PQL	mg/Kg	J (all detects)
SL-212-SA5A-SS-0.0-0.5	MERCURY	J	0.0064	0.110	PQL	mg/Kg	J (all detects)
SL-217-SA5A-SS-0.0-0.5	MERCURY	J	0.0143	0.116	PQL	mg/Kg	J (all detects)
SL-218-SA5A-SS-0.0-0.5	MERCURY	J	0.0413	0.114	PQL	mg/Kg	J (all detects)

Method: 8015M
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-035-SA5A-SB-4.0-5.0	EFH (C21-C30)	J	0.54	1.3	PQL	mg/Kg	J (all detects)

Method: 8081A
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-197-SA5A-SS-0.0-0.5	BETA-BHC HEPTACHLOR EPOXIDE	J J	0.68 0.58	0.99 0.99	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-211-SA5A-SS-0.0-0.5	4,4'-DDD DIELDRIN ENDOSULFAN SULFATE	J J J	0.18 0.085 0.15	0.37 0.37 0.37	PQL PQL PQL	ug/Kg ug/Kg ug/Kg	J (all detects)
SL-212-SA5A-SS-0.0-0.5	4,4'-DDT ENDRIN KETONE	J J	0.39 0.25	0.40 0.40	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-214-SA5A-SS-0.0-0.5	4,4'-DDD 4,4'-DDT	J J	0.24 0.29	0.38 0.38	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-215-SA5A-SS-0.0-0.5	4,4'-DDD DIELDRIN	J J	0.094 0.11	0.39 0.39	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-218-SA5A-SS-0.0-0.5	DIELDRIN ENDRIN ALDEHYDE	J J	0.18 0.21	0.40 0.40	PQL PQL	ug/Kg ug/Kg	J (all detects)

Method: 8082
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-175-SA5A-SS-0.0-0.3	AROCLOR 1248	J	3.8	4.9	PQL	ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE088 **Laboratory: LL**

EDD Filename: DE088_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-210-SA5A-SS-0.0-0.5	AROCLOR 1254 AROCLOR 1260	J J	0.75 1.7	1.8 1.8	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-212-SA5A-SS-0.0-0.5	AROCLOR 1254 AROCLOR 1260	J J	1.0 0.51	2.0 2.0	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-215-SA5A-SS-0.0-0.5	AROCLOR 1254 AROCLOR 1260	J J	0.62 0.59	1.9 1.9	PQL PQL	ug/Kg ug/Kg	J (all detects)

Method: 8151A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-211-SA5A-SS-0.0-0.5	2,4-DB MCPA	J J	1.1 110	1.9 270	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-217-SA5A-SS-0.0-0.5	2,4,5-T	J	0.17	0.20	PQL	ug/Kg	J (all detects)

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-024-SA5A-SB-2.5-3.5	ETHYLBENZENE m,p-Xylene METHYLENE CHLORIDE TOLUENE	J J J J	0.12 0.37 2.9 0.10	4.3 4.3 4.3 4.3	PQL PQL PQL PQL	ug/Kg ug/Kg ug/Kg ug/Kg	J (all detects)
SL-026-SA5A-SB-3.5-4.5	ETHYLBENZENE m,p-Xylene METHYLENE CHLORIDE TOLUENE	J J J J	0.13 0.42 1.4 0.10	4.2 4.2 4.2 4.2	PQL PQL PQL PQL	ug/Kg ug/Kg ug/Kg ug/Kg	J (all detects)
SL-031-SA5A-SB-4.0-5.0	METHYLENE CHLORIDE TOLUENE	J J	1.6 0.1	4.7 4.7	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-035-SA5A-SB-4.0-5.0	ETHYLBENZENE m,p-Xylene METHYLENE CHLORIDE TOLUENE	J J J J	0.17 0.59 1.9 0.11	4.1 4.1 4.1 4.1	PQL PQL PQL PQL	ug/Kg ug/Kg ug/Kg ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE088 **Laboratory: LL**

EDD Filename: DE088_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-02-SA5A-QC-022211	BENZO(A)ANTHRACENE	J	32	190	PQL	ug/Kg	J (all detects)
	BENZO(G,H,I)PERYLENE	J	34	190	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	44	380	PQL	ug/Kg	
	CHRYSENE	J	44	190	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	21	190	PQL	ug/Kg	
	FLUORANTHENE	J	58	190	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	28	190	PQL	ug/Kg	
	PHENANTHRENE	J	36	190	PQL	ug/Kg	
	PYRENE	J	62	190	PQL	ug/Kg	
SL-024-SA5A-SB-2.5-3.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	21	370	PQL	ug/Kg	J (all detects)
SL-031-SA5A-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	19	370	PQL	ug/Kg	J (all detects)
SL-175-SA5A-SS-0.0-0.3	PYRENE	J	140	190	PQL	ug/Kg	J (all detects)
SL-181-SA5A-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	82	190	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	85	190	PQL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	110	190	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	74	190	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	50	190	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	45	380	PQL	ug/Kg	
	CHRYSENE	J	120	190	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	22	190	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	56	190	PQL	ug/Kg	
	PHENANTHRENE	J	140	190	PQL	ug/Kg	
SL-196-SA5A-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	25	370	PQL	ug/Kg	J (all detects)
SL-197-SA5A-SS-0.0-0.5	BENZOIC ACID	J	320	590	PQL	ug/Kg	J (all detects)
	BIS(2-ETHYLHEXYL)PHTHALATE	J	99	390	PQL	ug/Kg	
	DIBENZOFURAN	J	77	200	PQL	ug/Kg	
SL-215-SA5A-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	27	380	PQL	ug/Kg	J (all detects)
SL-217-SA5A-SS-0.0-0.5	BENZO(B)FLUORANTHENE	J	22	190	PQL	ug/Kg	J (all detects)
	BENZO(G,H,I)PERYLENE	J	29	190	PQL	ug/Kg	
	CHRYSENE	J	34	190	PQL	ug/Kg	
	FLUORANTHENE	J	40	190	PQL	ug/Kg	
	PYRENE	J	34	190	PQL	ug/Kg	

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-02-SA5A-QC-022211	1-METHYLNAPHTHALENE	J	1.0	1.9	PQL	ug/Kg	J (all detects)
	2-METHYLNAPHTHALENE	J	1.3	1.9	PQL	ug/Kg	
	ACENAPHTHENE	J	1.6	1.9	PQL	ug/Kg	
	NAPHTHALENE	J	1.7	1.9	PQL	ug/Kg	
SL-175-SA5A-SS-0.0-0.3	ACENAPHTHYLENE	J	8.3	9.5	PQL	ug/Kg	J (all detects)
	BIS(2-ETHYLHEXYL)PHTHALATE	J	90	100	PQL	ug/Kg	
	NAPHTHALENE	J	6.9	9.5	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE088 **Laboratory: LL**

EDD Filename: DE088_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-180-SA5A-SS-0.0-0.5	ACENAPHTHYLENE	J	1.3	1.9	PQL	ug/Kg	J (all detects)
	ANTHRACENE	J	1.8	1.9	PQL	ug/Kg	
	Dimethylphthalate	J	8.0	20	PQL	ug/Kg	
	Di-n-butylphthalate	J	13	20	PQL	ug/Kg	
SL-181-SA5A-SS-0.0-0.5	1-METHYLNAPHTHALENE	J	1.2	1.9	PQL	ug/Kg	J (all detects)
	2-METHYLNAPHTHALENE	J	1.6	1.9	PQL	ug/Kg	
	ACENAPHTHENE	J	1.4	1.9	PQL	ug/Kg	
	Dimethylphthalate	J	15	21	PQL	ug/Kg	
	NAPHTHALENE	J	1.4	1.9	PQL	ug/Kg	
SL-196-SA5A-SS-0.0-0.5	ANTHRACENE	J	1.2	1.9	PQL	ug/Kg	J (all detects)
	BENZO(K)FLUORANTHENE	J	0.91	1.9	PQL	ug/Kg	
	Di-n-octylphthalate	J	15	20	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	0.96	1.9	PQL	ug/Kg	
SL-197-SA5A-SS-0.0-0.5	Di-n-butylphthalate	J	10	21	PQL	ug/Kg	J (all detects)
SL-210-SA5A-SS-0.0-0.5	ACENAPHTHYLENE	J	0.39	1.8	PQL	ug/Kg	J (all detects)
	ANTHRACENE	J	0.68	1.8	PQL	ug/Kg	
	BENZO(A)PYRENE	J	1.3	1.8	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	1.3	1.8	PQL	ug/Kg	
	Butylbenzylphthalate	J	7.9	19	PQL	ug/Kg	
	CHRYSENE	J	1.2	1.8	PQL	ug/Kg	
	Di-n-butylphthalate	J	13	19	PQL	ug/Kg	
	FLUORANTHENE	J	1.4	1.8	PQL	ug/Kg	
	NAPHTHALENE	J	1.1	1.8	PQL	ug/Kg	
	PHENANTHRENE	J	0.98	1.8	PQL	ug/Kg	
	PYRENE	J	1.5	1.8	PQL	ug/Kg	
SL-211-SA5A-SS-0.0-0.5	ACENAPHTHYLENE	J	0.70	1.8	PQL	ug/Kg	J (all detects)
	ANTHRACENE	J	1.0	1.8	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	1.1	1.8	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	7.6	20	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	1.6	1.8	PQL	ug/Kg	
	NAPHTHALENE	J	1.2	1.8	PQL	ug/Kg	
SL-212-SA5A-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	1.7	1.9	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	1.3	1.9	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	0.84	1.9	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	1.0	1.9	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	13	21	PQL	ug/Kg	
	CHRYSENE	J	1.3	1.9	PQL	ug/Kg	
	PYRENE	J	1.4	1.9	PQL	ug/Kg	
SL-214-SA5A-SS-0.0-0.5	ACENAPHTHYLENE	J	0.41	1.8	PQL	ug/Kg	J (all detects)
	BIS(2-ETHYLHEXYL)PHTHALATE	J	12	20	PQL	ug/Kg	
	NAPHTHALENE	J	1.1	1.8	PQL	ug/Kg	
SL-215-SA5A-SS-0.0-0.5	ACENAPHTHYLENE	J	0.71	1.9	PQL	ug/Kg	J (all detects)
	ANTHRACENE	J	0.66	1.9	PQL	ug/Kg	
	NAPHTHALENE	J	1.5	1.9	PQL	ug/Kg	
SL-217-SA5A-SS-0.0-0.5	1-METHYLNAPHTHALENE	J	0.84	1.9	PQL	ug/Kg	J (all detects)
	2-METHYLNAPHTHALENE	J	0.94	1.9	PQL	ug/Kg	
	ACENAPHTHYLENE	J	1.1	1.9	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	1.1	1.9	PQL	ug/Kg	
	NAPHTHALENE	J	1.3	1.9	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE088 **Laboratory: LL**

EDD Filename: DE088_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-218-SA5A-SS-0.0-0.5	ACENAPHTHYLENE	J	0.44	2.0	PQL	ug/Kg	J (all detects)
	ANTHRACENE	J	1.0	2.0	PQL	ug/Kg	
	BENZO(A)ANTHRACENE	J	0.89	2.0	PQL	ug/Kg	
	BENZO(A)PYRENE	J	1.3	2.0	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	1.2	2.0	PQL	ug/Kg	
	PHENANTHRENE	J	1.4	2.0	PQL	ug/Kg	

LDC #: 25764N4 **VALIDATION COMPLETENESS WORKSHEET** Date: 7/6/11
SDG #: DE088 ADR Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: CR
2nd Reviewer: A

METHOD: Metals (EPA SW 846 Method 6010B/6020A/7000)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	N	Sampling dates:
II.	ICP/MS Tune	—	
III.	Calibration	—	
IV.	Blanks	A	ICB/CCB hits → No Qual
V.	ICP Interference Check Sample (ICS) Analysis	N	
VI.	Matrix Spike Analysis	N	MS/D (Al, Ba, Ca, Fe, Mg, Mn, Ti, Zn > 4x)
VII.	Duplicate Sample Analysis	N	Dup (Sb, Se, Tl, Zn < 5xRL)
VIII.	Laboratory Control Samples (LCS)	N	
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	SW	Co: 35%, Ni: 11%, Li: 21% (J/UJ/A)
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	—	
XV	Field Blanks	—	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: Soil

1	DUP02-SA5A-QC-022211 D	11	SL-215-SA5A-SS-0.0-0.05	21		31	
2	SL-175-SA5A-SS-0.0-0.05	12	SL-217-SA5A-SS-0.0-0.05	22		32	
3	SL-180-SA5A-SS-0.0-0.05	13	SL-218-SA5A-SS-0.0-0.05	23		33	
4	SL-181-SA5A-SS-0.0-0.05 D	14	SL-024-SA5A-SS-0.0-0.05	24		34	
5	SL-196-SA5A-SS-0.0-0.05	15	SL-026-SA5A-SS-0.0-0.05	25		35	
6	SL-197-SA5A-SS-0.0-0.05	16	SL-031-SA5A-SS-0.0-0.05	26		36	
7	SL-210-SA5A-SS-0.0-0.05	17	SL-035-SA5A-SS-0.0-0.05	27		37	
8	SL-211-SA5A-SS-0.0-0.05	18	SL-181-SA5A-SS-0.0-0.05MS	28		38	
9	SL-212-SA5A-SS-0.0-0.05	19	SL-181-SA5A-SS-0.0-0.05MSD	29		39	
10	SL-214-SA5A-SS-0.0-0.05	20	SL-181-SA5A-SS-0.0-0.05DUP	30		40	

Notes:

SAMPLE DELIVERY GROUP

DE089

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
23-Feb-2011	SL-036-SA5A-SB-4.0-5.0	6214502	N	3050B	6010B	III
23-Feb-2011	SL-036-SA5A-SB-4.0-5.0	6214502	N	3050B	6020	III
23-Feb-2011	SL-036-SA5A-SB-4.0-5.0	6214502	N	3060A	7199	III
23-Feb-2011	SL-036-SA5A-SB-4.0-5.0	6214502	N	3546	1625C	III
23-Feb-2011	SL-036-SA5A-SB-4.0-5.0	6214502	N	3550B	8015B	III
23-Feb-2011	SL-036-SA5A-SB-4.0-5.0	6214502	N	3550B	8015M	III
23-Feb-2011	SL-036-SA5A-SB-4.0-5.0	6214502	N	3550B	8082	III
23-Feb-2011	SL-036-SA5A-SB-4.0-5.0	6214502	N	3550B	8270C	III
23-Feb-2011	SL-036-SA5A-SB-4.0-5.0	6214502	N	3550B	8270C SIM	III
23-Feb-2011	SL-036-SA5A-SB-4.0-5.0	6214502	N	5035	8015M	III
23-Feb-2011	SL-036-SA5A-SB-4.0-5.0	6214502	N	5035	8260B	III
23-Feb-2011	SL-036-SA5A-SB-4.0-5.0	6214502	N	5035	8260B SIM	III
23-Feb-2011	SL-036-SA5A-SB-4.0-5.0	6214502	N	8330	8330A	III
23-Feb-2011	SL-036-SA5A-SB-4.0-5.0	6214502	N	Gen Prep	9045M	III
23-Feb-2011	SL-036-SA5A-SB-4.0-5.0	6214502	N	METHOD	300.0	III
23-Feb-2011	SL-036-SA5A-SB-4.0-5.0	6214502	N	METHOD	314.0	III
23-Feb-2011	SL-036-SA5A-SB-4.0-5.0	6214502	N	METHOD	7471A	III
23-Feb-2011	SL-036-SA5A-SB-4.0-5.0	6214502	N	METHOD	8015B	III
23-Feb-2011	SL-036-SA5A-SB-4.0-5.0	6214502	N	METHOD	8015M	III
23-Feb-2011	SL-036-SA5A-SB-4.0-5.0	6214502	N	METHOD	8315A	III
23-Feb-2011	SL-036-SA5A-SB-4.0-5.0	6214502	N	METHOD	9012B	III
23-Feb-2011	SL-036-SA5A-SB-4.0-5.0MS	6214503	MS	3050B	6010B	III
23-Feb-2011	SL-036-SA5A-SB-4.0-5.0MS	6214503	MS	3050B	6020	III
23-Feb-2011	SL-036-SA5A-SB-4.0-5.0MS	6214503	MS	3060A	7199	III
23-Feb-2011	SL-036-SA5A-SB-4.0-5.0MS	6214503	MS	3546	1625C	III
23-Feb-2011	SL-036-SA5A-SB-4.0-5.0MS	6214503	MS	3550B	8015B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
23-Feb-2011	SL-036-SA5A-SB-4.0-5.0MS	6214503	MS	3550B	8015M	III
23-Feb-2011	SL-036-SA5A-SB-4.0-5.0MS	6214503	MS	3550B	8082	III
23-Feb-2011	SL-036-SA5A-SB-4.0-5.0MS	6214503	MS	3550B	8270C	III
23-Feb-2011	SL-036-SA5A-SB-4.0-5.0MS	6214503	MS	3550B	8270C SIM	III
23-Feb-2011	SL-036-SA5A-SB-4.0-5.0MS	6214503	MS	5035	8015M	III
23-Feb-2011	SL-036-SA5A-SB-4.0-5.0MS	6214503	MS	5035	8260B	III
23-Feb-2011	SL-036-SA5A-SB-4.0-5.0MS	6214503	MS	5035	8260B SIM	III
23-Feb-2011	SL-036-SA5A-SB-4.0-5.0MS	6214503	MS	8330	8330A	III
23-Feb-2011	SL-036-SA5A-SB-4.0-5.0MS	6214503	MS	METHOD	300.0	III
23-Feb-2011	SL-036-SA5A-SB-4.0-5.0MS	6214503	MS	METHOD	314.0	III
23-Feb-2011	SL-036-SA5A-SB-4.0-5.0MS	6214503	MS	METHOD	7471A	III
23-Feb-2011	SL-036-SA5A-SB-4.0-5.0MS	6214503	MS	METHOD	8015B	III
23-Feb-2011	SL-036-SA5A-SB-4.0-5.0MS	6214503	MS	METHOD	8015M	III
23-Feb-2011	SL-036-SA5A-SB-4.0-5.0MS	6214503	MS	METHOD	8315A	III
23-Feb-2011	SL-036-SA5A-SB-4.0-5.0MS	6214503	MS	METHOD	9012B	III
23-Feb-2011	SL-036-SA5A-SB-4.0-5.0MSD	6214504	MSD	3050B	6010B	III
23-Feb-2011	SL-036-SA5A-SB-4.0-5.0MSD	6214504	MSD	3050B	6020	III
23-Feb-2011	SL-036-SA5A-SB-4.0-5.0MSD	6214504	MSD	3546	1625C	III
23-Feb-2011	SL-036-SA5A-SB-4.0-5.0MSD	6214504	MSD	3550B	8015B	III
23-Feb-2011	SL-036-SA5A-SB-4.0-5.0MSD	6214504	MSD	3550B	8015M	III
23-Feb-2011	SL-036-SA5A-SB-4.0-5.0MSD	6214504	MSD	3550B	8082	III
23-Feb-2011	SL-036-SA5A-SB-4.0-5.0MSD	6214504	MSD	3550B	8270C	III
23-Feb-2011	SL-036-SA5A-SB-4.0-5.0MSD	6214504	MSD	3550B	8270C SIM	III
23-Feb-2011	SL-036-SA5A-SB-4.0-5.0MSD	6214504	MSD	5035	8015M	III
23-Feb-2011	SL-036-SA5A-SB-4.0-5.0MSD	6214504	MSD	5035	8260B	III
23-Feb-2011	SL-036-SA5A-SB-4.0-5.0MSD	6214504	MSD	5035	8260B SIM	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
23-Feb-2011	SL-036-SA5A-SB-4.0-5.0MSD	6214504	MSD	8330	8330A	III
23-Feb-2011	SL-036-SA5A-SB-4.0-5.0MSD	6214504	MSD	METHOD	7471A	III
23-Feb-2011	SL-036-SA5A-SB-4.0-5.0MSD	6214504	MSD	METHOD	8015B	III
23-Feb-2011	SL-036-SA5A-SB-4.0-5.0MSD	6214504	MSD	METHOD	8015M	III
23-Feb-2011	SL-036-SA5A-SB-4.0-5.0MSD	6214504	MSD	METHOD	8315A	III
23-Feb-2011	SL-036-SA5A-SB-4.0-5.0DUP	6214505	DUP	3050B	6010B	III
23-Feb-2011	SL-036-SA5A-SB-4.0-5.0DUP	6214505	DUP	3050B	6020	III
23-Feb-2011	SL-036-SA5A-SB-4.0-5.0DUP	6214505	DUP	3060A	7199	III
23-Feb-2011	SL-036-SA5A-SB-4.0-5.0DUP	6214505	DUP	Gen Prep	9045M	III
23-Feb-2011	SL-036-SA5A-SB-4.0-5.0DUP	6214505	DUP	METHOD	300.0	III
23-Feb-2011	SL-036-SA5A-SB-4.0-5.0DUP	6214505	DUP	METHOD	314.0	III
23-Feb-2011	SL-036-SA5A-SB-4.0-5.0DUP	6214505	DUP	METHOD	7471A	III
23-Feb-2011	SL-036-SA5A-SB-4.0-5.0DUP	6214505	DUP	METHOD	9012B	III
23-Feb-2011	DUP-03-SA5A-QC-022311	6214501	FD	3050B	6010B	III
23-Feb-2011	DUP-03-SA5A-QC-022311	6214501	FD	3050B	6020	III
23-Feb-2011	DUP-03-SA5A-QC-022311	6214501	FD	3060A	7199	III
23-Feb-2011	DUP-03-SA5A-QC-022311	6214501	FD	3546	1625C	III
23-Feb-2011	DUP-03-SA5A-QC-022311	6214501	FD	3550B	8015B	III
23-Feb-2011	DUP-03-SA5A-QC-022311	6214501	FD	3550B	8015M	III
23-Feb-2011	DUP-03-SA5A-QC-022311	6214501	FD	3550B	8082	III
23-Feb-2011	DUP-03-SA5A-QC-022311	6214501	FD	3550B	8270C	III
23-Feb-2011	DUP-03-SA5A-QC-022311	6214501	FD	3550B	8270C SIM	III
23-Feb-2011	DUP-03-SA5A-QC-022311	6214501	FD	5035	8015M	III
23-Feb-2011	DUP-03-SA5A-QC-022311	6214501	FD	5035	8260B	III
23-Feb-2011	DUP-03-SA5A-QC-022311	6214501	FD	5035	8260B SIM	III
23-Feb-2011	DUP-03-SA5A-QC-022311	6214501	FD	8330	8330A	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
23-Feb-2011	DUP-03-SA5A-QC-022311	6214501	FD	Gen Prep	9045M	III
23-Feb-2011	DUP-03-SA5A-QC-022311	6214501	FD	METHOD	300.0	III
23-Feb-2011	DUP-03-SA5A-QC-022311	6214501	FD	METHOD	314.0	III
23-Feb-2011	DUP-03-SA5A-QC-022311	6214501	FD	METHOD	7471A	III
23-Feb-2011	DUP-03-SA5A-QC-022311	6214501	FD	METHOD	8015B	III
23-Feb-2011	DUP-03-SA5A-QC-022311	6214501	FD	METHOD	8015M	III
23-Feb-2011	DUP-03-SA5A-QC-022311	6214501	FD	METHOD	8315A	III
23-Feb-2011	DUP-03-SA5A-QC-022311	6214501	FD	METHOD	9012B	III
23-Feb-2011	SL-037-SA5A-SB-4.0-5.0	6214506	N	3050B	6010B	III
23-Feb-2011	SL-037-SA5A-SB-4.0-5.0	6214506	N	3050B	6020	III
23-Feb-2011	SL-037-SA5A-SB-4.0-5.0	6214506	N	3060A	7199	III
23-Feb-2011	SL-037-SA5A-SB-4.0-5.0	6214506	N	3546	1625C	III
23-Feb-2011	SL-037-SA5A-SB-4.0-5.0	6214506	N	3550B	8015B	III
23-Feb-2011	SL-037-SA5A-SB-4.0-5.0	6214506	N	3550B	8015M	III
23-Feb-2011	SL-037-SA5A-SB-4.0-5.0	6214506	N	3550B	8082	III
23-Feb-2011	SL-037-SA5A-SB-4.0-5.0	6214506	N	3550B	8270C	III
23-Feb-2011	SL-037-SA5A-SB-4.0-5.0	6214506	N	3550B	8270C SIM	III
23-Feb-2011	SL-037-SA5A-SB-4.0-5.0	6214506	N	5035	8015M	III
23-Feb-2011	SL-037-SA5A-SB-4.0-5.0	6214506	N	5035	8260B	III
23-Feb-2011	SL-037-SA5A-SB-4.0-5.0	6214506	N	5035	8260B SIM	III
23-Feb-2011	SL-037-SA5A-SB-4.0-5.0	6214506	N	8330	8330A	III
23-Feb-2011	SL-037-SA5A-SB-4.0-5.0	6214506	N	Gen Prep	9045M	III
23-Feb-2011	SL-037-SA5A-SB-4.0-5.0	6214506	N	METHOD	300.0	III
23-Feb-2011	SL-037-SA5A-SB-4.0-5.0	6214506	N	METHOD	314.0	III
23-Feb-2011	SL-037-SA5A-SB-4.0-5.0	6214506	N	METHOD	7471A	III
23-Feb-2011	SL-037-SA5A-SB-4.0-5.0	6214506	N	METHOD	8015B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
23-Feb-2011	SL-037-SA5A-SB-4.0-5.0	6214506	N	METHOD	8015M	III
23-Feb-2011	SL-037-SA5A-SB-4.0-5.0	6214506	N	METHOD	8315A	III
23-Feb-2011	SL-037-SA5A-SB-4.0-5.0	6214506	N	METHOD	9012B	III
23-Feb-2011	SL-040-SA5A-SB-4.0-5.0	6214507	N	3050B	6010B	III
23-Feb-2011	SL-040-SA5A-SB-4.0-5.0	6214507	N	3050B	6020	III
23-Feb-2011	SL-040-SA5A-SB-4.0-5.0	6214507	N	3060A	7199	III
23-Feb-2011	SL-040-SA5A-SB-4.0-5.0	6214507	N	3546	1625C	III
23-Feb-2011	SL-040-SA5A-SB-4.0-5.0	6214507	N	3550B	8015B	III
23-Feb-2011	SL-040-SA5A-SB-4.0-5.0	6214507	N	3550B	8015M	III
23-Feb-2011	SL-040-SA5A-SB-4.0-5.0	6214507	N	3550B	8082	III
23-Feb-2011	SL-040-SA5A-SB-4.0-5.0	6214507	N	3550B	8270C	III
23-Feb-2011	SL-040-SA5A-SB-4.0-5.0	6214507	N	3550B	8270C SIM	III
23-Feb-2011	SL-040-SA5A-SB-4.0-5.0	6214507	N	5035	8015M	III
23-Feb-2011	SL-040-SA5A-SB-4.0-5.0	6214507	N	5035	8260B	III
23-Feb-2011	SL-040-SA5A-SB-4.0-5.0	6214507	N	5035	8260B SIM	III
23-Feb-2011	SL-040-SA5A-SB-4.0-5.0	6214507	N	8330	8330A	III
23-Feb-2011	SL-040-SA5A-SB-4.0-5.0	6214507	N	Gen Prep	9045M	III
23-Feb-2011	SL-040-SA5A-SB-4.0-5.0	6214507	N	METHOD	300.0	III
23-Feb-2011	SL-040-SA5A-SB-4.0-5.0	6214507	N	METHOD	314.0	III
23-Feb-2011	SL-040-SA5A-SB-4.0-5.0	6214507	N	METHOD	7471A	III
23-Feb-2011	SL-040-SA5A-SB-4.0-5.0	6214507	N	METHOD	8015B	III
23-Feb-2011	SL-040-SA5A-SB-4.0-5.0	6214507	N	METHOD	8015M	III
23-Feb-2011	SL-040-SA5A-SB-4.0-5.0	6214507	N	METHOD	8315A	III
23-Feb-2011	SL-040-SA5A-SB-4.0-5.0	6214507	N	METHOD	9012B	III
23-Feb-2011	SL-040-SA5A-SB-9.0-10.0	6214508	N	3050B	6010B	III
23-Feb-2011	SL-040-SA5A-SB-9.0-10.0	6214508	N	3050B	6020	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
23-Feb-2011	SL-040-SA5A-SB-9.0-10.0	6214508	N	3060A	7199	III
23-Feb-2011	SL-040-SA5A-SB-9.0-10.0	6214508	N	3546	1625C	III
23-Feb-2011	SL-040-SA5A-SB-9.0-10.0	6214508	N	3550B	8015B	III
23-Feb-2011	SL-040-SA5A-SB-9.0-10.0	6214508	N	3550B	8015M	III
23-Feb-2011	SL-040-SA5A-SB-9.0-10.0	6214508	N	3550B	8082	III
23-Feb-2011	SL-040-SA5A-SB-9.0-10.0	6214508	N	3550B	8270C	III
23-Feb-2011	SL-040-SA5A-SB-9.0-10.0	6214508	N	3550B	8270C SIM	III
23-Feb-2011	SL-040-SA5A-SB-9.0-10.0	6214508	N	5035	8015M	III
23-Feb-2011	SL-040-SA5A-SB-9.0-10.0	6214508	N	5035	8260B	III
23-Feb-2011	SL-040-SA5A-SB-9.0-10.0	6214508	N	5035	8260B SIM	III
23-Feb-2011	SL-040-SA5A-SB-9.0-10.0	6214508	N	8330	8330A	III
23-Feb-2011	SL-040-SA5A-SB-9.0-10.0	6214508	N	Gen Prep	9045M	III
23-Feb-2011	SL-040-SA5A-SB-9.0-10.0	6214508	N	METHOD	300.0	III
23-Feb-2011	SL-040-SA5A-SB-9.0-10.0	6214508	N	METHOD	314.0	III
23-Feb-2011	SL-040-SA5A-SB-9.0-10.0	6214508	N	METHOD	7471A	III
23-Feb-2011	SL-040-SA5A-SB-9.0-10.0	6214508	N	METHOD	8015B	III
23-Feb-2011	SL-040-SA5A-SB-9.0-10.0	6214508	N	METHOD	8015M	III
23-Feb-2011	SL-040-SA5A-SB-9.0-10.0	6214508	N	METHOD	8315A	III
23-Feb-2011	SL-040-SA5A-SB-9.0-10.0	6214508	N	METHOD	9012B	III
23-Feb-2011	TB-022311	6214509	TB	5030B	8015M	III
23-Feb-2011	TB-022311	6214509	TB	5030B	8260B	III
23-Feb-2011	TB-022311	6214509	TB	5030B	8260B SIM	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE089 **Laboratory: LL**

EDD Filename: DE089_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: GENCHEM

Method: 300.0 **Matrix: SO**

Sample ID: DUP-03-SA5A-QC-022311 *Collected:* 2/23/2011 10:31:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.2		0.84	MDL	1.1	PQL	mg/Kg	J	Q
Nitrate-NO3	1.2	J	0.84	MDL	1.6	PQL	mg/Kg	J	Z

Sample ID: SL-036-SA5A-SB-4.0-5.0 *Collected:* 2/23/2011 10:25:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.4		0.85	MDL	1.1	PQL	mg/Kg	J	Q
Nitrate-NO3	1.3	J	0.85	MDL	1.6	PQL	mg/Kg	J	Z

Sample ID: SL-037-SA5A-SB-4.0-5.0 *Collected:* 2/23/2011 11:54:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	6.5		0.90	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-040-SA5A-SB-4.0-5.0 *Collected:* 2/23/2011 3:26:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.9		0.89	MDL	1.1	PQL	mg/Kg	J	Q
Nitrate-NO3	1.3	J	0.89	MDL	1.7	PQL	mg/Kg	J	Z

Sample ID: SL-040-SA5A-SB-9.0-10.0 *Collected:* 2/23/2011 3:36:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.2		0.84	MDL	1.1	PQL	mg/Kg	J	Q

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: DUP-03-SA5A-QC-022311 *Collected:* 2/23/2011 10:31:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.35	J	0.904	MDL	5.08	PQL	mg/Kg	J	Z
MANGANESE	129		0.0792	MDL	0.508	PQL	mg/Kg	J	Q
POTASSIUM	1230		18.3	MDL	50.8	PQL	mg/Kg	J	Q
TIN	2.92	J	1.02	MDL	10.2	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE089 **Laboratory: LL**

EDD Filename: DE089_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: **DUP-03-SA5A-QC-022311** ***Collected:*** **2/23/2011 10:31:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	1.33	J	0.853	MDL	5.08	PQL	mg/Kg	J	Z

Sample ID: **SL-036-SA5A-SB-4.0-5.0** ***Collected:*** **2/23/2011 10:25:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.74	J	0.921	MDL	5.18	PQL	mg/Kg	J	Z
MANGANESE	178		0.0807	MDL	0.518	PQL	mg/Kg	J	Q
POTASSIUM	1740		18.6	MDL	51.8	PQL	mg/Kg	J	Q
TIN	2.86	J	1.04	MDL	10.4	PQL	mg/Kg	U	B
Zirconium	1.46	J	0.869	MDL	5.18	PQL	mg/Kg	J	Z

Sample ID: **SL-037-SA5A-SB-4.0-5.0** ***Collected:*** **2/23/2011 11:54:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.28	J	0.965	MDL	5.42	PQL	mg/Kg	J	Z
MANGANESE	245		0.0846	MDL	0.542	PQL	mg/Kg	J	Q
POTASSIUM	1600		19.5	MDL	54.2	PQL	mg/Kg	J	Q
TIN	3.34	J	1.08	MDL	10.8	PQL	mg/Kg	U	B
Zirconium	2.32	J	0.911	MDL	5.42	PQL	mg/Kg	J	Z

Sample ID: **SL-040-SA5A-SB-4.0-5.0** ***Collected:*** **2/23/2011 3:26:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.16	J	0.973	MDL	5.46	PQL	mg/Kg	J	Z
MANGANESE	288		0.0853	MDL	0.546	PQL	mg/Kg	J	Q
POTASSIUM	1860		19.7	MDL	54.6	PQL	mg/Kg	J	Q
SODIUM	106	J	40.8	MDL	109	PQL	mg/Kg	J	Z
TIN	2.92	J	1.09	MDL	10.9	PQL	mg/Kg	U	B
Zirconium	2.06	J	0.918	MDL	5.46	PQL	mg/Kg	J	Z

Sample ID: **SL-040-SA5A-SB-9.0-10.0** ***Collected:*** **2/23/2011 3:36:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.35	J	0.938	MDL	5.27	PQL	mg/Kg	J	Z
MANGANESE	178		0.0822	MDL	0.527	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE089 **Laboratory: LL**

EDD Filename: DE089_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: **SL-040-SA5A-SB-9.0-10.0** ***Collected:*** **2/23/2011 3:36:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	1610		19.0	MDL	52.7	PQL	mg/Kg	J	Q
TIN	2.83	J	1.05	MDL	10.5	PQL	mg/Kg	U	B
Zirconium	1.45	J	0.885	MDL	5.27	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: **DUP-03-SA5A-QC-022311** ***Collected:*** **2/23/2011 10:31:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.164	J	0.0406	MDL	0.406	PQL	mg/Kg	J	Z, Q

Sample ID: **DUP-03-SA5A-QC-022311** ***Collected:*** **2/23/2011 10:31:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.875		0.0508	MDL	0.102	PQL	mg/Kg	J	Q

Sample ID: **DUP-03-SA5A-QC-022311** ***Collected:*** **2/23/2011 10:31:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	121		0.110	MDL	0.406	PQL	mg/Kg	J	A

Sample ID: **DUP-03-SA5A-QC-022311** ***Collected:*** **2/23/2011 10:31:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.240		0.0609	MDL	0.203	PQL	mg/Kg	J	Q, E
ARSENIC	8.51		0.0812	MDL	0.406	PQL	mg/Kg	J	Q
BERYLLIUM	0.855		0.0162	MDL	0.102	PQL	mg/Kg	J	Q
CADMIUM	0.0739	J	0.0406	MDL	0.102	PQL	mg/Kg	UJ	Q, B
CHROMIUM	31.7		0.122	MDL	0.406	PQL	mg/Kg	J	Q, A
COBALT	5.96		0.0203	MDL	0.102	PQL	mg/Kg	J	Q, A
LEAD	8.57		0.0106	MDL	0.203	PQL	mg/Kg	J	Q
NICKEL	16.2		0.102	MDL	0.406	PQL	mg/Kg	J	Q, A
SILVER	0.0276	J	0.0122	MDL	0.102	PQL	mg/Kg	J	Z, Q
THALLIUM	0.337		0.0305	MDL	0.102	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE089 **Laboratory: LL**

EDD Filename: DE089_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: **DUP-03-SA5A-QC-022311** ***Collected:*** **2/23/2011 10:31:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
VANADIUM	59.6		0.0223	MDL	0.102	PQL	mg/Kg	J	A

Sample ID: **SL-036-SA5A-SB-4.0-5.0** ***Collected:*** **2/23/2011 10:25:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.192	J	0.0426	MDL	0.426	PQL	mg/Kg	J	Z, Q

Sample ID: **SL-036-SA5A-SB-4.0-5.0** ***Collected:*** **2/23/2011 10:25:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.566		0.0533	MDL	0.107	PQL	mg/Kg	J	Q

Sample ID: **SL-036-SA5A-SB-4.0-5.0** ***Collected:*** **2/23/2011 10:25:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	93.4		0.115	MDL	0.426	PQL	mg/Kg	J	A

Sample ID: **SL-036-SA5A-SB-4.0-5.0** ***Collected:*** **2/23/2011 10:25:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.154	J	0.0640	MDL	0.213	PQL	mg/Kg	J	Z, Q, E
ARSENIC	5.54		0.0853	MDL	0.426	PQL	mg/Kg	J	Q
BERYLLIUM	0.629		0.0171	MDL	0.107	PQL	mg/Kg	J	Q
CADMIUM	0.0614	J	0.0426	MDL	0.107	PQL	mg/Kg	UJ	Q, B
CHROMIUM	23.9		0.128	MDL	0.426	PQL	mg/Kg	J	Q, A
COBALT	4.68		0.0213	MDL	0.107	PQL	mg/Kg	J	Q, A
LEAD	6.40		0.0111	MDL	0.213	PQL	mg/Kg	J	Q
NICKEL	11.8		0.107	MDL	0.426	PQL	mg/Kg	J	Q, A
SILVER	0.0264	J	0.0128	MDL	0.107	PQL	mg/Kg	J	Z, Q
THALLIUM	0.253		0.0320	MDL	0.107	PQL	mg/Kg	J	Q
VANADIUM	43.4		0.0235	MDL	0.107	PQL	mg/Kg	J	A

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE089 **Laboratory: LL**

EDD Filename: DE089_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: **SL-037-SA5A-SB-4.0-5.0** ***Collected:*** **2/23/2011 11:54:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0843	J	0.0442	MDL	0.442	PQL	mg/Kg	J	Z, Q

Sample ID: **SL-037-SA5A-SB-4.0-5.0** ***Collected:*** **2/23/2011 11:54:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.974		0.0553	MDL	0.111	PQL	mg/Kg	J	Q

Sample ID: **SL-037-SA5A-SB-4.0-5.0** ***Collected:*** **2/23/2011 11:54:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	116		0.119	MDL	0.442	PQL	mg/Kg	J	A

Sample ID: **SL-037-SA5A-SB-4.0-5.0** ***Collected:*** **2/23/2011 11:54:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.146	J	0.0663	MDL	0.221	PQL	mg/Kg	J	Z, Q, E
ARSENIC	7.71		0.0884	MDL	0.442	PQL	mg/Kg	J	Q
BERYLLIUM	0.977		0.0177	MDL	0.111	PQL	mg/Kg	J	Q
CADMIUM	0.0889	J	0.0442	MDL	0.111	PQL	mg/Kg	UJ	Q, B
CHROMIUM	39.7		0.133	MDL	0.442	PQL	mg/Kg	J	Q, A
COBALT	8.16		0.0221	MDL	0.111	PQL	mg/Kg	J	Q, A
LEAD	8.26		0.0115	MDL	0.221	PQL	mg/Kg	J	Q
NICKEL	20.4		0.111	MDL	0.442	PQL	mg/Kg	J	Q, A
SILVER	0.0840	J	0.0133	MDL	0.111	PQL	mg/Kg	J	Z, Q
THALLIUM	0.290		0.0332	MDL	0.111	PQL	mg/Kg	J	Q
VANADIUM	59.2		0.0243	MDL	0.111	PQL	mg/Kg	J	A

Sample ID: **SL-040-SA5A-SB-4.0-5.0** ***Collected:*** **2/23/2011 3:26:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0940	J	0.0442	MDL	0.442	PQL	mg/Kg	J	Z, Q

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE089 **Laboratory: LL**

EDD Filename: DE089_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: **SL-040-SA5A-SB-4.0-5.0** ***Collected:*** **2/23/2011 3:26:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.25		0.0552	MDL	0.110	PQL	mg/Kg	J	Q

Sample ID: **SL-040-SA5A-SB-4.0-5.0** ***Collected:*** **2/23/2011 3:26:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	156		0.119	MDL	0.442	PQL	mg/Kg	J	A

Sample ID: **SL-040-SA5A-SB-4.0-5.0** ***Collected:*** **2/23/2011 3:26:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.227		0.0662	MDL	0.221	PQL	mg/Kg	J	Q, E
ARSENIC	9.15		0.0883	MDL	0.442	PQL	mg/Kg	J	Q
BERYLLIUM	1.02		0.0177	MDL	0.110	PQL	mg/Kg	J	Q
CADMIUM	0.113		0.0442	MDL	0.110	PQL	mg/Kg	UJ	Q, B
CHROMIUM	33.7		0.132	MDL	0.442	PQL	mg/Kg	J	Q, A
COBALT	13.0		0.0221	MDL	0.110	PQL	mg/Kg	J	Q, A
LEAD	10.8		0.0115	MDL	0.221	PQL	mg/Kg	J	Q
NICKEL	19.7		0.110	MDL	0.442	PQL	mg/Kg	J	Q, A
SILVER	0.0604	J	0.0132	MDL	0.110	PQL	mg/Kg	J	Z, Q
THALLIUM	0.421		0.0331	MDL	0.110	PQL	mg/Kg	J	Q
VANADIUM	63.3		0.0243	MDL	0.110	PQL	mg/Kg	J	A

Sample ID: **SL-040-SA5A-SB-9.0-10.0** ***Collected:*** **2/23/2011 3:36:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0666	J	0.0413	MDL	0.413	PQL	mg/Kg	J	Z, Q

Sample ID: **SL-040-SA5A-SB-9.0-10.0** ***Collected:*** **2/23/2011 3:36:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.733		0.0517	MDL	0.103	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE089 **Laboratory: LL**

EDD Filename: DE089_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: **SL-040-SA5A-SB-9.0-10.0** ***Collected:*** **2/23/2011 3:36:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	108		0.112	MDL	0.413	PQL	mg/Kg	J	A

Sample ID: **SL-040-SA5A-SB-9.0-10.0** ***Collected:*** **2/23/2011 3:36:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.151	J	0.0620	MDL	0.207	PQL	mg/Kg	J	Z, Q, E
ARSENIC	8.53		0.0826	MDL	0.413	PQL	mg/Kg	J	Q
BERYLLIUM	0.734		0.0165	MDL	0.103	PQL	mg/Kg	J	Q
CADMIUM	0.0722	J	0.0413	MDL	0.103	PQL	mg/Kg	UJ	Q, B
CHROMIUM	26.6		0.124	MDL	0.413	PQL	mg/Kg	J	Q, A
COBALT	7.94		0.0207	MDL	0.103	PQL	mg/Kg	J	Q, A
LEAD	7.92		0.0107	MDL	0.207	PQL	mg/Kg	J	Q
NICKEL	13.9		0.103	MDL	0.413	PQL	mg/Kg	J	Q, A
SILVER	0.0472	J	0.0124	MDL	0.103	PQL	mg/Kg	J	Z, Q
THALLIUM	0.371		0.0310	MDL	0.103	PQL	mg/Kg	J	Q
VANADIUM	54.1		0.0227	MDL	0.103	PQL	mg/Kg	J	A

Method Category: METALS

Method: 7199 **Matrix: SO**

Sample ID: **DUP-03-SA5A-QC-022311** ***Collected:*** **2/23/2011 10:31:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.37	J	0.21	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: **SL-036-SA5A-SB-4.0-5.0** ***Collected:*** **2/23/2011 10:25:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.45	J	0.21	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: **SL-037-SA5A-SB-4.0-5.0** ***Collected:*** **2/23/2011 11:54:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.34	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE089 **Laboratory: LL**

EDD Filename: DE089_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 7199 **Matrix: SO**

Sample ID: SL-040-SA5A-SB-4.0-5.0 *Collected:* 2/23/2011 3:26:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.30	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-040-SA5A-SB-9.0-10.0 *Collected:* 2/23/2011 3:36:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.26	J	0.21	MDL	1.1	PQL	mg/Kg	J	Z

Method Category: SVOA

Method: 1625C **Matrix: SO**

Sample ID: SL-040-SA5A-SB-4.0-5.0 *Collected:* 2/23/2011 3:26:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	21.4	J	18.5	MDL	37.0	PQL	ng/Kg	J	Z

Method Category: SVOA

Method: 8015M **Matrix: SO**

Sample ID: SL-037-SA5A-SB-4.0-5.0 *Collected:* 2/23/2011 11:54:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DIETHYLENE GLYCOL	5.6	U	5.6	MDL	14	PQL	mg/Kg	UJ	S
ETHYLENE GLYCOL	5.6	U	5.6	MDL	14	PQL	mg/Kg	UJ	S
Propylene glycol	5.6	U	5.6	MDL	14	PQL	mg/Kg	UJ	S

Sample ID: SL-037-SA5A-SB-4.0-5.0 *Collected:* 2/23/2011 11:54:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C8-C11)	0.51	J	0.45	MDL	1.3	PQL	mg/Kg	J	Z

Sample ID: SL-037-SA5A-SB-4.0-5.0 *Collected:* 2/23/2011 11:54:00 *Analysis Type:* RES *Dilution:* 24.32

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
GASOLINE RANGE ORGANICS (C5-C12)	0.2	J	0.2	MDL	1.1	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE089 **Laboratory: LL**

EDD Filename: DE089_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: **DUP-03-SA5A-QC-022311** ***Collected:*** **2/23/2011 10:31:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	1.1	U	1.1	MDL	3.5	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.5	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.5	PQL	ug/Kg	UJ	L

Sample ID: **SL-036-SA5A-SB-4.0-5.0** ***Collected:*** **2/23/2011 10:25:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	1.1	U	1.1	MDL	3.5	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.5	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.5	PQL	ug/Kg	UJ	L

Sample ID: **SL-037-SA5A-SB-4.0-5.0** ***Collected:*** **2/23/2011 11:54:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L

Sample ID: **SL-040-SA5A-SB-4.0-5.0** ***Collected:*** **2/23/2011 3:26:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L

Sample ID: **SL-040-SA5A-SB-9.0-10.0** ***Collected:*** **2/23/2011 3:36:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	1.0	U	1.0	MDL	3.5	PQL	ug/Kg	UJ	L
Aroclor 5442	1.0	U	1.0	MDL	3.5	PQL	ug/Kg	UJ	L
Aroclor 5460	1.0	U	1.0	MDL	3.5	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE089 **Laboratory: LL**

EDD Filename: DE089_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: **DUP-03-SA5A-QC-022311** ***Collected:*** **2/23/2011 10:31:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,4-TRICHLOROBENZENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
1,2-DICHLOROBENZENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
1,2-Diphenylhydrazine/Azobenzene	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
1,3-DICHLOROBENZENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
1,4-DICHLOROBENZENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
2,4,5-TRICHLOROPHENOL	35	U	35	MDL	180	PQL	ug/Kg	UJ	L
2,4,6-TRICHLOROPHENOL	35	U	35	MDL	180	PQL	ug/Kg	UJ	L
2,4-DICHLOROPHENOL	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
2,4-DIMETHYLPHENOL	35	U	35	MDL	180	PQL	ug/Kg	UJ	L
2,4-DINITROTOLUENE	35	U	35	MDL	180	PQL	ug/Kg	UJ	L
2,6-DINITROTOLUENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
2-CHLORONAPHTHALENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
2-CHLOROPHENOL	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
2-METHYLPHENOL	35	U	35	MDL	180	PQL	ug/Kg	UJ	L
2-NITROANILINE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
2-NITROPHENOL	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
3,5-Dimethylphenol	35	U	35	MDL	180	PQL	ug/Kg	UJ	L
3-NITROANILINE	35	U	35	MDL	180	PQL	ug/Kg	UJ	L
4,6-DINITRO-2-METHYLPHENOL	180	U	180	MDL	530	PQL	ug/Kg	UJ	L
4-BROMOPHENYL-PHENYLETHER	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
4-CHLORO-3-METHYLPHENOL	35	U	35	MDL	180	PQL	ug/Kg	UJ	L
4-CHLOROPHENYL-PHENYLETHER	35	U	35	MDL	180	PQL	ug/Kg	UJ	L
4-METHYLPHENOL	35	U	35	MDL	180	PQL	ug/Kg	UJ	L
4-NITROANILINE	70	U	70	MDL	180	PQL	ug/Kg	UJ	L
4-NITROPHENOL	180	U	180	MDL	530	PQL	ug/Kg	UJ	L
BENZYL ALCOHOL	180	U	180	MDL	530	PQL	ug/Kg	UJ	L
BIS(2-CHLOROETHOXY)METHANE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
BIS(2-CHLOROETHYL) ETHER	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
BIS(2-CHLOROISOPROPYL) ETHER	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	18	U	18	MDL	350	PQL	ug/Kg	UJ	L, FD
CARBAZOLE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
DIBENZOFURAN	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
Di-n-butylphthalate	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
HEXACHLOROBENZENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE089 **Laboratory: LL**

EDD Filename: DE089_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: **DUP-03-SA5A-QC-022311** ***Collected:*** **2/23/2011 10:31:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXACHLOROBUTADIENE	70	U	70	MDL	180	PQL	ug/Kg	UJ	L
HEXACHLOROETHANE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
ISOPHORONE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
NITROBENZENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
N-NITROSO-DI-N-PROPYLAMINE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
N-NITROSODIPHENYLAMINE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
PHENOL	18	U	18	MDL	180	PQL	ug/Kg	UJ	L

Sample ID: **SL-036-SA5A-SB-4.0-5.0** ***Collected:*** **2/23/2011 10:25:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,4-TRICHLOROBENZENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
1,2-DICHLOROBENZENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
1,2-Diphenylhydrazine/Azobenzene	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
1,3-DICHLOROBENZENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
1,4-DICHLOROBENZENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
2,4,5-TRICHLOROPHENOL	35	U	35	MDL	180	PQL	ug/Kg	UJ	L
2,4,6-TRICHLOROPHENOL	35	U	35	MDL	180	PQL	ug/Kg	UJ	L
2,4-DICHLOROPHENOL	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
2,4-DIMETHYLPHENOL	35	U	35	MDL	180	PQL	ug/Kg	UJ	L
2,4-DINITROTOLUENE	35	U	35	MDL	180	PQL	ug/Kg	UJ	L
2,6-DINITROTOLUENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
2-CHLORONAPHTHALENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
2-CHLOROPHENOL	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
2-METHYLPHENOL	35	U	35	MDL	180	PQL	ug/Kg	UJ	L
2-NITROANILINE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
2-NITROPHENOL	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
3,5-Dimethylphenol	35	U	35	MDL	180	PQL	ug/Kg	UJ	L
3-NITROANILINE	35	U	35	MDL	180	PQL	ug/Kg	UJ	L
4,6-DINITRO-2-METHYLPHENOL	180	U	180	MDL	530	PQL	ug/Kg	UJ	L
4-BROMOPHENYL-PHENYLETHER	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
4-CHLORO-3-METHYLPHENOL	35	U	35	MDL	180	PQL	ug/Kg	UJ	L
4-CHLOROPHENYL-PHENYLETHER	35	U	35	MDL	180	PQL	ug/Kg	UJ	L
4-METHYLPHENOL	35	U	35	MDL	180	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE089 **Laboratory: LL**

EDD Filename: DE089_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: **SL-036-SA5A-SB-4.0-5.0** ***Collected:*** **2/23/2011 10:25:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4-NITROANILINE	70	U	70	MDL	180	PQL	ug/Kg	UJ	L
4-NITROPHENOL	180	U	180	MDL	530	PQL	ug/Kg	UJ	L
BENZIDINE	1200	U	1200	MDL	3500	PQL	ug/Kg	R	Q
BENZYL ALCOHOL	180	U	180	MDL	530	PQL	ug/Kg	UJ	L
BIS(2-CHLOROETHOXY)METHANE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
BIS(2-CHLOROETHYL) ETHER	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
BIS(2-CHLOROISOPROPYL) ETHER	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	23	J	18	MDL	350	PQL	ug/Kg	J	Z, L, FD
CARBAZOLE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
DIBENZOFURAN	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
Di-n-butylphthalate	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
HEXACHLOROBENZENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
HEXACHLOROBUTADIENE	70	U	70	MDL	180	PQL	ug/Kg	UJ	L
HEXACHLOROETHANE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
ISOPHORONE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
NITROBENZENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
N-NITROSO-DI-N-PROPYLAMINE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
N-NITROSODIPHENYLAMINE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
PHENOL	18	U	18	MDL	180	PQL	ug/Kg	UJ	L

Sample ID: **SL-037-SA5A-SB-4.0-5.0** ***Collected:*** **2/23/2011 11:54:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,4-TRICHLOROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
1,2-DICHLOROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
1,2-Diphenylhydrazine/Azobenzene	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
1,3-DICHLOROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
1,4-DICHLOROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
2,4,5-TRICHLOROPHENOL	37	U	37	MDL	190	PQL	ug/Kg	UJ	L
2,4,6-TRICHLOROPHENOL	37	U	37	MDL	190	PQL	ug/Kg	UJ	L
2,4-DICHLOROPHENOL	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
2,4-DIMETHYLPHENOL	37	U	37	MDL	190	PQL	ug/Kg	UJ	L
2,4-DINITROTOLUENE	37	U	37	MDL	190	PQL	ug/Kg	UJ	L
2,6-DINITROTOLUENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE089 **Laboratory: LL**

EDD Filename: DE089_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: **SL-037-SA5A-SB-4.0-5.0** ***Collected:*** **2/23/2011 11:54:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-CHLORONAPHTHALENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
2-CHLOROPHENOL	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
2-METHYLPHENOL	37	U	37	MDL	190	PQL	ug/Kg	UJ	L
2-NITROANILINE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
2-NITROPHENOL	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
3,5-Dimethylphenol	37	U	37	MDL	190	PQL	ug/Kg	UJ	L
3-NITROANILINE	37	U	37	MDL	190	PQL	ug/Kg	UJ	L
4,6-DINITRO-2-METHYLPHENOL	190	U	190	MDL	560	PQL	ug/Kg	UJ	L
4-BROMOPHENYL-PHENYLETHER	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
4-CHLORO-3-METHYLPHENOL	37	U	37	MDL	190	PQL	ug/Kg	UJ	L
4-CHLOROPHENYL-PHENYLETHER	37	U	37	MDL	190	PQL	ug/Kg	UJ	L
4-METHYLPHENOL	37	U	37	MDL	190	PQL	ug/Kg	UJ	L
4-NITROANILINE	75	U	75	MDL	190	PQL	ug/Kg	UJ	L
4-NITROPHENOL	190	U	190	MDL	560	PQL	ug/Kg	UJ	L
BENZYL ALCOHOL	190	U	190	MDL	560	PQL	ug/Kg	UJ	L
BIS(2-CHLOROETHOXY)METHANE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
BIS(2-CHLOROETHYL) ETHER	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
BIS(2-CHLOROISOPROPYL) ETHER	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	19	U	19	MDL	370	PQL	ug/Kg	UJ	L
CARBAZOLE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
DIBENZOFURAN	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
Di-n-butylphthalate	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
HEXACHLOROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
HEXACHLOROBUTADIENE	75	U	75	MDL	190	PQL	ug/Kg	UJ	L
HEXACHLOROETHANE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
ISOPHORONE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
NITROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
N-NITROSO-DI-N-PROPYLAMINE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
N-NITROSODIPHENYLAMINE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
PHENOL	19	U	19	MDL	190	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE089 **Laboratory: LL**

EDD Filename: DE089_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: **SL-040-SA5A-SB-4.0-5.0** ***Collected:*** **2/23/2011 3:26:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,4-TRICHLOROBENZENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
1,2-DICHLOROBENZENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
1,2-Diphenylhydrazine/Azobenzene	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
1,3-DICHLOROBENZENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
1,4-DICHLOROBENZENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
2,4,5-TRICHLOROPHENOL	37	U	37	MDL	180	PQL	ug/Kg	UJ	L
2,4,6-TRICHLOROPHENOL	37	U	37	MDL	180	PQL	ug/Kg	UJ	L
2,4-DICHLOROPHENOL	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
2,4-DIMETHYLPHENOL	37	U	37	MDL	180	PQL	ug/Kg	UJ	L
2,4-DINITROTOLUENE	37	U	37	MDL	180	PQL	ug/Kg	UJ	L
2,6-DINITROTOLUENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
2-CHLORONAPHTHALENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
2-CHLOROPHENOL	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
2-METHYLPHENOL	37	U	37	MDL	180	PQL	ug/Kg	UJ	L
2-NITROANILINE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
2-NITROPHENOL	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
3,5-Dimethylphenol	37	U	37	MDL	180	PQL	ug/Kg	UJ	L
3-NITROANILINE	37	U	37	MDL	180	PQL	ug/Kg	UJ	L
4,6-DINITRO-2-METHYLPHENOL	180	U	180	MDL	550	PQL	ug/Kg	UJ	L
4-BROMOPHENYL-PHENYLETHER	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
4-CHLORO-3-METHYLPHENOL	37	U	37	MDL	180	PQL	ug/Kg	UJ	L
4-CHLOROPHENYL-PHENYLETHER	37	U	37	MDL	180	PQL	ug/Kg	UJ	L
4-METHYLPHENOL	37	U	37	MDL	180	PQL	ug/Kg	UJ	L
4-NITROANILINE	74	U	74	MDL	180	PQL	ug/Kg	UJ	L
4-NITROPHENOL	180	U	180	MDL	550	PQL	ug/Kg	UJ	L
BENZYL ALCOHOL	180	U	180	MDL	550	PQL	ug/Kg	UJ	L
BIS(2-CHLOROETHOXY)METHANE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
BIS(2-CHLOROETHYL) ETHER	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
BIS(2-CHLOROISOPROPYL) ETHER	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	18	U	18	MDL	370	PQL	ug/Kg	UJ	L
CARBAZOLE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
DIBENZOFURAN	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
Di-n-butylphthalate	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
HEXACHLOROBENZENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE089 **Laboratory: LL**

EDD Filename: DE089_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: **SL-040-SA5A-SB-4.0-5.0** ***Collected:*** **2/23/2011 3:26:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXACHLOROBUTADIENE	74	U	74	MDL	180	PQL	ug/Kg	UJ	L
HEXACHLOROETHANE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
ISOPHORONE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
NITROBENZENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
N-NITROSO-DI-N-PROPYLAMINE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
N-NITROSODIPHENYLAMINE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
PHENOL	18	U	18	MDL	180	PQL	ug/Kg	UJ	L

Sample ID: **SL-040-SA5A-SB-9.0-10.0** ***Collected:*** **2/23/2011 3:36:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,4-TRICHLOROBENZENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
1,2-DICHLOROBENZENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
1,2-Diphenylhydrazine/Azobenzene	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
1,3-DICHLOROBENZENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
1,4-DICHLOROBENZENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
2,4,5-TRICHLOROPHENOL	35	U	35	MDL	180	PQL	ug/Kg	UJ	L
2,4,6-TRICHLOROPHENOL	35	U	35	MDL	180	PQL	ug/Kg	UJ	L
2,4-DICHLOROPHENOL	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
2,4-DIMETHYLPHENOL	35	U	35	MDL	180	PQL	ug/Kg	UJ	L
2,4-DINITROTOLUENE	35	U	35	MDL	180	PQL	ug/Kg	UJ	L
2,6-DINITROTOLUENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
2-CHLORONAPHTHALENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
2-CHLOROPHENOL	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
2-METHYLPHENOL	35	U	35	MDL	180	PQL	ug/Kg	UJ	L
2-NITROANILINE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
2-NITROPHENOL	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
3,5-Dimethylphenol	35	U	35	MDL	180	PQL	ug/Kg	UJ	L
3-NITROANILINE	35	U	35	MDL	180	PQL	ug/Kg	UJ	L
4,6-DINITRO-2-METHYLPHENOL	180	U	180	MDL	530	PQL	ug/Kg	UJ	L
4-BROMOPHENYL-PHENYLETHER	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
4-CHLORO-3-METHYLPHENOL	35	U	35	MDL	180	PQL	ug/Kg	UJ	L
4-CHLOROPHENYL-PHENYLETHER	35	U	35	MDL	180	PQL	ug/Kg	UJ	L
4-METHYLPHENOL	35	U	35	MDL	180	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE089 **Laboratory: LL**

EDD Filename: DE089_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C **Matrix: SO**

Sample ID: **SL-040-SA5A-SB-9.0-10.0** ***Collected:*** **2/23/2011 3:36:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4-NITROANILINE	70	U	70	MDL	180	PQL	ug/Kg	UJ	L
4-NITROPHENOL	180	U	180	MDL	530	PQL	ug/Kg	UJ	L
BENZYL ALCOHOL	180	U	180	MDL	530	PQL	ug/Kg	UJ	L
BIS(2-CHLOROETHOXY)METHANE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
BIS(2-CHLOROETHYL) ETHER	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
BIS(2-CHLOROISOPROPYL) ETHER	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	18	U	18	MDL	350	PQL	ug/Kg	UJ	L
CARBAZOLE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
DIBENZOFURAN	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
Di-n-butylphthalate	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
HEXACHLOROBENZENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
HEXACHLOROBUTADIENE	70	U	70	MDL	180	PQL	ug/Kg	UJ	L
HEXACHLOROETHANE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
ISOPHORONE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
NITROBENZENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
N-NITROSO-DI-N-PROPYLAMINE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
N-NITROSODIPHENYLAMINE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
PHENOL	18	U	18	MDL	180	PQL	ug/Kg	UJ	L

Method Category: VOA

Method: 8260B **Matrix: SO**

Sample ID: **DUP-03-SA5A-QC-022311** ***Collected:*** **2/23/2011 10:31:00** ***Analysis Type:*** **RES** ***Dilution:*** **1.05**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ETHYLBENZENE	0.07	U	0.07	MDL	4.4	PQL	ug/Kg	UJ	FD
m,p-Xylene	0.19	U	0.19	MDL	4.4	PQL	ug/Kg	UJ	FD
METHYLENE CHLORIDE	1.1	J	0.27	MDL	4.4	PQL	ug/Kg	U	B

Sample ID: **SL-036-SA5A-SB-4.0-5.0** ***Collected:*** **2/23/2011 10:25:00** ***Analysis Type:*** **RES** ***Dilution:*** **1.13**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ETHYLBENZENE	0.12	J	0.07	MDL	4.8	PQL	ug/Kg	J	Z, FD
m,p-Xylene	0.39	J	0.21	MDL	4.8	PQL	ug/Kg	J	Z, FD

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE089 **Laboratory: LL**

EDD Filename: DE089_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: **SL-036-SA5A-SB-4.0-5.0** ***Collected:*** **2/23/2011 10:25:00** ***Analysis Type:*** **RES** ***Dilution:*** **1.13**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.83	J	0.29	MDL	4.8	PQL	ug/Kg	U	B

Sample ID: **SL-037-SA5A-SB-4.0-5.0** ***Collected:*** **2/23/2011 11:54:00** ***Analysis Type:*** **RES** ***Dilution:*** **0.97**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ETHYLBENZENE	0.18	J	0.07	MDL	4.4	PQL	ug/Kg	J	Z
m,p-Xylene	0.55	J	0.19	MDL	4.4	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	0.98	J	0.26	MDL	4.4	PQL	ug/Kg	U	B
O-XYLENE	0.19	J	0.19	MDL	4.4	PQL	ug/Kg	J	Z

Sample ID: **SL-040-SA5A-SB-4.0-5.0** ***Collected:*** **2/23/2011 3:26:00** ***Analysis Type:*** **RES** ***Dilution:*** **0.91**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ETHYLBENZENE	0.13	J	0.06	MDL	4.1	PQL	ug/Kg	J	Z
m,p-Xylene	0.35	J	0.17	MDL	4.1	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	2.7	J	0.24	MDL	4.1	PQL	ug/Kg	U	B

Sample ID: **SL-040-SA5A-SB-9.0-10.0** ***Collected:*** **2/23/2011 3:36:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ETHYLBENZENE	0.15	J	0.06	MDL	4.2	PQL	ug/Kg	J	Z
m,p-Xylene	0.51	J	0.18	MDL	4.2	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	0.73	J	0.25	MDL	4.2	PQL	ug/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE089 **Laboratory: LL**

EDD Filename: DE089_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
*#	Professional Judgment
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Verification Correlation Coefficient
C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE089 **Laboratory: LL**

EDD Filename: DE089_v1 **eQAPP Name: CDM_SSFL_110509**

F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation
L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery Lower Estimation

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE089 **Laboratory: LL**

EDD Filename: DE089_v1 **eQAPP Name: CDM_SSFL_110509**

R	Continuing Calibration Verification Percent Recovery Lower Rejection
R	Continuing Calibration Verification Percent Recovery Upper Estimation
R	Continuing Calibration Verification Percent Recovery Upper Rejection
R	Continuing Calibration Verification Relative Response Factor
R	Initial Calibration Relative Response Factor
R	Initial Calibration Verification Percent Recovery Lower Estimation
R	Initial Calibration Verification Percent Recovery Lower Rejection
R	Initial Calibration Verification Percent Recovery Upper Estimation
R	Initial Calibration Verification Percent Recovery Upper Rejection
R	Initial Calibration Verification Relative Response Factor
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control Outlier Reports

DE089

Method Blank Outlier Report

Lab Reporting Batch ID: DE089 **Laboratory: LL**

EDD Filename: DE089_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P06108BB220148	3/4/2011 1:48:00 AM	PHOSPHORUS TIN	1.16 mg/Kg 1.38 mg/Kg	DUP-03-SA5A-QC-022311 SL-036-SA5A-SB-4.0-5.0 SL-037-SA5A-SB-4.0-5.0 SL-040-SA5A-SB-4.0-5.0 SL-040-SA5A-SB-9.0-10.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
DUP-03-SA5A-QC-022311(RES)	TIN	2.92 mg/Kg	2.92U mg/Kg
SL-036-SA5A-SB-4.0-5.0(RES)	TIN	2.86 mg/Kg	2.86U mg/Kg
SL-037-SA5A-SB-4.0-5.0(RES)	TIN	3.34 mg/Kg	3.34U mg/Kg
SL-040-SA5A-SB-4.0-5.0(RES)	TIN	2.92 mg/Kg	2.92U mg/Kg
SL-040-SA5A-SB-9.0-10.0(RES)	TIN	2.83 mg/Kg	2.83U mg/Kg

Method: 6020
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P06726AB220721A	3/9/2011 7:21:00 AM	COPPER	0.183 mg/Kg	DUP-03-SA5A-QC-022311 SL-036-SA5A-SB-4.0-5.0 SL-037-SA5A-SB-4.0-5.0 SL-040-SA5A-SB-4.0-5.0 SL-040-SA5A-SB-9.0-10.0

Method: 8260B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB78B210235A	2/25/2011 2:35:00 AM	METHYLENE CHLORIDE	0.60 ug/Kg	DUP-03-SA5A-QC-022311 SL-036-SA5A-SB-4.0-5.0 SL-037-SA5A-SB-4.0-5.0 SL-040-SA5A-SB-4.0-5.0 SL-040-SA5A-SB-9.0-10.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
DUP-03-SA5A-QC-022311(RES)	METHYLENE CHLORIDE	1.1 ug/Kg	4.4U ug/Kg
SL-036-SA5A-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.83 ug/Kg	4.8U ug/Kg
SL-037-SA5A-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.98 ug/Kg	4.4U ug/Kg
SL-040-SA5A-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	2.7 ug/Kg	4.1U ug/Kg
SL-040-SA5A-SB-9.0-10.0(RES)	METHYLENE CHLORIDE	0.73 ug/Kg	4.2U ug/Kg

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Method Blank Outlier Report

Lab Reporting Batch ID: DE089 **Laboratory: LL**

EDD Filename: DE089_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8270C SIM**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKLC05B261049	3/1/2011 10:49:00 AM	BIS(2-ETHYLHEXYL)PHTHALATE Butylbenzylphthalate Di-n-butylphthalate	7.0 ug/Kg 7.1 ug/Kg 6.3 ug/Kg	DUP-03-SA5A-QC-022311 SL-036-SA5A-SB-4.0-5.0 SL-037-SA5A-SB-4.0-5.0 SL-040-SA5A-SB-4.0-5.0 SL-040-SA5A-SB-9.0-10.0

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE089 **Laboratory: LL**

EDD Filename: DE089_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-036-SA5A-SB-4.0-5.0MSD (SL-036-SA5A-SB-4.0-5.0)	2,4-DINITROPHENOL	-	-	20.00-143.00	40 (30.00)	2,4-DINITROPHENOL	J (all detects)
SL-036-SA5A-SB-4.0-5.0MS **SL-036-SA5A-SB-4.0-5.0MSD** (SL-036-SA5A-SB-4.0-5.0)	BENZIDINE	0	0	35.00-141.00	-	BENZIDINE	J(all detects) R(all non-detects)

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-036-SA5A-SB-4.0-5.0MS **SL-036-SA5A-SB-4.0-5.0MSD** (DUP-03-SA5A-QC-022311 SL-036-SA5A-SB-4.0-5.0 SL-037-SA5A-SB-4.0-5.0 SL-040-SA5A-SB-4.0-5.0 SL-040-SA5A-SB-9.0-10.0)	ALUMINUM MAGNESIUM MANGANESE POTASSIUM TITANIUM	1032 196 143 145 251	1564 231 147 144 246	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	- - - - -	ALUMINUM MAGNESIUM MANGANESE POTASSIUM TITANIUM	J(all detects) Al, Mg, Ti No Qual, >4x
SL-036-SA5A-SB-4.0-5.0MS **SL-036-SA5A-SB-4.0-5.0MSD** (DUP-03-SA5A-QC-022311 SL-036-SA5A-SB-4.0-5.0 SL-037-SA5A-SB-4.0-5.0 SL-040-SA5A-SB-4.0-5.0 SL-040-SA5A-SB-9.0-10.0)	IRON	-1114	-630	75.00-125.00	-	IRON	No Qual, >4x

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-036-SA5A-SB-4.0-5.0MS **SL-036-SA5A-SB-4.0-5.0MSD** (DUP-03-SA5A-QC-022311 SL-036-SA5A-SB-4.0-5.0 SL-037-SA5A-SB-4.0-5.0 SL-040-SA5A-SB-4.0-5.0 SL-040-SA5A-SB-9.0-10.0)	ARSENIC BERYLLIUM CADMIUM CHROMIUM COBALT LEAD NICKEL SILVER THALLIUM VANADIUM ZINC	266 141 156 229 137 231 182 145 179 309 304	249 130 139 181 - 201 141 133 149 236 234	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	- - - - - - - - - - -	ARSENIC BERYLLIUM CADMIUM CHROMIUM COBALT LEAD NICKEL SILVER THALLIUM VANADIUM ZINC	J(all detects) V, Zn No Qual, >4x
SL-036-SA5A-SB-4.0-5.0MSD (DUP-03-SA5A-QC-022311 SL-036-SA5A-SB-4.0-5.0 SL-037-SA5A-SB-4.0-5.0 SL-040-SA5A-SB-4.0-5.0 SL-040-SA5A-SB-9.0-10.0)	ANTIMONY	-	60	75.00-125.00	30 (20.00)	ANTIMONY	J(all detects) UJ(all non-detects)
SL-036-SA5A-SB-4.0-5.0MS (DUP-03-SA5A-QC-022311 SL-036-SA5A-SB-4.0-5.0 SL-037-SA5A-SB-4.0-5.0 SL-040-SA5A-SB-4.0-5.0 SL-040-SA5A-SB-9.0-10.0)	SELENIUM	135	-	75.00-125.00	-	SELENIUM	J(all detects)

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE089 **Laboratory: LL**

EDD Filename: DE089_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-036-SA5A-SB-4.0-5.0MS **SL-036-SA5A-SB-4.0-5.0MSD** (DUP-03-SA5A-QC-022311 SL-036-SA5A-SB-4.0-5.0 SL-037-SA5A-SB-4.0-5.0 SL-040-SA5A-SB-4.0-5.0 SL-040-SA5A-SB-9.0-10.0)	MOLYBDENUM	152	135	75.00-125.00	-	MOLYBDENUM	J(all detects)
SL-036-SA5A-SB-4.0-5.0MS **SL-036-SA5A-SB-4.0-5.0MSD** (DUP-03-SA5A-QC-022311 SL-036-SA5A-SB-4.0-5.0 SL-037-SA5A-SB-4.0-5.0 SL-040-SA5A-SB-4.0-5.0 SL-040-SA5A-SB-9.0-10.0)	BARIUM	509	250	75.00-125.00	-	BARIUM	No Qual, >4x

Method: 300.0
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-036-SA5A-SB-4.0-5.0MS (DUP-03-SA5A-QC-022311 SL-036-SA5A-SB-4.0-5.0 SL-037-SA5A-SB-4.0-5.0 SL-040-SA5A-SB-4.0-5.0 SL-040-SA5A-SB-9.0-10.0)	FLUORIDE	39	-	80.00-120.00	-	FLUORIDE	J(all detects) UJ(all non-detects)

Method: 8015M
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-036-SA5A-SB-4.0-5.0MSD (SL-036-SA5A-SB-4.0-5.0)	DIETHYLENE GLYCOL	-	-	59.00-109.00	21 (20.00)	DIETHYLENE GLYCOL	J(all detects)
SL-036-SA5A-SB-4.0-5.0MS **SL-036-SA5A-SB-4.0-5.0MSD** (SL-036-SA5A-SB-4.0-5.0)	EFH (C12-C14) EFH (C21-C30) EFH (C30-C40)	- 255 709	- - 156	49.00-123.00 49.00-123.00 49.00-123.00	27 (20.00) 75 (20.00) 127 (20.00)	EFH (C12-C14) EFH (C21-C30) EFH (C30-C40)	J(all detects)

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE089 **Laboratory: LL**

EDD Filename: DE089_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B

Matrix: SO

QC Sample ID (Associated Sample ID)	*Analyte*	*Sample RPD*	*eQAPP RPD*	*Flag*
SL-036-SA5A-SB-4.0-5.0DUP (DUP-03-SA5A-QC-022311 SL -036-SA5A-SB-4.0-5.0 SL -037-SA5A-SB-4.0-5.0 SL -040-SA5A-SB-4.0-5.0 SL -040-SA5A-SB-9.0-10.0)	Zirconium	29	20.00	No Qual OK by difference

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE089 **Laboratory: LL**

EDD Filename: DE089_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C

Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P9LCLCSQ260129	1,2,4-TRICHLOROBENZENE	58	-	73.00-108.00	-	1,2,4-TRICHLOROBENZENE	J (all detects) UJ (all non-detects)
(DUP-03-SA5A-QC-022311	1,2-DICHLOROBENZENE	52	-	79.00-102.00	-	1,2-DICHLOROBENZENE	
SL-036-SA5A-SB-4.0-5.0	1,2-Diphenylhydrazine/Azobenzen	48	-	77.00-111.00	-	1,2-Diphenylhydrazine/Azobenz	
SL-037-SA5A-SB-4.0-5.0	1,3-DICHLOROBENZENE	50	-	70.00-98.00	-	1,3-DICHLOROBENZENE	
SL-040-SA5A-SB-4.0-5.0	1,4-DICHLOROBENZENE	50	-	74.00-106.00	-	1,4-DICHLOROBENZENE	
SL-040-SA5A-SB-9.0-10.0)	1-METHYLNAPHTHALENE	59	-	74.00-105.00	-	1-METHYLNAPHTHALENE	
	2,4,5-TRICHLOROPHENOL	58	-	76.00-107.00	-	2,4,5-TRICHLOROPHENOL	
	2,4,6-TRICHLOROPHENOL	60	-	78.00-111.00	-	2,4,6-TRICHLOROPHENOL	
	2,4-DICHLOROPHENOL	60	-	75.00-111.00	-	2,4-DICHLOROPHENOL	
	2,4-DIMETHYLPHENOL	56	-	72.00-111.00	-	2,4-DIMETHYLPHENOL	
	2,4-DINITROTOLUENE	58	-	73.00-115.00	-	2,4-DINITROTOLUENE	
	2,6-DINITROTOLUENE	57	-	79.00-115.00	-	2,6-DINITROTOLUENE	
	2-CHLORONAPHTHALENE	55	-	67.00-127.00	-	2-CHLORONAPHTHALENE	
	2-CHLOROPHENOL	57	-	72.00-112.00	-	2-CHLOROPHENOL	
	2-METHYLNAPHTHALENE	57	-	76.00-105.00	-	2-METHYLNAPHTHALENE	
	2-METHYLPHENOL	53	-	66.00-110.00	-	2-METHYLPHENOL	
	2-NITROANILINE	56	-	78.00-116.00	-	2-NITROANILINE	
	2-NITROPHENOL	59	-	81.00-114.00	-	2-NITROPHENOL	
	3,5-Dimethylphenol	58	-	70.00-130.00	-	3,5-Dimethylphenol	
	3-NITROANILINE	57	-	62.00-109.00	-	3-NITROANILINE	
	4,6-DINITRO-2-METHYLPHENOL	50	-	53.00-110.00	-	4,6-DINITRO-2-METHYLPHEN	
	4-BROMOPHENYL-PHENYLETH	60	-	79.00-117.00	-	4-BROMOPHENYL-PHENYLET	
	4-CHLORO-3-METHYLPHENOL	54	-	74.00-119.00	-	4-CHLORO-3-METHYLPHENOL	
	4-CHLOROPHENYL-PHENYLET	58	-	79.00-110.00	-	4-CHLOROPHENYL-PHENYLE	
	4-METHYLPHENOL	52	-	66.00-117.00	-	4-METHYLPHENOL	
	4-NITROANILINE	42	-	49.00-98.00	-	4-NITROANILINE	
	4-NITROPHENOL	37	-	56.00-118.00	-	4-NITROPHENOL	
	ACENAPHTHENE	56	-	76.00-111.00	-	ACENAPHTHENE	
	ACENAPHTHYLENE	58	-	75.00-122.00	-	ACENAPHTHYLENE	
	ANTHRACENE	53	-	76.00-112.00	-	ANTHRACENE	
	BENZO(A)ANTHRACENE	61	-	73.00-112.00	-	BENZO(A)ANTHRACENE	
	BENZO(A)PYRENE	62	-	69.00-122.00	-	BENZO(A)PYRENE	
	BENZO(G,H,I)PERYLENE	64	-	65.00-122.00	-	BENZO(G,H,I)PERYLENE	
	BENZO(K)FLUORANTHENE	62	-	67.00-125.00	-	BENZO(K)FLUORANTHENE	
	BENZYL ALCOHOL	54	-	68.00-111.00	-	BENZYL ALCOHOL	
	BIS(2-CHLOROETHOXY)METHA	55	-	70.00-118.00	-	BIS(2-CHLOROETHOXY)METH	
	BIS(2-CHLOROETHYL) ETHER	47	-	70.00-104.00	-	BIS(2-CHLOROETHYL) ETHER	
	BIS(2-CHLOROISOPROPYL) ET	58	-	68.00-131.00	-	BIS(2-CHLOROISOPROPYL) E	
	BIS(2-ETHYLHEXYL)PHTHALAT	63	-	75.00-117.00	-	BIS(2-ETHYLHEXYL)PHTHALA	
	Butylbenzylphthalate	67	-	75.00-115.00	-	Butylbenzylphthalate	
	CARBAZOLE	51	-	77.00-113.00	-	CARBAZOLE	
	CHRYSENE	63	-	76.00-113.00	-	CHRYSENE	
	DIBENZO(A,H)ANTHRACENE	61	-	70.00-128.00	-	DIBENZO(A,H)ANTHRACENE	
	DIBENZOFURAN	56	-	79.00-108.00	-	DIBENZOFURAN	
	Diethylphthalate	55	-	76.00-111.00	-	Diethylphthalate	
	Dimethylphthalate	57	-	77.00-109.00	-	Dimethylphthalate	
	Di-n-butylphthalate	54	-	79.00-112.00	-	Di-n-butylphthalate	
	Di-n-octylphthalate	65	-	68.00-130.00	-	Di-n-octylphthalate	
	FLUORANTHENE	49	-	78.00-116.00	-	FLUORANTHENE	
	FLUORENE	53	-	75.00-116.00	-	FLUORENE	
	HEXACHLOROBENZENE	59	-	78.00-116.00	-	HEXACHLOROBENZENE	
	HEXACHLOROBUTADIENE	60	-	70.00-112.00	-	HEXACHLOROBUTADIENE	
	HEXACHLOROETHANE	46	-	68.00-105.00	-	HEXACHLOROETHANE	
	INDENO(1,2,3-CD)PYRENE	62	-	64.00-119.00	-	INDENO(1,2,3-CD)PYRENE	
	ISOPHORONE	55	-	69.00-110.00	-	ISOPHORONE	
	NAPHTHALENE	54	-	73.00-106.00	-	NAPHTHALENE	
	NITROBENZENE	52	-	71.00-104.00	-	NITROBENZENE	
	N-NITROSODIMETHYLAMINE	41	-	60.00-106.00	-	N-NITROSODIMETHYLAMINE	
	N-NITROSO-DI-N-PROPYLAMIN	49	-	63.00-107.00	-	N-NITROSO-DI-N-PROPYLAMI	
	N-NITROSODIPHENYLAMINE	56	-	67.00-141.00	-	N-NITROSODIPHENYLAMINE	
	PHENANTHRENE	53	-	77.00-113.00	-	PHENANTHRENE	
	PHENOL	51	-	58.00-112.00	-	PHENOL	
	PYRENE	60	-	75.00-115.00	-	PYRENE	

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE089 **Laboratory: LL**

EDD Filename: DE089_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P06326BQ220941A (DUP-03-SA5A-QC-022311 SL-036-SA5A-SB-4.0-5.0 SL-037-SA5A-SB-4.0-5.0 SL-040-SA5A-SB-4.0-5.0 SL-040-SA5A-SB-9.0-10.0)	ANTIMONY	128	-	80.00-120.00	-	ANTIMONY	No Qual SRM within QC limits

Method: 8082
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P10573AY241138A (DUP-03-SA5A-QC-022311 SL-036-SA5A-SB-4.0-5.0 SL-037-SA5A-SB-4.0-5.0 SL-040-SA5A-SB-4.0-5.0 SL-040-SA5A-SB-9.0-10.0)	Aroclor 5442	-	69	75.00-125.00	-	Aroclor 5432, 5442, 5460	J(all detects) UJ(all non-detects)

Surrogate Outlier Report

Lab Reporting Batch ID: DE089 **Laboratory: LL**

EDD Filename: DE089_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8015M
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-037-SA5A-SB-4.0-5.0	TETRAMETHYLENE GLYCOL	27	29.00-137.00	All Target Analytes	J (all detects) UJ (all non-detects)

Field Duplicate RPD Report

Lab Reporting Batch ID: DE089 **Laboratory: LL**

EDD Filename: DE089_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 160.3M
Matrix: SO

Analyte	Concentration (%) SL-036-SA5A-SB-4.0-5.0	Concentration (%) DUP-03-SA5A-QC-022311	Sample RPD	eQAPP RPD	Flag
MOISTURE	6.2	5.3	16		No Qualifiers Applied

Method: 300.0
Matrix: SO

Analyte	Concentration (mg/Kg) SL-036-SA5A-SB-4.0-5.0	Concentration (mg/Kg) DUP-03-SA5A-QC-022311	Sample RPD	eQAPP RPD	Flag
FLUORIDE	1.4	2.2	44	50.00	No Qualifiers Applied
Nitrate-NO3	1.3	1.2	8	50.00	

Method: 6010B
Matrix: SO

Analyte	Concentration (mg/Kg) SL-036-SA5A-SB-4.0-5.0	Concentration (mg/Kg) DUP-03-SA5A-QC-022311	Sample RPD	eQAPP RPD	Flag
ALUMINUM	19600	21900	11	50.00	No Qualifiers Applied
BORON	1.74	1.35	25	50.00	
CALCIUM	1950	2180	11	50.00	
IRON	22700	27000	17	50.00	
LITHIUM	21.2	22.2	5	50.00	
MAGNESIUM	4470	4430	1	50.00	
MANGANESE	178	129	32	50.00	
PHOSPHORUS	139	126	10	50.00	
POTASSIUM	1740	1230	34	50.00	
SODIUM	199	324	48	50.00	
STRONTIUM	19.6	19.9	2	50.00	
TIN	2.86	2.92	2	50.00	
TITANIUM	1280	1130	12	50.00	
Zirconium	1.46	1.33	9	50.00	

Method: 6020
Matrix: SO

Analyte	Concentration (mg/Kg) SL-036-SA5A-SB-4.0-5.0	Concentration (mg/Kg) DUP-03-SA5A-QC-022311	Sample RPD	eQAPP RPD	Flag
ANTIMONY	0.154	0.240	44	50.00	No Qualifiers Applied
ARSENIC	5.54	8.51	42	50.00	
BARIUM	93.4	121	26	50.00	
BERYLLIUM	0.629	0.855	30	50.00	
CADMIUM	0.0614	0.0739	18	50.00	
CHROMIUM	23.9	31.7	28	50.00	
COBALT	4.68	5.96	24	50.00	
COPPER	7.76	7.89	2	50.00	
LEAD	6.40	8.57	29	50.00	
MOLYBDENUM	0.566	0.875	43	50.00	
NICKEL	11.8	16.2	31	50.00	
SELENIUM	0.192	0.164	16	50.00	
SILVER	0.0264	0.0276	4	50.00	
THALLIUM	0.253	0.337	28	50.00	
VANADIUM	43.4	59.6	31	50.00	
ZINC	48.6	71.6	38	50.00	

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Field Duplicate RPD Report

Lab Reporting Batch ID: DE089 **Laboratory: LL**

EDD Filename: DE089_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7199
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-036-SA5A-SB-4.0-5.0	DUP-03-SA5A-QC-022311			
HEXAVALENT CHROMIUM	0.45	0.37	20	50.00	No Qualifiers Applied

Method: 8260B
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-036-SA5A-SB-4.0-5.0	DUP-03-SA5A-QC-022311			
METHYLENE CHLORIDE	0.83	1.1	28	50.00	No Qualifiers Applied
ETHYLBENZENE	0.12	4.4 U	200	50.00	J(all detects)
m,p-Xylene	0.39	4.4 U	200	50.00	UJ(all non-detects)

Method: 8270C
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-036-SA5A-SB-4.0-5.0	DUP-03-SA5A-QC-022311			
BIS(2-ETHYLHEXYL)PHTHALATE	23	350 U	200	50.00	J(all detects) UJ(all non-detects)

Method: 9045M
Matrix: SO

Analyte	Concentration (pH unit)		Sample RPD	eQAPP RPD	Flag
	SL-036-SA5A-SB-4.0-5.0	DUP-03-SA5A-QC-022311			
PH	6.74	6.29	7	50.00	No Qualifiers Applied

Method: ASTM D1498
Matrix: SO

Analyte	Concentration (mV)		Sample RPD	eQAPP RPD	Flag
	SL-036-SA5A-SB-4.0-5.0	DUP-03-SA5A-QC-022311			
Oxidation Reduction Potential	347	350	1		No Qualifiers Applied

Reporting Limit Outliers

Lab Reporting Batch ID: DE089 **Laboratory: LL**

EDD Filename: DE089_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1625C
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-040-SA5A-SB-4.0-5.0	N-NITROSODIMETHYLAMINE	J	21.4	37.0	PQL	ng/Kg	J (all detects)

Method: 300.0
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-03-SA5A-QC-022311	Nitrate-NO3	J	1.2	1.6	PQL	mg/Kg	J (all detects)
SL-036-SA5A-SB-4.0-5.0	Nitrate-NO3	J	1.3	1.6	PQL	mg/Kg	J (all detects)
SL-040-SA5A-SB-4.0-5.0	Nitrate-NO3	J	1.3	1.7	PQL	mg/Kg	J (all detects)

Method: 6010B
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-03-SA5A-QC-022311	BORON	J	1.35	5.08	PQL	mg/Kg	J (all detects)
	TIN	J	2.92	10.2	PQL	mg/Kg	
	Zirconium	J	1.33	5.08	PQL	mg/Kg	
SL-036-SA5A-SB-4.0-5.0	BORON	J	1.74	5.18	PQL	mg/Kg	J (all detects)
	TIN	J	2.86	10.4	PQL	mg/Kg	
	Zirconium	J	1.46	5.18	PQL	mg/Kg	
SL-037-SA5A-SB-4.0-5.0	BORON	J	2.28	5.42	PQL	mg/Kg	J (all detects)
	TIN	J	3.34	10.8	PQL	mg/Kg	
	Zirconium	J	2.32	5.42	PQL	mg/Kg	
SL-040-SA5A-SB-4.0-5.0	BORON	J	2.16	5.46	PQL	mg/Kg	J (all detects)
	SODIUM	J	106	109	PQL	mg/Kg	
	TIN	J	2.92	10.9	PQL	mg/Kg	
	Zirconium	J	2.06	5.46	PQL	mg/Kg	
SL-040-SA5A-SB-9.0-10.0	BORON	J	1.35	5.27	PQL	mg/Kg	J (all detects)
	TIN	J	2.83	10.5	PQL	mg/Kg	
	Zirconium	J	1.45	5.27	PQL	mg/Kg	

Method: 6020
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-03-SA5A-QC-022311	CADMIUM	J	0.0739	0.102	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.164	0.406	PQL	mg/Kg	
	SILVER	J	0.0276	0.102	PQL	mg/Kg	
SL-036-SA5A-SB-4.0-5.0	ANTIMONY	J	0.154	0.213	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0614	0.107	PQL	mg/Kg	
	SELENIUM	J	0.192	0.426	PQL	mg/Kg	
	SILVER	J	0.0264	0.107	PQL	mg/Kg	

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Reporting Limit Outliers

Lab Reporting Batch ID: DE089 **Laboratory: LL**

EDD Filename: DE089_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-037-SA5A-SB-4.0-5.0	ANTIMONY	J	0.146	0.221	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0889	0.111	PQL	mg/Kg	
	SELENIUM	J	0.0843	0.442	PQL	mg/Kg	
	SILVER	J	0.0840	0.111	PQL	mg/Kg	
SL-040-SA5A-SB-4.0-5.0	SELENIUM	J	0.0940	0.442	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0604	0.110	PQL	mg/Kg	
SL-040-SA5A-SB-9.0-10.0	ANTIMONY	J	0.151	0.207	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0722	0.103	PQL	mg/Kg	
	SELENIUM	J	0.0666	0.413	PQL	mg/Kg	
	SILVER	J	0.0472	0.103	PQL	mg/Kg	

Method: 7196

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-03-SA5A-QC-022311	HEXAVALENT CHROMIUM	J	0.37	1.1	PQL	mg/Kg	J (all detects)
SL-036-SA5A-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.45	1.1	PQL	mg/Kg	J (all detects)
SL-037-SA5A-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.34	1.1	PQL	mg/Kg	J (all detects)
SL-040-SA5A-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.30	1.1	PQL	mg/Kg	J (all detects)
SL-040-SA5A-SB-9.0-10.0	HEXAVALENT CHROMIUM	J	0.26	1.1	PQL	mg/Kg	J (all detects)

Method: 8015M

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-037-SA5A-SB-4.0-5.0	EFH (C8-C11)	J	0.51	1.3	PQL	mg/Kg	J (all detects)
	GASOLINE RANGE ORGANICS (C5-C12)	J	0.2	1.1	PQL	mg/Kg	

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-03-SA5A-QC-022311	METHYLENE CHLORIDE	J	1.1	4.4	PQL	ug/Kg	J (all detects)
SL-036-SA5A-SB-4.0-5.0	ETHYLBENZENE	J	0.12	4.8	PQL	ug/Kg	J (all detects)
	m,p-Xylene	J	0.39	4.8	PQL	ug/Kg	
	METHYLENE CHLORIDE	J	0.83	4.8	PQL	ug/Kg	
SL-037-SA5A-SB-4.0-5.0	ETHYLBENZENE	J	0.18	4.4	PQL	ug/Kg	J (all detects)
	m,p-Xylene	J	0.55	4.4	PQL	ug/Kg	
	METHYLENE CHLORIDE	J	0.98	4.4	PQL	ug/Kg	
	O-XYLENE	J	0.19	4.4	PQL	ug/Kg	

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Reporting Limit Outliers

Lab Reporting Batch ID: DE089 **Laboratory: LL**

EDD Filename: DE089_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8260B
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-040-SA5A-SB-4.0-5.0	ETHYLBENZENE	J	0.13	4.1	PQL	ug/Kg	J (all detects)
	m,p-Xylene	J	0.35	4.1	PQL	ug/Kg	
	METHYLENE CHLORIDE	J	2.7	4.1	PQL	ug/Kg	
SL-040-SA5A-SB-9.0-10.0	ETHYLBENZENE	J	0.15	4.2	PQL	ug/Kg	J (all detects)
	m,p-Xylene	J	0.51	4.2	PQL	ug/Kg	
	METHYLENE CHLORIDE	J	0.73	4.2	PQL	ug/Kg	

Method: 8270C
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-036-SA5A-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	23	350	PQL	ug/Kg	J (all detects)

LDC #: 25764O4

SDG #: DE089

Laboratory: Lancaster Laboratories

VALIDATION COMPLETENESS WORKSHEET

ADR

Date: 7/6/14

Page: 1 of 1

Reviewer: OR

2nd Reviewer: C

METHOD: Metals (EPA SW 846 Method 6010B/6020A/7000)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	N	Sampling dates:
II.	ICP/MS Tune	—	
III.	Calibration	—	
IV.	Blanks	SW	
V.	ICP Interference Check Sample (ICS) Analysis	N	
VI.	Matrix Spike Analysis	N	MS/D (Al, Ba, Ca, Fe, Mg, Ti, V, Zn >4X)
VII.	Duplicate Sample Analysis	N	DD (Zr <5x RL)
VIII.	Laboratory Control Samples (LCS)	A	LCS
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	SW	J/UJ/A
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	—	
XV	Field Blanks	—	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: Soil

1	DUP-03-SA5A-QC-022311	11	DDS	21		31	
2	SL-036-SA5A-SB-4.0-5.0	12		22		32	
3	SL-037-SA5A-SB-4.0-5.0	13		23		33	
4	SL-040-SA5A-SB-4.0-5.0	14		24		34	
5	SL-040-SA5A-SB-9.0-10.0	15		25		35	
6	SL-036-SA5A-SB-4.0-5.0MS	16		26		36	
7	SL-036-SA5A-SB-4.0-5.0MSD	17		27		37	
8	SL-036-SA5A-SB-4.0-5.0DUP	18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

LDC #: 25764O4

VALIDATION FINDINGS WORKSHEET
PB/ICB/CCB QUALIFIED SAMPLES

Reviewer: VR
2nd Reviewer: A

METHOD: Trace metals (EPA SW 864 Method 6010B/6020/7000) Soil preparation factor applied: 100x x MS: 2xdil
Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: All Reason Code: B

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit	1	2	3	4	5						
Cd			0.35	0.35	0.074	0.061	0.089	0.11	0.072						

Samples with analyte concentrations within five times the associated ICB, CCB or PB concentration are listed above with the identifications from the Validation Completeness Worksheet. These sample results were qualified as not detected, "U".
Note : a - The listed analyte concentration is the highest ICB, CCB, or PB detected in the analysis of each element.

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 9
SERIAL DILUTIONS
SDG No.: DE089
Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: 6214502BKG Serial Dilution Lab Sample ID: 6214502L
Batch ID(s): P06108B, P06326B, P06726A
Concentration Units: UG/L

Analyte	Mass	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Diff.	Q	M
Aluminum		189610.1000		192094.7500		1		P
Antimony	121	0.7243	B	1.5000	U	100		MS
Arsenic	75	25.9700		31.6550		22		MS
Barium	137	438.2000		495.8500		13	E	MS
Beryllium	9	2.9520		3.4565		17		MS
Boron		16.8000	B	44.5000	U	100		P
Cadmium	111	0.2882	B	1.1865	B	312		MS
Calcium		18875.5300		20348.0000		8		P
Chromium	52	112.2000		135.9500		21	E	MS
Cobalt	59	21.9700		26.5750		21	E	MS
Copper	63	37.1400		36.7550		1		MS
Iron		219115.0300		225759.2500		3		P
Lead	208	30.0200		32.8400		9		MS
Lithium		204.7500		211.4000		3		P
Magnesium		43184.8200		45972.5500		6		P
Manganese		1722.8300		1835.3000		7		P
Molybdenum	98	2.6540		2.6860		1		MS
Nickel	60	55.3300		71.1500		29	E	MS
Phosphorus		1345.7500		1372.6000		2		P
Potassium		16807.6100		17559.5500		4		P
Selenium	78	0.8997	B	1.0000	U	100		MS
Silver	107	0.1236	B	0.3000	U	100		MS
Sodium		1925.2100		2272.7500	B	18		P
Strontium		189.5500		198.5500		5		P
Thallium	203	1.1870		1.6315	B	37		MS
Tin		27.6200	B	50.0000	U	100		P
Titanium		12331.7200		13425.8500		9		P
Vanadium	51	203.7000		245.2000		20	E	MS
Zinc	66	228.1000		265.6500		16		MS
Zirconium		14.0700	B	42.0000	U	100		P

NOTE: An E in column Q indicates the presence of a chemical or physical interference in the matrix when the % difference is greater than 10%. This applies only when (I) is greater than or equal to 50x MDL for ICP, 100x MDL for ICP-MS (6020), 50x MDL for ICP-MS (200.8), or 25x MDL for GFAA.

DE089 3399

METHODS:	CONCENTRATION QUALIFIERS:
P = ICP Atomic Emission Spectrometer	U= Below MDL
MS = ICP Mass Spectrometry	B= Below LOQ
	FLAGS:
	E = Matrix Effects exist as proven by Serial Dilution or Spiked Dilution

SAMPLE DELIVERY GROUP

DX090

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
23-Feb-2011	SL-016-SA5A-SS-0.0-0.5	6214529	N	3050B	6010B	III
23-Feb-2011	SL-016-SA5A-SS-0.0-0.5	6214529	N	3050B	6020	III
23-Feb-2011	SL-016-SA5A-SS-0.0-0.5	6214529	N	3060A	7199	III
23-Feb-2011	SL-016-SA5A-SS-0.0-0.5	6214529	N	3550B	8081A	III
23-Feb-2011	SL-016-SA5A-SS-0.0-0.5	6214529	N	3550B	8082	III
23-Feb-2011	SL-016-SA5A-SS-0.0-0.5	6214529	N	3550B	8151A	III
23-Feb-2011	SL-016-SA5A-SS-0.0-0.5	6214529	N	3550B	8270C	III
23-Feb-2011	SL-016-SA5A-SS-0.0-0.5	6214529	N	3550B	8270C SIM	III
23-Feb-2011	SL-016-SA5A-SS-0.0-0.5	6214529	N	Gen Prep	9045M	III
23-Feb-2011	SL-016-SA5A-SS-0.0-0.5	6214529	N	METHOD	300.0	III
23-Feb-2011	SL-016-SA5A-SS-0.0-0.5	6214529	N	METHOD	314.0	III
23-Feb-2011	SL-016-SA5A-SS-0.0-0.5	6214529	N	METHOD	7471A	III
23-Feb-2011	SL-010-SA5A-SS-0.0-0.5	6214526	N	3050B	6010B	III
23-Feb-2011	SL-010-SA5A-SS-0.0-0.5	6214526	N	3050B	6020	III
23-Feb-2011	SL-010-SA5A-SS-0.0-0.5	6214526	N	3060A	7199	III
23-Feb-2011	SL-010-SA5A-SS-0.0-0.5	6214526	N	3550B	8081A	III
23-Feb-2011	SL-010-SA5A-SS-0.0-0.5	6214526	N	3550B	8082	III
23-Feb-2011	SL-010-SA5A-SS-0.0-0.5	6214526	N	3550B	8151A	III
23-Feb-2011	SL-010-SA5A-SS-0.0-0.5	6214526	N	3550B	8270C	III
23-Feb-2011	SL-010-SA5A-SS-0.0-0.5	6214526	N	3550B	8270C SIM	III
23-Feb-2011	SL-010-SA5A-SS-0.0-0.5	6214526	N	Gen Prep	9045M	III
23-Feb-2011	SL-010-SA5A-SS-0.0-0.5	6214526	N	METHOD	300.0	III
23-Feb-2011	SL-010-SA5A-SS-0.0-0.5	6214526	N	METHOD	314.0	III
23-Feb-2011	SL-010-SA5A-SS-0.0-0.5	6214526	N	METHOD	7471A	III
23-Feb-2011	SL-009-SA5A-SS-0.0-0.5	6214525	N	3050B	6010B	III
23-Feb-2011	SL-009-SA5A-SS-0.0-0.5	6214525	N	3050B	6020	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
23-Feb-2011	SL-009-SA5A-SS-0.0-0.5	6214525	N	3060A	7199	III
23-Feb-2011	SL-009-SA5A-SS-0.0-0.5	6214525	N	3550B	8081A	III
23-Feb-2011	SL-009-SA5A-SS-0.0-0.5	6214525	N	3550B	8082	III
23-Feb-2011	SL-009-SA5A-SS-0.0-0.5	6214525	N	3550B	8151A	III
23-Feb-2011	SL-009-SA5A-SS-0.0-0.5	6214525	N	3550B	8270C	III
23-Feb-2011	SL-009-SA5A-SS-0.0-0.5	6214525	N	3550B	8270C SIM	III
23-Feb-2011	SL-009-SA5A-SS-0.0-0.5	6214525	N	Gen Prep	9045M	III
23-Feb-2011	SL-009-SA5A-SS-0.0-0.5	6214525	N	METHOD	300.0	III
23-Feb-2011	SL-009-SA5A-SS-0.0-0.5	6214525	N	METHOD	314.0	III
23-Feb-2011	SL-009-SA5A-SS-0.0-0.5	6214525	N	METHOD	6850	III
23-Feb-2011	SL-009-SA5A-SS-0.0-0.5	6214525	N	METHOD	7471A	III
23-Feb-2011	SL-013-SA5A-SS-0.0-0.5	6214528	N	3050B	6010B	III
23-Feb-2011	SL-013-SA5A-SS-0.0-0.5	6214528	N	3050B	6020	III
23-Feb-2011	SL-013-SA5A-SS-0.0-0.5	6214528	N	3060A	7199	III
23-Feb-2011	SL-013-SA5A-SS-0.0-0.5	6214528	N	3550B	8081A	III
23-Feb-2011	SL-013-SA5A-SS-0.0-0.5	6214528	N	3550B	8082	III
23-Feb-2011	SL-013-SA5A-SS-0.0-0.5	6214528	N	3550B	8151A	III
23-Feb-2011	SL-013-SA5A-SS-0.0-0.5	6214528	N	3550B	8270C	III
23-Feb-2011	SL-013-SA5A-SS-0.0-0.5	6214528	N	3550B	8270C SIM	III
23-Feb-2011	SL-013-SA5A-SS-0.0-0.5	6214528	N	Gen Prep	9045M	III
23-Feb-2011	SL-013-SA5A-SS-0.0-0.5	6214528	N	METHOD	300.0	III
23-Feb-2011	SL-013-SA5A-SS-0.0-0.5	6214528	N	METHOD	314.0	III
23-Feb-2011	SL-013-SA5A-SS-0.0-0.5	6214528	N	METHOD	7471A	III
23-Feb-2011	SL-019-SA5A-SS-0.0-0.5	6214532	N	3050B	6010B	III
23-Feb-2011	SL-019-SA5A-SS-0.0-0.5	6214532	N	3050B	6020	III
23-Feb-2011	SL-019-SA5A-SS-0.0-0.5	6214532	N	3060A	7199	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
23-Feb-2011	SL-019-SA5A-SS-0.0-0.5	6214532	N	3550B	8081A	III
23-Feb-2011	SL-019-SA5A-SS-0.0-0.5	6214532	N	3550B	8082	III
23-Feb-2011	SL-019-SA5A-SS-0.0-0.5	6214532	N	3550B	8151A	III
23-Feb-2011	SL-019-SA5A-SS-0.0-0.5	6214532	N	3550B	8270C	III
23-Feb-2011	SL-019-SA5A-SS-0.0-0.5	6214532	N	3550B	8270C SIM	III
23-Feb-2011	SL-019-SA5A-SS-0.0-0.5	6214532	N	Gen Prep	9045M	III
23-Feb-2011	SL-019-SA5A-SS-0.0-0.5	6214532	N	METHOD	300.0	III
23-Feb-2011	SL-019-SA5A-SS-0.0-0.5	6214532	N	METHOD	314.0	III
23-Feb-2011	SL-019-SA5A-SS-0.0-0.5	6214532	N	METHOD	7471A	III
23-Feb-2011	SL-012-SA5A-SS-0.0-0.5	6214527	N	3050B	6010B	III
23-Feb-2011	SL-012-SA5A-SS-0.0-0.5	6214527	N	3050B	6020	III
23-Feb-2011	SL-012-SA5A-SS-0.0-0.5	6214527	N	3060A	7199	III
23-Feb-2011	SL-012-SA5A-SS-0.0-0.5	6214527	N	3550B	8081A	III
23-Feb-2011	SL-012-SA5A-SS-0.0-0.5	6214527	N	3550B	8082	III
23-Feb-2011	SL-012-SA5A-SS-0.0-0.5	6214527	N	3550B	8151A	III
23-Feb-2011	SL-012-SA5A-SS-0.0-0.5	6214527	N	3550B	8270C	III
23-Feb-2011	SL-012-SA5A-SS-0.0-0.5	6214527	N	3550B	8270C SIM	III
23-Feb-2011	SL-012-SA5A-SS-0.0-0.5	6214527	N	Gen Prep	9045M	III
23-Feb-2011	SL-012-SA5A-SS-0.0-0.5	6214527	N	METHOD	300.0	III
23-Feb-2011	SL-012-SA5A-SS-0.0-0.5	6214527	N	METHOD	314.0	III
23-Feb-2011	SL-012-SA5A-SS-0.0-0.5	6214527	N	METHOD	7471A	III
23-Feb-2011	SL-006-SA5A-SS-0.0-0.5	6214524	N	3050B	6010B	III
23-Feb-2011	SL-006-SA5A-SS-0.0-0.5	6214524	N	3050B	6020	III
23-Feb-2011	SL-006-SA5A-SS-0.0-0.5	6214524	N	3060A	7199	III
23-Feb-2011	SL-006-SA5A-SS-0.0-0.5	6214524	N	3550B	8081A	III
23-Feb-2011	SL-006-SA5A-SS-0.0-0.5	6214524	N	3550B	8082	III

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IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
23-Feb-2011	SL-006-SA5A-SS-0.0-0.5	6214524	N	3550B	8151A	III
23-Feb-2011	SL-006-SA5A-SS-0.0-0.5	6214524	N	3550B	8270C	III
23-Feb-2011	SL-006-SA5A-SS-0.0-0.5	6214524	N	3550B	8270C SIM	III
23-Feb-2011	SL-006-SA5A-SS-0.0-0.5	6214524	N	Gen Prep	9045M	III
23-Feb-2011	SL-006-SA5A-SS-0.0-0.5	6214524	N	METHOD	300.0	III
23-Feb-2011	SL-006-SA5A-SS-0.0-0.5	6214524	N	METHOD	314.0	III
23-Feb-2011	SL-006-SA5A-SS-0.0-0.5	6214524	N	METHOD	7471A	III
23-Feb-2011	SL-018-SA5A-SS-0.0-0.5	6214531	N	3050B	6010B	III
23-Feb-2011	SL-018-SA5A-SS-0.0-0.5	6214531	N	3050B	6020	III
23-Feb-2011	SL-018-SA5A-SS-0.0-0.5	6214531	N	3060A	7199	III
23-Feb-2011	SL-018-SA5A-SS-0.0-0.5	6214531	N	3550B	8081A	III
23-Feb-2011	SL-018-SA5A-SS-0.0-0.5	6214531	N	3550B	8082	III
23-Feb-2011	SL-018-SA5A-SS-0.0-0.5	6214531	N	3550B	8151A	III
23-Feb-2011	SL-018-SA5A-SS-0.0-0.5	6214531	N	3550B	8270C	III
23-Feb-2011	SL-018-SA5A-SS-0.0-0.5	6214531	N	3550B	8270C SIM	III
23-Feb-2011	SL-018-SA5A-SS-0.0-0.5	6214531	N	Gen Prep	9045M	III
23-Feb-2011	SL-018-SA5A-SS-0.0-0.5	6214531	N	METHOD	300.0	III
23-Feb-2011	SL-018-SA5A-SS-0.0-0.5	6214531	N	METHOD	314.0	III
23-Feb-2011	SL-018-SA5A-SS-0.0-0.5	6214531	N	METHOD	7471A	III
23-Feb-2011	SL-017-SA5A-SS-0.0-0.5	6214530	N	3050B	6010B	III
23-Feb-2011	SL-017-SA5A-SS-0.0-0.5	6214530	N	3050B	6020	III
23-Feb-2011	SL-017-SA5A-SS-0.0-0.5	6214530	N	3060A	7199	III
23-Feb-2011	SL-017-SA5A-SS-0.0-0.5	6214530	N	3550B	8081A	III
23-Feb-2011	SL-017-SA5A-SS-0.0-0.5	6214530	N	3550B	8082	III
23-Feb-2011	SL-017-SA5A-SS-0.0-0.5	6214530	N	3550B	8151A	III
23-Feb-2011	SL-017-SA5A-SS-0.0-0.5	6214530	N	3550B	8270C	III

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IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
23-Feb-2011	SL-017-SA5A-SS-0.0-0.5	6214530	N	3550B	8270C SIM	III
23-Feb-2011	SL-017-SA5A-SS-0.0-0.5	6214530	N	Gen Prep	9045M	III
23-Feb-2011	SL-017-SA5A-SS-0.0-0.5	6214530	N	METHOD	300.0	III
23-Feb-2011	SL-017-SA5A-SS-0.0-0.5	6214530	N	METHOD	314.0	III
23-Feb-2011	SL-017-SA5A-SS-0.0-0.5	6214530	N	METHOD	6850	III
23-Feb-2011	SL-017-SA5A-SS-0.0-0.5	6214530	N	METHOD	7471A	III
23-Feb-2011	DUP-04-SA5A-QC-022311	6214517	FD	3050B	6010B	III
23-Feb-2011	DUP-04-SA5A-QC-022311	6214517	FD	3050B	6020	III
23-Feb-2011	DUP-04-SA5A-QC-022311	6214517	FD	3060A	7199	III
23-Feb-2011	DUP-04-SA5A-QC-022311	6214517	FD	3550B	8081A	III
23-Feb-2011	DUP-04-SA5A-QC-022311	6214517	FD	3550B	8082	III
23-Feb-2011	DUP-04-SA5A-QC-022311	6214517	FD	3550B	8151A	III
23-Feb-2011	DUP-04-SA5A-QC-022311	6214517	FD	3550B	8270C	III
23-Feb-2011	DUP-04-SA5A-QC-022311	6214517	FD	3550B	8270C SIM	III
23-Feb-2011	DUP-04-SA5A-QC-022311	6214517	FD	Gen Prep	9045M	III
23-Feb-2011	DUP-04-SA5A-QC-022311	6214517	FD	METHOD	300.0	III
23-Feb-2011	DUP-04-SA5A-QC-022311	6214517	FD	METHOD	314.0	III
23-Feb-2011	DUP-04-SA5A-QC-022311	6214517	FD	METHOD	7471A	III
23-Feb-2011	SL-004-SA5A-SS-0.0-0.5	6214520	N	3050B	6010B	III
23-Feb-2011	SL-004-SA5A-SS-0.0-0.5	6214520	N	3050B	6020	III
23-Feb-2011	SL-004-SA5A-SS-0.0-0.5	6214520	N	3060A	7199	III
23-Feb-2011	SL-004-SA5A-SS-0.0-0.5	6214520	N	3550B	8081A	III
23-Feb-2011	SL-004-SA5A-SS-0.0-0.5	6214520	N	3550B	8082	III
23-Feb-2011	SL-004-SA5A-SS-0.0-0.5	6214520	N	3550B	8151A	III
23-Feb-2011	SL-004-SA5A-SS-0.0-0.5	6214520	N	3550B	8270C	III
23-Feb-2011	SL-004-SA5A-SS-0.0-0.5	6214520	N	3550B	8270C SIM	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
23-Feb-2011	SL-004-SA5A-SS-0.0-0.5	6214520	N	Gen Prep	9045M	III
23-Feb-2011	SL-004-SA5A-SS-0.0-0.5	6214520	N	METHOD	300.0	III
23-Feb-2011	SL-004-SA5A-SS-0.0-0.5	6214520	N	METHOD	314.0	III
23-Feb-2011	SL-004-SA5A-SS-0.0-0.5	6214520	N	METHOD	7471A	III
23-Feb-2011	SL-004-SA5A-SS-0.0-0.5MS	6214521	MS	3050B	6010B	III
23-Feb-2011	SL-004-SA5A-SS-0.0-0.5MS	6214521	MS	3050B	6020	III
23-Feb-2011	SL-004-SA5A-SS-0.0-0.5MS	6214521	MS	3060A	7199	III
23-Feb-2011	SL-004-SA5A-SS-0.0-0.5MS	6214521	MS	3550B	8081A	III
23-Feb-2011	SL-004-SA5A-SS-0.0-0.5MS	6214521	MS	3550B	8082	III
23-Feb-2011	SL-004-SA5A-SS-0.0-0.5MS	6214521	MS	3550B	8151A	III
23-Feb-2011	SL-004-SA5A-SS-0.0-0.5MS	6214521	MS	3550B	8270C	III
23-Feb-2011	SL-004-SA5A-SS-0.0-0.5MS	6214521	MS	3550B	8270C SIM	III
23-Feb-2011	SL-004-SA5A-SS-0.0-0.5MS	6214521	MS	METHOD	300.0	III
23-Feb-2011	SL-004-SA5A-SS-0.0-0.5MS	6214521	MS	METHOD	314.0	III
23-Feb-2011	SL-004-SA5A-SS-0.0-0.5MS	6214521	MS	METHOD	7471A	III
23-Feb-2011	SL-004-SA5A-SS-0.0-0.5MSD	6214522	MSD	3050B	6010B	III
23-Feb-2011	SL-004-SA5A-SS-0.0-0.5MSD	6214522	MSD	3050B	6020	III
23-Feb-2011	SL-004-SA5A-SS-0.0-0.5MSD	6214522	MSD	3550B	8081A	III
23-Feb-2011	SL-004-SA5A-SS-0.0-0.5MSD	6214522	MSD	3550B	8082	III
23-Feb-2011	SL-004-SA5A-SS-0.0-0.5MSD	6214522	MSD	3550B	8151A	III
23-Feb-2011	SL-004-SA5A-SS-0.0-0.5MSD	6214522	MSD	3550B	8270C	III
23-Feb-2011	SL-004-SA5A-SS-0.0-0.5MSD	6214522	MSD	3550B	8270C SIM	III
23-Feb-2011	SL-004-SA5A-SS-0.0-0.5MSD	6214522	MSD	METHOD	7471A	III
23-Feb-2011	SL-004-SA5A-SS-0.0-0.5DUP	6214523	DUP	3050B	6010B	III
23-Feb-2011	SL-004-SA5A-SS-0.0-0.5DUP	6214523	DUP	3050B	6020	III
23-Feb-2011	SL-004-SA5A-SS-0.0-0.5DUP	6214523	DUP	3060A	7199	III

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IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
23-Feb-2011	SL-004-SA5A-SS-0.0-0.5DUP	6214523	DUP	Gen Prep	9045M	III
23-Feb-2011	SL-004-SA5A-SS-0.0-0.5DUP	6214523	DUP	METHOD	300.0	III
23-Feb-2011	SL-004-SA5A-SS-0.0-0.5DUP	6214523	DUP	METHOD	314.0	III
23-Feb-2011	SL-004-SA5A-SS-0.0-0.5DUP	6214523	DUP	METHOD	7471A	III
23-Feb-2011	SL-001-SA5A-SS-0.0-0.5	6214518	N	3050B	6010B	III
23-Feb-2011	SL-001-SA5A-SS-0.0-0.5	6214518	N	3050B	6020	III
23-Feb-2011	SL-001-SA5A-SS-0.0-0.5	6214518	N	3060A	7199	III
23-Feb-2011	SL-001-SA5A-SS-0.0-0.5	6214518	N	3550B	8081A	III
23-Feb-2011	SL-001-SA5A-SS-0.0-0.5	6214518	N	3550B	8082	III
23-Feb-2011	SL-001-SA5A-SS-0.0-0.5	6214518	N	3550B	8151A	III
23-Feb-2011	SL-001-SA5A-SS-0.0-0.5	6214518	N	3550B	8270C	III
23-Feb-2011	SL-001-SA5A-SS-0.0-0.5	6214518	N	3550B	8270C SIM	III
23-Feb-2011	SL-001-SA5A-SS-0.0-0.5	6214518	N	Gen Prep	9045M	III
23-Feb-2011	SL-001-SA5A-SS-0.0-0.5	6214518	N	METHOD	300.0	III
23-Feb-2011	SL-001-SA5A-SS-0.0-0.5	6214518	N	METHOD	314.0	III
23-Feb-2011	SL-001-SA5A-SS-0.0-0.5	6214518	N	METHOD	6850	III
23-Feb-2011	SL-001-SA5A-SS-0.0-0.5	6214518	N	METHOD	7471A	III
23-Feb-2011	SL-002-SA5A-SS-0.0-0.5	6214519	N	3050B	6010B	III
23-Feb-2011	SL-002-SA5A-SS-0.0-0.5	6214519	N	3050B	6020	III
23-Feb-2011	SL-002-SA5A-SS-0.0-0.5	6214519	N	3060A	7199	III
23-Feb-2011	SL-002-SA5A-SS-0.0-0.5	6214519	N	3550B	8081A	III
23-Feb-2011	SL-002-SA5A-SS-0.0-0.5	6214519	N	3550B	8082	III
23-Feb-2011	SL-002-SA5A-SS-0.0-0.5	6214519	N	3550B	8151A	III
23-Feb-2011	SL-002-SA5A-SS-0.0-0.5	6214519	N	3550B	8270C	III
23-Feb-2011	SL-002-SA5A-SS-0.0-0.5	6214519	N	3550B	8270C SIM	III
23-Feb-2011	SL-002-SA5A-SS-0.0-0.5	6214519	N	Gen Prep	9045M	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
23-Feb-2011	SL-002-SA5A-SS-0.0-0.5	6214519	N	METHOD	300.0	III
23-Feb-2011	SL-002-SA5A-SS-0.0-0.5	6214519	N	METHOD	314.0	III
23-Feb-2011	SL-002-SA5A-SS-0.0-0.5	6214519	N	METHOD	7471A	III
23-Feb-2011	EB01-SA5A-022311	6214533	EB	3005A	6010B	III
23-Feb-2011	EB01-SA5A-022311	6214533	EB	3020A	6020	III
23-Feb-2011	EB01-SA5A-022311	6214533	EB	3510C	8081A	III
23-Feb-2011	EB01-SA5A-022311	6214533	EB	3510C	8082	III
23-Feb-2011	EB01-SA5A-022311	6214533	EB	3510C	8270C	III
23-Feb-2011	EB01-SA5A-022311	6214533	EB	3510C	8270C SIM	III
23-Feb-2011	EB01-SA5A-022311	6214533	EB	Gen Prep	300.0	III
23-Feb-2011	EB01-SA5A-022311	6214533	EB	Gen Prep	314.0	III
23-Feb-2011	EB01-SA5A-022311	6214533	EB	Gen Prep	7199	III
23-Feb-2011	EB01-SA5A-022311	6214533	EB	METHOD	7470A	III
23-Feb-2011	EB01-SA5A-022311	6214533	EB	METHOD	8151A	III

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IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE090 | Laboratory: LL

EDD Filename: DE090_v1 | eQAPP Name: CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: SL-004-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 1:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.0	J	0.89	MDL	1.1	PQL	mg/Kg	J	Z, Q

Sample ID: SL-006-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 11:14:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.9		0.90	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-009-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 9:25:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.3		0.90	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-010-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 9:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.4		0.88	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-012-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 10:27:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	4.6		0.95	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-013-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 9:49:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	3.5		0.90	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-016-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 8:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.2		0.91	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-017-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 1:20:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.4		0.89	MDL	1.1	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE090 **Laboratory: LL**

EDD Filename: DE090_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: GENCHEM

Method: 300.0 **Matrix: SO**

Sample ID: SL-018-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 1:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.3		0.89	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-019-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 10:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.7		1.0	MDL	1.3	PQL	mg/Kg	J	Q

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: DUP-04-SA5A-QC-022311 *Collected:* 2/23/2011 1:35:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.79	J	1.06	MDL	10.6	PQL	mg/Kg	U	B
Zirconium	2.36	J	0.894	MDL	5.32	PQL	mg/Kg	J	Z

Sample ID: DUP-04-SA5A-QC-022311 *Collected:* 2/23/2011 1:35:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.26	J	0.948	MDL	5.32	PQL	mg/Kg	J	Z
CALCIUM	3280		6.53	MDL	21.3	PQL	mg/Kg	J	E
POTASSIUM	3130		19.2	MDL	53.2	PQL	mg/Kg	J	Q
SODIUM	86.1	J	39.7	MDL	106	PQL	mg/Kg	J	Z

Sample ID: SL-001-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 1:53:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.89	J	1.09	MDL	10.9	PQL	mg/Kg	U	B
Zirconium	2.05	J	0.913	MDL	5.43	PQL	mg/Kg	J	Z

Sample ID: SL-001-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 1:53:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.96	J	0.967	MDL	5.43	PQL	mg/Kg	J	Z
CALCIUM	2920		6.66	MDL	21.7	PQL	mg/Kg	J	E

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE090 **Laboratory: LL**

EDD Filename: DE090_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6010B** ***Matrix:*** **SO**

Sample ID: **SL-001-SA5A-SS-0.0-0.5** ***Collected:*** **2/23/2011 1:53:00** ***Analysis Type:*** **REA2** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	3280		19.6	MDL	54.3	PQL	mg/Kg	J	Q
SODIUM	81.6	J	40.5	MDL	109	PQL	mg/Kg	J	Z

Sample ID: **SL-002-SA5A-SS-0.0-0.5** ***Collected:*** **2/23/2011 2:25:00** ***Analysis Type:*** **REA** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.85	J	1.07	MDL	10.7	PQL	mg/Kg	U	B
Zirconium	1.41	J	0.899	MDL	5.35	PQL	mg/Kg	J	Z

Sample ID: **SL-002-SA5A-SS-0.0-0.5** ***Collected:*** **2/23/2011 2:25:00** ***Analysis Type:*** **REA2** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.97	J	0.953	MDL	5.35	PQL	mg/Kg	J	Z
CALCIUM	5350		6.56	MDL	21.4	PQL	mg/Kg	J	E
POTASSIUM	3230		19.3	MDL	53.5	PQL	mg/Kg	J	Q

Sample ID: **SL-004-SA5A-SS-0.0-0.5** ***Collected:*** **2/23/2011 1:35:00** ***Analysis Type:*** **REA** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.96	J	1.10	MDL	11.0	PQL	mg/Kg	U	B
Zirconium	1.96	J	0.921	MDL	5.48	PQL	mg/Kg	J	Z

Sample ID: **SL-004-SA5A-SS-0.0-0.5** ***Collected:*** **2/23/2011 1:35:00** ***Analysis Type:*** **REA2** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.61	J	0.976	MDL	5.48	PQL	mg/Kg	J	Z
CALCIUM	3370		6.72	MDL	21.9	PQL	mg/Kg	J	E
POTASSIUM	3280		19.7	MDL	54.8	PQL	mg/Kg	J	Q
SODIUM	91.4	J	40.9	MDL	110	PQL	mg/Kg	J	Z

Sample ID: **SL-006-SA5A-SS-0.0-0.5** ***Collected:*** **2/23/2011 11:14:00** ***Analysis Type:*** **REA** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	3.05	J	1.10	MDL	11.0	PQL	mg/Kg	U	B
Zirconium	1.80	J	0.923	MDL	5.49	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE090 **Laboratory: LL**

EDD Filename: DE090_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6010B** ***Matrix:*** **SO**

Sample ID: **SL-006-SA5A-SS-0.0-0.5** ***Collected:*** **2/23/2011 11:14:00** ***Analysis Type:*** **REA2** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.28	J	0.977	MDL	5.49	PQL	mg/Kg	J	Z
CALCIUM	3050		6.73	MDL	22.0	PQL	mg/Kg	J	E
POTASSIUM	2170		19.8	MDL	54.9	PQL	mg/Kg	J	Q

Sample ID: **SL-009-SA5A-SS-0.0-0.5** ***Collected:*** **2/23/2011 9:25:00** ***Analysis Type:*** **REA** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	3.04	J	1.10	MDL	11.0	PQL	mg/Kg	U	B
Zirconium	2.79	J	0.927	MDL	5.52	PQL	mg/Kg	J	Z

Sample ID: **SL-009-SA5A-SS-0.0-0.5** ***Collected:*** **2/23/2011 9:25:00** ***Analysis Type:*** **REA2** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.41	J	0.983	MDL	5.52	PQL	mg/Kg	J	Z
CALCIUM	3060		6.77	MDL	22.1	PQL	mg/Kg	J	E
POTASSIUM	3110		19.9	MDL	55.2	PQL	mg/Kg	J	Q
SODIUM	80.1	J	41.2	MDL	110	PQL	mg/Kg	J	Z

Sample ID: **SL-010-SA5A-SS-0.0-0.5** ***Collected:*** **2/23/2011 9:05:00** ***Analysis Type:*** **REA** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	3.16	J	1.06	MDL	10.6	PQL	mg/Kg	U	B
Zirconium	2.02	J	0.893	MDL	5.32	PQL	mg/Kg	J	Z

Sample ID: **SL-010-SA5A-SS-0.0-0.5** ***Collected:*** **2/23/2011 9:05:00** ***Analysis Type:*** **REA2** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.09	J	0.947	MDL	5.32	PQL	mg/Kg	J	Z
CALCIUM	2640		6.52	MDL	21.3	PQL	mg/Kg	J	E
POTASSIUM	2060		19.1	MDL	53.2	PQL	mg/Kg	J	Q
SODIUM	80.0	J	39.7	MDL	106	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE090 **Laboratory: LL**

EDD Filename: DE090_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-012-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 10:27:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	3.35	J	1.18	MDL	11.8	PQL	mg/Kg	U	B
Zirconium	4.42	J	0.988	MDL	5.88	PQL	mg/Kg	J	Z

Sample ID: SL-012-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 10:27:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	16300		7.21	MDL	23.5	PQL	mg/Kg	J	E
POTASSIUM	3440		21.2	MDL	58.8	PQL	mg/Kg	J	Q

Sample ID: SL-013-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 9:49:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	3.13	J	1.12	MDL	11.2	PQL	mg/Kg	U	B
Zirconium	2.27	J	0.945	MDL	5.62	PQL	mg/Kg	J	Z

Sample ID: SL-013-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 9:49:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.52	J	1.00	MDL	5.62	PQL	mg/Kg	J	Z
CALCIUM	2620		6.90	MDL	22.5	PQL	mg/Kg	J	E
POTASSIUM	2310		20.2	MDL	56.2	PQL	mg/Kg	J	Q

Sample ID: SL-016-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 8:35:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	3.68	J	1.12	MDL	11.2	PQL	mg/Kg	U	B
Zirconium	2.32	J	0.944	MDL	5.62	PQL	mg/Kg	J	Z

Sample ID: SL-016-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 8:35:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.46	J	1.00	MDL	5.62	PQL	mg/Kg	J	Z
CALCIUM	2270		6.89	MDL	22.5	PQL	mg/Kg	J	E
POTASSIUM	2760		20.2	MDL	56.2	PQL	mg/Kg	J	Q
SODIUM	81.7	J	41.9	MDL	112	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE090 | Laboratory: LL

EDD Filename: DE090_v1 | eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-017-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 1:20:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	3.09	J	1.10	MDL	11.0	PQL	mg/Kg	U	B
Zirconium	2.00	J	0.923	MDL	5.49	PQL	mg/Kg	J	Z

Sample ID: SL-017-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 1:20:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.52	J	0.978	MDL	5.49	PQL	mg/Kg	J	Z
CALCIUM	3150		6.74	MDL	22.0	PQL	mg/Kg	J	E
POTASSIUM	3280		19.8	MDL	54.9	PQL	mg/Kg	J	Q
SODIUM	77.2	J	41.0	MDL	110	PQL	mg/Kg	J	Z

Sample ID: SL-018-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 1:05:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.96	J	1.09	MDL	10.9	PQL	mg/Kg	U	B
Zirconium	1.97	J	0.916	MDL	5.45	PQL	mg/Kg	J	Z

Sample ID: SL-018-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 1:05:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.51	J	0.971	MDL	5.45	PQL	mg/Kg	J	Z
CALCIUM	3170		6.68	MDL	21.8	PQL	mg/Kg	J	E
POTASSIUM	3130		19.6	MDL	54.5	PQL	mg/Kg	J	Q
SODIUM	80.8	J	40.7	MDL	109	PQL	mg/Kg	J	Z

Sample ID: SL-019-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 10:10:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	3.31	J	1.20	MDL	12.0	PQL	mg/Kg	U	B
Zirconium	2.01	J	1.01	MDL	6.02	PQL	mg/Kg	J	Z

Sample ID: SL-019-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 10:10:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.74	J	1.07	MDL	6.02	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE090 | Laboratory: LL

EDD Filename: DE090_v1 | eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-019-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 10:10:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	3210		7.38	MDL	24.1	PQL	mg/Kg	J	E
POTASSIUM	2370		21.7	MDL	60.2	PQL	mg/Kg	J	Q
SODIUM	88.3	J	44.9	MDL	120	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: DUP-04-SA5A-QC-022311 *Collected:* 2/23/2011 1:35:00 *Analysis Type:* REA10 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	7.36		0.0724	MDL	0.439	PQL	mg/Kg	J	A

Sample ID: DUP-04-SA5A-QC-022311 *Collected:* 2/23/2011 1:35:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.133	J	0.0651	MDL	0.217	PQL	mg/Kg	J	Z, Q
CHROMIUM	15.9		0.130	MDL	0.434	PQL	mg/Kg	J	A
LEAD	8.66		0.0113	MDL	0.217	PQL	mg/Kg	J	Q, A
SILVER	0.0302	J	0.0130	MDL	0.109	PQL	mg/Kg	J	Z
ZINC	82.8		0.608	MDL	3.26	PQL	mg/Kg	J	A

Sample ID: DUP-04-SA5A-QC-022311 *Collected:* 2/23/2011 1:35:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COBALT	5.15		0.0217	MDL	0.109	PQL	mg/Kg	J	A

Sample ID: DUP-04-SA5A-QC-022311 *Collected:* 2/23/2011 1:35:00 *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.107	J	0.0434	MDL	0.434	PQL	mg/Kg	J	Z

Sample ID: DUP-04-SA5A-QC-022311 *Collected:* 2/23/2011 1:35:00 *Analysis Type:* REA9 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	99.6		0.117	MDL	0.434	PQL	mg/Kg	J	A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE090 **Laboratory: LL**

EDD Filename: DE090_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6020** ***Matrix:*** **SO**

Sample ID: **SL-001-SA5A-SS-0.0-0.5** ***Collected:*** **2/23/2011 1:53:00** ***Analysis Type:*** **REA10** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	11.4		0.0710	MDL	0.431	PQL	mg/Kg	J	A

Sample ID: **SL-001-SA5A-SS-0.0-0.5** ***Collected:*** **2/23/2011 1:53:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.232		0.0659	MDL	0.220	PQL	mg/Kg	J	Q
CHROMIUM	16.3		0.132	MDL	0.439	PQL	mg/Kg	J	A
LEAD	10.1		0.0114	MDL	0.220	PQL	mg/Kg	J	Q, A
SILVER	0.0393	J	0.0132	MDL	0.110	PQL	mg/Kg	J	Z
ZINC	175		0.615	MDL	3.29	PQL	mg/Kg	J	A

Sample ID: **SL-001-SA5A-SS-0.0-0.5** ***Collected:*** **2/23/2011 1:53:00** ***Analysis Type:*** **REA5** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COBALT	4.96		0.0220	MDL	0.110	PQL	mg/Kg	J	A

Sample ID: **SL-001-SA5A-SS-0.0-0.5** ***Collected:*** **2/23/2011 1:53:00** ***Analysis Type:*** **REA7** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.102	J	0.0439	MDL	0.439	PQL	mg/Kg	J	Z

Sample ID: **SL-001-SA5A-SS-0.0-0.5** ***Collected:*** **2/23/2011 1:53:00** ***Analysis Type:*** **REA9** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	108		0.119	MDL	0.439	PQL	mg/Kg	J	A

Sample ID: **SL-002-SA5A-SS-0.0-0.5** ***Collected:*** **2/23/2011 2:25:00** ***Analysis Type:*** **REA10** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	9.28		0.0693	MDL	0.420	PQL	mg/Kg	J	A

Sample ID: **SL-002-SA5A-SS-0.0-0.5** ***Collected:*** **2/23/2011 2:25:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.141	J	0.0655	MDL	0.218	PQL	mg/Kg	J	Z, Q
CHROMIUM	12.6		0.131	MDL	0.437	PQL	mg/Kg	J	A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE090 **Laboratory: LL**

EDD Filename: DE090_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-002-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 2:25:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	4.60		0.0114	MDL	0.218	PQL	mg/Kg	J	Q, A
SILVER	0.0212	J	0.0131	MDL	0.109	PQL	mg/Kg	J	Z
ZINC	85.9		0.611	MDL	3.27	PQL	mg/Kg	J	A

Sample ID: SL-002-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 2:25:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COBALT	4.74		0.0218	MDL	0.109	PQL	mg/Kg	J	A

Sample ID: SL-002-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 2:25:00 *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0561	J	0.0437	MDL	0.437	PQL	mg/Kg	J	Z

Sample ID: SL-002-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 2:25:00 *Analysis Type:* REA9 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	126		0.118	MDL	0.437	PQL	mg/Kg	J	A

Sample ID: SL-004-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 1:35:00 *Analysis Type:* REA10 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	7.78		0.0724	MDL	0.439	PQL	mg/Kg	J	A

Sample ID: SL-004-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 1:35:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.178	J	0.0664	MDL	0.221	PQL	mg/Kg	J	Z, Q
CHROMIUM	17.0		0.133	MDL	0.443	PQL	mg/Kg	J	A
LEAD	7.09		0.0115	MDL	0.221	PQL	mg/Kg	J	Q, A
SILVER	0.0318	J	0.0133	MDL	0.111	PQL	mg/Kg	J	Z
ZINC	86.1		0.620	MDL	3.32	PQL	mg/Kg	J	A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE090 **Laboratory: LL**

EDD Filename: DE090_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6020** ***Matrix:*** **SO**

Sample ID: **SL-004-SA5A-SS-0.0-0.5** ***Collected:*** **2/23/2011 1:35:00** ***Analysis Type:*** **REA5** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COBALT	5.10		0.0221	MDL	0.111	PQL	mg/Kg	J	A

Sample ID: **SL-004-SA5A-SS-0.0-0.5** ***Collected:*** **2/23/2011 1:35:00** ***Analysis Type:*** **REA7** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0750	J	0.0443	MDL	0.443	PQL	mg/Kg	J	Z

Sample ID: **SL-004-SA5A-SS-0.0-0.5** ***Collected:*** **2/23/2011 1:35:00** ***Analysis Type:*** **REA9** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	109		0.120	MDL	0.443	PQL	mg/Kg	J	A

Sample ID: **SL-006-SA5A-SS-0.0-0.5** ***Collected:*** **2/23/2011 11:14:00** ***Analysis Type:*** **REA10** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	6.46		0.0725	MDL	0.439	PQL	mg/Kg	J	A

Sample ID: **SL-006-SA5A-SS-0.0-0.5** ***Collected:*** **2/23/2011 11:14:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.154	J	0.0672	MDL	0.224	PQL	mg/Kg	J	Z, Q
CADMIUM	0.161		0.0448	MDL	0.112	PQL	mg/Kg	U	B
CHROMIUM	16.8		0.134	MDL	0.448	PQL	mg/Kg	J	A
LEAD	5.11		0.0116	MDL	0.224	PQL	mg/Kg	J	Q, A
SILVER	0.0430	J	0.0134	MDL	0.112	PQL	mg/Kg	J	Z
ZINC	57.2		0.627	MDL	3.36	PQL	mg/Kg	J	A

Sample ID: **SL-006-SA5A-SS-0.0-0.5** ***Collected:*** **2/23/2011 11:14:00** ***Analysis Type:*** **REA5** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COBALT	4.72		0.0224	MDL	0.112	PQL	mg/Kg	J	A

Sample ID: **SL-006-SA5A-SS-0.0-0.5** ***Collected:*** **2/23/2011 11:14:00** ***Analysis Type:*** **REA7** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0557	J	0.0448	MDL	0.448	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE090 | Laboratory: LL

EDD Filename: DE090_v1 | eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-006-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 11:14:00 *Analysis Type:* REA9 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	101		0.121	MDL	0.448	PQL	mg/Kg	J	A

Sample ID: SL-009-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 9:25:00 *Analysis Type:* REA10 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	8.80		0.0715	MDL	0.433	PQL	mg/Kg	J	A

Sample ID: SL-009-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 9:25:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	1.19		0.0656	MDL	0.219	PQL	mg/Kg	J	Q
CHROMIUM	16.4		0.131	MDL	0.437	PQL	mg/Kg	J	A
LEAD	7.03		0.0114	MDL	0.219	PQL	mg/Kg	J	Q, A
SILVER	0.0368	J	0.0131	MDL	0.109	PQL	mg/Kg	J	Z

Sample ID: SL-009-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 9:25:00 *Analysis Type:* REA5 *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ZINC	309		1.53	MDL	8.20	PQL	mg/Kg	J	A

Sample ID: SL-009-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 9:25:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COBALT	4.93		0.0219	MDL	0.109	PQL	mg/Kg	J	A

Sample ID: SL-009-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 9:25:00 *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0853	J	0.0437	MDL	0.437	PQL	mg/Kg	J	Z

Sample ID: SL-009-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 9:25:00 *Analysis Type:* REA9 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	101		0.118	MDL	0.437	PQL	mg/Kg	J	A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE090 **Laboratory: LL**

EDD Filename: DE090_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-010-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 9:05:00 *Analysis Type:* REA10 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	6.80		0.0716	MDL	0.434	PQL	mg/Kg	J	A

Sample ID: SL-010-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 9:05:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.195	J	0.0651	MDL	0.217	PQL	mg/Kg	J	Z, Q
CADMIUM	0.142		0.0434	MDL	0.108	PQL	mg/Kg	U	B
CHROMIUM	21.1		0.130	MDL	0.434	PQL	mg/Kg	J	A
LEAD	5.29		0.0113	MDL	0.217	PQL	mg/Kg	J	Q, A
SILVER	0.0181	J	0.0130	MDL	0.108	PQL	mg/Kg	J	Z
ZINC	55.9		0.607	MDL	3.25	PQL	mg/Kg	J	A

Sample ID: SL-010-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 9:05:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COBALT	5.53		0.0217	MDL	0.108	PQL	mg/Kg	J	A

Sample ID: SL-010-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 9:05:00 *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0768	J	0.0434	MDL	0.434	PQL	mg/Kg	J	Z

Sample ID: SL-010-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 9:05:00 *Analysis Type:* REA9 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	80.6		0.117	MDL	0.434	PQL	mg/Kg	J	A

Sample ID: SL-012-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 10:27:00 *Analysis Type:* REA10 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	10.1		0.0776	MDL	0.470	PQL	mg/Kg	J	A

Sample ID: SL-012-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 10:27:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.208	J	0.0692	MDL	0.231	PQL	mg/Kg	J	Z, Q

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE090 **Laboratory: LL**

EDD Filename: DE090_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-012-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 10:27:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHROMIUM	27.3		0.138	MDL	0.461	PQL	mg/Kg	J	A
LEAD	8.18		0.0120	MDL	0.231	PQL	mg/Kg	J	Q, A
SILVER	0.0404	J	0.0138	MDL	0.115	PQL	mg/Kg	J	Z
ZINC	89.1		0.646	MDL	3.46	PQL	mg/Kg	J	A

Sample ID: SL-012-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 10:27:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COBALT	6.78		0.0231	MDL	0.115	PQL	mg/Kg	J	A

Sample ID: SL-012-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 10:27:00 *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.110	J	0.0461	MDL	0.461	PQL	mg/Kg	J	Z

Sample ID: SL-012-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 10:27:00 *Analysis Type:* REA9 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	96.4		0.125	MDL	0.461	PQL	mg/Kg	J	A

Sample ID: SL-013-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 9:49:00 *Analysis Type:* REA10 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	6.73		0.0728	MDL	0.441	PQL	mg/Kg	J	A

Sample ID: SL-013-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 9:49:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.122	J	0.0662	MDL	0.221	PQL	mg/Kg	J	Z, Q
CADMIUM	0.193		0.0441	MDL	0.110	PQL	mg/Kg	U	B
CHROMIUM	17.1		0.132	MDL	0.441	PQL	mg/Kg	J	A
LEAD	4.85		0.0115	MDL	0.221	PQL	mg/Kg	J	Q, A
SILVER	0.0395	J	0.0132	MDL	0.110	PQL	mg/Kg	J	Z
ZINC	57.9		0.618	MDL	3.31	PQL	mg/Kg	J	A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE090 **Laboratory: LL**

EDD Filename: DE090_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6020** ***Matrix:*** **SO**

Sample ID: **SL-013-SA5A-SS-0.0-0.5** ***Collected:*** **2/23/2011 9:49:00** ***Analysis Type:*** **REA5** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COBALT	4.76		0.0221	MDL	0.110	PQL	mg/Kg	J	A

Sample ID: **SL-013-SA5A-SS-0.0-0.5** ***Collected:*** **2/23/2011 9:49:00** ***Analysis Type:*** **REA7** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0544	J	0.0441	MDL	0.441	PQL	mg/Kg	J	Z

Sample ID: **SL-013-SA5A-SS-0.0-0.5** ***Collected:*** **2/23/2011 9:49:00** ***Analysis Type:*** **REA9** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	100		0.119	MDL	0.441	PQL	mg/Kg	J	A

Sample ID: **SL-016-SA5A-SS-0.0-0.5** ***Collected:*** **2/23/2011 8:35:00** ***Analysis Type:*** **REA10** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	13.8		0.0749	MDL	0.454	PQL	mg/Kg	J	A

Sample ID: **SL-016-SA5A-SS-0.0-0.5** ***Collected:*** **2/23/2011 8:35:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.139	J	0.0674	MDL	0.225	PQL	mg/Kg	J	Z, Q
CHROMIUM	18.4		0.135	MDL	0.450	PQL	mg/Kg	J	A
LEAD	6.41		0.0117	MDL	0.225	PQL	mg/Kg	J	Q, A
SILVER	0.0548	J	0.0135	MDL	0.112	PQL	mg/Kg	J	Z

Sample ID: **SL-016-SA5A-SS-0.0-0.5** ***Collected:*** **2/23/2011 8:35:00** ***Analysis Type:*** **REA5** ***Dilution:*** **5**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ZINC	273		1.57	MDL	8.43	PQL	mg/Kg	J	A

Sample ID: **SL-016-SA5A-SS-0.0-0.5** ***Collected:*** **2/23/2011 8:35:00** ***Analysis Type:*** **REA6** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COBALT	4.57		0.0225	MDL	0.112	PQL	mg/Kg	J	A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE090 **Laboratory: LL**

EDD Filename: DE090_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 ***Matrix:*** SO

Sample ID: SL-016-SA5A-SS-0.0-0.5 ***Collected:*** 2/23/2011 8:35:00 ***Analysis Type:*** REA7 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.125	J	0.0450	MDL	0.450	PQL	mg/Kg	J	Z

Sample ID: SL-016-SA5A-SS-0.0-0.5 ***Collected:*** 2/23/2011 8:35:00 ***Analysis Type:*** REA9 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	82.8		0.121	MDL	0.450	PQL	mg/Kg	J	A

Sample ID: SL-017-SA5A-SS-0.0-0.5 ***Collected:*** 2/23/2011 1:20:00 ***Analysis Type:*** REA10 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	11.6		0.0733	MDL	0.444	PQL	mg/Kg	J	A

Sample ID: SL-017-SA5A-SS-0.0-0.5 ***Collected:*** 2/23/2011 1:20:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.135	J	0.0640	MDL	0.213	PQL	mg/Kg	J	Z, Q
CHROMIUM	16.0		0.128	MDL	0.427	PQL	mg/Kg	J	A
LEAD	7.11		0.0111	MDL	0.213	PQL	mg/Kg	J	Q, A
SILVER	0.0251	J	0.0128	MDL	0.107	PQL	mg/Kg	J	Z
ZINC	99.2		0.598	MDL	3.20	PQL	mg/Kg	J	A

Sample ID: SL-017-SA5A-SS-0.0-0.5 ***Collected:*** 2/23/2011 1:20:00 ***Analysis Type:*** REA5 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COBALT	5.61		0.0213	MDL	0.107	PQL	mg/Kg	J	A

Sample ID: SL-017-SA5A-SS-0.0-0.5 ***Collected:*** 2/23/2011 1:20:00 ***Analysis Type:*** REA7 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0919	J	0.0427	MDL	0.427	PQL	mg/Kg	J	Z

Sample ID: SL-017-SA5A-SS-0.0-0.5 ***Collected:*** 2/23/2011 1:20:00 ***Analysis Type:*** REA9 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	107		0.115	MDL	0.427	PQL	mg/Kg	J	A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE090 **Laboratory: LL**

EDD Filename: DE090_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-018-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 1:05:00 *Analysis Type:* REA10 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	7.57		0.0727	MDL	0.441	PQL	mg/Kg	J	A

Sample ID: SL-018-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 1:05:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.183	J	0.0648	MDL	0.216	PQL	mg/Kg	J	Z, Q
CADMIUM	0.275		0.0432	MDL	0.108	PQL	mg/Kg	U	B
CHROMIUM	15.8		0.130	MDL	0.432	PQL	mg/Kg	J	A
LEAD	6.09		0.0112	MDL	0.216	PQL	mg/Kg	J	Q, A
SILVER	0.0342	J	0.0130	MDL	0.108	PQL	mg/Kg	J	Z
ZINC	81.9		0.605	MDL	3.24	PQL	mg/Kg	J	A

Sample ID: SL-018-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 1:05:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COBALT	4.79		0.0216	MDL	0.108	PQL	mg/Kg	J	A

Sample ID: SL-018-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 1:05:00 *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0661	J	0.0432	MDL	0.432	PQL	mg/Kg	J	Z

Sample ID: SL-018-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 1:05:00 *Analysis Type:* REA9 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	99.2		0.117	MDL	0.432	PQL	mg/Kg	J	A

Sample ID: SL-019-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 10:10:00 *Analysis Type:* REA10 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	8.74		0.0802	MDL	0.486	PQL	mg/Kg	J	A

Sample ID: SL-019-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 10:10:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.172	J	0.0729	MDL	0.243	PQL	mg/Kg	J	Z, Q

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE090 **Laboratory: LL**

EDD Filename: DE090_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-019-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 10:10:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHROMIUM	23.0		0.146	MDL	0.486	PQL	mg/Kg	J	A
LEAD	9.45		0.0126	MDL	0.243	PQL	mg/Kg	J	Q, A
SILVER	0.0512	J	0.0146	MDL	0.122	PQL	mg/Kg	J	Z
ZINC	125		0.680	MDL	3.65	PQL	mg/Kg	J	A

Sample ID: SL-019-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 10:10:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.259		0.0486	MDL	0.122	PQL	mg/Kg	U	B
COBALT	5.96		0.0243	MDL	0.122	PQL	mg/Kg	J	A

Sample ID: SL-019-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 10:10:00 *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0832	J	0.0486	MDL	0.486	PQL	mg/Kg	J	Z

Sample ID: SL-019-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 10:10:00 *Analysis Type:* REA9 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	108		0.131	MDL	0.486	PQL	mg/Kg	J	A

Method Category: METALS

Method: 7199 **Matrix: SO**

Sample ID: DUP-04-SA5A-QC-022311 *Collected:* 2/23/2011 1:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.31	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-001-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 1:53:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.32	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE090 **Laboratory: LL**

EDD Filename: DE090_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **7199** ***Matrix:*** **SO**

Sample ID: **SL-002-SA5A-SS-0.0-0.5** ***Collected:*** **2/23/2011 2:25:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.72	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: **SL-004-SA5A-SS-0.0-0.5** ***Collected:*** **2/23/2011 1:35:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.33	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: **SL-006-SA5A-SS-0.0-0.5** ***Collected:*** **2/23/2011 11:14:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.36	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: **SL-009-SA5A-SS-0.0-0.5** ***Collected:*** **2/23/2011 9:25:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.86	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: **SL-010-SA5A-SS-0.0-0.5** ***Collected:*** **2/23/2011 9:05:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.31	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: **SL-012-SA5A-SS-0.0-0.5** ***Collected:*** **2/23/2011 10:27:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.47	J	0.24	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: **SL-013-SA5A-SS-0.0-0.5** ***Collected:*** **2/23/2011 9:49:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.35	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: **SL-016-SA5A-SS-0.0-0.5** ***Collected:*** **2/23/2011 8:35:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.47	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE090 **Laboratory: LL**

EDD Filename: DE090_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 7199 **Matrix: SO**

Sample ID: SL-017-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 1:20:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.44	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-018-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 1:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.34	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 7471A **Matrix: SO**

Sample ID: DUP-04-SA5A-QC-022311 *Collected:* 2/23/2011 1:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0379	J	0.0030	MDL	0.105	PQL	mg/Kg	J	Z

Sample ID: SL-001-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 1:53:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0302	J	0.0031	MDL	0.107	PQL	mg/Kg	J	Z

Sample ID: SL-002-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 2:25:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0642	J	0.0031	MDL	0.109	PQL	mg/Kg	J	Z

Sample ID: SL-004-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 1:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0398	J	0.0031	MDL	0.107	PQL	mg/Kg	J	Z

Sample ID: SL-017-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 1:20:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0210	J	0.0031	MDL	0.108	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE090 **Laboratory: LL**

EDD Filename: DE090_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 7471A **Matrix: SO**

Sample ID: SL-018-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 1:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0235	J	0.0031	MDL	0.109	PQL	mg/Kg	J	Z

Sample ID: SL-019-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 10:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0164	J	0.0035	MDL	0.123	PQL	mg/Kg	J	Z

Method Category: SVOA

Method: 8081A **Matrix: SO**

Sample ID: DUP-04-SA5A-QC-022311 *Collected:* 2/23/2011 1:35:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	0.073	U	0.073	MDL	0.37	PQL	ug/Kg	UJ	S
4,4'-DDE	0.11	U	0.11	MDL	0.37	PQL	ug/Kg	UJ	S
4,4'-DDT	0.61	U	0.61	MDL	0.61	PQL	ug/Kg	UJ	S, FD
ALDRIN	0.073	U	0.073	MDL	0.18	PQL	ug/Kg	UJ	S
ALPHA-BHC	0.037	U	0.037	MDL	0.18	PQL	ug/Kg	UJ	S
BETA-BHC	0.066	U	0.066	MDL	0.18	PQL	ug/Kg	UJ	S
Chlordane	0.88	U	0.88	MDL	3.7	PQL	ug/Kg	UJ	S
DELTA-BHC	0.040	U	0.040	MDL	0.18	PQL	ug/Kg	UJ	S
DIELDRIN	0.19	U	0.19	MDL	0.37	PQL	ug/Kg	UJ	S
ENDOSULFAN I	0.048	U	0.048	MDL	0.18	PQL	ug/Kg	UJ	S
ENDOSULFAN II	0.073	U	0.073	MDL	0.37	PQL	ug/Kg	UJ	S
ENDOSULFAN SULFATE	0.073	U	0.073	MDL	0.37	PQL	ug/Kg	UJ	S
ENDRIN	0.073	U	0.073	MDL	0.37	PQL	ug/Kg	UJ	S
ENDRIN ALDEHYDE	0.25	U	0.25	MDL	0.37	PQL	ug/Kg	UJ	S
ENDRIN KETONE	0.073	U	0.073	MDL	0.37	PQL	ug/Kg	UJ	S
gamma-BHC (Lindane)	0.037	U	0.037	MDL	0.18	PQL	ug/Kg	UJ	S, FD
HEPTACHLOR	0.066	U	0.066	MDL	0.18	PQL	ug/Kg	UJ	S
HEPTACHLOR EPOXIDE	0.037	U	0.037	MDL	0.18	PQL	ug/Kg	UJ	S
METHOXYCHLOR	0.37	U	0.37	MDL	1.8	PQL	ug/Kg	UJ	S
MIREX	0.073	U	0.073	MDL	0.37	PQL	ug/Kg	UJ	S
TOXAPHENE	2.4	U	2.4	MDL	7.3	PQL	ug/Kg	UJ	S

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE090 | Laboratory: LL

EDD Filename: DE090_v1 | eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8081A **Matrix:** SO

Sample ID: SL-002-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 2:25:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEPTACHLOR	1.2		0.066	MDL	0.18	PQL	ug/Kg	J	S

Sample ID: SL-004-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 1:35:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDT	1.5		0.073	MDL	0.38	PQL	ug/Kg	J	Q, S, FD
ALDRIN	0.073	U	0.073	MDL	0.18	PQL	ug/Kg	R	Q
ENDRIN KETONE	0.073	U	0.073	MDL	0.38	PQL	ug/Kg	R	Q
gamma-BHC (Lindane)	0.052	J	0.038	MDL	0.18	PQL	ug/Kg	J	Z, S, FD

Sample ID: SL-006-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 11:14:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDE	0.095	J	0.074	MDL	0.38	PQL	ug/Kg	J	Z
DIELDRIN	0.19	J	0.074	MDL	0.38	PQL	ug/Kg	J	Z
ENDOSULFAN II	0.074	J	0.074	MDL	0.38	PQL	ug/Kg	J	Z

Sample ID: SL-009-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 9:25:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDE	0.11	J	0.074	MDL	0.38	PQL	ug/Kg	J	Z, S
4,4'-DDT	1.1		0.074	MDL	0.38	PQL	ug/Kg	J	S
DIELDRIN	0.57		0.074	MDL	0.38	PQL	ug/Kg	J	S
ENDRIN ALDEHYDE	0.41		0.074	MDL	0.38	PQL	ug/Kg	J	S
gamma-BHC (Lindane)	0.096	J	0.038	MDL	0.19	PQL	ug/Kg	J	Z, S
MIREX	0.53		0.074	MDL	0.38	PQL	ug/Kg	J	S

Sample ID: SL-010-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 9:05:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ENDRIN KETONE	0.29	J	0.073	MDL	0.38	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE090 **Laboratory: LL**

EDD Filename: DE090_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8081A **Matrix:** SO

Sample ID: SL-012-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 10:27:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDT	0.094	J	0.078	MDL	0.40	PQL	ug/Kg	J	Z
ENDOSULFAN SULFATE	0.14	J	0.078	MDL	0.40	PQL	ug/Kg	J	Z
ENDRIN ALDEHYDE	0.084	J	0.078	MDL	0.40	PQL	ug/Kg	J	Z

Sample ID: SL-013-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 9:49:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDT	0.082	J	0.074	MDL	0.38	PQL	ug/Kg	J	Z

Sample ID: SL-016-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 8:35:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	0.087	J	0.074	MDL	0.38	PQL	ug/Kg	J	Z
4,4'-DDT	0.14	J	0.074	MDL	0.38	PQL	ug/Kg	J	Z

Sample ID: SL-018-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 1:05:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	0.073	U	0.073	MDL	0.38	PQL	ug/Kg	UJ	S
4,4'-DDE	0.085	U	0.085	MDL	0.38	PQL	ug/Kg	UJ	S
4,4'-DDT	0.55	U	0.55	MDL	0.55	PQL	ug/Kg	UJ	S
ALDRIN	0.073	U	0.073	MDL	0.18	PQL	ug/Kg	UJ	S
ALPHA-BHC	0.038	U	0.038	MDL	0.18	PQL	ug/Kg	UJ	S
BETA-BHC	0.067	U	0.067	MDL	0.18	PQL	ug/Kg	UJ	S
Chlordane	0.89	U	0.89	MDL	3.8	PQL	ug/Kg	UJ	S
DELTA-BHC	0.040	U	0.040	MDL	0.18	PQL	ug/Kg	UJ	S
DIELDRIN	0.17	U	0.17	MDL	0.38	PQL	ug/Kg	UJ	S
ENDOSULFAN I	0.049	U	0.049	MDL	0.18	PQL	ug/Kg	UJ	S
ENDOSULFAN II	0.073	U	0.073	MDL	0.38	PQL	ug/Kg	UJ	S
ENDOSULFAN SULFATE	0.17	U	0.17	MDL	0.38	PQL	ug/Kg	UJ	S
ENDRIN	0.099	U	0.099	MDL	0.38	PQL	ug/Kg	UJ	S
ENDRIN ALDEHYDE	0.35	U	0.35	MDL	0.38	PQL	ug/Kg	UJ	S
ENDRIN KETONE	0.073	U	0.073	MDL	0.38	PQL	ug/Kg	UJ	S
gamma-BHC (Lindane)	0.038	U	0.038	MDL	0.18	PQL	ug/Kg	UJ	S
HEPTACHLOR	0.067	U	0.067	MDL	0.18	PQL	ug/Kg	UJ	S

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE090 **Laboratory: LL**

EDD Filename: DE090_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8081A **Matrix: SO**

Sample ID: SL-018-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 1:05:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEPTACHLOR EPOXIDE	0.038	U	0.038	MDL	0.18	PQL	ug/Kg	UJ	S
METHOXYCHLOR	0.38	U	0.38	MDL	1.8	PQL	ug/Kg	UJ	S
MIREX	0.42	U	0.42	MDL	0.42	PQL	ug/Kg	UJ	S
TOXAPHENE	2.4	U	2.4	MDL	7.3	PQL	ug/Kg	UJ	S

Sample ID: SL-019-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 10:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DELTA-BHC	0.046	J	0.045	MDL	0.21	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8082 **Matrix: AQ**

Sample ID: EB01-SA5A-022311 *Collected:* 2/23/2011 2:50:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1016	0.11	U	0.11	MDL	0.53	PQL	ug/L	UJ	S
AROCLOR 1221	0.11	U	0.11	MDL	0.53	PQL	ug/L	UJ	S
AROCLOR 1232	0.21	U	0.21	MDL	0.53	PQL	ug/L	UJ	S
AROCLOR 1242	0.11	U	0.11	MDL	0.53	PQL	ug/L	UJ	S
AROCLOR 1248	0.11	U	0.11	MDL	0.53	PQL	ug/L	UJ	S
AROCLOR 1254	0.11	U	0.11	MDL	0.53	PQL	ug/L	UJ	S
AROCLOR 1260	0.11	U	0.11	MDL	0.53	PQL	ug/L	UJ	S
Aroclor 1262	0.21	U	0.21	MDL	0.53	PQL	ug/L	UJ	S
Aroclor 1268	0.17	U	0.17	MDL	0.53	PQL	ug/L	UJ	S
Aroclor 5432	0.11	U	0.11	MDL	0.53	PQL	ug/L	UJ	S
Aroclor 5442	0.11	U	0.11	MDL	0.53	PQL	ug/L	UJ	S
Aroclor 5460	0.11	U	0.11	MDL	0.53	PQL	ug/L	UJ	S

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE090 **Laboratory: LL**

EDD Filename: DE090_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: DUP-04-SA5A-QC-022311 *Collected:* 2/23/2011 1:35:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	45		1.8	MDL	9.4	PQL	ug/Kg	J	FD
Aroclor 1268	47		1.8	MDL	9.4	PQL	ug/Kg	J	FD
Aroclor 5460	51		5.5	MDL	18	PQL	ug/Kg	J	FD

Sample ID: SL-001-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 1:53:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	31		0.37	MDL	1.9	PQL	ug/Kg	J	S
Aroclor 1268	12		0.37	MDL	1.9	PQL	ug/Kg	J	S
Aroclor 5460	12		1.1	MDL	3.7	PQL	ug/Kg	J	S

Sample ID: SL-002-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 2:25:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	20		0.36	MDL	1.9	PQL	ug/Kg	J	S
Aroclor 1268	11		0.36	MDL	1.9	PQL	ug/Kg	J	S
Aroclor 5460	14		1.1	MDL	3.6	PQL	ug/Kg	J	S

Sample ID: SL-004-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 1:35:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	12		0.37	MDL	1.9	PQL	ug/Kg	J	S, FD, Q
Aroclor 1268	7.8		0.37	MDL	1.9	PQL	ug/Kg	J	S, FD, Q
Aroclor 5460	8.2		1.1	MDL	3.7	PQL	ug/Kg	J	S, FD

Sample ID: SL-012-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 10:27:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	2.7		0.39	MDL	2.0	PQL	ug/Kg	J	S
Aroclor 1268	22		0.39	MDL	2.0	PQL	ug/Kg	J	S
Aroclor 5460	19		1.2	MDL	3.9	PQL	ug/Kg	J	S

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE090 **Laboratory: LL**

EDD Filename: DE090_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: SL-018-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 1:05:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1016	0.37	U	0.37	MDL	1.9	PQL	ug/Kg	UJ	S
AROCLOR 1221	0.37	U	0.37	MDL	1.9	PQL	ug/Kg	UJ	S
AROCLOR 1232	0.37	U	0.37	MDL	1.9	PQL	ug/Kg	UJ	S
AROCLOR 1242	0.37	U	0.37	MDL	1.9	PQL	ug/Kg	UJ	S
AROCLOR 1248	0.37	U	0.37	MDL	1.9	PQL	ug/Kg	UJ	S
AROCLOR 1254	8.4		0.37	MDL	1.9	PQL	ug/Kg	J	S, S
AROCLOR 1260	0.43	U	0.43	MDL	1.9	PQL	ug/Kg	UJ	S
Aroclor 1262	0.37	U	0.37	MDL	1.9	PQL	ug/Kg	UJ	S
Aroclor 1268	15		0.37	MDL	1.9	PQL	ug/Kg	J	S, S
Aroclor 5432	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	S
Aroclor 5442	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	S
Aroclor 5460	19		1.1	MDL	3.7	PQL	ug/Kg	J	S, S

Sample ID: SL-019-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 10:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	2.1	J	0.41	MDL	2.1	PQL	ug/Kg	J	S
Aroclor 1268	7.4		0.41	MDL	2.1	PQL	ug/Kg	J	S
Aroclor 5460	16		1.3	MDL	4.1	PQL	ug/Kg	J	S

Method Category: SVOA

Method: 8151A **Matrix: SO**

Sample ID: DUP-04-SA5A-QC-022311 *Collected:* 2/23/2011 1:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4,5-T	0.091	U	0.091	MDL	0.19	PQL	ug/Kg	UJ	L
DINOSEB	0.89	U	0.89	MDL	2.7	PQL	ug/Kg	R	L
MCPA	260	J	84	MDL	280	PQL	ug/Kg	J	Z, FD

Sample ID: SL-001-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 1:53:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4,5-T	0.091	U	0.091	MDL	0.19	PQL	ug/Kg	UJ	L
DINOSEB	0.89	U	0.89	MDL	2.7	PQL	ug/Kg	R	L

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE090 **Laboratory: LL**

EDD Filename: DE090_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8151A **Matrix:** SO

Sample ID: SL-002-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 2:25:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4,5-T	0.090	U	0.090	MDL	0.19	PQL	ug/Kg	UJ	L
DINOSEB	0.88	U	0.88	MDL	2.6	PQL	ug/Kg	R	L

Sample ID: SL-004-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 1:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4,5-T	0.092	U	0.092	MDL	0.19	PQL	ug/Kg	UJ	L
DINOSEB	0.89	U	0.89	MDL	2.7	PQL	ug/Kg	R	L
MCPA	85	U	85	MDL	280	PQL	ug/Kg	UJ	FD

Sample ID: SL-006-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 11:14:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4,5-T	0.093	U	0.093	MDL	0.19	PQL	ug/Kg	UJ	L
DINOSEB	0.90	U	0.90	MDL	2.7	PQL	ug/Kg	R	L
MCPP	270	J	85	MDL	280	PQL	ug/Kg	U	B

Sample ID: SL-009-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 9:25:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4,5-T	0.092	U	0.092	MDL	0.19	PQL	ug/Kg	UJ	L
2,4,5-TP (Silvex)	0.12	J	0.084	MDL	0.19	PQL	ug/Kg	J	Z
DINOSEB	0.90	U	0.90	MDL	2.7	PQL	ug/Kg	R	L
MCPA	140	J	86	MDL	280	PQL	ug/Kg	J	Z

Sample ID: SL-010-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 9:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4,5-T	0.091	U	0.091	MDL	0.19	PQL	ug/Kg	UJ	L
DINOSEB	0.88	U	0.88	MDL	2.7	PQL	ug/Kg	R	L

Sample ID: SL-012-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 10:27:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4,5-T	0.097	U	0.097	MDL	0.20	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE090 **Laboratory: LL**

EDD Filename: DE090_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **8151A** ***Matrix:*** **SO**

Sample ID: **SL-012-SA5A-SS-0.0-0.5** ***Collected:*** **2/23/2011 10:27:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.95	U	0.95	MDL	2.9	PQL	ug/Kg	R	L
MCPP	580		89	MDL	300	PQL	ug/Kg	U	B

Sample ID: **SL-013-SA5A-SS-0.0-0.5** ***Collected:*** **2/23/2011 9:49:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4,5-T	0.092	U	0.092	MDL	0.19	PQL	ug/Kg	UJ	L
DINOSEB	0.90	U	0.90	MDL	2.7	PQL	ug/Kg	R	L

Sample ID: **SL-016-SA5A-SS-0.0-0.5** ***Collected:*** **2/23/2011 8:35:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4,5-T	0.093	U	0.093	MDL	0.19	PQL	ug/Kg	UJ	L
2,4,5-TP (Silvex)	0.12	J	0.085	MDL	0.19	PQL	ug/Kg	J	Z
DINOSEB	0.91	U	0.91	MDL	2.7	PQL	ug/Kg	R	L
MCPP	140	J	140	MDL	280	PQL	ug/Kg	U	B

Sample ID: **SL-017-SA5A-SS-0.0-0.5** ***Collected:*** **2/23/2011 1:20:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4,5-T	0.091	U	0.091	MDL	0.19	PQL	ug/Kg	UJ	L
DINOSEB	0.89	U	0.89	MDL	2.7	PQL	ug/Kg	R	L

Sample ID: **SL-018-SA5A-SS-0.0-0.5** ***Collected:*** **2/23/2011 1:05:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4,5-T	0.091	U	0.091	MDL	0.19	PQL	ug/Kg	UJ	L
DINOSEB	0.89	U	0.89	MDL	2.7	PQL	ug/Kg	R	L

Sample ID: **SL-019-SA5A-SS-0.0-0.5** ***Collected:*** **2/23/2011 10:10:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4,5-T	0.69		0.10	MDL	0.21	PQL	ug/Kg	J	L
DINOSEB	1.0	U	1.0	MDL	3.0	PQL	ug/Kg	R	L
MCPA	170	J	95	MDL	310	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE090 **Laboratory: LL**

EDD Filename: DE090_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA
Method: 8270C **Matrix:** AQ

Sample ID: EB01-SA5A-022311 *Collected:* 2/23/2011 2:50:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZYL ALCOHOL	5	U	5	MDL	16	PQL	ug/L	UJ	L
BIS(2-CHLOROETHYL) ETHER	1	U	1	MDL	5	PQL	ug/L	UJ	L

Method Category: SVOA
Method: 8270C **Matrix:** SO

Sample ID: SL-016-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 8:35:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(G,H,I)PERYLENE	41	J	19	MDL	190	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	41	J	19	MDL	380	PQL	ug/Kg	U	B
CHRYSENE	41	J	19	MDL	190	PQL	ug/Kg	J	Z
FLUORANTHENE	33	J	19	MDL	190	PQL	ug/Kg	J	Z
PYRENE	27	J	19	MDL	190	PQL	ug/Kg	J	Z

Sample ID: SL-017-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 1:20:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	19	J	18	MDL	180	PQL	ug/Kg	J	Z
CHRYSENE	21	J	18	MDL	180	PQL	ug/Kg	J	Z
FLUORANTHENE	19	J	18	MDL	180	PQL	ug/Kg	J	Z
PYRENE	19	J	18	MDL	180	PQL	ug/Kg	J	Z

Sample ID: SL-019-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 10:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	42	J	21	MDL	210	PQL	ug/Kg	J	Z
CHRYSENE	41	J	21	MDL	210	PQL	ug/Kg	J	Z
FLUORANTHENE	54	J	21	MDL	210	PQL	ug/Kg	J	Z
PHENANTHRENE	29	J	21	MDL	210	PQL	ug/Kg	J	Z
PYRENE	41	J	21	MDL	210	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE090 **Laboratory: LL**

EDD Filename: DE090_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C SIM **Matrix:** AQ

Sample ID: EB01-SA5A-022311 *Collected:* 2/23/2011 2:50:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	0.52	J	0.052	MDL	1.0	PQL	ug/L	U	B
Butylbenzylphthalate	0.23	J	0.052	MDL	1.0	PQL	ug/L	U	B
Diethylphthalate	0.079	J	0.052	MDL	1.0	PQL	ug/L	U	B
Dimethylphthalate	0.052	U	0.052	MDL	1.0	PQL	ug/L	UJ	L
Di-n-butylphthalate	0.48	J	0.052	MDL	1.0	PQL	ug/L	U	B
Di-n-octylphthalate	0.22	J	0.052	MDL	1.0	PQL	ug/L	J	Z
NAPHTHALENE	0.029	J	0.010	MDL	0.052	PQL	ug/L	J	Z

Method Category: SVOA

Method: 8270C SIM **Matrix:** SO

Sample ID: DUP-04-SA5A-QC-022311 *Collected:* 2/23/2011 1:35:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)PYRENE	7.5		0.73	MDL	1.8	PQL	ug/Kg	J	FD
BENZO(B)FLUORANTHENE	6.5		0.73	MDL	1.8	PQL	ug/Kg	J	FD
BENZO(G,H,I)PERYLENE	5.0		0.73	MDL	1.8	PQL	ug/Kg	J	FD
BENZO(K)FLUORANTHENE	0.73	U	0.73	MDL	1.8	PQL	ug/Kg	UJ	FD
BIS(2-ETHYLHEXYL)PHTHALATE	30		6.6	MDL	20	PQL	ug/Kg	U	B
CHRYSENE	4.6		0.37	MDL	1.8	PQL	ug/Kg	J	FD
DIBENZO(A,H)ANTHRACENE	1.9		0.73	MDL	1.8	PQL	ug/Kg	J	FD
Di-n-octylphthalate	23		6.6	MDL	20	PQL	ug/Kg	UJ	B, FD
FLUORANTHENE	1.3	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	2.5		0.73	MDL	1.8	PQL	ug/Kg	J	FD
PHENANTHRENE	0.73	U	0.73	MDL	1.8	PQL	ug/Kg	UJ	FD

Sample ID: SL-002-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 2:25:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	15	J	6.6	MDL	20	PQL	ug/Kg	U	B

Sample ID: SL-004-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 1:35:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	1.5	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE090 | Laboratory: LL

EDD Filename: DE090_v1 | eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8270C SIM **Matrix:** SO

Sample ID: SL-004-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 1:35:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)PYRENE	3.3		0.74	MDL	1.8	PQL	ug/Kg	J	Q, FD
BENZO(B)FLUORANTHENE	2.6		0.74	MDL	1.8	PQL	ug/Kg	J	FD
BENZO(G,H,I)PERYLENE	2.6		0.74	MDL	1.8	PQL	ug/Kg	J	Q, FD
BENZO(K)FLUORANTHENE	1.4	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z, Q, FD
BIS(2-ETHYLHEXYL)PHTHALATE	21		6.6	MDL	20	PQL	ug/Kg	UJ	Q, Q, B
CHRYSENE	2.6		0.37	MDL	1.8	PQL	ug/Kg	J	FD
DIBENZO(A,H)ANTHRACENE	0.74	U	0.74	MDL	1.8	PQL	ug/Kg	UJ	FD
Di-n-octylphthalate	6.6	U	6.6	MDL	20	PQL	ug/Kg	UJ	FD
FLUORANTHENE	1.7	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	1.0	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z, Q, FD
PHENANTHRENE	0.98	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z, FD
PYRENE	1.7	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-006-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 11:14:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	14	J	6.8	MDL	20	PQL	ug/Kg	U	B
CHRYSENE	0.53	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z
PHENANTHRENE	0.89	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-009-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 9:25:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	1.4	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	0.97	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	15	J	6.6	MDL	20	PQL	ug/Kg	U	B
FLUORANTHENE	1.6	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	1.1	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
PHENANTHRENE	1.1	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-012-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 10:27:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)PYRENE	5.9	J	3.9	MDL	9.8	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	8.6	J	3.9	MDL	9.8	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE090 **Laboratory: LL**

EDD Filename: DE090_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C SIM **Matrix:** SO

Sample ID: SL-012-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 10:27:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(G,H,I)PERYLENE	9.1	J	3.9	MDL	9.8	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	46	J	35	MDL	110	PQL	ug/Kg	U	B
CHRYSENE	6.1	J	2.0	MDL	9.8	PQL	ug/Kg	J	Z

Sample ID: SL-013-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 9:49:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	12	J	6.7	MDL	20	PQL	ug/Kg	U	B

Sample ID: SL-016-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 8:35:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACENAPHTHYLENE	0.73	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z
ANTHRACENE	1.5	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z
NAPHTHALENE	0.95	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-017-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 1:20:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	0.39	J	0.37	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.7	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.2	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	0.96	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	14	J	6.6	MDL	20	PQL	ug/Kg	U	B
INDENO(1,2,3-CD)PYRENE	0.78	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-018-SA5A-SS-0.0-0.5 *Collected:* 2/23/2011 1:05:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	0.70	J	0.37	MDL	1.8	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	21		6.7	MDL	20	PQL	ug/Kg	U	B
INDENO(1,2,3-CD)PYRENE	1.4	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE090 **Laboratory: LL**

EDD Filename: DE090_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **8270C SIM** ***Matrix:*** **SO**

Sample ID: **SL-019-SA5A-SS-0.0-0.5** ***Collected:*** **2/23/2011 10:10:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	0.92	J	0.82	MDL	2.1	PQL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	1.0	J	0.82	MDL	2.1	PQL	ug/Kg	J	Z
ACENAPHTHYLENE	1.1	J	0.41	MDL	2.1	PQL	ug/Kg	J	Z
ANTHRACENE	1.4	J	0.41	MDL	2.1	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	38		7.4	MDL	22	PQL	ug/Kg	U	B
Butylbenzylphthalate	25		7.4	MDL	22	PQL	ug/Kg	U	B
NAPHTHALENE	1.2	J	0.82	MDL	2.1	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE090 **Laboratory: LL**

EDD Filename: DE090_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
*#	Professional Judgment
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Verification Correlation Coefficient
C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE090 **Laboratory: LL**

EDD Filename: DE090_v1 **eQAPP Name: CDM_SSFL_110509**

F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation
L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery Lower Estimation

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE090 **Laboratory: LL**

EDD Filename: DE090_v1 **eQAPP Name: CDM_SSFL_110509**

R	Continuing Calibration Verification Percent Recovery Lower Rejection
R	Continuing Calibration Verification Percent Recovery Upper Estimation
R	Continuing Calibration Verification Percent Recovery Upper Rejection
R	Continuing Calibration Verification Relative Response Factor
R	Initial Calibration Relative Response Factor
R	Initial Calibration Verification Percent Recovery Lower Estimation
R	Initial Calibration Verification Percent Recovery Lower Rejection
R	Initial Calibration Verification Percent Recovery Upper Estimation
R	Initial Calibration Verification Percent Recovery Upper Rejection
R	Initial Calibration Verification Relative Response Factor
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control Outlier Reports

DE090

Method Blank Outlier Report

Lab Reporting Batch ID: DE090 **Laboratory: LL**

EDD Filename: DE090_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **6010B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P06208BB221427	3/4/2011 2:27:00 PM	TIN	1.51 mg/Kg	DUP-04-SA5A-QC-022311 SL-001-SA5A-SS-0.0-0.5 SL-002-SA5A-SS-0.0-0.5 SL-004-SA5A-SS-0.0-0.5 SL-006-SA5A-SS-0.0-0.5 SL-009-SA5A-SS-0.0-0.5 SL-010-SA5A-SS-0.0-0.5 SL-012-SA5A-SS-0.0-0.5 SL-013-SA5A-SS-0.0-0.5 SL-016-SA5A-SS-0.0-0.5 SL-017-SA5A-SS-0.0-0.5 SL-018-SA5A-SS-0.0-0.5 SL-019-SA5A-SS-0.0-0.5
P06208BB221448	3/9/2011 2:48:00 PM	PHOSPHORUS	1.19 mg/Kg	DUP-04-SA5A-QC-022311 SL-001-SA5A-SS-0.0-0.5 SL-002-SA5A-SS-0.0-0.5 SL-004-SA5A-SS-0.0-0.5 SL-006-SA5A-SS-0.0-0.5 SL-009-SA5A-SS-0.0-0.5 SL-010-SA5A-SS-0.0-0.5 SL-012-SA5A-SS-0.0-0.5 SL-013-SA5A-SS-0.0-0.5 SL-016-SA5A-SS-0.0-0.5 SL-017-SA5A-SS-0.0-0.5 SL-018-SA5A-SS-0.0-0.5 SL-019-SA5A-SS-0.0-0.5

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
DUP-04-SA5A-QC-022311(REA)	TIN	2.79 mg/Kg	2.79U mg/Kg
SL-001-SA5A-SS-0.0-0.5(REA)	TIN	2.89 mg/Kg	2.89U mg/Kg
SL-002-SA5A-SS-0.0-0.5(REA)	TIN	2.85 mg/Kg	2.85U mg/Kg
SL-004-SA5A-SS-0.0-0.5(REA)	TIN	2.96 mg/Kg	2.96U mg/Kg
SL-006-SA5A-SS-0.0-0.5(REA)	TIN	3.05 mg/Kg	3.05U mg/Kg
SL-009-SA5A-SS-0.0-0.5(REA)	TIN	3.04 mg/Kg	3.04U mg/Kg
SL-010-SA5A-SS-0.0-0.5(REA)	TIN	3.16 mg/Kg	3.16U mg/Kg
SL-012-SA5A-SS-0.0-0.5(REA)	TIN	3.35 mg/Kg	3.35U mg/Kg
SL-013-SA5A-SS-0.0-0.5(REA)	TIN	3.13 mg/Kg	3.13U mg/Kg
SL-016-SA5A-SS-0.0-0.5(REA)	TIN	3.68 mg/Kg	3.68U mg/Kg
SL-017-SA5A-SS-0.0-0.5(REA)	TIN	3.09 mg/Kg	3.09U mg/Kg
SL-018-SA5A-SS-0.0-0.5(REA)	TIN	2.96 mg/Kg	2.96U mg/Kg
SL-019-SA5A-SS-0.0-0.5(REA)	TIN	3.31 mg/Kg	3.31U mg/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE090 **Laboratory: LL**

EDD Filename: DE090_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P06826AB220103A	3/11/2011 1:03:00 AM	COPPER	0.283 mg/Kg	DUP-04-SA5A-QC-022311 SL-001-SA5A-SS-0.0-0.5 SL-002-SA5A-SS-0.0-0.5 SL-004-SA5A-SS-0.0-0.5 SL-006-SA5A-SS-0.0-0.5 SL-009-SA5A-SS-0.0-0.5 SL-010-SA5A-SS-0.0-0.5 SL-012-SA5A-SS-0.0-0.5 SL-013-SA5A-SS-0.0-0.5 SL-016-SA5A-SS-0.0-0.5 SL-017-SA5A-SS-0.0-0.5 SL-018-SA5A-SS-0.0-0.5 SL-019-SA5A-SS-0.0-0.5

Method: 8151A
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P60601AB241854A	3/7/2011 6:54:00 PM	MCPP	140 ug/Kg	DUP-04-SA5A-QC-022311 SL-001-SA5A-SS-0.0-0.5 SL-002-SA5A-SS-0.0-0.5 SL-004-SA5A-SS-0.0-0.5 SL-006-SA5A-SS-0.0-0.5 SL-009-SA5A-SS-0.0-0.5 SL-010-SA5A-SS-0.0-0.5 SL-012-SA5A-SS-0.0-0.5 SL-013-SA5A-SS-0.0-0.5 SL-016-SA5A-SS-0.0-0.5 SL-017-SA5A-SS-0.0-0.5 SL-018-SA5A-SS-0.0-0.5 SL-019-SA5A-SS-0.0-0.5

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-006-SA5A-SS-0.0-0.5(RES)	MCPP	270 ug/Kg	280U ug/Kg
SL-012-SA5A-SS-0.0-0.5(RES)	MCPP	580 ug/Kg	580U ug/Kg
SL-016-SA5A-SS-0.0-0.5(RES)	MCPP	140 ug/Kg	280U ug/Kg

Method: 8270C
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKLD05B260027	3/8/2011 12:27:00 AM	BIS(2-ETHYLHEXYL)PHTHALATE	22 ug/Kg	DUP-04-SA5A-QC-022311 SL-001-SA5A-SS-0.0-0.5 SL-002-SA5A-SS-0.0-0.5 SL-004-SA5A-SS-0.0-0.5 SL-006-SA5A-SS-0.0-0.5 SL-009-SA5A-SS-0.0-0.5 SL-010-SA5A-SS-0.0-0.5 SL-012-SA5A-SS-0.0-0.5 SL-013-SA5A-SS-0.0-0.5 SL-016-SA5A-SS-0.0-0.5 SL-017-SA5A-SS-0.0-0.5 SL-018-SA5A-SS-0.0-0.5 SL-019-SA5A-SS-0.0-0.5

Method Blank Outlier Report

Lab Reporting Batch ID: DE090 | Laboratory: LL

EDD Filename: DE090_v1 | eQAPP Name: CDM_SSFL_110509

Method: 8270C
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-016-SA5A-SS-0.0-0.5(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	41 ug/Kg	380U ug/Kg

Method: 8270C SIM
Matrix: AQ

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKWE05B261910	3/1/2011 7:10:00 PM	BIS(2-ETHYLHEXYL)PHTHALATE Butylbenzylphthalate Diethylphthalate Di-n-butylphthalate	0.25 ug/L 0.21 ug/L 0.081 ug/L 0.27 ug/L	EB01-SA5A-022311

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
EB01-SA5A-022311(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	0.52 ug/L	1.0U ug/L
EB01-SA5A-022311(RES)	Butylbenzylphthalate	0.23 ug/L	1.0U ug/L
EB01-SA5A-022311(RES)	Diethylphthalate	0.079 ug/L	1.0U ug/L
EB01-SA5A-022311(RES)	Di-n-butylphthalate	0.48 ug/L	1.0U ug/L

Method: 8270C SIM
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKLA06B262011	3/2/2011 8:11:00 PM	BIS(2-ETHYLHEXYL)PHTHALATE Butylbenzylphthalate Di-n-butylphthalate Di-n-octylphthalate	8.4 ug/Kg 7.2 ug/Kg 7.1 ug/Kg 7.1 ug/Kg	DUP-04-SA5A-QC-022311 SL-001-SA5A-SS-0.0-0.5 SL-002-SA5A-SS-0.0-0.5 SL-004-SA5A-SS-0.0-0.5 SL-006-SA5A-SS-0.0-0.5 SL-009-SA5A-SS-0.0-0.5 SL-010-SA5A-SS-0.0-0.5 SL-012-SA5A-SS-0.0-0.5 SL-013-SA5A-SS-0.0-0.5 SL-016-SA5A-SS-0.0-0.5 SL-017-SA5A-SS-0.0-0.5 SL-018-SA5A-SS-0.0-0.5 SL-019-SA5A-SS-0.0-0.5

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
DUP-04-SA5A-QC-022311(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	30 ug/Kg	30U ug/Kg
DUP-04-SA5A-QC-022311(RES)	Di-n-octylphthalate	23 ug/Kg	23U ug/Kg
SL-002-SA5A-SS-0.0-0.5(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	15 ug/Kg	20U ug/Kg
SL-004-SA5A-SS-0.0-0.5(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	21 ug/Kg	21U ug/Kg
SL-006-SA5A-SS-0.0-0.5(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	14 ug/Kg	20U ug/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE090 | Laboratory: LL

EDD Filename: DE090_v1 | eQAPP Name: CDM_SSFL_110509

Method: **8270C SIM**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-009-SA5A-SS-0.0-0.5(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	15 ug/Kg	20U ug/Kg
SL-012-SA5A-SS-0.0-0.5(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	46 ug/Kg	110U ug/Kg
SL-013-SA5A-SS-0.0-0.5(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	12 ug/Kg	20U ug/Kg
SL-017-SA5A-SS-0.0-0.5(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	14 ug/Kg	20U ug/Kg
SL-018-SA5A-SS-0.0-0.5(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	21 ug/Kg	21U ug/Kg
SL-019-SA5A-SS-0.0-0.5(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	38 ug/Kg	38U ug/Kg
SL-019-SA5A-SS-0.0-0.5(RES)	Butylbenzylphthalate	25 ug/Kg	25U ug/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE090 **Laboratory: LL**

EDD Filename: DE090_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-004-SA5A-SS-0.0-0.5MSD (SL-004-SA5A-SS-0.0-0.5)	4-CHLOROANILINE	-	-	23.00-95.00	35 (30.00)	4-CHLOROANILINE	J (all detects)

Method: 8270C SIM
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-004-SA5A-SS-0.0-0.5MS	BENZO(A)PYRENE	139	145	45.00-138.00	-	BENZO(A)PYRENE	
SL-004-SA5A-SS-0.0-0.5MSD	BENZO(G,H,I)PERYLENE	143	-	33.00-141.00	-	BENZO(G,H,I)PERYLENE	
(SL-004-SA5A-SS-0.0-0.5)	BENZO(K)FLUORANTHENE	-	146	42.00-144.00	-	BENZO(K)FLUORANTHENE	
	BIS(2-ETHYLHEXYL)PHTHALAT	376	184	39.00-167.00	56 (30.00)	BIS(2-ETHYLHEXYL)PHTHALA	J(all detects)
	Butylbenzylphthalate	201	-	57.00-173.00	31 (30.00)	Butylbenzylphthalate	
	DIBENZO(A,H)ANTHRACENE	153	-	22.00-133.00	-	DIBENZO(A,H)ANTHRACENE	
	INDENO(1,2,3-CD)PYRENE	148	-	21.00-143.00	-	INDENO(1,2,3-CD)PYRENE	

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-004-SA5A-SS-0.0-0.5MS	ANTIMONY	39	35	75.00-125.00	-	ANTIMONY	
SL-004-SA5A-SS-0.0-0.5MSD	LEAD	72	-	75.00-125.00	-	LEAD	
(DUP-04-SA5A-QC-022311	ZINC	67	-	75.00-125.00	-	ZINC	
SL -001-SA5A-SS-0.0-0.5							
SL -002-SA5A-SS-0.0-0.5							
SL -004-SA5A-SS-0.0-0.5							
SL -006-SA5A-SS-0.0-0.5							
SL -009-SA5A-SS-0.0-0.5							J(all detects)
SL -010-SA5A-SS-0.0-0.5							UJ(all non-detects)
SL -012-SA5A-SS-0.0-0.5							
SL -013-SA5A-SS-0.0-0.5							Zn No Qual, >4x
SL -016-SA5A-SS-0.0-0.5							
SL -017-SA5A-SS-0.0-0.5							
SL -018-SA5A-SS-0.0-0.5							
SL -019-SA5A-SS-0.0-0.5)							
SL-004-SA5A-SS-0.0-0.5MS	BARIUM	69	-	75.00-125.00	-	BARIUM	
(DUP-04-SA5A-QC-022311							
SL -001-SA5A-SS-0.0-0.5							
SL -002-SA5A-SS-0.0-0.5							
SL -004-SA5A-SS-0.0-0.5							No Qual, >4x
SL -006-SA5A-SS-0.0-0.5							
SL -009-SA5A-SS-0.0-0.5							
SL -010-SA5A-SS-0.0-0.5							
SL -012-SA5A-SS-0.0-0.5							
SL -013-SA5A-SS-0.0-0.5							
SL -016-SA5A-SS-0.0-0.5							
SL -017-SA5A-SS-0.0-0.5							
SL -018-SA5A-SS-0.0-0.5							
SL -019-SA5A-SS-0.0-0.5)							

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE090 **Laboratory: LL**

EDD Filename: DE090_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-004-SA5A-SS-0.0-0.5MS SL-004-SA5A-SS-0.0-0.5MSD (DUP-04-SA5A-QC-022311 SL-001-SA5A-SS-0.0-0.5 SL-002-SA5A-SS-0.0-0.5 SL-004-SA5A-SS-0.0-0.5 SL-006-SA5A-SS-0.0-0.5 SL-009-SA5A-SS-0.0-0.5 SL-010-SA5A-SS-0.0-0.5 SL-012-SA5A-SS-0.0-0.5 SL-013-SA5A-SS-0.0-0.5 SL-016-SA5A-SS-0.0-0.5 SL-017-SA5A-SS-0.0-0.5 SL-018-SA5A-SS-0.0-0.5 SL-019-SA5A-SS-0.0-0.5)	ALUMINUM TITANIUM	1361 162	498 -	75.00-125.00 75.00-125.00	- -	ALUMINUM TITANIUM	No Qual, >4x
SL-004-SA5A-SS-0.0-0.5MS SL-004-SA5A-SS-0.0-0.5MSD (DUP-04-SA5A-QC-022311 SL-001-SA5A-SS-0.0-0.5 SL-002-SA5A-SS-0.0-0.5 SL-004-SA5A-SS-0.0-0.5 SL-006-SA5A-SS-0.0-0.5 SL-009-SA5A-SS-0.0-0.5 SL-010-SA5A-SS-0.0-0.5 SL-012-SA5A-SS-0.0-0.5 SL-013-SA5A-SS-0.0-0.5 SL-016-SA5A-SS-0.0-0.5 SL-017-SA5A-SS-0.0-0.5 SL-018-SA5A-SS-0.0-0.5 SL-019-SA5A-SS-0.0-0.5)	IRON MAGNESIUM MANGANESE	-2 158 71	-2981 -133 21	75.00-125.00 75.00-125.00 75.00-125.00	- - -	IRON MAGNESIUM MANGANESE	No Qual, >4x
SL-004-SA5A-SS-0.0-0.5MS SL-004-SA5A-SS-0.0-0.5MSD (DUP-04-SA5A-QC-022311 SL-001-SA5A-SS-0.0-0.5 SL-002-SA5A-SS-0.0-0.5 SL-004-SA5A-SS-0.0-0.5 SL-006-SA5A-SS-0.0-0.5 SL-009-SA5A-SS-0.0-0.5 SL-010-SA5A-SS-0.0-0.5 SL-012-SA5A-SS-0.0-0.5 SL-013-SA5A-SS-0.0-0.5 SL-016-SA5A-SS-0.0-0.5 SL-017-SA5A-SS-0.0-0.5 SL-018-SA5A-SS-0.0-0.5 SL-019-SA5A-SS-0.0-0.5)	CALCIUM PHOSPHORUS POTASSIUM	262 65 -	57 34 68	75.00-125.00 75.00-125.00 75.00-125.00	22 (20.00) - -	CALCIUM PHOSPHORUS POTASSIUM	J(all detects) UJ(all non-detects) Ca No Qual %R, >4x P No Qual, >4x

Method: 300.0
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-004-SA5A-SS-0.0-0.5MS (SL-004-SA5A-SS-0.0-0.5 SL-006-SA5A-SS-0.0-0.5 SL-009-SA5A-SS-0.0-0.5 SL-010-SA5A-SS-0.0-0.5 SL-012-SA5A-SS-0.0-0.5 SL-013-SA5A-SS-0.0-0.5 SL-016-SA5A-SS-0.0-0.5 SL-017-SA5A-SS-0.0-0.5 SL-018-SA5A-SS-0.0-0.5 SL-019-SA5A-SS-0.0-0.5)	FLUORIDE	78	-	80.00-120.00	-	FLUORIDE	J(all detects) UJ(all non-detects)

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE090 | **Laboratory: LL**

EDD Filename: DE090_v1 | **eQAPP Name: CDM_SSFL_110509**

Method: 8081A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-004-SA5A-SS-0.0-0.5MSD (SL-004-SA5A-SS-0.0-0.5)	HEPTACHLOR	-	-	13.00-126.00	53 (50.00)	HEPTACHLOR	J(all detects)
SL-004-SA5A-SS-0.0-0.5MS SL-004-SA5A-SS-0.0-0.5MSD (SL-004-SA5A-SS-0.0-0.5)	4,4'-DDT ALDRIN ENDRIN KETONE	-25 - 0	-63 0 -	10.00-176.00 16.00-126.00 22.00-165.00	- 200 (50.00) 200 (50.00)	4,4'-DDT ALDRIN ENDRIN KETONE	J(all detects) R(all non-detects)

Method: 8082
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-004-SA5A-SS-0.0-0.5MSD (SL-004-SA5A-SS-0.0-0.5)	AROCLOR 1260	-	202	39.00-149.00	-	AROCLOR 1242, 1248, 1254, 1260, 1262, 1268	J(all detects)

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE090 | Laboratory: LL

EDD Filename: DE090_v1 | eQAPP Name: CDM_SSFL_110509

Method: 6020
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-004-SA5A-SS-0.0-0.5DUP (DUP-04-SA5A-QC-022311	SELENIUM	28	20.00	
	SILVER	85	20.00	
SL-001-SA5A-SS-0.0-0.5				
SL-002-SA5A-SS-0.0-0.5				
SL-004-SA5A-SS-0.0-0.5				
SL-006-SA5A-SS-0.0-0.5				
SL-009-SA5A-SS-0.0-0.5				No Qual
SL-010-SA5A-SS-0.0-0.5				OK by difference
SL-012-SA5A-SS-0.0-0.5				
SL-013-SA5A-SS-0.0-0.5				
SL-016-SA5A-SS-0.0-0.5				
SL-017-SA5A-SS-0.0-0.5				
SL-018-SA5A-SS-0.0-0.5				
SL-019-SA5A-SS-0.0-0.5)				

Method: 7199
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-004-SA5A-SS-0.0-0.5DUP (DUP-04-SA5A-QC-022311	HEXAVALENT CHROMIUM	23	20.00	
SL-001-SA5A-SS-0.0-0.5				
SL-002-SA5A-SS-0.0-0.5				
SL-004-SA5A-SS-0.0-0.5				
SL-006-SA5A-SS-0.0-0.5				
SL-009-SA5A-SS-0.0-0.5				No Qual
SL-010-SA5A-SS-0.0-0.5				OK by difference
SL-012-SA5A-SS-0.0-0.5				
SL-013-SA5A-SS-0.0-0.5				
SL-016-SA5A-SS-0.0-0.5				
SL-017-SA5A-SS-0.0-0.5				
SL-018-SA5A-SS-0.0-0.5				
SL-019-SA5A-SS-0.0-0.5)				

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE090 | Laboratory: LL

EDD Filename: DE090_v1 | eQAPP Name: CDM_SSFL_110509

Method: 8270C SIM
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P6WELCSQ261942 P6WELCSY262014 (EB01-SA5A-022311)	Dimethylphthalate	15	16	40.00-119.00	-	Dimethylphthalate	J (all detects) UJ (all non-detects)

Method: 8270C
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P7WALCSQ260142 P7WALCSY260208 (EB01-SA5A-022311)	BENZYL ALCOHOL BIS(2-CHLOROETHYL) ETHER	63 74	- 76	66.00-97.00 77.00-108.00	- -	BENZYL ALCOHOL BIS(2-CHLOROETHYL) ETHER	J(all detects) UJ(all non-detects)

Method: 8151A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P10601AQ241922A (DUP-04-SA5A-QC-022311 SL-001-SA5A-SS-0.0-0.5 SL-002-SA5A-SS-0.0-0.5 SL-004-SA5A-SS-0.0-0.5 SL-006-SA5A-SS-0.0-0.5 SL-009-SA5A-SS-0.0-0.5 SL-010-SA5A-SS-0.0-0.5 SL-012-SA5A-SS-0.0-0.5 SL-013-SA5A-SS-0.0-0.5 SL-016-SA5A-SS-0.0-0.5 SL-017-SA5A-SS-0.0-0.5 SL-018-SA5A-SS-0.0-0.5 SL-019-SA5A-SS-0.0-0.5)	DINOSEB	8	-	10.00-36.00	-	DINOSEB	J(all detects) R(all non-detects)
P10601AQ241922A (DUP-04-SA5A-QC-022311 SL-001-SA5A-SS-0.0-0.5 SL-002-SA5A-SS-0.0-0.5 SL-004-SA5A-SS-0.0-0.5 SL-006-SA5A-SS-0.0-0.5 SL-009-SA5A-SS-0.0-0.5 SL-010-SA5A-SS-0.0-0.5 SL-012-SA5A-SS-0.0-0.5 SL-013-SA5A-SS-0.0-0.5 SL-016-SA5A-SS-0.0-0.5 SL-017-SA5A-SS-0.0-0.5 SL-018-SA5A-SS-0.0-0.5 SL-019-SA5A-SS-0.0-0.5)	2,4,5-T	72	-	73.00-143.00	-	2,4,5-T	J(all detects) UJ(all non-detects)

Surrogate Outlier Report

Lab Reporting Batch ID: DE090 **Laboratory: LL**

EDD Filename: DE090_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8081A
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
DUP-04-SA5A-QC-022311	TETRACHLORO-M-XYLENE	22	50.00-130.00	All Target Analytes	J (all detects) UJ (all non-detects)
SL-001-SA5A-SS-0.0-0.5	DECACHLOROBIPHENYL	134	20.00-120.00	All Target Analytes	J(all detects)
SL-002-SA5A-SS-0.0-0.5	DECACHLOROBIPHENYL	288	20.00-120.00	All Target Analytes	J(all detects)
SL-004-SA5A-SS-0.0-0.5	DECACHLOROBIPHENYL	124	20.00-120.00	All Target Analytes	J(all detects)
SL-009-SA5A-SS-0.0-0.5	DECACHLOROBIPHENYL	147	20.00-120.00	All Target Analytes	J(all detects)
SL-018-SA5A-SS-0.0-0.5	TETRACHLORO-M-XYLENE	43	50.00-130.00	All Target Analytes	J(all detects) UJ(all non-detects)

Method: 8082
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
DUP-04-SA5A-QC-022311	DECACHLOROBIPHENYL	463	45.00-120.00	All Target Analytes	No Qual, Diluted Out

Method: 8082
Matrix: AQ

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
EB01-SA5A-022311	DECACHLOROBIPHENYL	41	45.00-120.00	All Target Analytes	J(all detects) UJ(all non-detects)

Method: 8082
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-001-SA5A-SS-0.0-0.5	DECACHLOROBIPHENYL	161	45.00-120.00	All Target Analytes	J(all detects)
SL-002-SA5A-SS-0.0-0.5	DECACHLOROBIPHENYL	171	45.00-120.00	All Target Analytes	J(all detects)
SL-004-SA5A-SS-0.0-0.5	DECACHLOROBIPHENYL	127	45.00-120.00	All Target Analytes	J(all detects)
SL-006-SA5A-SS-0.0-0.5	DECACHLOROBIPHENYL	133	45.00-120.00	All Target Analytes	J(all detects)
SL-009-SA5A-SS-0.0-0.5	DECACHLOROBIPHENYL	455	45.00-120.00	All Target Analytes	No Qual, Diluted Out
SL-012-SA5A-SS-0.0-0.5	DECACHLOROBIPHENYL	198	45.00-120.00	All Target Analytes	J(all detects)
SL-018-SA5A-SS-0.0-0.5	DECACHLOROBIPHENYL	197	45.00-120.00	All Target Analytes	J(all detects)
SL-018-SA5A-SS-0.0-0.5	TETRACHLORO-M-XYLENE	52	53.00-139.00	All Target Analytes	J(all detects) UJ(all non-detects)

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Surrogate Outlier Report

Lab Reporting Batch ID: DE090 **Laboratory: LL**

EDD Filename: DE090_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8082
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-019-SA5A-SS-0.0-0.5	DECACHLOROBIPHENYL	162	45.00-120.00	All Target Analytes	J(all detects)

Method: 8270C SIM
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-019-SA5A-SS-0.0-0.5	Terphenyl-d14	174	45.00-135.00	No Affected Compounds	J(all detects)

Field Duplicate RPD Report

Lab Reporting Batch ID: DE090 **Laboratory: LL**

EDD Filename: DE090_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 160.3M
Matrix: SO

Analyte	Concentration (%) SL-004-SA5A-SS-0.0-0.5	Concentration (%) DUP-04-SA5A-QC-022311	Sample RPD	eQAPP RPD	Flag
MOISTURE	10.6	9.7	9		No Qualifiers Applied

Method: 300.0
Matrix: SO

Analyte	Concentration (mg/Kg) SL-004-SA5A-SS-0.0-0.5	Concentration (mg/Kg) DUP-04-SA5A-QC-022311	Sample RPD	eQAPP RPD	Flag
FLUORIDE	1.0	1.2	18	50.00	No Qualifiers Applied

Method: 6010B
Matrix: SO

Analyte	Concentration (mg/Kg) SL-004-SA5A-SS-0.0-0.5	Concentration (mg/Kg) DUP-04-SA5A-QC-022311	Sample RPD	eQAPP RPD	Flag
ALUMINUM	14700	14100	4	50.00	No Qualifiers Applied
BORON	3.61	3.26	10	50.00	
CALCIUM	3370	3280	3	50.00	
IRON	21300	19600	8	50.00	
LITHIUM	24.3	22.5	8	50.00	
MAGNESIUM	4690	4410	6	50.00	
MANGANESE	325	282	14	50.00	
PHOSPHORUS	460	389	17	50.00	
POTASSIUM	3280	3130	5	50.00	
SODIUM	91.4	86.1	6	50.00	
STRONTIUM	19.1	17.4	9	50.00	
TIN	2.96	2.79	6	50.00	
TITANIUM	1240	1190	4	50.00	
Zirconium	1.96	2.36	19	50.00	

Method: 6020
Matrix: SO

Analyte	Concentration (mg/Kg) SL-004-SA5A-SS-0.0-0.5	Concentration (mg/Kg) DUP-04-SA5A-QC-022311	Sample RPD	eQAPP RPD	Flag
ANTIMONY	0.178	0.133	29	50.00	No Qualifiers Applied
ARSENIC	4.15	3.88	7	50.00	
BARIUM	109	99.6	9	50.00	
BERYLLIUM	0.549	0.499	10	50.00	
CADMIUM	0.217	0.204	6	50.00	
CHROMIUM	17.0	15.9	7	50.00	
COBALT	5.10	5.15	1	50.00	
COPPER	7.78	7.36	6	50.00	
LEAD	7.09	8.66	20	50.00	
MOLYBDENUM	0.397	0.408	3	50.00	
NICKEL	10.8	9.57	12	50.00	
SELENIUM	0.0750	0.107	35	50.00	
SILVER	0.0318	0.0302	5	50.00	
THALLIUM	0.255	0.237	7	50.00	
VANADIUM	33.0	27.7	17	50.00	
ZINC	86.1	82.8	4	50.00	

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Field Duplicate RPD Report

Lab Reporting Batch ID: DE090 **Laboratory: LL**

EDD Filename: DE090_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7199
Matrix: SO

Analyte	Concentration (mg/Kg) SL-004-SA5A-SS-0.0-0.5	Concentration (mg/Kg) DUP-04-SA5A-QC-022311	Sample RPD	eQAPP RPD	Flag
HEXAVALENT CHROMIUM	0.33	0.31	6	50.00	No Qualifiers Applied

Method: 7471A
Matrix: SO

Analyte	Concentration (mg/Kg) SL-004-SA5A-SS-0.0-0.5	Concentration (mg/Kg) DUP-04-SA5A-QC-022311	Sample RPD	eQAPP RPD	Flag
MERCURY	0.0398	0.0379	5	50.00	No Qualifiers Applied

Method: 8081A
Matrix: SO

Analyte	Concentration (ug/Kg) SL-004-SA5A-SS-0.0-0.5	Concentration (ug/Kg) DUP-04-SA5A-QC-022311	Sample RPD	eQAPP RPD	Flag
4,4'-DDT	1.5	0.61 U	200	50.00	J(all detects)
gamma-BHC (Lindane)	0.052	0.18 U	200	50.00	UJ(all non-detects)

Method: 8082
Matrix: SO

Analyte	Concentration (ug/Kg) SL-004-SA5A-SS-0.0-0.5	Concentration (ug/Kg) DUP-04-SA5A-QC-022311	Sample RPD	eQAPP RPD	Flag
AROCLOR 1254	12	45	116	50.00	J(all detects)
Aroclor 1268	7.8	47	143	50.00	
Aroclor 5460	8.2	51	145	50.00	

Method: 8151A
Matrix: SO

Analyte	Concentration (ug/Kg) SL-004-SA5A-SS-0.0-0.5	Concentration (ug/Kg) DUP-04-SA5A-QC-022311	Sample RPD	eQAPP RPD	Flag
MCPA	280 U	260	200	50.00	J(all detects) UJ(all non-detects)

Method: 8270C SIM
Matrix: SO

Analyte	Concentration (ug/Kg) SL-004-SA5A-SS-0.0-0.5	Concentration (ug/Kg) DUP-04-SA5A-QC-022311	Sample RPD	eQAPP RPD	Flag
BENZO(A)ANTHRACENE	1.5	1.9	24	50.00	No Qualifiers Applied
BIS(2-ETHYLHEXYL)PHTHALATE	21	30	35	50.00	
FLUORANTHENE	1.7	1.3	27	50.00	
PYRENE	1.7	1.9	11	50.00	

Field Duplicate RPD Report

Lab Reporting Batch ID: DE090 **Laboratory: LL**

EDD Filename: DE090_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C SIM
Matrix: SO

BENZO(A)PYRENE	3.3	7.5	78	50.00	J(all detects) UJ(all non-detects)
BENZO(B)FLUORANTHENE	2.6	6.5	86	50.00	
BENZO(G,H,I)PERYLENE	2.6	5.0	63	50.00	
BENZO(K)FLUORANTHENE	1.4	1.8 U	200	50.00	
CHRYSENE	2.6	4.6	56	50.00	
DIBENZO(A,H)ANTHRACENE	1.8 U	1.9	200	50.00	
Di-n-octylphthalate	20 U	23	200	50.00	
INDENO(1,2,3-CD)PYRENE	1.0	2.5	86	50.00	
PHENANTHRENE	0.98	1.8 U	200	50.00	

Method: 9045M
Matrix: SO

Analyte	Concentration (pH unit)		Sample RPD	eQAPP RPD	Flag
	SL-004-SA5A-SS-0.0-0.5	DUP-04-SA5A-QC-022311			
PH	7.95	8.04	1	50.00	No Qualifiers Applied

Method: ASTM D1498
Matrix: SO

Analyte	Concentration (mV)		Sample RPD	eQAPP RPD	Flag
	SL-004-SA5A-SS-0.0-0.5	DUP-04-SA5A-QC-022311			
Oxidation Reduction Potential	293	380	26		No Qualifiers Applied

Reporting Limit Outliers

Lab Reporting Batch ID: DE090 | Laboratory: LL

EDD Filename: DE090_v1 | eQAPP Name: CDM_SSFL_110509

Method: 8270C SIM

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB01-SA5A-022311	BIS(2-ETHYLHEXYL)PHTHALATE	J	0.52	1.0	PQL	ug/L	J (all detects)
	Butylbenzylphthalate	J	0.23	1.0	PQL	ug/L	
	Diethylphthalate	J	0.079	1.0	PQL	ug/L	
	Di-n-butylphthalate	J	0.48	1.0	PQL	ug/L	
	Di-n-octylphthalate	J	0.22	1.0	PQL	ug/L	
	NAPHTHALENE	J	0.029	0.052	PQL	ug/L	

Method: 300.0

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-004-SA5A-SS-0.0-0.5	FLUORIDE	J	1.0	1.1	PQL	mg/Kg	J (all detects)

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-04-SA5A-QC-022311	BORON	J	3.26	5.32	PQL	mg/Kg	J (all detects)
	SODIUM	J	86.1	106	PQL	mg/Kg	
	TIN	J	2.79	10.6	PQL	mg/Kg	
	Zirconium	J	2.36	5.32	PQL	mg/Kg	
SL-001-SA5A-SS-0.0-0.5	BORON	J	2.96	5.43	PQL	mg/Kg	J (all detects)
	SODIUM	J	81.6	109	PQL	mg/Kg	
	TIN	J	2.89	10.9	PQL	mg/Kg	
	Zirconium	J	2.05	5.43	PQL	mg/Kg	
SL-002-SA5A-SS-0.0-0.5	BORON	J	2.97	5.35	PQL	mg/Kg	J (all detects)
	TIN	J	2.85	10.7	PQL	mg/Kg	
	Zirconium	J	1.41	5.35	PQL	mg/Kg	
SL-004-SA5A-SS-0.0-0.5	BORON	J	3.61	5.48	PQL	mg/Kg	J (all detects)
	SODIUM	J	91.4	110	PQL	mg/Kg	
	TIN	J	2.96	11.0	PQL	mg/Kg	
	Zirconium	J	1.96	5.48	PQL	mg/Kg	
SL-006-SA5A-SS-0.0-0.5	BORON	J	3.28	5.49	PQL	mg/Kg	J (all detects)
	TIN	J	3.05	11.0	PQL	mg/Kg	
	Zirconium	J	1.80	5.49	PQL	mg/Kg	
SL-009-SA5A-SS-0.0-0.5	BORON	J	3.41	5.52	PQL	mg/Kg	J (all detects)
	SODIUM	J	80.1	110	PQL	mg/Kg	
	TIN	J	3.04	11.0	PQL	mg/Kg	
	Zirconium	J	2.79	5.52	PQL	mg/Kg	
SL-010-SA5A-SS-0.0-0.5	BORON	J	3.09	5.32	PQL	mg/Kg	J (all detects)
	SODIUM	J	80.0	106	PQL	mg/Kg	
	TIN	J	3.16	10.6	PQL	mg/Kg	
	Zirconium	J	2.02	5.32	PQL	mg/Kg	
SL-012-SA5A-SS-0.0-0.5	TIN	J	3.35	11.8	PQL	mg/Kg	J (all detects)
	Zirconium	J	4.42	5.88	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE090 | Laboratory: LL

EDD Filename: DE090_v1 | eQAPP Name: CDM_SSFL_110509

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-013-SA5A-SS-0.0-0.5	BORON	J	3.52	5.62	PQL	mg/Kg	J (all detects)
	TIN	J	3.13	11.2	PQL	mg/Kg	
	Zirconium	J	2.27	5.62	PQL	mg/Kg	
SL-016-SA5A-SS-0.0-0.5	BORON	J	2.46	5.62	PQL	mg/Kg	J (all detects)
	SODIUM	J	81.7	112	PQL	mg/Kg	
	TIN	J	3.68	11.2	PQL	mg/Kg	
	Zirconium	J	2.32	5.62	PQL	mg/Kg	
SL-017-SA5A-SS-0.0-0.5	BORON	J	2.52	5.49	PQL	mg/Kg	J (all detects)
	SODIUM	J	77.2	110	PQL	mg/Kg	
	TIN	J	3.09	11.0	PQL	mg/Kg	
	Zirconium	J	2.00	5.49	PQL	mg/Kg	
SL-018-SA5A-SS-0.0-0.5	BORON	J	3.51	5.45	PQL	mg/Kg	J (all detects)
	SODIUM	J	80.8	109	PQL	mg/Kg	
	TIN	J	2.96	10.9	PQL	mg/Kg	
	Zirconium	J	1.97	5.45	PQL	mg/Kg	
SL-019-SA5A-SS-0.0-0.5	BORON	J	3.74	6.02	PQL	mg/Kg	J (all detects)
	SODIUM	J	88.3	120	PQL	mg/Kg	
	TIN	J	3.31	12.0	PQL	mg/Kg	
	Zirconium	J	2.01	6.02	PQL	mg/Kg	

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-04-SA5A-QC-022311	ANTIMONY	J	0.133	0.217	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.107	0.434	PQL	mg/Kg	
	SILVER	J	0.0302	0.109	PQL	mg/Kg	
SL-001-SA5A-SS-0.0-0.5	SELENIUM	J	0.102	0.439	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0393	0.110	PQL	mg/Kg	
SL-002-SA5A-SS-0.0-0.5	ANTIMONY	J	0.141	0.218	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0561	0.437	PQL	mg/Kg	
	SILVER	J	0.0212	0.109	PQL	mg/Kg	
SL-004-SA5A-SS-0.0-0.5	ANTIMONY	J	0.178	0.221	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0750	0.443	PQL	mg/Kg	
	SILVER	J	0.0318	0.111	PQL	mg/Kg	
SL-006-SA5A-SS-0.0-0.5	ANTIMONY	J	0.154	0.224	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0557	0.448	PQL	mg/Kg	
	SILVER	J	0.0430	0.112	PQL	mg/Kg	
SL-009-SA5A-SS-0.0-0.5	SELENIUM	J	0.0853	0.437	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0368	0.109	PQL	mg/Kg	
SL-010-SA5A-SS-0.0-0.5	ANTIMONY	J	0.195	0.217	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0768	0.434	PQL	mg/Kg	
	SILVER	J	0.0181	0.108	PQL	mg/Kg	
SL-012-SA5A-SS-0.0-0.5	ANTIMONY	J	0.208	0.231	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.110	0.461	PQL	mg/Kg	
	SILVER	J	0.0404	0.115	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE090 | Laboratory: LL

EDD Filename: DE090_v1 | eQAPP Name: CDM_SSFL_110509

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-013-SA5A-SS-0.0-0.5	ANTIMONY	J	0.122	0.221	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0544	0.441	PQL	mg/Kg	
	SILVER	J	0.0395	0.110	PQL	mg/Kg	
SL-016-SA5A-SS-0.0-0.5	ANTIMONY	J	0.139	0.225	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.125	0.450	PQL	mg/Kg	
	SILVER	J	0.0548	0.112	PQL	mg/Kg	
SL-017-SA5A-SS-0.0-0.5	ANTIMONY	J	0.135	0.213	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0919	0.427	PQL	mg/Kg	
	SILVER	J	0.0251	0.107	PQL	mg/Kg	
SL-018-SA5A-SS-0.0-0.5	ANTIMONY	J	0.183	0.216	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0661	0.432	PQL	mg/Kg	
	SILVER	J	0.0342	0.108	PQL	mg/Kg	
SL-019-SA5A-SS-0.0-0.5	ANTIMONY	J	0.172	0.243	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0832	0.486	PQL	mg/Kg	
	SILVER	J	0.0512	0.122	PQL	mg/Kg	

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-04-SA5A-QC-022311	HEXAVALENT CHROMIUM	J	0.31	1.1	PQL	mg/Kg	J (all detects)
SL-001-SA5A-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.32	1.1	PQL	mg/Kg	J (all detects)
SL-002-SA5A-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.72	1.1	PQL	mg/Kg	J (all detects)
SL-004-SA5A-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.33	1.1	PQL	mg/Kg	J (all detects)
SL-006-SA5A-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.36	1.1	PQL	mg/Kg	J (all detects)
SL-009-SA5A-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.86	1.1	PQL	mg/Kg	J (all detects)
SL-010-SA5A-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.31	1.1	PQL	mg/Kg	J (all detects)
SL-012-SA5A-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.47	1.2	PQL	mg/Kg	J (all detects)
SL-013-SA5A-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.35	1.1	PQL	mg/Kg	J (all detects)
SL-016-SA5A-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.47	1.1	PQL	mg/Kg	J (all detects)
SL-017-SA5A-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.44	1.1	PQL	mg/Kg	J (all detects)
SL-018-SA5A-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.34	1.1	PQL	mg/Kg	J (all detects)

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-04-SA5A-QC-022311	MERCURY	J	0.0379	0.105	PQL	mg/Kg	J (all detects)
SL-001-SA5A-SS-0.0-0.5	MERCURY	J	0.0302	0.107	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE090 **Laboratory: LL**

EDD Filename: DE090_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-002-SA5A-SS-0.0-0.5	MERCURY	J	0.0642	0.109	PQL	mg/Kg	J (all detects)
SL-004-SA5A-SS-0.0-0.5	MERCURY	J	0.0398	0.107	PQL	mg/Kg	J (all detects)
SL-017-SA5A-SS-0.0-0.5	MERCURY	J	0.0210	0.108	PQL	mg/Kg	J (all detects)
SL-018-SA5A-SS-0.0-0.5	MERCURY	J	0.0235	0.109	PQL	mg/Kg	J (all detects)
SL-019-SA5A-SS-0.0-0.5	MERCURY	J	0.0164	0.123	PQL	mg/Kg	J (all detects)

Method: 8081A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-004-SA5A-SS-0.0-0.5	gamma-BHC (Lindane)	J	0.052	0.18	PQL	ug/Kg	J (all detects)
SL-006-SA5A-SS-0.0-0.5	4,4'-DDE DIELDRIN ENDOSULFAN II	J J J	0.095 0.19 0.074	0.38 0.38 0.38	PQL PQL PQL	ug/Kg ug/Kg ug/Kg	J (all detects)
SL-009-SA5A-SS-0.0-0.5	4,4'-DDE gamma-BHC (Lindane)	J J	0.11 0.096	0.38 0.19	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-010-SA5A-SS-0.0-0.5	ENDRIN KETONE	J	0.29	0.38	PQL	ug/Kg	J (all detects)
SL-012-SA5A-SS-0.0-0.5	4,4'-DDT ENDOSULFAN SULFATE ENDRIN ALDEHYDE	J J J	0.094 0.14 0.084	0.40 0.40 0.40	PQL PQL PQL	ug/Kg ug/Kg ug/Kg	J (all detects)
SL-013-SA5A-SS-0.0-0.5	4,4'-DDT	J	0.082	0.38	PQL	ug/Kg	J (all detects)
SL-016-SA5A-SS-0.0-0.5	4,4'-DDD 4,4'-DDT	J J	0.087 0.14	0.38 0.38	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-019-SA5A-SS-0.0-0.5	DELTA-BHC	J	0.046	0.21	PQL	ug/Kg	J (all detects)

Method: 8151A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-04-SA5A-QC-022311	MCPA	J	260	280	PQL	ug/Kg	J (all detects)
SL-006-SA5A-SS-0.0-0.5	MCPP	J	270	280	PQL	ug/Kg	J (all detects)
SL-009-SA5A-SS-0.0-0.5	2,4,5-TP (Silvex) MCPA	J J	0.12 140	0.19 280	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-016-SA5A-SS-0.0-0.5	2,4,5-TP (Silvex) MCPP	J J	0.12 140	0.19 280	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-019-SA5A-SS-0.0-0.5	MCPA	J	170	310	PQL	ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE090 **Laboratory: LL**

EDD Filename: DE090_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-016-SA5A-SS-0.0-0.5	BENZO(G,H,I)PERYLENE	J	41	190	PQL	ug/Kg	J (all detects)
	BIS(2-ETHYLHEXYL)PHTHALATE	J	41	380	PQL	ug/Kg	
	CHRYSENE	J	41	190	PQL	ug/Kg	
	FLUORANTHENE	J	33	190	PQL	ug/Kg	
	PYRENE	J	27	190	PQL	ug/Kg	
SL-017-SA5A-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	19	180	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	21	180	PQL	ug/Kg	
	FLUORANTHENE	J	19	180	PQL	ug/Kg	
	PYRENE	J	19	180	PQL	ug/Kg	
SL-019-SA5A-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	42	210	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	41	210	PQL	ug/Kg	
	FLUORANTHENE	J	54	210	PQL	ug/Kg	
	PHENANTHRENE	J	29	210	PQL	ug/Kg	
	PYRENE	J	41	210	PQL	ug/Kg	

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-04-SA5A-QC-022311	FLUORANTHENE	J	1.3	1.8	PQL	ug/Kg	J (all detects)
SL-002-SA5A-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	15	20	PQL	ug/Kg	J (all detects)
SL-004-SA5A-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	1.5	1.8	PQL	ug/Kg	J (all detects)
	BENZO(K)FLUORANTHENE	J	1.4	1.8	PQL	ug/Kg	
	FLUORANTHENE	J	1.7	1.8	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.0	1.8	PQL	ug/Kg	
	PHENANTHRENE	J	0.98	1.8	PQL	ug/Kg	
	PYRENE	J	1.7	1.8	PQL	ug/Kg	
SL-006-SA5A-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	14	20	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	0.53	1.9	PQL	ug/Kg	
	PHENANTHRENE	J	0.89	1.9	PQL	ug/Kg	
SL-009-SA5A-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	1.4	1.8	PQL	ug/Kg	J (all detects)
	BENZO(K)FLUORANTHENE	J	0.97	1.8	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	15	20	PQL	ug/Kg	
	FLUORANTHENE	J	1.6	1.8	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.1	1.8	PQL	ug/Kg	
	PHENANTHRENE	J	1.1	1.8	PQL	ug/Kg	
SL-012-SA5A-SS-0.0-0.5	BENZO(A)PYRENE	J	5.9	9.8	PQL	ug/Kg	J (all detects)
	BENZO(B)FLUORANTHENE	J	8.6	9.8	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	9.1	9.8	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	46	110	PQL	ug/Kg	
	CHRYSENE	J	6.1	9.8	PQL	ug/Kg	
SL-013-SA5A-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	12	20	PQL	ug/Kg	J (all detects)
SL-016-SA5A-SS-0.0-0.5	ACENAPHTHYLENE	J	0.73	1.9	PQL	ug/Kg	J (all detects)
	ANTHRACENE	J	1.5	1.9	PQL	ug/Kg	
	NAPHTHALENE	J	0.95	1.9	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE090 **Laboratory: LL**

EDD Filename: DE090_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8270C SIM**

Matrix: **SO**

SampleID	*Analyte*	*Lab Qual*	*Result*	*Reporting Limit*	*RL Type*	*Units*	*Flag*
SL-017-SA5A-SS-0.0-0.5	ANTHRACENE	J	0.39	1.8	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	1.7	1.8	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.2	1.8	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	0.96	1.8	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	14	20	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	0.78	1.8	PQL	ug/Kg	
SL-018-SA5A-SS-0.0-0.5	ANTHRACENE	J	0.70	1.8	PQL	ug/Kg	J (all detects)
	INDENO(1,2,3-CD)PYRENE	J	1.4	1.8	PQL	ug/Kg	
SL-019-SA5A-SS-0.0-0.5	1-METHYLNAPHTHALENE	J	0.92	2.1	PQL	ug/Kg	J (all detects)
	2-METHYLNAPHTHALENE	J	1.0	2.1	PQL	ug/Kg	
	ACENAPHTHYLENE	J	1.1	2.1	PQL	ug/Kg	
	ANTHRACENE	J	1.4	2.1	PQL	ug/Kg	
	NAPHTHALENE	J	1.2	2.1	PQL	ug/Kg	

LDC #: 25911B4 **VALIDATION COMPLETENESS WORKSHEET** Date: 8-3-11

SDG #: DE090 ADR

Laboratory: Lancaster Laboratories

Reviewer: CR

2nd Reviewer: A

METHOD: Metals (EPA SW 846 Method 6010B/6020A/7000)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets. .

	Validation Area		Comments
I.	Technical holding times	N	Sampling dates:
II.	ICP/MS Tune	—	
III.	Calibration	—	
IV.	Blanks	SW	
V.	ICP Interference Check Sample (ICS) Analysis	N	
VI.	Matrix Spike Analysis	N	MS/D (Al, Ba, Ca, Fe, Mg, Mn, P, Ti, Zn > 4x)
VII.	Duplicate Sample Analysis	N	Dup (Se, Ag < 5xRL)
VIII.	Laboratory Control Samples (LCS)	A	LCS/D
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	SW	J/UJ/A (Ba, Cr, Co, Cu, Pb, Zn)
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	—	
XV	Field Blanks	ND	EB=14

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:

1	DUP-04-SA5A-QC-022311	11	SL-017-SA5A-SS-0.0-0.5	21		31	
2	SL-001-SA5A-SS-0.0-0.5	12	SL-018-SA5A-SS-0.0-0.5	22		32	
3	SL-002-SA5A-SS-0.0-0.5	13	SL-019-SA5A-SS-0.0-0.5	23		33	
4	SL-004-SA5A-SS-0.0-0.5	14	EB01-SA5A-022311	24		34	
5	SL-006-SA5A-SS-0.0-0.5	15	SL-004-SA5A-SS-0.0-0.5MS	25		35	
6	SL-009-SA5A-SS-0.0-0.5	16	SL-004-SA5A-SS-0.0-0.5MSD	26		36	
7	SL-010-SA5A-SS-0.0-0.5	17	SL-004-SA5A-SS-0.0-0.5DUP	27		37	
8	SL-012-SA5A-SS-0.0-0.5	18		28		38	
9	SL-013-SA5A-SS-0.0-0.5	19		29		39	
10	SL-016-SA5A-SS-0.0-0.5	20		30		40	

Notes:

LDC #: 25911B4

VALIDATION FINDINGS WORKSHEET
PB/ICB/CCB QUALIFIED SAMPLES

Reviewer: 02
2nd Reviewer: 1

METHOD: Trace metals (EPA SW 864 Method 6010B/6020/7000) Soil preparation factor applied: 100x x MS: 2xdil
Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: 11-13

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit	12	13								
Cd			0.31	0.31	0.27	0.26								

Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: 2, 3, 5-10

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit	5	7	9							
Cd			0.25	0.25	0.16	0.14	0.19							

Samples with analyte concentrations within five times the associated ICB, CCB or PB concentration are listed above with the identifications from the Validation Completeness Worksheet. These sample results were qualified as not detected, "U".
Note : a - The listed analyte concentration is the highest ICB, CCB, or PB detected in the analysis of each element.

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 9
SERIAL DILUTIONS
SDG No.: DE090
Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: 6214520BKG Serial Dilution Lab Sample ID: 6214520L
Batch ID(s): P06208B, P06226A, P06826A
Concentration Units: UG/L

Analyte	Mass	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Diff.	Q	M
Aluminum		134464.1900		144587.7500		8		P
Antimony	121	0.8055	B	1.5000	U	100		MS
Arsenic	75	18.7500		20.5900		10		MS
Barium	137	490.7000		555.0000		13	E	MS
Beryllium	9	2.4770		2.8460		15		MS
Boron		32.8800	B	70.2500	B	114		P
Cadmium	111	0.9819		1.4700	B	50		MS
Calcium		30720.4800		31288.4500		2		P
Chromium	52	76.7300		87.7500		14	E	MS
Cobalt	59	23.0100		25.5000		11	E	MS
Copper	63	35.4900		40.9050		15	E	MS
Iron		194608.0300		209157.0500		7		P
Lead	208	32.0200		36.4850		14	E	MS
Lithium		221.6300		203.0000		8		P
Magnesium		42793.4800		43887.7000		3		P
Manganese		2960.3100		3266.0500		10		P
Molybdenum	98	1.7940		2.1830	B	22		MS
Nickel	60	48.8900		58.8500		20		MS
Phosphorus		4197.5400		4164.7500		1		P
Potassium		29864.4400		29604.1000		1		P
Selenium	78	0.3388	B	1.0000	U	100		MS
Silver	107	0.1436	B	0.3015	B	110		MS
Sodium		833.4100	B	2042.2000	B	145		P
Strontium		174.3000		192.2500		10		P
Thallium	203	1.1490		1.3480	B	17		MS
Tin		27.0300	B	50.0000	U	100		P
Titanium		11310.9300		11651.1500		3		P
Vanadium	51	150.5000		165.8000		10		MS
Zinc	66	388.9000		431.5500		11	E	MS
Zirconium		17.8900	B	42.0000	U	100		P

NOTE: An E in column Q indicates the presence of a chemical or physical interference in the matrix when the % difference is greater than 10%. This applies only when (I) is greater than or equal to 50x MDL for ICP, 100x MDL for ICP-MS (6020), 50x MDL for ICP-MS (200.8), or 25x MDL for GFAA.

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry

CONCENTRATION QUALIFIERS:
U= Below MDL
B= Below LOQ

FLAGS:
E = Matrix Effects exist as proven by Serial Dilution or Spiked Dilution

SAMPLE DELIVERY GROUP

DE091

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
24-Feb-2011	SL-007-SA5A-SS-0.0-0.5	6216199	N	3050B	6010B	III
24-Feb-2011	SL-007-SA5A-SS-0.0-0.5	6216199	N	3050B	6020	III
24-Feb-2011	SL-007-SA5A-SS-0.0-0.5	6216199	N	3060A	7199	III
24-Feb-2011	SL-007-SA5A-SS-0.0-0.5	6216199	N	3550B	8081A	III
24-Feb-2011	SL-007-SA5A-SS-0.0-0.5	6216199	N	3550B	8082	III
24-Feb-2011	SL-007-SA5A-SS-0.0-0.5	6216199	N	3550B	8151A	III
24-Feb-2011	SL-007-SA5A-SS-0.0-0.5	6216199	N	3550B	8270C	III
24-Feb-2011	SL-007-SA5A-SS-0.0-0.5	6216199	N	3550B	8270C SIM	III
24-Feb-2011	SL-007-SA5A-SS-0.0-0.5	6216199	N	Gen Prep	9045M	III
24-Feb-2011	SL-007-SA5A-SS-0.0-0.5	6216199	N	METHOD	300.0	III
24-Feb-2011	SL-007-SA5A-SS-0.0-0.5	6216199	N	METHOD	314.0	III
24-Feb-2011	SL-007-SA5A-SS-0.0-0.5	6216199	N	METHOD	7471A	III
24-Feb-2011	SL-007-SA5A-SS-0.0-0.5DUP	P216199D220235A	DUP	3050B	6020	III
24-Feb-2011	SL-007-SA5A-SS-0.0-0.5DUP	P216199D220235C	DUP	3050B	6020	III
24-Feb-2011	SL-007-SA5A-SS-0.0-0.5DUP	P216199D220235D	DUP	3050B	6020	III
24-Feb-2011	SL-007-SA5A-SS-0.0-0.5DUP	P216199D221117	DUP	3050B	6010B	III
24-Feb-2011	SL-007-SA5A-SS-0.0-0.5DUP	P216199D221315A	DUP	3050B	6020	III
24-Feb-2011	SL-007-SA5A-SS-0.0-0.5DUP	P216199D221411B	DUP	3050B	6020	III
24-Feb-2011	SL-007-SA5A-SS-0.0-0.5DUP	P216199D272103A	DUP	METHOD	300.0	III
24-Feb-2011	SL-007-SA5A-SS-0.0-0.5DUP	P216199D291120A	DUP	Gen Prep	9045M	III
24-Feb-2011	SL-007-SA5A-SS-0.0-0.5MSD	P216199M220239A	MSD	3050B	6020	III
24-Feb-2011	SL-007-SA5A-SS-0.0-0.5MSD	P216199M220239C	MSD	3050B	6020	III
24-Feb-2011	SL-007-SA5A-SS-0.0-0.5MSD	P216199M220239D	MSD	3050B	6020	III
24-Feb-2011	SL-007-SA5A-SS-0.0-0.5MSD	P216199M221009A	MSD	3050B	6020	III
24-Feb-2011	SL-007-SA5A-SS-0.0-0.5MSD	P216199M221125	MSD	3050B	6010B	III
24-Feb-2011	SL-007-SA5A-SS-0.0-0.5MSD	P216199M221417B	MSD	3050B	6020	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
24-Feb-2011	SL-007-SA5A-SS-0.0-0.5MSD	P216199M240450A	MSD	3550B	8081A	III
24-Feb-2011	SL-007-SA5A-SS-0.0-0.5MSD	P216199M240746A	MSD	3550B	8082	III
24-Feb-2011	SL-007-SA5A-SS-0.0-0.5MSD	P216199M242222A	MSD	3550B	8151A	III
24-Feb-2011	SL-007-SA5A-SS-0.0-0.5MSD	P216199M260738	MSD	3550B	8270C	III
24-Feb-2011	SL-007-SA5A-SS-0.0-0.5MS	P216199R220237A	MS	3050B	6020	III
24-Feb-2011	SL-007-SA5A-SS-0.0-0.5MS	P216199R220237C	MS	3050B	6020	III
24-Feb-2011	SL-007-SA5A-SS-0.0-0.5MS	P216199R220237D	MS	3050B	6020	III
24-Feb-2011	SL-007-SA5A-SS-0.0-0.5MS	P216199R221008A	MS	3050B	6020	III
24-Feb-2011	SL-007-SA5A-SS-0.0-0.5MS	P216199R221121	MS	3050B	6010B	III
24-Feb-2011	SL-007-SA5A-SS-0.0-0.5MS	P216199R221414B	MS	3050B	6020	III
24-Feb-2011	SL-007-SA5A-SS-0.0-0.5MS	P216199R240435A	MS	3550B	8081A	III
24-Feb-2011	SL-007-SA5A-SS-0.0-0.5MS	P216199R240727A	MS	3550B	8082	III
24-Feb-2011	SL-007-SA5A-SS-0.0-0.5MS	P216199R242155A	MS	3550B	8151A	III
24-Feb-2011	SL-007-SA5A-SS-0.0-0.5MS	P216199R260713	MS	3550B	8270C	III
24-Feb-2011	SL-007-SA5A-SS-0.0-0.5MS	P216199R272117A	MS	METHOD	300.0	III
24-Feb-2011	SL-008-SA5A-SS-0.0-0.5	6216200	N	3050B	6010B	III
24-Feb-2011	SL-008-SA5A-SS-0.0-0.5	6216200	N	3050B	6020	III
24-Feb-2011	SL-008-SA5A-SS-0.0-0.5	6216200	N	3060A	7199	III
24-Feb-2011	SL-008-SA5A-SS-0.0-0.5	6216200	N	3550B	8081A	III
24-Feb-2011	SL-008-SA5A-SS-0.0-0.5	6216200	N	3550B	8082	III
24-Feb-2011	SL-008-SA5A-SS-0.0-0.5	6216200	N	3550B	8151A	III
24-Feb-2011	SL-008-SA5A-SS-0.0-0.5	6216200	N	3550B	8270C	III
24-Feb-2011	SL-008-SA5A-SS-0.0-0.5	6216200	N	3550B	8270C SIM	III
24-Feb-2011	SL-008-SA5A-SS-0.0-0.5	6216200	N	Gen Prep	9045M	III
24-Feb-2011	SL-008-SA5A-SS-0.0-0.5	6216200	N	METHOD	300.0	III
24-Feb-2011	SL-008-SA5A-SS-0.0-0.5	6216200	N	METHOD	314.0	III

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Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
24-Feb-2011	SL-008-SA5A-SS-0.0-0.5	6216200	N	METHOD	6850	III
24-Feb-2011	SL-008-SA5A-SS-0.0-0.5	6216200	N	METHOD	7471A	III
24-Feb-2011	SL-233-SA5A-SS-0.0-0.5	6216209	N	3050B	6010B	III
24-Feb-2011	SL-233-SA5A-SS-0.0-0.5	6216209	N	3050B	6020	III
24-Feb-2011	SL-233-SA5A-SS-0.0-0.5	6216209	N	3060A	7199	III
24-Feb-2011	SL-233-SA5A-SS-0.0-0.5	6216209	N	3550B	8081A	III
24-Feb-2011	SL-233-SA5A-SS-0.0-0.5	6216209	N	3550B	8082	III
24-Feb-2011	SL-233-SA5A-SS-0.0-0.5	6216209	N	3550B	8151A	III
24-Feb-2011	SL-233-SA5A-SS-0.0-0.5	6216209	N	3550B	8270C	III
24-Feb-2011	SL-233-SA5A-SS-0.0-0.5	6216209	N	3550B	8270C SIM	III
24-Feb-2011	SL-233-SA5A-SS-0.0-0.5	6216209	N	Gen Prep	9045M	III
24-Feb-2011	SL-233-SA5A-SS-0.0-0.5	6216209	N	METHOD	300.0	III
24-Feb-2011	SL-233-SA5A-SS-0.0-0.5	6216209	N	METHOD	314.0	III
24-Feb-2011	SL-233-SA5A-SS-0.0-0.5	6216209	N	METHOD	7471A	III
24-Feb-2011	SL-233-SA5A-SS-0.0-0.5DUP	P216209D270021B	DUP	METHOD	300.0	III
24-Feb-2011	SL-233-SA5A-SS-0.0-0.5MS	P216209R270036B	MS	METHOD	300.0	III
24-Feb-2011	SL-021-SA5A-SB-3.0-4.0	6216212	N	3050B	6010B	III
24-Feb-2011	SL-021-SA5A-SB-3.0-4.0	6216212	N	3050B	6020	III
24-Feb-2011	SL-021-SA5A-SB-3.0-4.0	6216212	N	3060A	7199	III
24-Feb-2011	SL-021-SA5A-SB-3.0-4.0	6216212	N	3550B	8082	III
24-Feb-2011	SL-021-SA5A-SB-3.0-4.0	6216212	N	3550B	8270C	III
24-Feb-2011	SL-021-SA5A-SB-3.0-4.0	6216212	N	3550B	8270C SIM	III
24-Feb-2011	SL-021-SA5A-SB-3.0-4.0	6216212	N	5035	8260B	III
24-Feb-2011	SL-021-SA5A-SB-3.0-4.0	6216212	N	5035	8260B SIM	III
24-Feb-2011	SL-021-SA5A-SB-3.0-4.0	6216212	N	Gen Prep	9045M	III
24-Feb-2011	SL-021-SA5A-SB-3.0-4.0	6216212	N	METHOD	300.0	III

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Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
24-Feb-2011	SL-021-SA5A-SB-3.0-4.0	6216212	N	METHOD	314.0	III
24-Feb-2011	SL-021-SA5A-SB-3.0-4.0	6216212	N	METHOD	7471A	III
24-Feb-2011	SL-122-SA5A-SS-0.0-0.5	6216216	N	3050B	6010B	III
24-Feb-2011	SL-122-SA5A-SS-0.0-0.5	6216216	N	3050B	6020	III
24-Feb-2011	SL-122-SA5A-SS-0.0-0.5	6216216	N	3060A	7199	III
24-Feb-2011	SL-122-SA5A-SS-0.0-0.5	6216216	N	3550B	8081A	III
24-Feb-2011	SL-122-SA5A-SS-0.0-0.5	6216216	N	3550B	8082	III
24-Feb-2011	SL-122-SA5A-SS-0.0-0.5	6216216	N	3550B	8151A	III
24-Feb-2011	SL-122-SA5A-SS-0.0-0.5	6216216	N	3550B	8270C	III
24-Feb-2011	SL-122-SA5A-SS-0.0-0.5	6216216	N	3550B	8270C SIM	III
24-Feb-2011	SL-122-SA5A-SS-0.0-0.5	6216216	N	Gen Prep	9045M	III
24-Feb-2011	SL-122-SA5A-SS-0.0-0.5	6216216	N	METHOD	300.0	III
24-Feb-2011	SL-122-SA5A-SS-0.0-0.5	6216216	N	METHOD	314.0	III
24-Feb-2011	SL-122-SA5A-SS-0.0-0.5	6216216	N	METHOD	7471A	III
24-Feb-2011	SL-122-SA5A-SS-0.0-0.5DUP	P216216D272105A	DUP	3060A	7199	III
24-Feb-2011	SL-122-SA5A-SS-0.0-0.5MS	P216216R272028A	MS	3060A	7199	III
24-Feb-2011	SL-121-SA5A-SS-0.0-0.5	6216204	N	3050B	6010B	III
24-Feb-2011	SL-121-SA5A-SS-0.0-0.5	6216204	N	3050B	6020	III
24-Feb-2011	SL-121-SA5A-SS-0.0-0.5	6216204	N	3060A	7199	III
24-Feb-2011	SL-121-SA5A-SS-0.0-0.5	6216204	N	3550B	8081A	III
24-Feb-2011	SL-121-SA5A-SS-0.0-0.5	6216204	N	3550B	8082	III
24-Feb-2011	SL-121-SA5A-SS-0.0-0.5	6216204	N	3550B	8151A	III
24-Feb-2011	SL-121-SA5A-SS-0.0-0.5	6216204	N	3550B	8270C	III
24-Feb-2011	SL-121-SA5A-SS-0.0-0.5	6216204	N	3550B	8270C SIM	III
24-Feb-2011	SL-121-SA5A-SS-0.0-0.5	6216204	N	Gen Prep	9045M	III
24-Feb-2011	SL-121-SA5A-SS-0.0-0.5	6216204	N	METHOD	300.0	III

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Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
24-Feb-2011	SL-121-SA5A-SS-0.0-0.5	6216204	N	METHOD	314.0	III
24-Feb-2011	SL-121-SA5A-SS-0.0-0.5	6216204	N	METHOD	6850	III
24-Feb-2011	SL-121-SA5A-SS-0.0-0.5	6216204	N	METHOD	7471A	III
24-Feb-2011	SL-250-SA5A-SS-0.0-0.5	6216210	N	3050B	6010B	III
24-Feb-2011	SL-250-SA5A-SS-0.0-0.5	6216210	N	3050B	6020	III
24-Feb-2011	SL-250-SA5A-SS-0.0-0.5	6216210	N	3060A	7199	III
24-Feb-2011	SL-250-SA5A-SS-0.0-0.5	6216210	N	3550B	8081A	III
24-Feb-2011	SL-250-SA5A-SS-0.0-0.5	6216210	N	3550B	8082	III
24-Feb-2011	SL-250-SA5A-SS-0.0-0.5	6216210	N	3550B	8151A	III
24-Feb-2011	SL-250-SA5A-SS-0.0-0.5	6216210	N	3550B	8270C	III
24-Feb-2011	SL-250-SA5A-SS-0.0-0.5	6216210	N	3550B	8270C SIM	III
24-Feb-2011	SL-250-SA5A-SS-0.0-0.5	6216210	N	Gen Prep	9045M	III
24-Feb-2011	SL-250-SA5A-SS-0.0-0.5	6216210	N	METHOD	300.0	III
24-Feb-2011	SL-250-SA5A-SS-0.0-0.5	6216210	N	METHOD	314.0	III
24-Feb-2011	SL-250-SA5A-SS-0.0-0.5	6216210	N	METHOD	7471A	III
24-Feb-2011	SL-119-SA5A-SS-0.0-0.5	6216202	N	3050B	6010B	III
24-Feb-2011	SL-119-SA5A-SS-0.0-0.5	6216202	N	3050B	6020	III
24-Feb-2011	SL-119-SA5A-SS-0.0-0.5	6216202	N	3060A	7199	III
24-Feb-2011	SL-119-SA5A-SS-0.0-0.5	6216202	N	3550B	8081A	III
24-Feb-2011	SL-119-SA5A-SS-0.0-0.5	6216202	N	3550B	8082	III
24-Feb-2011	SL-119-SA5A-SS-0.0-0.5	6216202	N	3550B	8151A	III
24-Feb-2011	SL-119-SA5A-SS-0.0-0.5	6216202	N	3550B	8270C	III
24-Feb-2011	SL-119-SA5A-SS-0.0-0.5	6216202	N	3550B	8270C SIM	III
24-Feb-2011	SL-119-SA5A-SS-0.0-0.5	6216202	N	Gen Prep	9045M	III
24-Feb-2011	SL-119-SA5A-SS-0.0-0.5	6216202	N	METHOD	300.0	III
24-Feb-2011	SL-119-SA5A-SS-0.0-0.5	6216202	N	METHOD	314.0	III

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Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
24-Feb-2011	SL-119-SA5A-SS-0.0-0.5	6216202	N	METHOD	7471A	III
24-Feb-2011	SL-119-SA5A-SS-0.0-0.5MSD	P216202M260803	MSD	3550B	8270C SIM	III
24-Feb-2011	SL-119-SA5A-SS-0.0-0.5MS	P216202R260730	MS	3550B	8270C SIM	III
24-Feb-2011	SL-120-SA5A-SS-0.0-0.5	6216203	N	3050B	6010B	III
24-Feb-2011	SL-120-SA5A-SS-0.0-0.5	6216203	N	3050B	6020	III
24-Feb-2011	SL-120-SA5A-SS-0.0-0.5	6216203	N	3060A	7199	III
24-Feb-2011	SL-120-SA5A-SS-0.0-0.5	6216203	N	3550B	8081A	III
24-Feb-2011	SL-120-SA5A-SS-0.0-0.5	6216203	N	3550B	8082	III
24-Feb-2011	SL-120-SA5A-SS-0.0-0.5	6216203	N	3550B	8151A	III
24-Feb-2011	SL-120-SA5A-SS-0.0-0.5	6216203	N	3550B	8270C	III
24-Feb-2011	SL-120-SA5A-SS-0.0-0.5	6216203	N	3550B	8270C SIM	III
24-Feb-2011	SL-120-SA5A-SS-0.0-0.5	6216203	N	Gen Prep	9045M	III
24-Feb-2011	SL-120-SA5A-SS-0.0-0.5	6216203	N	METHOD	300.0	III
24-Feb-2011	SL-120-SA5A-SS-0.0-0.5	6216203	N	METHOD	314.0	III
24-Feb-2011	SL-120-SA5A-SS-0.0-0.5	6216203	N	METHOD	7471A	III
24-Feb-2011	SL-022-SA5A-SB-4.0-5.0	6216213	N	3050B	6010B	III
24-Feb-2011	SL-022-SA5A-SB-4.0-5.0	6216213	N	3050B	6020	III
24-Feb-2011	SL-022-SA5A-SB-4.0-5.0	6216213	N	3060A	7199	III
24-Feb-2011	SL-022-SA5A-SB-4.0-5.0	6216213	N	3550B	8082	III
24-Feb-2011	SL-022-SA5A-SB-4.0-5.0	6216213	N	3550B	8270C	III
24-Feb-2011	SL-022-SA5A-SB-4.0-5.0	6216213	N	3550B	8270C SIM	III
24-Feb-2011	SL-022-SA5A-SB-4.0-5.0	6216213	N	5035	8260B	III
24-Feb-2011	SL-022-SA5A-SB-4.0-5.0	6216213	N	5035	8260B SIM	III
24-Feb-2011	SL-022-SA5A-SB-4.0-5.0	6216213	N	Gen Prep	9045M	III
24-Feb-2011	SL-022-SA5A-SB-4.0-5.0	6216213	N	METHOD	300.0	III
24-Feb-2011	SL-022-SA5A-SB-4.0-5.0	6216213	N	METHOD	314.0	III

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Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
24-Feb-2011	SL-022-SA5A-SB-4.0-5.0	6216213	N	METHOD	7471A	III
24-Feb-2011	SL-110-SA5A-SS-0.0-0.5	6216201	N	3050B	6010B	III
24-Feb-2011	SL-110-SA5A-SS-0.0-0.5	6216201	N	3050B	6020	III
24-Feb-2011	SL-110-SA5A-SS-0.0-0.5	6216201	N	3060A	7199	III
24-Feb-2011	SL-110-SA5A-SS-0.0-0.5	6216201	N	3550B	8081A	III
24-Feb-2011	SL-110-SA5A-SS-0.0-0.5	6216201	N	3550B	8082	III
24-Feb-2011	SL-110-SA5A-SS-0.0-0.5	6216201	N	3550B	8151A	III
24-Feb-2011	SL-110-SA5A-SS-0.0-0.5	6216201	N	3550B	8270C	III
24-Feb-2011	SL-110-SA5A-SS-0.0-0.5	6216201	N	3550B	8270C SIM	III
24-Feb-2011	SL-110-SA5A-SS-0.0-0.5	6216201	N	Gen Prep	9045M	III
24-Feb-2011	SL-110-SA5A-SS-0.0-0.5	6216201	N	METHOD	300.0	III
24-Feb-2011	SL-110-SA5A-SS-0.0-0.5	6216201	N	METHOD	314.0	III
24-Feb-2011	SL-110-SA5A-SS-0.0-0.5	6216201	N	METHOD	7471A	III
24-Feb-2011	SL-143-SA5A-SS-0.0-0.5	6216208	N	3050B	6010B	III
24-Feb-2011	SL-143-SA5A-SS-0.0-0.5	6216208	N	3050B	6020	III
24-Feb-2011	SL-143-SA5A-SS-0.0-0.5	6216208	N	3060A	7199	III
24-Feb-2011	SL-143-SA5A-SS-0.0-0.5	6216208	N	3550B	8081A	III
24-Feb-2011	SL-143-SA5A-SS-0.0-0.5	6216208	N	3550B	8082	III
24-Feb-2011	SL-143-SA5A-SS-0.0-0.5	6216208	N	3550B	8151A	III
24-Feb-2011	SL-143-SA5A-SS-0.0-0.5	6216208	N	3550B	8270C	III
24-Feb-2011	SL-143-SA5A-SS-0.0-0.5	6216208	N	3550B	8270C SIM	III
24-Feb-2011	SL-143-SA5A-SS-0.0-0.5	6216208	N	Gen Prep	9045M	III
24-Feb-2011	SL-143-SA5A-SS-0.0-0.5	6216208	N	METHOD	300.0	III
24-Feb-2011	SL-143-SA5A-SS-0.0-0.5	6216208	N	METHOD	314.0	III
24-Feb-2011	SL-143-SA5A-SS-0.0-0.5	6216208	N	METHOD	7471A	III
24-Feb-2011	SL-143-SA5A-SS-0.0-0.5DUP	P216208D291120B	DUP	Gen Prep	9045M	III

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Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
24-Feb-2011	SL-251-SA5A-SS-0.0-0.5	6216211	N	3050B	6010B	III
24-Feb-2011	SL-251-SA5A-SS-0.0-0.5	6216211	N	3050B	6020	III
24-Feb-2011	SL-251-SA5A-SS-0.0-0.5	6216211	N	3060A	7199	III
24-Feb-2011	SL-251-SA5A-SS-0.0-0.5	6216211	N	3550B	8081A	III
24-Feb-2011	SL-251-SA5A-SS-0.0-0.5	6216211	N	3550B	8082	III
24-Feb-2011	SL-251-SA5A-SS-0.0-0.5	6216211	N	3550B	8151A	III
24-Feb-2011	SL-251-SA5A-SS-0.0-0.5	6216211	N	3550B	8270C	III
24-Feb-2011	SL-251-SA5A-SS-0.0-0.5	6216211	N	3550B	8270C SIM	III
24-Feb-2011	SL-251-SA5A-SS-0.0-0.5	6216211	N	Gen Prep	9045M	III
24-Feb-2011	SL-251-SA5A-SS-0.0-0.5	6216211	N	METHOD	300.0	III
24-Feb-2011	SL-251-SA5A-SS-0.0-0.5	6216211	N	METHOD	314.0	III
24-Feb-2011	SL-251-SA5A-SS-0.0-0.5	6216211	N	METHOD	7471A	III
24-Feb-2011	SL-136-SA5A-SS-0.0-0.5	6216205	N	3050B	6010B	III
24-Feb-2011	SL-136-SA5A-SS-0.0-0.5	6216205	N	3050B	6020	III
24-Feb-2011	SL-136-SA5A-SS-0.0-0.5	6216205	N	3060A	7199	III
24-Feb-2011	SL-136-SA5A-SS-0.0-0.5	6216205	N	3550B	8081A	III
24-Feb-2011	SL-136-SA5A-SS-0.0-0.5	6216205	N	3550B	8082	III
24-Feb-2011	SL-136-SA5A-SS-0.0-0.5	6216205	N	3550B	8151A	III
24-Feb-2011	SL-136-SA5A-SS-0.0-0.5	6216205	N	3550B	8270C	III
24-Feb-2011	SL-136-SA5A-SS-0.0-0.5	6216205	N	3550B	8270C SIM	III
24-Feb-2011	SL-136-SA5A-SS-0.0-0.5	6216205	N	Gen Prep	9045M	III
24-Feb-2011	SL-136-SA5A-SS-0.0-0.5	6216205	N	METHOD	300.0	III
24-Feb-2011	SL-136-SA5A-SS-0.0-0.5	6216205	N	METHOD	314.0	III
24-Feb-2011	SL-136-SA5A-SS-0.0-0.5	6216205	N	METHOD	7471A	III
24-Feb-2011	SL-138-SA5A-SS-0.0-0.5	6216207	N	3050B	6010B	III
24-Feb-2011	SL-138-SA5A-SS-0.0-0.5	6216207	N	3050B	6020	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
24-Feb-2011	SL-138-SA5A-SS-0.0-0.5	6216207	N	3060A	7199	III
24-Feb-2011	SL-138-SA5A-SS-0.0-0.5	6216207	N	3550B	8081A	III
24-Feb-2011	SL-138-SA5A-SS-0.0-0.5	6216207	N	3550B	8082	III
24-Feb-2011	SL-138-SA5A-SS-0.0-0.5	6216207	N	3550B	8151A	III
24-Feb-2011	SL-138-SA5A-SS-0.0-0.5	6216207	N	3550B	8270C	III
24-Feb-2011	SL-138-SA5A-SS-0.0-0.5	6216207	N	3550B	8270C SIM	III
24-Feb-2011	SL-138-SA5A-SS-0.0-0.5	6216207	N	Gen Prep	9045M	III
24-Feb-2011	SL-138-SA5A-SS-0.0-0.5	6216207	N	METHOD	300.0	III
24-Feb-2011	SL-138-SA5A-SS-0.0-0.5	6216207	N	METHOD	314.0	III
24-Feb-2011	SL-138-SA5A-SS-0.0-0.5	6216207	N	METHOD	7471A	III
24-Feb-2011	SL-137-SA5A-SS-0.0-0.5	6216206	N	3050B	6010B	III
24-Feb-2011	SL-137-SA5A-SS-0.0-0.5	6216206	N	3050B	6020	III
24-Feb-2011	SL-137-SA5A-SS-0.0-0.5	6216206	N	3060A	7199	III
24-Feb-2011	SL-137-SA5A-SS-0.0-0.5	6216206	N	3550B	8081A	III
24-Feb-2011	SL-137-SA5A-SS-0.0-0.5	6216206	N	3550B	8082	III
24-Feb-2011	SL-137-SA5A-SS-0.0-0.5	6216206	N	3550B	8151A	III
24-Feb-2011	SL-137-SA5A-SS-0.0-0.5	6216206	N	3550B	8270C	III
24-Feb-2011	SL-137-SA5A-SS-0.0-0.5	6216206	N	3550B	8270C SIM	III
24-Feb-2011	SL-137-SA5A-SS-0.0-0.5	6216206	N	Gen Prep	9045M	III
24-Feb-2011	SL-137-SA5A-SS-0.0-0.5	6216206	N	METHOD	300.0	III
24-Feb-2011	SL-137-SA5A-SS-0.0-0.5	6216206	N	METHOD	314.0	III
24-Feb-2011	SL-137-SA5A-SS-0.0-0.5	6216206	N	METHOD	7471A	III
24-Feb-2011	SL-050-SA5A-SB-4.0-5.0	6216214	N	3050B	6010B	III
24-Feb-2011	SL-050-SA5A-SB-4.0-5.0	6216214	N	3050B	6020	III
24-Feb-2011	SL-050-SA5A-SB-4.0-5.0	6216214	N	3060A	7199	III
24-Feb-2011	SL-050-SA5A-SB-4.0-5.0	6216214	N	3550B	8082	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
24-Feb-2011	SL-050-SA5A-SB-4.0-5.0	6216214	N	3550B	8270C	III
24-Feb-2011	SL-050-SA5A-SB-4.0-5.0	6216214	N	3550B	8270C SIM	III
24-Feb-2011	SL-050-SA5A-SB-4.0-5.0	6216214	N	5035	8260B	III
24-Feb-2011	SL-050-SA5A-SB-4.0-5.0	6216214	N	5035	8260B SIM	III
24-Feb-2011	SL-050-SA5A-SB-4.0-5.0	6216214	N	Gen Prep	9045M	III
24-Feb-2011	SL-050-SA5A-SB-4.0-5.0	6216214	N	METHOD	300.0	III
24-Feb-2011	SL-050-SA5A-SB-4.0-5.0	6216214	N	METHOD	314.0	III
24-Feb-2011	SL-050-SA5A-SB-4.0-5.0	6216214	N	METHOD	7471A	III
24-Feb-2011	SL-050-SA5A-SB-4.0-5.0DUP	P216214D221056	DUP	METHOD	7471A	III
24-Feb-2011	SL-050-SA5A-SB-4.0-5.0MSD	P216214M221058	MSD	METHOD	7471A	III
24-Feb-2011	SL-050-SA5A-SB-4.0-5.0MS	P216214R221057	MS	METHOD	7471A	III
24-Feb-2011	TB-022411	6216215	TB	5030B	8260B	III
24-Feb-2011	TB-022411	6216215	TB	5030B	8260B SIM	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE091 | Laboratory: LL

EDD Filename: DE091_v2 | eQAPP Name: CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: SL-007-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 8:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.4		0.89	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-008-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 9:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.4		0.88	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-021-SA5A-SB-3.0-4.0 *Collected:* 2/24/2011 9:48:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.2		0.89	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-022-SA5A-SB-4.0-5.0 *Collected:* 2/24/2011 11:23:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.3		0.88	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-050-SA5A-SB-4.0-5.0 *Collected:* 2/24/2011 3:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	3.3		0.92	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-110-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 1:08:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.2		0.95	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-119-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 10:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.2	J	0.99	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-120-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 11:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	0.89	U	0.89	MDL	1.1	PQL	mg/Kg	UJ	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE091 | Laboratory: LL

EDD Filename: DE091_v2 | eQAPP Name: CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: SL-121-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 10:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.2		0.89	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-122-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 9:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	0.87	U	0.87	MDL	1.1	PQL	mg/Kg	UJ	Q

Sample ID: SL-136-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 2:25:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	0.88	J	0.87	MDL	1.1	PQL	mg/Kg	J	Z, Q

Sample ID: SL-137-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 3:28:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	0.95	U	0.95	MDL	1.2	PQL	mg/Kg	UJ	Q

Sample ID: SL-138-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 3:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.6		0.91	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-143-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 1:38:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.9		0.90	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-233-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 9:22:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	3.1		0.88	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-250-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 10:20:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	0.88	U	0.88	MDL	1.1	PQL	mg/Kg	UJ	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE091 **Laboratory: LL**

EDD Filename: DE091_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: SL-251-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 2:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.3		0.89	MDL	1.1	PQL	mg/Kg	J	Q

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-007-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 8:45:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	5.09	J	0.993	MDL	5.58	PQL	mg/Kg	J	Z

Sample ID: SL-007-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 8:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	3670		20.1	MDL	55.8	PQL	mg/Kg	J	Q
SODIUM	58.5	J	41.6	MDL	112	PQL	mg/Kg	J	Z
TIN	2.99	J	1.12	MDL	11.2	PQL	mg/Kg	U	B
Zirconium	2.13	J	0.938	MDL	5.58	PQL	mg/Kg	J	Z

Sample ID: SL-008-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 9:05:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	5.42	J	0.974	MDL	5.47	PQL	mg/Kg	J	Z

Sample ID: SL-008-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 9:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	3680		19.7	MDL	54.7	PQL	mg/Kg	J	Q
SODIUM	54.3	J	40.8	MDL	109	PQL	mg/Kg	J	Z
TIN	2.67	J	1.09	MDL	10.9	PQL	mg/Kg	U	B
Zirconium	1.70	J	0.919	MDL	5.47	PQL	mg/Kg	J	Z

Sample ID: SL-021-SA5A-SB-3.0-4.0 *Collected:* 2/24/2011 9:48:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.90	J	1.08	MDL	10.8	PQL	mg/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE091 **Laboratory: LL**

EDD Filename: DE091_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B ***Matrix:*** SO

Sample ID: SL-021-SA5A-SB-3.0-4.0 ***Collected:*** 2/24/2011 9:48:00 ***Analysis Type:*** REA2 ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.26	J	0.959	MDL	5.39	PQL	mg/Kg	J	Z

Sample ID: SL-021-SA5A-SB-3.0-4.0 ***Collected:*** 2/24/2011 9:48:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	1150		19.4	MDL	53.9	PQL	mg/Kg	J	Q
SODIUM	63.5	J	40.2	MDL	108	PQL	mg/Kg	J	Z
Zirconium	1.94	J	0.905	MDL	5.39	PQL	mg/Kg	J	Z

Sample ID: SL-022-SA5A-SB-4.0-5.0 ***Collected:*** 2/24/2011 11:23:00 ***Analysis Type:*** REA ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.53	J	0.981	MDL	5.51	PQL	mg/Kg	J	Z
TIN	3.17	J	1.10	MDL	11.0	PQL	mg/Kg	U	B

Sample ID: SL-022-SA5A-SB-4.0-5.0 ***Collected:*** 2/24/2011 11:23:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	1710		19.8	MDL	55.1	PQL	mg/Kg	J	Q
SODIUM	67.8	J	41.1	MDL	110	PQL	mg/Kg	J	Z
Zirconium	1.23	J	0.926	MDL	5.51	PQL	mg/Kg	J	Z

Sample ID: SL-050-SA5A-SB-4.0-5.0 ***Collected:*** 2/24/2011 3:30:00 ***Analysis Type:*** REA ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.23	J	1.02	MDL	5.73	PQL	mg/Kg	J	Z
TIN	3.19	J	1.15	MDL	11.5	PQL	mg/Kg	U	B

Sample ID: SL-050-SA5A-SB-4.0-5.0 ***Collected:*** 2/24/2011 3:30:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	1610		20.6	MDL	57.3	PQL	mg/Kg	J	Q
SODIUM	87.5	J	42.7	MDL	115	PQL	mg/Kg	J	Z
Zirconium	2.70	J	0.962	MDL	5.73	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE091 | Laboratory: LL

EDD Filename: DE091_v2 | eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-110-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 1:08:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.69	J	1.03	MDL	5.81	PQL	mg/Kg	J	Z

Sample ID: SL-110-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 1:08:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	1870		20.9	MDL	58.1	PQL	mg/Kg	J	Q
TIN	2.38	J	1.16	MDL	11.6	PQL	mg/Kg	U	B

Sample ID: SL-119-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 10:35:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	5.47	J	1.07	MDL	6.00	PQL	mg/Kg	J	Z

Sample ID: SL-119-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 10:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	3170		21.6	MDL	60.0	PQL	mg/Kg	J	Q
SODIUM	81.7	J	44.8	MDL	120	PQL	mg/Kg	J	Z
TIN	5.14	J	1.20	MDL	12.0	PQL	mg/Kg	U	B

Sample ID: SL-120-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 11:00:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	4.55	J	0.967	MDL	5.43	PQL	mg/Kg	J	Z

Sample ID: SL-120-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 11:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	2990		19.6	MDL	54.3	PQL	mg/Kg	J	Q
TIN	2.32	J	1.09	MDL	10.9	PQL	mg/Kg	U	B

Sample ID: SL-121-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 10:05:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	5.21	J	0.966	MDL	5.43	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE091 **Laboratory: LL**

EDD Filename: DE091_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B ***Matrix:*** SO

Sample ID: SL-121-SA5A-SS-0.0-0.5 ***Collected:*** 2/24/2011 10:05:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	3110		19.5	MDL	54.3	PQL	mg/Kg	J	Q
SODIUM	85.2	J	40.5	MDL	109	PQL	mg/Kg	J	Z
TIN	2.99	J	1.09	MDL	10.9	PQL	mg/Kg	U	B
Zirconium	1.73	J	0.912	MDL	5.43	PQL	mg/Kg	J	Z

Sample ID: SL-122-SA5A-SS-0.0-0.5 ***Collected:*** 2/24/2011 9:50:00 ***Analysis Type:*** REA ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	5.09	J	0.949	MDL	5.33	PQL	mg/Kg	J	Z
TIN	2.54	J	1.07	MDL	10.7	PQL	mg/Kg	U	B

Sample ID: SL-122-SA5A-SS-0.0-0.5 ***Collected:*** 2/24/2011 9:50:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	2990		19.2	MDL	53.3	PQL	mg/Kg	J	Q
Zirconium	0.953	J	0.896	MDL	5.33	PQL	mg/Kg	J	Z

Sample ID: SL-136-SA5A-SS-0.0-0.5 ***Collected:*** 2/24/2011 2:25:00 ***Analysis Type:*** REA ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.32	J	0.944	MDL	5.31	PQL	mg/Kg	J	Z

Sample ID: SL-136-SA5A-SS-0.0-0.5 ***Collected:*** 2/24/2011 2:25:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	2550		19.1	MDL	53.1	PQL	mg/Kg	J	Q
SODIUM	43.3	J	39.6	MDL	106	PQL	mg/Kg	J	Z
TIN	2.44	J	1.06	MDL	10.6	PQL	mg/Kg	U	B
Zirconium	1.71	J	0.891	MDL	5.31	PQL	mg/Kg	J	Z

Sample ID: SL-137-SA5A-SS-0.0-0.5 ***Collected:*** 2/24/2011 3:28:00 ***Analysis Type:*** REA ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	4.23	J	1.05	MDL	5.91	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE091 | Laboratory: LL

EDD Filename: DE091_v2 | eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-137-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 3:28:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	3380		21.3	MDL	59.1	PQL	mg/Kg	J	Q
Zirconium	1.37	J	0.992	MDL	5.91	PQL	mg/Kg	J	Z

Sample ID: SL-138-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 3:00:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	5.15	J	0.990	MDL	5.56	PQL	mg/Kg	J	Z

Sample ID: SL-138-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 3:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	2490		20.0	MDL	55.6	PQL	mg/Kg	J	Q
TIN	2.75	J	1.11	MDL	11.1	PQL	mg/Kg	U	B
Zirconium	1.65	J	0.935	MDL	5.56	PQL	mg/Kg	J	Z

Sample ID: SL-143-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 1:38:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	4.48	J	0.987	MDL	5.55	PQL	mg/Kg	J	Z

Sample ID: SL-143-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 1:38:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	3080		20.0	MDL	55.5	PQL	mg/Kg	J	Q
TIN	2.73	J	1.11	MDL	11.1	PQL	mg/Kg	U	B
Zirconium	1.33	J	0.932	MDL	5.55	PQL	mg/Kg	J	Z

Sample ID: SL-233-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 9:22:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	4.22	J	0.968	MDL	5.44	PQL	mg/Kg	J	Z

Sample ID: SL-233-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 9:22:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	2860		19.6	MDL	54.4	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE091 | Laboratory: LL

EDD Filename: DE091_v2 | eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-233-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 9:22:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.76	J	1.09	MDL	10.9	PQL	mg/Kg	U	B
Zirconium	3.32	J	0.914	MDL	5.44	PQL	mg/Kg	J	Z

Sample ID: SL-250-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 10:20:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	2800		19.1	MDL	53.0	PQL	mg/Kg	J	Q
SODIUM	54.0	J	39.5	MDL	106	PQL	mg/Kg	J	Z
TIN	2.87	J	1.06	MDL	10.6	PQL	mg/Kg	U	B
Zirconium	1.29	J	0.891	MDL	5.30	PQL	mg/Kg	J	Z

Sample ID: SL-251-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 2:05:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.63	J	1.07	MDL	10.7	PQL	mg/Kg	U	B

Sample ID: SL-251-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 2:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	2860		19.3	MDL	53.7	PQL	mg/Kg	J	Q
SODIUM	42.0	J	40.0	MDL	107	PQL	mg/Kg	J	Z
Zirconium	1.64	J	0.901	MDL	5.37	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-007-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 8:45:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.221		0.0644	MDL	0.215	PQL	mg/Kg	UJ	Q, B
CHROMIUM	21.5		0.129	MDL	0.429	PQL	mg/Kg	J	Q, A
COBALT	5.88		0.0215	MDL	0.107	PQL	mg/Kg	J	A
NICKEL	13.1		0.107	MDL	0.429	PQL	mg/Kg	J	A
SILVER	0.0332	J	0.0129	MDL	0.107	PQL	mg/Kg	U	B
THALLIUM	0.302		0.0322	MDL	0.107	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE091 **Laboratory: LL**

EDD Filename: DE091_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-007-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 8:45:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
VANADIUM	39.0		0.0236	MDL	0.107	PQL	mg/Kg	J	Q, A

Sample ID: SL-007-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 8:45:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	8.70		0.0708	MDL	0.429	PQL	mg/Kg	J	A

Sample ID: SL-007-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 8:45:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.147	J	0.0429	MDL	0.429	PQL	mg/Kg	U	B

Sample ID: SL-007-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 8:45:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	116		0.116	MDL	0.429	PQL	mg/Kg	J	A

Sample ID: SL-007-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 8:45:00 *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.273		0.0438	MDL	0.109	PQL	mg/Kg	J	Q

Sample ID: SL-008-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 9:05:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.190	J	0.0656	MDL	0.219	PQL	mg/Kg	UJ	Q, B
CHROMIUM	19.1		0.131	MDL	0.438	PQL	mg/Kg	J	Q, A
COBALT	6.80		0.0219	MDL	0.109	PQL	mg/Kg	J	A
NICKEL	12.3		0.109	MDL	0.438	PQL	mg/Kg	J	A
SILVER	0.0438	J	0.0131	MDL	0.109	PQL	mg/Kg	U	B
THALLIUM	0.294		0.0328	MDL	0.109	PQL	mg/Kg	U	B
VANADIUM	38.2		0.0241	MDL	0.109	PQL	mg/Kg	J	Q, A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE091 **Laboratory: LL**

EDD Filename: DE091_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-008-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 9:05:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	8.52		0.0722	MDL	0.438	PQL	mg/Kg	J	A

Sample ID: SL-008-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 9:05:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.149	J	0.0438	MDL	0.438	PQL	mg/Kg	U	B

Sample ID: SL-008-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 9:05:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	103		0.118	MDL	0.438	PQL	mg/Kg	J	A

Sample ID: SL-008-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 9:05:00 *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.175		0.0438	MDL	0.109	PQL	mg/Kg	J	Q

Sample ID: SL-021-SA5A-SB-3.0-4.0 *Collected:* 2/24/2011 9:48:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.141	J	0.0666	MDL	0.222	PQL	mg/Kg	UJ	Q, B
CHROMIUM	20.1		0.133	MDL	0.444	PQL	mg/Kg	J	Q, A
COBALT	5.90		0.0222	MDL	0.111	PQL	mg/Kg	J	A
NICKEL	9.12		0.111	MDL	0.444	PQL	mg/Kg	J	A
SILVER	0.0277	J	0.0133	MDL	0.111	PQL	mg/Kg	U	B
THALLIUM	0.216		0.0333	MDL	0.111	PQL	mg/Kg	U	B
VANADIUM	45.3		0.0244	MDL	0.111	PQL	mg/Kg	J	Q, A

Sample ID: SL-021-SA5A-SB-3.0-4.0 *Collected:* 2/24/2011 9:48:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	6.66		0.0733	MDL	0.444	PQL	mg/Kg	J	A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE091 | Laboratory: LL

EDD Filename: DE091_v2 | eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-021-SA5A-SB-3.0-4.0 *Collected:* 2/24/2011 9:48:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.256	J	0.0444	MDL	0.444	PQL	mg/Kg	J	Z

Sample ID: SL-021-SA5A-SB-3.0-4.0 *Collected:* 2/24/2011 9:48:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	76.0		0.120	MDL	0.444	PQL	mg/Kg	J	A

Sample ID: SL-021-SA5A-SB-3.0-4.0 *Collected:* 2/24/2011 9:48:00 *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.0804	J	0.0440	MDL	0.110	PQL	mg/Kg	J	Z, Q

Sample ID: SL-022-SA5A-SB-4.0-5.0 *Collected:* 2/24/2011 11:23:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.132	J	0.0649	MDL	0.216	PQL	mg/Kg	UJ	Q, B
CHROMIUM	15.7		0.130	MDL	0.432	PQL	mg/Kg	J	Q, A
COBALT	3.66		0.0216	MDL	0.108	PQL	mg/Kg	J	A
NICKEL	6.74		0.108	MDL	0.432	PQL	mg/Kg	J	A
THALLIUM	0.232		0.0324	MDL	0.108	PQL	mg/Kg	U	B
VANADIUM	30.4		0.0238	MDL	0.108	PQL	mg/Kg	J	Q, A

Sample ID: SL-022-SA5A-SB-4.0-5.0 *Collected:* 2/24/2011 11:23:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	5.22		0.0713	MDL	0.432	PQL	mg/Kg	J	A

Sample ID: SL-022-SA5A-SB-4.0-5.0 *Collected:* 2/24/2011 11:23:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.125	J	0.0432	MDL	0.432	PQL	mg/Kg	U	B

Sample ID: SL-022-SA5A-SB-4.0-5.0 *Collected:* 2/24/2011 11:23:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	59.0		0.117	MDL	0.432	PQL	mg/Kg	J	A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE091 | Laboratory: LL

EDD Filename: DE091_v2 | eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-022-SA5A-SB-4.0-5.0 *Collected:* 2/24/2011 11:23:00 *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.0922	J	0.0437	MDL	0.109	PQL	mg/Kg	J	Z, Q

Sample ID: SL-050-SA5A-SB-4.0-5.0 *Collected:* 2/24/2011 3:30:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.160	J	0.0667	MDL	0.222	PQL	mg/Kg	UJ	Q, B
CHROMIUM	27.2		0.133	MDL	0.445	PQL	mg/Kg	J	Q, A
COBALT	5.74		0.0222	MDL	0.111	PQL	mg/Kg	J	A
NICKEL	15.9		0.111	MDL	0.445	PQL	mg/Kg	J	A
SILVER	0.0777	J	0.0133	MDL	0.111	PQL	mg/Kg	U	B
THALLIUM	0.198		0.0334	MDL	0.111	PQL	mg/Kg	U	B
VANADIUM	51.4		0.0245	MDL	0.111	PQL	mg/Kg	J	Q, A

Sample ID: SL-050-SA5A-SB-4.0-5.0 *Collected:* 2/24/2011 3:30:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	8.34		0.0734	MDL	0.445	PQL	mg/Kg	J	A

Sample ID: SL-050-SA5A-SB-4.0-5.0 *Collected:* 2/24/2011 3:30:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.129	J	0.0445	MDL	0.445	PQL	mg/Kg	U	B

Sample ID: SL-050-SA5A-SB-4.0-5.0 *Collected:* 2/24/2011 3:30:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	97.2		0.120	MDL	0.445	PQL	mg/Kg	J	A

Sample ID: SL-050-SA5A-SB-4.0-5.0 *Collected:* 2/24/2011 3:30:00 *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.0728	J	0.0441	MDL	0.110	PQL	mg/Kg	J	Z, Q

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE091 **Laboratory: LL**

EDD Filename: DE091_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-110-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 1:08:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.288		0.0704	MDL	0.235	PQL	mg/Kg	UJ	Q, B
CHROMIUM	18.4		0.141	MDL	0.469	PQL	mg/Kg	J	Q, A
COBALT	4.95		0.0235	MDL	0.117	PQL	mg/Kg	J	A
NICKEL	10.7		0.117	MDL	0.469	PQL	mg/Kg	J	A
THALLIUM	0.209		0.0352	MDL	0.117	PQL	mg/Kg	U	B
VANADIUM	35.0		0.0258	MDL	0.117	PQL	mg/Kg	J	Q, A

Sample ID: SL-110-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 1:08:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	10.9		0.0774	MDL	0.469	PQL	mg/Kg	J	A

Sample ID: SL-110-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 1:08:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.130	J	0.0469	MDL	0.469	PQL	mg/Kg	U	B

Sample ID: SL-110-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 1:08:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	83.9		0.127	MDL	0.469	PQL	mg/Kg	J	A

Sample ID: SL-110-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 1:08:00 *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.567		0.0460	MDL	0.115	PQL	mg/Kg	J	Q

Sample ID: SL-119-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 10:35:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.880		0.0727	MDL	0.242	PQL	mg/Kg	J	Q
CHROMIUM	77.5		0.145	MDL	0.485	PQL	mg/Kg	J	Q, A
COBALT	7.83		0.0242	MDL	0.121	PQL	mg/Kg	J	A
NICKEL	71.2		0.121	MDL	0.485	PQL	mg/Kg	J	A
THALLIUM	0.206		0.0364	MDL	0.121	PQL	mg/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE091 **Laboratory: LL**

EDD Filename: DE091_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-119-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 10:35:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
VANADIUM	44.1		0.0267	MDL	0.121	PQL	mg/Kg	J	Q, A

Sample ID: SL-119-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 10:35:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	60.8		0.0800	MDL	0.485	PQL	mg/Kg	J	A

Sample ID: SL-119-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 10:35:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.195	J	0.0485	MDL	0.485	PQL	mg/Kg	U	B

Sample ID: SL-119-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 10:35:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	86.3		0.131	MDL	0.485	PQL	mg/Kg	J	A

Sample ID: SL-119-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 10:35:00 *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	3.12		0.0485	MDL	0.121	PQL	mg/Kg	J	Q

Sample ID: SL-120-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 11:00:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.273		0.0659	MDL	0.220	PQL	mg/Kg	UJ	Q, B
CHROMIUM	24.9		0.132	MDL	0.439	PQL	mg/Kg	J	Q, A
COBALT	5.64		0.0220	MDL	0.110	PQL	mg/Kg	J	A
NICKEL	14.9		0.110	MDL	0.439	PQL	mg/Kg	J	A
THALLIUM	0.137		0.0329	MDL	0.110	PQL	mg/Kg	U	B
VANADIUM	37.1		0.0241	MDL	0.110	PQL	mg/Kg	J	Q, A

Sample ID: SL-120-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 11:00:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	8.35		0.0724	MDL	0.439	PQL	mg/Kg	J	A

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE091 | Laboratory: LL

EDD Filename: DE091_v2 | eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-120-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 11:00:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0992	J	0.0439	MDL	0.439	PQL	mg/Kg	U	B

Sample ID: SL-120-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 11:00:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	141		0.119	MDL	0.439	PQL	mg/Kg	J	A

Sample ID: SL-120-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 11:00:00 *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.456		0.0431	MDL	0.108	PQL	mg/Kg	J	Q

Sample ID: SL-121-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 10:05:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.131	J	0.0645	MDL	0.215	PQL	mg/Kg	UJ	Q, B
CHROMIUM	15.9		0.129	MDL	0.430	PQL	mg/Kg	J	Q, A
COBALT	4.46		0.0215	MDL	0.108	PQL	mg/Kg	J	A
NICKEL	8.53		0.108	MDL	0.430	PQL	mg/Kg	J	A
SILVER	0.0237	J	0.0129	MDL	0.108	PQL	mg/Kg	U	B
THALLIUM	0.240		0.0323	MDL	0.108	PQL	mg/Kg	U	B
VANADIUM	32.7		0.0237	MDL	0.108	PQL	mg/Kg	J	Q, A

Sample ID: SL-121-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 10:05:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	7.71		0.0710	MDL	0.430	PQL	mg/Kg	J	A

Sample ID: SL-121-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 10:05:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0858	J	0.0430	MDL	0.430	PQL	mg/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE091 **Laboratory: LL**

EDD Filename: DE091_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 ***Matrix:*** SO

Sample ID: SL-121-SA5A-SS-0.0-0.5 ***Collected:*** 2/24/2011 10:05:00 ***Analysis Type:*** REA6 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	79.2		0.116	MDL	0.430	PQL	mg/Kg	J	A

Sample ID: SL-121-SA5A-SS-0.0-0.5 ***Collected:*** 2/24/2011 10:05:00 ***Analysis Type:*** REA7 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.244		0.0430	MDL	0.108	PQL	mg/Kg	J	Q

Sample ID: SL-122-SA5A-SS-0.0-0.5 ***Collected:*** 2/24/2011 9:50:00 ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.142	J	0.0653	MDL	0.218	PQL	mg/Kg	UJ	Q, B
CHROMIUM	14.0		0.131	MDL	0.435	PQL	mg/Kg	J	Q, A
COBALT	4.20		0.0218	MDL	0.109	PQL	mg/Kg	J	A
NICKEL	7.93		0.109	MDL	0.435	PQL	mg/Kg	J	A
SILVER	0.0274	J	0.0131	MDL	0.109	PQL	mg/Kg	U	B
THALLIUM	0.215		0.0326	MDL	0.109	PQL	mg/Kg	U	B
VANADIUM	31.1		0.0239	MDL	0.109	PQL	mg/Kg	J	Q, A

Sample ID: SL-122-SA5A-SS-0.0-0.5 ***Collected:*** 2/24/2011 9:50:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	5.58		0.0718	MDL	0.435	PQL	mg/Kg	J	A

Sample ID: SL-122-SA5A-SS-0.0-0.5 ***Collected:*** 2/24/2011 9:50:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0876	J	0.0435	MDL	0.435	PQL	mg/Kg	U	B

Sample ID: SL-122-SA5A-SS-0.0-0.5 ***Collected:*** 2/24/2011 9:50:00 ***Analysis Type:*** REA5 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.219		0.0544	MDL	0.109	PQL	mg/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE091 | Laboratory: LL

EDD Filename: DE091_v2 | eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-122-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 9:50:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	78.1		0.118	MDL	0.435	PQL	mg/Kg	J	A

Sample ID: SL-122-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 9:50:00 *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.136		0.0423	MDL	0.106	PQL	mg/Kg	J	Q

Sample ID: SL-136-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 2:25:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.112	J	0.0643	MDL	0.214	PQL	mg/Kg	UJ	Q, B
CHROMIUM	15.8		0.129	MDL	0.429	PQL	mg/Kg	J	Q, A
COBALT	4.84		0.0214	MDL	0.107	PQL	mg/Kg	J	A
NICKEL	10.1		0.107	MDL	0.429	PQL	mg/Kg	J	A
SILVER	0.0341	J	0.0129	MDL	0.107	PQL	mg/Kg	U	B
THALLIUM	0.234		0.0321	MDL	0.107	PQL	mg/Kg	U	B
VANADIUM	31.5		0.0236	MDL	0.107	PQL	mg/Kg	J	Q, A

Sample ID: SL-136-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 2:25:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	6.54		0.0707	MDL	0.429	PQL	mg/Kg	J	A

Sample ID: SL-136-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 2:25:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.123	J	0.0429	MDL	0.429	PQL	mg/Kg	U	B

Sample ID: SL-136-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 2:25:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	93.6		0.116	MDL	0.429	PQL	mg/Kg	J	A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE091 | Laboratory: LL

EDD Filename: DE091_v2 | eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-136-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 2:25:00 *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.159		0.0420	MDL	0.105	PQL	mg/Kg	J	Q

Sample ID: SL-137-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 3:28:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.830		0.0702	MDL	0.234	PQL	mg/Kg	J	Q
CHROMIUM	16.5		0.140	MDL	0.468	PQL	mg/Kg	J	Q, A
COBALT	4.69		0.0234	MDL	0.117	PQL	mg/Kg	J	A
NICKEL	10.2		0.117	MDL	0.468	PQL	mg/Kg	J	A
THALLIUM	0.248		0.0351	MDL	0.117	PQL	mg/Kg	U	B
VANADIUM	32.3		0.0257	MDL	0.117	PQL	mg/Kg	J	Q, A

Sample ID: SL-137-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 3:28:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	11.2		0.0772	MDL	0.468	PQL	mg/Kg	J	A

Sample ID: SL-137-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 3:28:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.113	J	0.0468	MDL	0.468	PQL	mg/Kg	U	B

Sample ID: SL-137-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 3:28:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	80.1		0.126	MDL	0.468	PQL	mg/Kg	J	A

Sample ID: SL-137-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 3:28:00 *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	2.20		0.0468	MDL	0.117	PQL	mg/Kg	J	Q

Sample ID: SL-138-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 3:00:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.208	J	0.0674	MDL	0.225	PQL	mg/Kg	UJ	Q, B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE091 **Laboratory: LL**

EDD Filename: DE091_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-138-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 3:00:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHROMIUM	29.6		0.135	MDL	0.450	PQL	mg/Kg	J	Q, A
COBALT	6.48		0.0225	MDL	0.112	PQL	mg/Kg	J	A
NICKEL	15.7		0.112	MDL	0.450	PQL	mg/Kg	J	A
SILVER	0.0344	J	0.0135	MDL	0.112	PQL	mg/Kg	U	B
THALLIUM	0.303		0.0337	MDL	0.112	PQL	mg/Kg	U	B
VANADIUM	46.6		0.0247	MDL	0.112	PQL	mg/Kg	J	Q, A

Sample ID: SL-138-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 3:00:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	6.32		0.0742	MDL	0.450	PQL	mg/Kg	J	A

Sample ID: SL-138-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 3:00:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0939	J	0.0450	MDL	0.450	PQL	mg/Kg	U	B

Sample ID: SL-138-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 3:00:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	117		0.121	MDL	0.450	PQL	mg/Kg	J	A

Sample ID: SL-138-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 3:00:00 *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.452		0.0450	MDL	0.112	PQL	mg/Kg	J	Q

Sample ID: SL-143-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 1:38:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.248		0.0672	MDL	0.224	PQL	mg/Kg	UJ	Q, B
CHROMIUM	17.6		0.134	MDL	0.448	PQL	mg/Kg	J	Q, A
COBALT	4.88		0.0224	MDL	0.112	PQL	mg/Kg	J	A
NICKEL	11.2		0.112	MDL	0.448	PQL	mg/Kg	J	A
SILVER	0.0658	J	0.0134	MDL	0.112	PQL	mg/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE091 | Laboratory: LL

EDD Filename: DE091_v2 | eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-143-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 1:38:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
THALLIUM	0.254		0.0336	MDL	0.112	PQL	mg/Kg	U	B
VANADIUM	33.7		0.0246	MDL	0.112	PQL	mg/Kg	J	Q, A

Sample ID: SL-143-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 1:38:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	7.77		0.0739	MDL	0.448	PQL	mg/Kg	J	A

Sample ID: SL-143-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 1:38:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.133	J	0.0448	MDL	0.448	PQL	mg/Kg	U	B

Sample ID: SL-143-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 1:38:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	85.9		0.121	MDL	0.448	PQL	mg/Kg	J	A

Sample ID: SL-143-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 1:38:00 *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.174		0.0444	MDL	0.111	PQL	mg/Kg	J	Q

Sample ID: SL-233-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 9:22:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.149	J	0.0640	MDL	0.213	PQL	mg/Kg	UJ	Q, B
CHROMIUM	17.5		0.128	MDL	0.427	PQL	mg/Kg	J	Q, A
COBALT	5.03		0.0213	MDL	0.107	PQL	mg/Kg	J	A
NICKEL	10.7		0.107	MDL	0.427	PQL	mg/Kg	J	A
SILVER	0.0289	J	0.0128	MDL	0.107	PQL	mg/Kg	U	B
THALLIUM	0.247		0.0320	MDL	0.107	PQL	mg/Kg	U	B
VANADIUM	35.4		0.0235	MDL	0.107	PQL	mg/Kg	J	Q, A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE091 **Laboratory: LL**

EDD Filename: DE091_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-233-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 9:22:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	7.65		0.0704	MDL	0.427	PQL	mg/Kg	J	A

Sample ID: SL-233-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 9:22:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0944	J	0.0427	MDL	0.427	PQL	mg/Kg	U	B

Sample ID: SL-233-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 9:22:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	99.4		0.115	MDL	0.427	PQL	mg/Kg	J	A

Sample ID: SL-233-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 9:22:00 *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.258		0.0431	MDL	0.108	PQL	mg/Kg	J	Q

Sample ID: SL-250-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 10:20:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.178	J	0.0649	MDL	0.216	PQL	mg/Kg	UJ	Q, B
CHROMIUM	15.4		0.130	MDL	0.432	PQL	mg/Kg	J	Q, A
COBALT	4.62		0.0216	MDL	0.108	PQL	mg/Kg	J	A
NICKEL	9.17		0.108	MDL	0.432	PQL	mg/Kg	J	A
SILVER	0.0306	J	0.0130	MDL	0.108	PQL	mg/Kg	U	B
THALLIUM	0.246		0.0324	MDL	0.108	PQL	mg/Kg	U	B
VANADIUM	35.2		0.0238	MDL	0.108	PQL	mg/Kg	J	Q, A

Sample ID: SL-250-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 10:20:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	5.86		0.0713	MDL	0.432	PQL	mg/Kg	J	A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE091 | Laboratory: LL

EDD Filename: DE091_v2 | eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-250-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 10:20:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0844	J	0.0432	MDL	0.432	PQL	mg/Kg	U	B

Sample ID: SL-250-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 10:20:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	79.5		0.117	MDL	0.432	PQL	mg/Kg	J	A

Sample ID: SL-250-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 10:20:00 *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.226		0.0437	MDL	0.109	PQL	mg/Kg	J	Q

Sample ID: SL-251-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 2:05:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.143	J	0.0657	MDL	0.219	PQL	mg/Kg	UJ	Q, B
CHROMIUM	15.3		0.131	MDL	0.438	PQL	mg/Kg	J	Q, A
COBALT	4.63		0.0219	MDL	0.109	PQL	mg/Kg	J	A
NICKEL	9.80		0.109	MDL	0.438	PQL	mg/Kg	J	A
SILVER	0.0495	J	0.0131	MDL	0.109	PQL	mg/Kg	U	B
THALLIUM	0.243		0.0328	MDL	0.109	PQL	mg/Kg	U	B
VANADIUM	29.9		0.0241	MDL	0.109	PQL	mg/Kg	J	Q, A

Sample ID: SL-251-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 2:05:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	6.69		0.0722	MDL	0.438	PQL	mg/Kg	J	A

Sample ID: SL-251-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 2:05:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.140	J	0.0438	MDL	0.438	PQL	mg/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE091 | Laboratory: LL

EDD Filename: DE091_v2 | eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-251-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 2:05:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	93.9		0.118	MDL	0.438	PQL	mg/Kg	J	A

Sample ID: SL-251-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 2:05:00 *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.241		0.0429	MDL	0.107	PQL	mg/Kg	J	Q

Method Category: METALS

Method: 7199 **Matrix:** SO

Sample ID: SL-007-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 8:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.32	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-021-SA5A-SB-3.0-4.0 *Collected:* 2/24/2011 9:48:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.81	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-022-SA5A-SB-4.0-5.0 *Collected:* 2/24/2011 11:23:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.41	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-050-SA5A-SB-4.0-5.0 *Collected:* 2/24/2011 3:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.31	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-110-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 1:08:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.52	J	0.24	MDL	1.2	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE091 | Laboratory: LL

EDD Filename: DE091_v2 | eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 7199 **Matrix:** SO

Sample ID: SL-120-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 11:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.51	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-136-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 2:25:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.29	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-138-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 3:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.72	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-143-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 1:38:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.38	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-233-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 9:22:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.25	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-250-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 10:20:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.32	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-251-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 2:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.35	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE091 | Laboratory: LL

EDD Filename: DE091_v2 | eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 7471A **Matrix:** SO

Sample ID: SL-008-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 9:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0355	J	0.0030	MDL	0.103	PQL	mg/Kg	J	Z

Sample ID: SL-050-SA5A-SB-4.0-5.0 *Collected:* 2/24/2011 3:30:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0095	J	0.0031	MDL	0.110	PQL	mg/Kg	J	Z

Sample ID: SL-110-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 1:08:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0620	J	0.0032	MDL	0.111	PQL	mg/Kg	J	Z

Sample ID: SL-119-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 10:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0946	J	0.0034	MDL	0.120	PQL	mg/Kg	J	Z

Sample ID: SL-120-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 11:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0650	J	0.0031	MDL	0.107	PQL	mg/Kg	J	Z

Sample ID: SL-121-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 10:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0042	J	0.0031	MDL	0.108	PQL	mg/Kg	J	Z

Sample ID: SL-122-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 9:50:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0094	J	0.0030	MDL	0.106	PQL	mg/Kg	J	Z

Sample ID: SL-143-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 1:38:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0197	J	0.0031	MDL	0.108	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE091 | Laboratory: LL

EDD Filename: DE091_v2 | eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 7471A **Matrix:** SO

Sample ID: SL-233-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 9:22:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0284	J	0.0029	MDL	0.102	PQL	mg/Kg	J	Z

Sample ID: SL-251-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 2:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0179	J	0.0031	MDL	0.110	PQL	mg/Kg	J	Z

Method Category: SVOA

Method: 8081A **Matrix:** SO

Sample ID: SL-007-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 8:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDT	0.11	J	0.074	MDL	0.38	PQL	ug/Kg	J	Z

Sample ID: SL-008-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 9:05:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDE	0.29	J	0.073	MDL	0.38	PQL	ug/Kg	J	Z
DIELDRIN	0.10	J	0.073	MDL	0.38	PQL	ug/Kg	J	Z
ENDRIN ALDEHYDE	0.10	J	0.073	MDL	0.38	PQL	ug/Kg	J	Z

Sample ID: SL-110-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 1:08:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ENDOSULFAN II	0.18	J	0.078	MDL	0.40	PQL	ug/Kg	J	Z
ENDRIN ALDEHYDE	0.18	J	0.078	MDL	0.40	PQL	ug/Kg	J	Z
HEPTACHLOR EPOXIDE	0.048	J	0.040	MDL	0.20	PQL	ug/Kg	J	Z

Sample ID: SL-119-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 10:35:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	2.8	U	2.8	MDL	2.8	PQL	ug/Kg	R	S
4,4'-DDE	0.23	U	0.23	MDL	0.42	PQL	ug/Kg	R	S
ALDRIN	0.082	U	0.082	MDL	0.21	PQL	ug/Kg	R	S

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE091 **Laboratory: LL**

EDD Filename: DE091_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **8081A** ***Matrix:*** **SO**

Sample ID: **SL-119-SA5A-SS-0.0-0.5** ***Collected:*** **2/24/2011 10:35:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALPHA-BHC	0.042	U	0.042	MDL	0.21	PQL	ug/Kg	R	S
BETA-BHC	0.074	U	0.074	MDL	0.21	PQL	ug/Kg	R	S
Chlordane	4.6	U	4.6	MDL	4.6	PQL	ug/Kg	R	S
DELTA-BHC	0.055	J	0.044	MDL	0.21	PQL	ug/Kg	J	Z, S
DIELDRIN	1.2		0.082	MDL	0.42	PQL	ug/Kg	J	S
ENDOSULFAN I	0.054	U	0.054	MDL	0.21	PQL	ug/Kg	R	S
ENDOSULFAN II	0.21	J	0.082	MDL	0.42	PQL	ug/Kg	J	Z, S
ENDOSULFAN SULFATE	0.082	U	0.082	MDL	0.42	PQL	ug/Kg	R	S
ENDRIN	0.082	U	0.082	MDL	0.42	PQL	ug/Kg	R	S
ENDRIN ALDEHYDE	0.71		0.21	MDL	0.42	PQL	ug/Kg	J	S
ENDRIN KETONE	0.60		0.082	MDL	0.42	PQL	ug/Kg	J	S
gamma-BHC (Lindane)	0.042	U	0.042	MDL	0.21	PQL	ug/Kg	R	S
HEPTACHLOR	0.074	U	0.074	MDL	0.21	PQL	ug/Kg	R	S
HEPTACHLOR EPOXIDE	0.14	U	0.14	MDL	0.21	PQL	ug/Kg	R	S
METHOXYCHLOR	0.42	U	0.42	MDL	2.1	PQL	ug/Kg	R	S
MIREX	1.2		0.082	MDL	0.42	PQL	ug/Kg	J	S
TOXAPHENE	2.7	U	2.7	MDL	8.2	PQL	ug/Kg	R	S

Sample ID: **SL-120-SA5A-SS-0.0-0.5** ***Collected:*** **2/24/2011 11:00:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	0.20	J	0.073	MDL	0.38	PQL	ug/Kg	J	Z
DIELDRIN	0.21	J	0.073	MDL	0.38	PQL	ug/Kg	J	Z
ENDRIN ALDEHYDE	0.085	J	0.073	MDL	0.38	PQL	ug/Kg	J	Z
ENDRIN KETONE	0.22	J	0.073	MDL	0.38	PQL	ug/Kg	J	Z

Sample ID: **SL-121-SA5A-SS-0.0-0.5** ***Collected:*** **2/24/2011 10:05:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MIREX	0.30	J	0.073	MDL	0.38	PQL	ug/Kg	J	Z

Sample ID: **SL-122-SA5A-SS-0.0-0.5** ***Collected:*** **2/24/2011 9:50:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDE	0.086	J	0.072	MDL	0.37	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE091 **Laboratory: LL**

EDD Filename: DE091_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8081A **Matrix:** SO

Sample ID: SL-122-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 9:50:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ENDRIN ALDEHYDE	0.085	J	0.072	MDL	0.37	PQL	ug/Kg	J	Z

Sample ID: SL-136-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 2:25:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDE	0.13	J	0.072	MDL	0.37	PQL	ug/Kg	J	Z
HEPTACHLOR	0.12	J	0.066	MDL	0.18	PQL	ug/Kg	J	Z

Sample ID: SL-137-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 3:28:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ENDRIN ALDEHYDE	0.16	J	0.079	MDL	0.41	PQL	ug/Kg	J	Z
HEPTACHLOR EPOXIDE	0.067	J	0.041	MDL	0.20	PQL	ug/Kg	J	Z

Sample ID: SL-138-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 3:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDE	0.11	J	0.075	MDL	0.39	PQL	ug/Kg	J	Z

Sample ID: SL-143-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 1:38:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DIELDRIN	0.66	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z
ENDRIN ALDEHYDE	1.4	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z
HEPTACHLOR EPOXIDE	0.52	J	0.19	MDL	0.94	PQL	ug/Kg	J	Z

Sample ID: SL-233-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 9:22:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ENDOSULFAN II	0.13	J	0.073	MDL	0.37	PQL	ug/Kg	J	Z
ENDRIN ALDEHYDE	0.20	J	0.073	MDL	0.37	PQL	ug/Kg	J	Z

Sample ID: SL-250-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 10:20:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ENDRIN ALDEHYDE	0.28	J	0.073	MDL	0.37	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE091 | Laboratory: LL

EDD Filename: DE091_v2 | eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8081A **Matrix:** SO

Sample ID: SL-250-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 10:20:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MIREX	0.21	J	0.073	MDL	0.37	PQL	ug/Kg	J	Z

Sample ID: SL-251-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 2:05:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDE	0.20	J	0.074	MDL	0.38	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: SL-110-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 1:08:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	6.7		0.39	MDL	2.0	PQL	ug/Kg	J	S
AROCLOR 1260	6.4		0.46	MDL	2.0	PQL	ug/Kg	J	S
Aroclor 5460	40		1.2	MDL	3.9	PQL	ug/Kg	J	S

Sample ID: SL-120-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 11:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5460	1.3	J	1.1	MDL	3.7	PQL	ug/Kg	J	Z

Sample ID: SL-121-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 10:05:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5460	5.3	J	2.2	MDL	7.3	PQL	ug/Kg	J	Z

Sample ID: SL-122-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 9:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5460	1.7	J	1.1	MDL	3.6	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE091 | Laboratory: LL

EDD Filename: DE091_v2 | eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: SL-136-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 2:25:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5460	2.5	J	1.1	MDL	3.6	PQL	ug/Kg	J	Z

Sample ID: SL-138-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 3:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	1.9		0.44	MDL	1.9	PQL	ug/Kg	J	S
Aroclor 5460	6.1		1.1	MDL	3.7	PQL	ug/Kg	J	S

Sample ID: SL-143-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 1:38:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	7.5	J	2.2	MDL	9.6	PQL	ug/Kg	J	Z

Sample ID: SL-250-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 10:20:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5460	5.9	J	2.2	MDL	7.3	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8151A **Matrix:** SO

Sample ID: SL-007-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 8:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4,5-TP (Silvex)	0.15	J	0.084	MDL	0.19	PQL	ug/Kg	J	Z, Q
2,4-DB	1.0	U	1.0	MDL	1.9	PQL	ug/Kg	R	Q
DALAPON	4.9	U	4.9	MDL	10	PQL	ug/Kg	R	Q
DINOSEB	0.89	U	0.89	MDL	2.7	PQL	ug/Kg	R	Q
MCPA	170	J	85	MDL	280	PQL	ug/Kg	J	Z

Sample ID: SL-008-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 9:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MCPP	160	J	83	MDL	280	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE091 | Laboratory: LL

EDD Filename: DE091_v2 | eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8151A **Matrix:** SO

Sample ID: SL-110-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 1:08:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DICAMBA	0.55	J	0.47	MDL	1.4	PQL	ug/Kg	J	Z
DICHLOROPROP	1.1	J	0.95	MDL	2.0	PQL	ug/Kg	J	Z

Sample ID: SL-119-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 10:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4,5-T	0.18	J	0.10	MDL	0.21	PQL	ug/Kg	J	Z

Sample ID: SL-138-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 3:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DICAMBA	0.65	J	0.45	MDL	1.4	PQL	ug/Kg	J	Z

Sample ID: SL-233-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 9:22:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MCPA	120	J	84	MDL	270	PQL	ug/Kg	J	Z

Sample ID: SL-251-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 2:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4,5-TP (Silvex)	0.13	J	0.084	MDL	0.19	PQL	ug/Kg	J	Z
MCPA	230	J	85	MDL	280	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SL-007-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 8:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZIDINE	1300	U	1300	MDL	3700	PQL	ug/Kg	UJ	Q

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE091 **Laboratory: LL**

EDD Filename: DE091_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **8270C** ***Matrix:*** **SO**

Sample ID: **SL-008-SA5A-SS-0.0-0.5** ***Collected:*** **2/24/2011 9:05:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	28	J	18	MDL	370	PQL	ug/Kg	J	Z

Sample ID: **SL-021-SA5A-SB-3.0-4.0** ***Collected:*** **2/24/2011 9:48:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	27	J	18	MDL	360	PQL	ug/Kg	J	Z

Sample ID: **SL-022-SA5A-SB-4.0-5.0** ***Collected:*** **2/24/2011 11:23:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	23	J	18	MDL	360	PQL	ug/Kg	J	Z

Sample ID: **SL-110-SA5A-SS-0.0-0.5** ***Collected:*** **2/24/2011 1:08:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(G,H,I)PERYLENE	26	J	19	MDL	190	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	91	J	19	MDL	390	PQL	ug/Kg	J	Z
CHRYSENE	49	J	19	MDL	190	PQL	ug/Kg	J	Z

Sample ID: **SL-119-SA5A-SS-0.0-0.5** ***Collected:*** **2/24/2011 10:35:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	39	J	20	MDL	200	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	81	J	20	MDL	200	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	100	J	20	MDL	200	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	130	J	20	MDL	200	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	77	J	20	MDL	200	PQL	ug/Kg	J	Z
BENZOIC ACID	240	J	200	MDL	610	PQL	ug/Kg	J	Z
CARBAZOLE	41	J	20	MDL	200	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	35	J	20	MDL	200	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	95	J	20	MDL	200	PQL	ug/Kg	J	Z
PHENANTHRENE	190	J	20	MDL	200	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE091 | Laboratory: LL

EDD Filename: DE091_v2 | eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SL-120-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 11:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)PYRENE	29	J	18	MDL	180	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	47	J	18	MDL	370	PQL	ug/Kg	J	Z

Sample ID: SL-121-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 10:05:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	31	J	18	MDL	370	PQL	ug/Kg	J	Z

Sample ID: SL-122-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 9:50:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	25	J	18	MDL	360	PQL	ug/Kg	J	Z

Sample ID: SL-136-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 2:25:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	34	J	18	MDL	360	PQL	ug/Kg	J	Z

Sample ID: SL-137-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 3:28:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	74	J	20	MDL	390	PQL	ug/Kg	J	Z
CHRYSENE	29	J	20	MDL	200	PQL	ug/Kg	J	Z

Sample ID: SL-138-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 3:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	27	J	19	MDL	370	PQL	ug/Kg	J	Z

Sample ID: SL-143-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 1:38:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	44	J	19	MDL	190	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	34	J	19	MDL	190	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	46	J	19	MDL	190	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	27	J	19	MDL	190	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE091 | Laboratory: LL

EDD Filename: DE091_v2 | eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SL-143-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 1:38:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	33	J	19	MDL	370	PQL	ug/Kg	J	Z
CHRYSENE	50	J	19	MDL	190	PQL	ug/Kg	J	Z
FLUORANTHENE	77	J	19	MDL	190	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	22	J	19	MDL	190	PQL	ug/Kg	J	Z
PHENANTHRENE	78	J	19	MDL	190	PQL	ug/Kg	J	Z
PYRENE	120	J	19	MDL	190	PQL	ug/Kg	J	Z

Sample ID: SL-233-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 9:22:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	24	J	18	MDL	360	PQL	ug/Kg	J	Z

Sample ID: SL-250-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 10:20:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	30	J	18	MDL	370	PQL	ug/Kg	J	Z

Sample ID: SL-251-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 2:05:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	45	J	18	MDL	370	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8270C SIM **Matrix:** SO

Sample ID: SL-008-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 9:05:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)PYRENE	0.91	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	1.6	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z, L
BENZO(G,H,I)PERYLENE	1.1	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
CHRYSENE	1.1	J	0.37	MDL	1.8	PQL	ug/Kg	J	Z
FLUORANTHENE	1.3	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
PYRENE	1.1	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE091 | Laboratory: LL

EDD Filename: DE091_v2 | eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8270C SIM **Matrix:** SO

Sample ID: SL-110-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 1:08:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACENAPHTHENE	1.2	J	0.79	MDL	2.0	PQL	ug/Kg	J	Z
ACENAPHTHYLENE	1.1	J	0.39	MDL	2.0	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	77		0.79	MDL	2.0	PQL	ug/Kg	J	L
Butylbenzylphthalate	11	J	7.1	MDL	21	PQL	ug/Kg	J	Z
FLUORENE	1.1	J	0.79	MDL	2.0	PQL	ug/Kg	J	Z

Sample ID: SL-119-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 10:35:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Di-n-octylphthalate	38	J	37	MDL	110	PQL	ug/Kg	J	Z

Sample ID: SL-120-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 11:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	23		3.7	MDL	9.2	PQL	ug/Kg	J	L
BENZO(K)FLUORANTHENE	5.8	J	3.7	MDL	9.2	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	4.8	J	3.7	MDL	9.2	PQL	ug/Kg	J	Z
FLUORANTHENE	4.2	J	3.7	MDL	9.2	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	4.9	J	3.7	MDL	9.2	PQL	ug/Kg	J	Z
PYRENE	5.6	J	3.7	MDL	9.2	PQL	ug/Kg	J	Z

Sample ID: SL-121-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 10:05:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	0.52	J	0.37	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	19		0.74	MDL	1.8	PQL	ug/Kg	J	L

Sample ID: SL-122-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 9:50:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	1.5	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	6.1		0.73	MDL	1.8	PQL	ug/Kg	J	L
Butylbenzylphthalate	10	J	6.5	MDL	20	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	0.82	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
Dimethylphthalate	12	J	6.5	MDL	20	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE091 | Laboratory: LL

EDD Filename: DE091_v2 | eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8270C SIM **Matrix:** SO

Sample ID: SL-122-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 9:50:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
INDENO(1,2,3-CD)PYRENE	1.1	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
PHENANTHRENE	0.99	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-136-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 2:25:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	8.9		0.73	MDL	1.8	PQL	ug/Kg	J	L
BENZO(G,H,I)PERYLENE	1.5	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	1.3	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
NAPHTHALENE	1.0	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-137-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 3:28:00 *Analysis Type:* RES *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	4.1	J	4.0	MDL	9.9	PQL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	6.5	J	4.0	MDL	9.9	PQL	ug/Kg	J	Z
ANTHRACENE	4.4	J	2.0	MDL	9.9	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	43		4.0	MDL	9.9	PQL	ug/Kg	J	L
BENZO(G,H,I)PERYLENE	6.8	J	4.0	MDL	9.9	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	6.3	J	4.0	MDL	9.9	PQL	ug/Kg	J	Z

Sample ID: SL-138-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 3:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	6.5	J	3.8	MDL	9.5	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	8.1	J	3.8	MDL	9.5	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	17		3.8	MDL	9.5	PQL	ug/Kg	J	L
BENZO(G,H,I)PERYLENE	4.1	J	3.8	MDL	9.5	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	7.6	J	3.8	MDL	9.5	PQL	ug/Kg	J	Z
FLUORANTHENE	6.9	J	3.8	MDL	9.5	PQL	ug/Kg	J	Z
PYRENE	8.7	J	3.8	MDL	9.5	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE091 **Laboratory: LL**

EDD Filename: DE091_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C SIM **Matrix: SO**

Sample ID: SL-143-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 1:38:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	0.86	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z
NAPHTHALENE	0.82	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-233-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 9:22:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	7.9		0.73	MDL	1.8	PQL	ug/Kg	J	L
BENZO(G,H,I)PERYLENE	1.5	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	1.3	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
NAPHTHALENE	0.85	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-250-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 10:20:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	0.54	J	0.37	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	14		0.74	MDL	1.8	PQL	ug/Kg	J	L
DIBENZO(A,H)ANTHRACENE	1.5	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-251-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 2:05:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NAPHTHALENE	0.90	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z

Method Category: VOA

Method: 8260B **Matrix: SO**

Sample ID: SL-021-SA5A-SB-3.0-4.0 *Collected:* 2/24/2011 9:48:00 *Analysis Type:* RES *Dilution:* 0.91

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ETHYLBENZENE	0.07	J	0.06	MDL	4.0	PQL	ug/Kg	J	Z
m,p-Xylene	0.22	J	0.17	MDL	4.0	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	0.55	J	0.24	MDL	4.0	PQL	ug/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE091 **Laboratory: LL**

EDD Filename: DE091_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: **VOA**

Method: **8260B** ***Matrix:*** **SO**

Sample ID: **SL-022-SA5A-SB-4.0-5.0** ***Collected:*** **2/24/2011 11:23:00** ***Analysis Type:*** **RES** ***Dilution:*** **1.02**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.92	J	0.27	MDL	4.5	PQL	ug/Kg	U	B
TOLUENE	0.11	J	0.09	MDL	4.5	PQL	ug/Kg	J	Z

Sample ID: **SL-050-SA5A-SB-4.0-5.0** ***Collected:*** **2/24/2011 3:30:00** ***Analysis Type:*** **RES** ***Dilution:*** **0.96**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ETHYLBENZENE	0.15	J	0.07	MDL	4.4	PQL	ug/Kg	J	Z
m,p-Xylene	0.54	J	0.19	MDL	4.4	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	0.52	J	0.26	MDL	4.4	PQL	ug/Kg	U	B
TOLUENE	0.12	J	0.09	MDL	4.4	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE091 | Laboratory: LL

EDD Filename: DE091_v2 | eQAPP Name: CDM_SSFL_110509

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
*#	Professional Judgment
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Verification Correlation Coefficient
C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE091 **Laboratory: LL**

EDD Filename: DE091_v2 **eQAPP Name: CDM_SSFL_110509**

F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation
L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery Lower Estimation

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE091 **Laboratory: LL**

EDD Filename: DE091_v2 **eQAPP Name: CDM_SSFL_110509**

R	Continuing Calibration Verification Percent Recovery Lower Rejection
R	Continuing Calibration Verification Percent Recovery Upper Estimation
R	Continuing Calibration Verification Percent Recovery Upper Rejection
R	Continuing Calibration Verification Relative Response Factor
R	Initial Calibration Relative Response Factor
R	Initial Calibration Verification Percent Recovery Lower Estimation
R	Initial Calibration Verification Percent Recovery Lower Rejection
R	Initial Calibration Verification Percent Recovery Upper Estimation
R	Initial Calibration Verification Percent Recovery Upper Rejection
R	Initial Calibration Verification Relative Response Factor
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control Outlier Reports

DE091

Method Blank Outlier Report

Lab Reporting Batch ID: DE091 **Laboratory: LL**

EDD Filename: DE091_v2 **eQAPP Name: CDM_SSFL_110509**

Method: **6010B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P06108AB221057	3/4/2011 10:57:00 AM	PHOSPHORUS TIN	1.19 mg/Kg 1.45 mg/Kg	SL-007-SA5A-SS-0.0-0.5 SL-008-SA5A-SS-0.0-0.5 SL-021-SA5A-SB-3.0-4.0 SL-022-SA5A-SB-4.0-5.0 SL-050-SA5A-SB-4.0-5.0 SL-110-SA5A-SS-0.0-0.5 SL-119-SA5A-SS-0.0-0.5 SL-120-SA5A-SS-0.0-0.5 SL-121-SA5A-SS-0.0-0.5 SL-122-SA5A-SS-0.0-0.5 SL-136-SA5A-SS-0.0-0.5 SL-137-SA5A-SS-0.0-0.5 SL-138-SA5A-SS-0.0-0.5 SL-143-SA5A-SS-0.0-0.5 SL-233-SA5A-SS-0.0-0.5 SL-250-SA5A-SS-0.0-0.5 SL-251-SA5A-SS-0.0-0.5

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-007-SA5A-SS-0.0-0.5(RES)	TIN	2.99 mg/Kg	2.99U mg/Kg
SL-008-SA5A-SS-0.0-0.5(RES)	TIN	2.67 mg/Kg	2.67U mg/Kg
SL-021-SA5A-SB-3.0-4.0(REA)	TIN	2.90 mg/Kg	2.90U mg/Kg
SL-022-SA5A-SB-4.0-5.0(REA)	TIN	3.17 mg/Kg	3.17U mg/Kg
SL-050-SA5A-SB-4.0-5.0(REA)	TIN	3.19 mg/Kg	3.19U mg/Kg
SL-110-SA5A-SS-0.0-0.5(RES)	TIN	2.38 mg/Kg	2.38U mg/Kg
SL-119-SA5A-SS-0.0-0.5(RES)	TIN	5.14 mg/Kg	5.14U mg/Kg
SL-120-SA5A-SS-0.0-0.5(RES)	TIN	2.32 mg/Kg	2.32U mg/Kg
SL-121-SA5A-SS-0.0-0.5(RES)	TIN	2.99 mg/Kg	2.99U mg/Kg
SL-122-SA5A-SS-0.0-0.5(REA)	TIN	2.54 mg/Kg	2.54U mg/Kg
SL-136-SA5A-SS-0.0-0.5(RES)	TIN	2.44 mg/Kg	2.44U mg/Kg
SL-138-SA5A-SS-0.0-0.5(RES)	TIN	2.75 mg/Kg	2.75U mg/Kg
SL-143-SA5A-SS-0.0-0.5(RES)	TIN	2.73 mg/Kg	2.73U mg/Kg
SL-233-SA5A-SS-0.0-0.5(RES)	TIN	2.76 mg/Kg	2.76U mg/Kg
SL-250-SA5A-SS-0.0-0.5(RES)	TIN	2.87 mg/Kg	2.87U mg/Kg
SL-251-SA5A-SS-0.0-0.5(REA)	TIN	2.63 mg/Kg	2.63U mg/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE091 **Laboratory: LL**

EDD Filename: DE091_v2 **eQAPP Name: CDM_SSFL_110509**

Method: **6020**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P06126AB220228A	3/10/2011 2:28:00 AM	ANTIMONY COBALT LEAD SILVER THALLIUM VANADIUM	0.147 mg/Kg 0.0428 mg/Kg 0.0378 mg/Kg 0.0168 mg/Kg 0.0672 mg/Kg 0.0528 mg/Kg	SL-007-SA5A-SS-0.0-0.5 SL-008-SA5A-SS-0.0-0.5 SL-021-SA5A-SB-3.0-4.0 SL-022-SA5A-SB-4.0-5.0 SL-050-SA5A-SB-4.0-5.0 SL-110-SA5A-SS-0.0-0.5 SL-119-SA5A-SS-0.0-0.5 SL-120-SA5A-SS-0.0-0.5 SL-121-SA5A-SS-0.0-0.5 SL-122-SA5A-SS-0.0-0.5 SL-136-SA5A-SS-0.0-0.5 SL-137-SA5A-SS-0.0-0.5 SL-138-SA5A-SS-0.0-0.5 SL-143-SA5A-SS-0.0-0.5 SL-233-SA5A-SS-0.0-0.5 SL-250-SA5A-SS-0.0-0.5 SL-251-SA5A-SS-0.0-0.5
P06126AB220228C	3/10/2011 2:28:00 AM	MOLYBDENUM	0.0581 mg/Kg	SL-007-SA5A-SS-0.0-0.5 SL-008-SA5A-SS-0.0-0.5 SL-021-SA5A-SB-3.0-4.0 SL-022-SA5A-SB-4.0-5.0 SL-050-SA5A-SB-4.0-5.0 SL-110-SA5A-SS-0.0-0.5 SL-119-SA5A-SS-0.0-0.5 SL-120-SA5A-SS-0.0-0.5 SL-121-SA5A-SS-0.0-0.5 SL-122-SA5A-SS-0.0-0.5 SL-136-SA5A-SS-0.0-0.5 SL-137-SA5A-SS-0.0-0.5 SL-138-SA5A-SS-0.0-0.5 SL-143-SA5A-SS-0.0-0.5 SL-233-SA5A-SS-0.0-0.5 SL-250-SA5A-SS-0.0-0.5 SL-251-SA5A-SS-0.0-0.5
P06126AB221359A	3/9/2011 1:59:00 PM	BERYLLIUM	0.0458 mg/Kg	SL-007-SA5A-SS-0.0-0.5 SL-008-SA5A-SS-0.0-0.5 SL-021-SA5A-SB-3.0-4.0 SL-022-SA5A-SB-4.0-5.0 SL-050-SA5A-SB-4.0-5.0 SL-110-SA5A-SS-0.0-0.5 SL-119-SA5A-SS-0.0-0.5 SL-120-SA5A-SS-0.0-0.5 SL-121-SA5A-SS-0.0-0.5 SL-122-SA5A-SS-0.0-0.5 SL-136-SA5A-SS-0.0-0.5 SL-137-SA5A-SS-0.0-0.5 SL-138-SA5A-SS-0.0-0.5 SL-143-SA5A-SS-0.0-0.5 SL-233-SA5A-SS-0.0-0.5 SL-250-SA5A-SS-0.0-0.5 SL-251-SA5A-SS-0.0-0.5
P06126AB221359B	3/9/2011 1:59:00 PM	SELENIUM	0.0455 mg/Kg	SL-007-SA5A-SS-0.0-0.5 SL-008-SA5A-SS-0.0-0.5 SL-021-SA5A-SB-3.0-4.0 SL-022-SA5A-SB-4.0-5.0 SL-050-SA5A-SB-4.0-5.0 SL-110-SA5A-SS-0.0-0.5 SL-119-SA5A-SS-0.0-0.5 SL-120-SA5A-SS-0.0-0.5 SL-121-SA5A-SS-0.0-0.5 SL-122-SA5A-SS-0.0-0.5 SL-136-SA5A-SS-0.0-0.5 SL-137-SA5A-SS-0.0-0.5 SL-138-SA5A-SS-0.0-0.5 SL-143-SA5A-SS-0.0-0.5 SL-233-SA5A-SS-0.0-0.5 SL-250-SA5A-SS-0.0-0.5 SL-251-SA5A-SS-0.0-0.5

Method Blank Outlier Report

Lab Reporting Batch ID: DE091 **Laboratory: LL**

EDD Filename: DE091_v2 **eQAPP Name: CDM_SSFL_110509**

Method: **6020**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P06126AB222144A	3/10/2011 9:44:00 PM	COPPER	0.0776 mg/Kg	SL-007-SA5A-SS-0.0-0.5 SL-008-SA5A-SS-0.0-0.5 SL-021-SA5A-SB-3.0-4.0 SL-022-SA5A-SB-4.0-5.0 SL-050-SA5A-SB-4.0-5.0 SL-110-SA5A-SS-0.0-0.5 SL-119-SA5A-SS-0.0-0.5 SL-120-SA5A-SS-0.0-0.5 SL-121-SA5A-SS-0.0-0.5 SL-122-SA5A-SS-0.0-0.5 SL-136-SA5A-SS-0.0-0.5 SL-137-SA5A-SS-0.0-0.5 SL-138-SA5A-SS-0.0-0.5 SL-143-SA5A-SS-0.0-0.5 SL-233-SA5A-SS-0.0-0.5 SL-250-SA5A-SS-0.0-0.5 SL-251-SA5A-SS-0.0-0.5

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-007-SA5A-SS-0.0-0.5(REA)	ANTIMONY	0.221 mg/Kg	0.221U mg/Kg
SL-007-SA5A-SS-0.0-0.5(REA)	SILVER	0.0332 mg/Kg	0.0332U mg/Kg
SL-007-SA5A-SS-0.0-0.5(REA)	THALLIUM	0.302 mg/Kg	0.302U mg/Kg
SL-007-SA5A-SS-0.0-0.5(REA4)	SELENIUM	0.147 mg/Kg	0.147U mg/Kg
SL-008-SA5A-SS-0.0-0.5(REA)	ANTIMONY	0.190 mg/Kg	0.190U mg/Kg
SL-008-SA5A-SS-0.0-0.5(REA)	SILVER	0.0438 mg/Kg	0.0438U mg/Kg
SL-008-SA5A-SS-0.0-0.5(REA)	THALLIUM	0.294 mg/Kg	0.294U mg/Kg
SL-008-SA5A-SS-0.0-0.5(REA4)	SELENIUM	0.149 mg/Kg	0.149U mg/Kg
SL-021-SA5A-SB-3.0-4.0(REA)	ANTIMONY	0.141 mg/Kg	0.141U mg/Kg
SL-021-SA5A-SB-3.0-4.0(REA)	SILVER	0.0277 mg/Kg	0.0277U mg/Kg
SL-021-SA5A-SB-3.0-4.0(REA)	THALLIUM	0.216 mg/Kg	0.216U mg/Kg
SL-022-SA5A-SB-4.0-5.0(REA)	ANTIMONY	0.132 mg/Kg	0.132U mg/Kg
SL-022-SA5A-SB-4.0-5.0(REA)	THALLIUM	0.232 mg/Kg	0.232U mg/Kg
SL-022-SA5A-SB-4.0-5.0(REA4)	SELENIUM	0.125 mg/Kg	0.125U mg/Kg
SL-050-SA5A-SB-4.0-5.0(REA)	ANTIMONY	0.160 mg/Kg	0.160U mg/Kg
SL-050-SA5A-SB-4.0-5.0(REA)	SILVER	0.0777 mg/Kg	0.0777U mg/Kg
SL-050-SA5A-SB-4.0-5.0(REA)	THALLIUM	0.198 mg/Kg	0.198U mg/Kg
SL-050-SA5A-SB-4.0-5.0(REA4)	SELENIUM	0.129 mg/Kg	0.129U mg/Kg
SL-110-SA5A-SS-0.0-0.5(REA)	ANTIMONY	0.288 mg/Kg	0.288U mg/Kg
SL-110-SA5A-SS-0.0-0.5(REA)	THALLIUM	0.209 mg/Kg	0.209U mg/Kg
SL-110-SA5A-SS-0.0-0.5(REA4)	SELENIUM	0.130 mg/Kg	0.130U mg/Kg
SL-119-SA5A-SS-0.0-0.5(REA)	THALLIUM	0.206 mg/Kg	0.206U mg/Kg
SL-119-SA5A-SS-0.0-0.5(REA4)	SELENIUM	0.195 mg/Kg	0.195U mg/Kg
SL-120-SA5A-SS-0.0-0.5(REA)	ANTIMONY	0.273 mg/Kg	0.273U mg/Kg
SL-120-SA5A-SS-0.0-0.5(REA)	THALLIUM	0.137 mg/Kg	0.137U mg/Kg
SL-120-SA5A-SS-0.0-0.5(REA4)	SELENIUM	0.0992 mg/Kg	0.0992U mg/Kg
SL-121-SA5A-SS-0.0-0.5(REA)	ANTIMONY	0.131 mg/Kg	0.131U mg/Kg
SL-121-SA5A-SS-0.0-0.5(REA)	SILVER	0.0237 mg/Kg	0.0237U mg/Kg
SL-121-SA5A-SS-0.0-0.5(REA)	THALLIUM	0.240 mg/Kg	0.240U mg/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE091 | Laboratory: LL

EDD Filename: DE091_v2 | eQAPP Name: CDM_SSFL_110509

Method: 6020
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-121-SA5A-SS-0.0-0.5(REA4)	SELENIUM	0.0858 mg/Kg	0.0858U mg/Kg
SL-122-SA5A-SS-0.0-0.5(REA)	ANTIMONY	0.142 mg/Kg	0.142U mg/Kg
SL-122-SA5A-SS-0.0-0.5(REA)	SILVER	0.0274 mg/Kg	0.0274U mg/Kg
SL-122-SA5A-SS-0.0-0.5(REA)	THALLIUM	0.215 mg/Kg	0.215U mg/Kg
SL-122-SA5A-SS-0.0-0.5(REA4)	SELENIUM	0.0876 mg/Kg	0.0876U mg/Kg
SL-122-SA5A-SS-0.0-0.5(REA5)	MOLYBDENUM	0.219 mg/Kg	0.219U mg/Kg
SL-136-SA5A-SS-0.0-0.5(REA)	ANTIMONY	0.112 mg/Kg	0.112U mg/Kg
SL-136-SA5A-SS-0.0-0.5(REA)	SILVER	0.0341 mg/Kg	0.0341U mg/Kg
SL-136-SA5A-SS-0.0-0.5(REA)	THALLIUM	0.234 mg/Kg	0.234U mg/Kg
SL-136-SA5A-SS-0.0-0.5(REA4)	SELENIUM	0.123 mg/Kg	0.123U mg/Kg
SL-137-SA5A-SS-0.0-0.5(REA)	THALLIUM	0.248 mg/Kg	0.248U mg/Kg
SL-137-SA5A-SS-0.0-0.5(REA4)	SELENIUM	0.113 mg/Kg	0.113U mg/Kg
SL-138-SA5A-SS-0.0-0.5(REA)	ANTIMONY	0.208 mg/Kg	0.208U mg/Kg
SL-138-SA5A-SS-0.0-0.5(REA)	SILVER	0.0344 mg/Kg	0.0344U mg/Kg
SL-138-SA5A-SS-0.0-0.5(REA)	THALLIUM	0.303 mg/Kg	0.303U mg/Kg
SL-138-SA5A-SS-0.0-0.5(REA4)	SELENIUM	0.0939 mg/Kg	0.0939U mg/Kg
SL-143-SA5A-SS-0.0-0.5(REA)	ANTIMONY	0.248 mg/Kg	0.248U mg/Kg
SL-143-SA5A-SS-0.0-0.5(REA)	SILVER	0.0658 mg/Kg	0.0658U mg/Kg
SL-143-SA5A-SS-0.0-0.5(REA)	THALLIUM	0.254 mg/Kg	0.254U mg/Kg
SL-143-SA5A-SS-0.0-0.5(REA4)	SELENIUM	0.133 mg/Kg	0.133U mg/Kg
SL-233-SA5A-SS-0.0-0.5(REA)	ANTIMONY	0.149 mg/Kg	0.149U mg/Kg
SL-233-SA5A-SS-0.0-0.5(REA)	SILVER	0.0289 mg/Kg	0.0289U mg/Kg
SL-233-SA5A-SS-0.0-0.5(REA)	THALLIUM	0.247 mg/Kg	0.247U mg/Kg
SL-233-SA5A-SS-0.0-0.5(REA4)	SELENIUM	0.0944 mg/Kg	0.0944U mg/Kg
SL-250-SA5A-SS-0.0-0.5(REA)	ANTIMONY	0.178 mg/Kg	0.178U mg/Kg
SL-250-SA5A-SS-0.0-0.5(REA)	SILVER	0.0306 mg/Kg	0.0306U mg/Kg
SL-250-SA5A-SS-0.0-0.5(REA)	THALLIUM	0.246 mg/Kg	0.246U mg/Kg
SL-250-SA5A-SS-0.0-0.5(REA4)	SELENIUM	0.0844 mg/Kg	0.0844U mg/Kg
SL-251-SA5A-SS-0.0-0.5(REA)	ANTIMONY	0.143 mg/Kg	0.143U mg/Kg
SL-251-SA5A-SS-0.0-0.5(REA)	SILVER	0.0495 mg/Kg	0.0495U mg/Kg
SL-251-SA5A-SS-0.0-0.5(REA)	THALLIUM	0.243 mg/Kg	0.243U mg/Kg
SL-251-SA5A-SS-0.0-0.5(REA4)	SELENIUM	0.140 mg/Kg	0.140U mg/Kg

Method: 8260B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB80B212159A	2/28/2011 9:59:00 PM	METHYLENE CHLORIDE	0.57 ug/Kg	SL-021-SA5A-SB-3.0-4.0 SL-022-SA5A-SB-4.0-5.0 SL-050-SA5A-SB-4.0-5.0

Method Blank Outlier Report

Lab Reporting Batch ID: DE091 | Laboratory: LL

EDD Filename: DE091_v2 | eQAPP Name: CDM_SSFL_110509

Method: **8260B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-021-SA5A-SB-3.0-4.0(RES)	METHYLENE CHLORIDE	0.55 ug/Kg	4.0U ug/Kg
SL-022-SA5A-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.92 ug/Kg	4.5U ug/Kg
SL-050-SA5A-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.52 ug/Kg	4.4U ug/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE091 **Laboratory: LL**

EDD Filename: DE091_v2 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-007-SA5A-SS-0.0-0.5MS SL-007-SA5A-SS-0.0-0.5MSD (SL-007-SA5A-SS-0.0-0.5)	2-CHLORONAPHTHALENE 4-CHLOROANILINE ANILINE	- - 96	- 98 -	50.00-141.00 23.00-95.00 35.00-95.00	33 (30.00) - -	2-CHLORONAPHTHALENE 4-CHLOROANILINE ANILINE	J (all detects)
SL-007-SA5A-SS-0.0-0.5MS SL-007-SA5A-SS-0.0-0.5MSD (SL-007-SA5A-SS-0.0-0.5)	BENZIDINE	27	18	35.00-141.00	40 (30.00)	BENZIDINE	J(all detects) UJ(all non-detects)

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-007-SA5A-SS-0.0-0.5MS SL-007-SA5A-SS-0.0-0.5MSD (SL-007-SA5A-SS-0.0-0.5 SL -008-SA5A-SS-0.0-0.5 SL -021-SA5A-SB-3.0-4.0 SL -022-SA5A-SB-4.0-5.0 SL -050-SA5A-SB-4.0-5.0 SL -110-SA5A-SS-0.0-0.5 SL -119-SA5A-SS-0.0-0.5 SL -120-SA5A-SS-0.0-0.5 SL -121-SA5A-SS-0.0-0.5 SL -122-SA5A-SS-0.0-0.5 SL -136-SA5A-SS-0.0-0.5 SL -137-SA5A-SS-0.0-0.5 SL -138-SA5A-SS-0.0-0.5 SL -143-SA5A-SS-0.0-0.5 SL -233-SA5A-SS-0.0-0.5 SL -250-SA5A-SS-0.0-0.5 SL -251-SA5A-SS-0.0-0.5)	CHROMIUM VANADIUM ZINC	- - 132	152 153 157	75.00-125.00 75.00-125.00 75.00-125.00	- - -	CHROMIUM VANADIUM ZINC	J(all detects) Zn No Qual, >4x
SL-007-SA5A-SS-0.0-0.5MS SL-007-SA5A-SS-0.0-0.5MSD (SL-007-SA5A-SS-0.0-0.5 SL -008-SA5A-SS-0.0-0.5 SL -021-SA5A-SB-3.0-4.0 SL -022-SA5A-SB-4.0-5.0 SL -050-SA5A-SB-4.0-5.0 SL -110-SA5A-SS-0.0-0.5 SL -119-SA5A-SS-0.0-0.5 SL -120-SA5A-SS-0.0-0.5 SL -121-SA5A-SS-0.0-0.5 SL -122-SA5A-SS-0.0-0.5 SL -136-SA5A-SS-0.0-0.5 SL -137-SA5A-SS-0.0-0.5 SL -138-SA5A-SS-0.0-0.5 SL -143-SA5A-SS-0.0-0.5 SL -233-SA5A-SS-0.0-0.5 SL -250-SA5A-SS-0.0-0.5 SL -251-SA5A-SS-0.0-0.5)	ANTIMONY	52	48	75.00-125.00	-	ANTIMONY	J(all detects) UJ(all non-detects)

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE091 **Laboratory: LL**

EDD Filename: DE091_v2 **eQAPP Name: CDM_SSFL_110509**

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-007-SA5A-SS-0.0-0.5MS	BARIUM	171	238	75.00-125.00	-	BARIUM	
SL-007-SA5A-SS-0.0-0.5MSD							
(SL-007-SA5A-SS-0.0-0.5							
SL -008-SA5A-SS-0.0-0.5							
SL -021-SA5A-SB-3.0-4.0							
SL -022-SA5A-SB-4.0-5.0							
SL -050-SA5A-SB-4.0-5.0							
SL -110-SA5A-SS-0.0-0.5							
SL -119-SA5A-SS-0.0-0.5							
SL -120-SA5A-SS-0.0-0.5							No Qual, >4x
SL -121-SA5A-SS-0.0-0.5							
SL -122-SA5A-SS-0.0-0.5							
SL -136-SA5A-SS-0.0-0.5							
SL -137-SA5A-SS-0.0-0.5							
SL -138-SA5A-SS-0.0-0.5							
SL -143-SA5A-SS-0.0-0.5							
SL -233-SA5A-SS-0.0-0.5							
SL -250-SA5A-SS-0.0-0.5							
SL -251-SA5A-SS-0.0-0.5)							

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-007-SA5A-SS-0.0-0.5MS	ALUMINUM	1344	1527	75.00-125.00	-	ALUMINUM	
SL-007-SA5A-SS-0.0-0.5MSD	CALCIUM	161	165	75.00-125.00	-	CALCIUM	
(SL-007-SA5A-SS-0.0-0.5	MAGNESIUM	194	160	75.00-125.00	-	MAGNESIUM	
SL -008-SA5A-SS-0.0-0.5	POTASSIUM	138	152	75.00-125.00	-	POTASSIUM	
SL -021-SA5A-SB-3.0-4.0	TITANIUM	264	282	75.00-125.00	-	TITANIUM	
SL -022-SA5A-SB-4.0-5.0							J(all detects)
SL -050-SA5A-SB-4.0-5.0							
SL -110-SA5A-SS-0.0-0.5							Al, Ca, Mg, Ti
SL -119-SA5A-SS-0.0-0.5							
SL -120-SA5A-SS-0.0-0.5							No Qual, >4x
SL -121-SA5A-SS-0.0-0.5							
SL -122-SA5A-SS-0.0-0.5							
SL -136-SA5A-SS-0.0-0.5							
SL -137-SA5A-SS-0.0-0.5							
SL -138-SA5A-SS-0.0-0.5							
SL -143-SA5A-SS-0.0-0.5							
SL -233-SA5A-SS-0.0-0.5							
SL -250-SA5A-SS-0.0-0.5							
SL -251-SA5A-SS-0.0-0.5)							

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE091 **Laboratory: LL**

EDD Filename: DE091_v2 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-007-SA5A-SS-0.0-0.5MS	IRON	446	-485	75.00-125.00	-	IRON	
SL-007-SA5A-SS-0.0-0.5MSD	MANGANESE	-	24	75.00-125.00	-	MANGANESE	
(SL-007-SA5A-SS-0.0-0.5							
SL -008-SA5A-SS-0.0-0.5							
SL -021-SA5A-SB-3.0-4.0							
SL -022-SA5A-SB-4.0-5.0							
SL -050-SA5A-SB-4.0-5.0							
SL -110-SA5A-SS-0.0-0.5							
SL -119-SA5A-SS-0.0-0.5							
SL -120-SA5A-SS-0.0-0.5							No Qual, >4x
SL -121-SA5A-SS-0.0-0.5							
SL -122-SA5A-SS-0.0-0.5							
SL -136-SA5A-SS-0.0-0.5							
SL -137-SA5A-SS-0.0-0.5							
SL -138-SA5A-SS-0.0-0.5							
SL -143-SA5A-SS-0.0-0.5							
SL -233-SA5A-SS-0.0-0.5							
SL -250-SA5A-SS-0.0-0.5							
SL -251-SA5A-SS-0.0-0.5)							

Method: 8270C SIM
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-119-SA5A-SS-0.0-0.5MS	BENZO(K)FLUORANTHENE	164	180	42.00-144.00	-	BENZO(K)FLUORANTHENE	
SL-119-SA5A-SS-0.0-0.5MSD							No Qual, Diluted Out
(SL-119-SA5A-SS-0.0-0.5)							
SL-119-SA5A-SS-0.0-0.5MS	BIS(2-ETHYLHEXYL)PHTHALAT	0	-	39.00-167.00	-	BIS(2-ETHYLHEXYL)PHTHALA	
SL-119-SA5A-SS-0.0-0.5MSD	Diethylphthalate	0	0	70.00-136.00	-	Diethylphthalate	No Qual
(SL-119-SA5A-SS-0.0-0.5)	Dimethylphthalate	0	0	74.00-118.00	-	Dimethylphthalate	Diluted Out
SL-119-SA5A-SS-0.0-0.5MS	1-METHYLNAPHTHALENE	63	-	72.00-123.00	-	1-METHYLNAPHTHALENE	
SL-119-SA5A-SS-0.0-0.5MSD	2-METHYLNAPHTHALENE	58	-	64.00-103.00	-	2-METHYLNAPHTHALENE	
(SL-119-SA5A-SS-0.0-0.5)	ACENAPHTHYLENE	64	-	67.00-114.00	-	ACENAPHTHYLENE	No Qual
	Butylbenzylphthalate	-	20	57.00-173.00	51 (30.00)	Butylbenzylphthalate	Diluted Out
	Di-n-butylphthalate	26	15	65.00-148.00	-	Di-n-butylphthalate	
	FLUORENE	64	-	66.00-122.00	-	FLUORENE	

Method: 300.0
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-007-SA5A-SS-0.0-0.5MS	FLUORIDE	65	-	80.00-120.00	-	FLUORIDE	
(SL-007-SA5A-SS-0.0-0.5							
SL -008-SA5A-SS-0.0-0.5							
SL -110-SA5A-SS-0.0-0.5							
SL -119-SA5A-SS-0.0-0.5							
SL -120-SA5A-SS-0.0-0.5							J(all detects)
SL -121-SA5A-SS-0.0-0.5							UJ(all non-detects)
SL -136-SA5A-SS-0.0-0.5							
SL -137-SA5A-SS-0.0-0.5							
SL -138-SA5A-SS-0.0-0.5							
SL -143-SA5A-SS-0.0-0.5)							

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE091 **Laboratory: LL**

EDD Filename: DE091_v2 **eQAPP Name: CDM_SSFL_110509**

Method: 300.0
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-233-SA5A-SS-0.0-0.5MS (SL-021-SA5A-SB-3.0-4.0 SL -022-SA5A-SB-4.0-5.0 SL -050-SA5A-SB-4.0-5.0 SL -122-SA5A-SS-0.0-0.5 SL -233-SA5A-SS-0.0-0.5 SL -250-SA5A-SS-0.0-0.5 SL -251-SA5A-SS-0.0-0.5)	FLUORIDE	72	-	80.00-120.00	-	FLUORIDE	J(all detects) UJ(all non-detects)

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-007-SA5A-SS-0.0-0.5MS **SL-007-SA5A-SS-0.0-0.5MSD** (SL-007-SA5A-SS-0.0-0.5 SL -008-SA5A-SS-0.0-0.5 SL -021-SA5A-SB-3.0-4.0 SL -022-SA5A-SB-4.0-5.0 SL -050-SA5A-SB-4.0-5.0 SL -110-SA5A-SS-0.0-0.5 SL -119-SA5A-SS-0.0-0.5 SL -120-SA5A-SS-0.0-0.5 SL -121-SA5A-SS-0.0-0.5 SL -122-SA5A-SS-0.0-0.5 SL -136-SA5A-SS-0.0-0.5 SL -137-SA5A-SS-0.0-0.5 SL -138-SA5A-SS-0.0-0.5 SL -143-SA5A-SS-0.0-0.5 SL -233-SA5A-SS-0.0-0.5 SL -250-SA5A-SS-0.0-0.5 SL -251-SA5A-SS-0.0-0.5)	CADMIUM	126	128	75.00-125.00	-	CADMIUM	J(all detects)

Method: 8081A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-007-SA5A-SS-0.0-0.5MSD (SL-007-SA5A-SS-0.0-0.5)	ALDRIN	-	-	16.00-126.00	54 (50.00)	ALDRIN	J(all detects)
	DIELDRIN	-	-	19.00-154.00	52 (50.00)	DIELDRIN	
	ENDOSULFAN SULFATE	-	-	21.00-160.00	65 (50.00)	ENDOSULFAN SULFATE	
	ENDRIN ALDEHYDE	-	-	10.00-148.00	43 (35.00)	ENDRIN ALDEHYDE	
	METHOXYCHLOR	-	-	32.00-147.00	58 (50.00)	METHOXYCHLOR	

Method: 8151A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-007-SA5A-SS-0.0-0.5MSD (SL-007-SA5A-SS-0.0-0.5)	MCPP	-	-	10.00-184.00	93 (50.00)	MCPP	J(all detects)

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE091 **Laboratory: LL**

EDD Filename: DE091_v2 **eQAPP Name: CDM_SSFL_110509**

Method: **8151A**
Matrix: **SO**

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-007-SA5A-SS-0.0-0.5MS SL-007-SA5A-SS-0.0-0.5MSD (SL-007-SA5A-SS-0.0-0.5)	2,4-DB DALAPON DINOSEB	0 0 0	0 0 0	10.00-201.00 10.00-125.00 10.00-46.00	- - -	2,4-DB DALAPON DINOSEB	J(all detects) R(all non-detects)
SL-007-SA5A-SS-0.0-0.5MS SL-007-SA5A-SS-0.0-0.5MSD (SL-007-SA5A-SS-0.0-0.5)	2,4,5-TP (Silvex)	18	16	24.00-141.00	-	2,4,5-TP (Silvex)	J(all detects) UJ(all non-detects)

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE091 | Laboratory: LL

EDD Filename: DE091_v2 | eQAPP Name: CDM_SSFL_110509

Method: 6020
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-007-SA5A-SS-0.0-0.5DUP	CADMIUM	24	20.00	
(SL-007-SA5A-SS-0.0-0.5				
SL -008-SA5A-SS-0.0-0.5				
SL -021-SA5A-SB-3.0-4.0				
SL -022-SA5A-SB-4.0-5.0				
SL -050-SA5A-SB-4.0-5.0				
SL -110-SA5A-SS-0.0-0.5				
SL -119-SA5A-SS-0.0-0.5				
SL -120-SA5A-SS-0.0-0.5				No Qual
SL -121-SA5A-SS-0.0-0.5				OK by difference
SL -122-SA5A-SS-0.0-0.5				
SL -136-SA5A-SS-0.0-0.5				
SL -137-SA5A-SS-0.0-0.5				
SL -138-SA5A-SS-0.0-0.5				
SL -143-SA5A-SS-0.0-0.5				
SL -233-SA5A-SS-0.0-0.5				
SL -250-SA5A-SS-0.0-0.5				
SL -251-SA5A-SS-0.0-0.5)				

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE091 **Laboratory: LL**

EDD Filename: DE091_v2 **eQAPP Name: CDM_SSFL_110509**

***Method:* 8270C SIM**

***Matrix:* SO**

QC Sample ID (Associated Samples)	*Compound*	*LCS %R*	*LCSD %R*	*%R Limits*	*RPD (Limits)*	*Affected Compounds*	*Flag*
P2LCLCSQ260626 (SL-007-SA5A-SS-0.0-0.5 SL-008-SA5A-SS-0.0-0.5 SL-021-SA5A-SB-3.0-4.0 SL-022-SA5A-SB-4.0-5.0 SL-050-SA5A-SB-4.0-5.0 SL-110-SA5A-SS-0.0-0.5 SL-119-SA5A-SS-0.0-0.5 SL-120-SA5A-SS-0.0-0.5 SL-121-SA5A-SS-0.0-0.5 SL-122-SA5A-SS-0.0-0.5 SL-136-SA5A-SS-0.0-0.5 SL-137-SA5A-SS-0.0-0.5 SL-138-SA5A-SS-0.0-0.5 SL-143-SA5A-SS-0.0-0.5 SL-233-SA5A-SS-0.0-0.5 SL-250-SA5A-SS-0.0-0.5 SL-251-SA5A-SS-0.0-0.5)	BENZO(B)FLUORANTHENE	146	-	63.00-143.00	-	BENZO(B)FLUORANTHENE	J (all detects)

Surrogate Outlier Report

Lab Reporting Batch ID: DE091 **Laboratory: LL**

EDD Filename: DE091_v2 **eQAPP Name: CDM_SSFL_110509**

Method: 8081A
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-119-SA5A-SS-0.0-0.5	DECACHLOROBIPHENYL	0	20.00-120.00	All Target Analytes	J(all detects) R(all non-detects)
SL-143-SA5A-SS-0.0-0.5	DECACHLOROBIPHENYL	1023	20.00-120.00	All Target Analytes	No Qual, Diluted Out

Method: 8082
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-007-SA5A-SS-0.0-0.5	DECACHLOROBIPHENYL	134	45.00-120.00	All Target Analytes	J (all detects)
SL-008-SA5A-SS-0.0-0.5	DECACHLOROBIPHENYL	129	45.00-120.00	All Target Analytes	J(all detects)
SL-110-SA5A-SS-0.0-0.5	DECACHLOROBIPHENYL	125	45.00-120.00	All Target Analytes	J(all detects)
SL-138-SA5A-SS-0.0-0.5	DECACHLOROBIPHENYL	149	45.00-120.00	All Target Analytes	J(all detects)
SL-143-SA5A-SS-0.0-0.5	DECACHLOROBIPHENYL	137	45.00-120.00	All Target Analytes	No Qual, Diluted Out

Method: 8270C SIM
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-021-SA5A-SB-3.0-4.0	Terphenyl-d14	137	45.00-135.00	No Affected Compounds	No Qualifiers
SL-050-SA5A-SB-4.0-5.0	Terphenyl-d14	149	45.00-135.00	No Affected Compounds	No Qualifiers
SL-250-SA5A-SS-0.0-0.5	Terphenyl-d14	143	45.00-135.00	No Affected Compounds	No Qualifiers
SL-251-SA5A-SS-0.0-0.5	Terphenyl-d14	138	45.00-135.00	No Affected Compounds	No Qualifiers

Reporting Limit Outliers

Lab Reporting Batch ID: DE091 **Laboratory: LL**

EDD Filename: DE091_v2 **eQAPP Name: CDM_SSFL_110509**

Method: 300.0

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-136-SA5A-SS-0.0-0.5	FLUORIDE	J	0.88	1.1	PQL	mg/Kg	J (all detects)

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-007-SA5A-SS-0.0-0.5	BORON	J	5.09	5.58	PQL	mg/Kg	J (all detects)
	SODIUM	J	58.5	112	PQL	mg/Kg	
	TIN	J	2.99	11.2	PQL	mg/Kg	
	Zirconium	J	2.13	5.58	PQL	mg/Kg	
SL-008-SA5A-SS-0.0-0.5	BORON	J	5.42	5.47	PQL	mg/Kg	J (all detects)
	SODIUM	J	54.3	109	PQL	mg/Kg	
	TIN	J	2.67	10.9	PQL	mg/Kg	
	Zirconium	J	1.70	5.47	PQL	mg/Kg	
SL-021-SA5A-SB-3.0-4.0	BORON	J	2.26	5.39	PQL	mg/Kg	J (all detects)
	SODIUM	J	63.5	108	PQL	mg/Kg	
	TIN	J	2.90	10.8	PQL	mg/Kg	
	Zirconium	J	1.94	5.39	PQL	mg/Kg	
SL-022-SA5A-SB-4.0-5.0	BORON	J	2.53	5.51	PQL	mg/Kg	J (all detects)
	SODIUM	J	67.8	110	PQL	mg/Kg	
	TIN	J	3.17	11.0	PQL	mg/Kg	
	Zirconium	J	1.23	5.51	PQL	mg/Kg	
SL-050-SA5A-SB-4.0-5.0	BORON	J	3.23	5.73	PQL	mg/Kg	J (all detects)
	SODIUM	J	87.5	115	PQL	mg/Kg	
	TIN	J	3.19	11.5	PQL	mg/Kg	
	Zirconium	J	2.70	5.73	PQL	mg/Kg	
SL-110-SA5A-SS-0.0-0.5	BORON	J	2.69	5.81	PQL	mg/Kg	J (all detects)
	TIN	J	2.38	11.6	PQL	mg/Kg	
SL-119-SA5A-SS-0.0-0.5	BORON	J	5.47	6.00	PQL	mg/Kg	J (all detects)
	SODIUM	J	81.7	120	PQL	mg/Kg	
	TIN	J	5.14	12.0	PQL	mg/Kg	
SL-120-SA5A-SS-0.0-0.5	BORON	J	4.55	5.43	PQL	mg/Kg	J (all detects)
	TIN	J	2.32	10.9	PQL	mg/Kg	
SL-121-SA5A-SS-0.0-0.5	BORON	J	5.21	5.43	PQL	mg/Kg	J (all detects)
	SODIUM	J	85.2	109	PQL	mg/Kg	
	TIN	J	2.99	10.9	PQL	mg/Kg	
	Zirconium	J	1.73	5.43	PQL	mg/Kg	
SL-122-SA5A-SS-0.0-0.5	BORON	J	5.09	5.33	PQL	mg/Kg	J (all detects)
	TIN	J	2.54	10.7	PQL	mg/Kg	
	Zirconium	J	0.953	5.33	PQL	mg/Kg	
SL-136-SA5A-SS-0.0-0.5	BORON	J	3.32	5.31	PQL	mg/Kg	J (all detects)
	SODIUM	J	43.3	106	PQL	mg/Kg	
	TIN	J	2.44	10.6	PQL	mg/Kg	
	Zirconium	J	1.71	5.31	PQL	mg/Kg	
SL-137-SA5A-SS-0.0-0.5	BORON	J	4.23	5.91	PQL	mg/Kg	J (all detects)
	Zirconium	J	1.37	5.91	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE091 **Laboratory: LL**

EDD Filename: DE091_v2 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-138-SA5A-SS-0.0-0.5	BORON	J	5.15	5.56	PQL	mg/Kg	J (all detects)
	TIN	J	2.75	11.1	PQL	mg/Kg	
	Zirconium	J	1.65	5.56	PQL	mg/Kg	
SL-143-SA5A-SS-0.0-0.5	BORON	J	4.48	5.55	PQL	mg/Kg	J (all detects)
	TIN	J	2.73	11.1	PQL	mg/Kg	
	Zirconium	J	1.33	5.55	PQL	mg/Kg	
SL-233-SA5A-SS-0.0-0.5	BORON	J	4.22	5.44	PQL	mg/Kg	J (all detects)
	TIN	J	2.76	10.9	PQL	mg/Kg	
	Zirconium	J	3.32	5.44	PQL	mg/Kg	
SL-250-SA5A-SS-0.0-0.5	SODIUM	J	54.0	106	PQL	mg/Kg	J (all detects)
	TIN	J	2.87	10.6	PQL	mg/Kg	
	Zirconium	J	1.29	5.30	PQL	mg/Kg	
SL-251-SA5A-SS-0.0-0.5	SODIUM	J	42.0	107	PQL	mg/Kg	J (all detects)
	TIN	J	2.63	10.7	PQL	mg/Kg	
	Zirconium	J	1.64	5.37	PQL	mg/Kg	

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-007-SA5A-SS-0.0-0.5	SELENIUM	J	0.147	0.429	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0332	0.107	PQL	mg/Kg	
SL-008-SA5A-SS-0.0-0.5	ANTIMONY	J	0.190	0.219	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.149	0.438	PQL	mg/Kg	
	SILVER	J	0.0438	0.109	PQL	mg/Kg	
SL-021-SA5A-SB-3.0-4.0	ANTIMONY	J	0.141	0.222	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0804	0.110	PQL	mg/Kg	
	SELENIUM	J	0.256	0.444	PQL	mg/Kg	
	SILVER	J	0.0277	0.111	PQL	mg/Kg	
SL-022-SA5A-SB-4.0-5.0	ANTIMONY	J	0.132	0.216	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0922	0.109	PQL	mg/Kg	
	SELENIUM	J	0.125	0.432	PQL	mg/Kg	
SL-050-SA5A-SB-4.0-5.0	ANTIMONY	J	0.160	0.222	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0728	0.110	PQL	mg/Kg	
	SELENIUM	J	0.129	0.445	PQL	mg/Kg	
	SILVER	J	0.0777	0.111	PQL	mg/Kg	
SL-110-SA5A-SS-0.0-0.5	SELENIUM	J	0.130	0.469	PQL	mg/Kg	J (all detects)
SL-119-SA5A-SS-0.0-0.5	SELENIUM	J	0.195	0.485	PQL	mg/Kg	J (all detects)
SL-120-SA5A-SS-0.0-0.5	SELENIUM	J	0.0992	0.439	PQL	mg/Kg	J (all detects)
SL-121-SA5A-SS-0.0-0.5	ANTIMONY	J	0.131	0.215	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0858	0.430	PQL	mg/Kg	
	SILVER	J	0.0237	0.108	PQL	mg/Kg	
SL-122-SA5A-SS-0.0-0.5	ANTIMONY	J	0.142	0.218	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0876	0.435	PQL	mg/Kg	
	SILVER	J	0.0274	0.109	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE091 **Laboratory: LL**

EDD Filename: DE091_v2 **eQAPP Name: CDM_SSFL_110509**

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-136-SA5A-SS-0.0-0.5	ANTIMONY	J	0.112	0.214	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.123	0.429	PQL	mg/Kg	
	SILVER	J	0.0341	0.107	PQL	mg/Kg	
SL-137-SA5A-SS-0.0-0.5	SELENIUM	J	0.113	0.468	PQL	mg/Kg	J (all detects)
SL-138-SA5A-SS-0.0-0.5	ANTIMONY	J	0.208	0.225	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0939	0.450	PQL	mg/Kg	
	SILVER	J	0.0344	0.112	PQL	mg/Kg	
SL-143-SA5A-SS-0.0-0.5	SELENIUM	J	0.133	0.448	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0658	0.112	PQL	mg/Kg	
SL-233-SA5A-SS-0.0-0.5	ANTIMONY	J	0.149	0.213	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0944	0.427	PQL	mg/Kg	
	SILVER	J	0.0289	0.107	PQL	mg/Kg	
SL-250-SA5A-SS-0.0-0.5	ANTIMONY	J	0.178	0.216	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0844	0.432	PQL	mg/Kg	
	SILVER	J	0.0306	0.108	PQL	mg/Kg	
SL-251-SA5A-SS-0.0-0.5	ANTIMONY	J	0.143	0.219	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.140	0.438	PQL	mg/Kg	
	SILVER	J	0.0495	0.109	PQL	mg/Kg	

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-007-SA5A-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.32	1.1	PQL	mg/Kg	J (all detects)
SL-021-SA5A-SB-3.0-4.0	HEXAVALENT CHROMIUM	J	0.81	1.1	PQL	mg/Kg	J (all detects)
SL-022-SA5A-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.41	1.1	PQL	mg/Kg	J (all detects)
SL-050-SA5A-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.31	1.1	PQL	mg/Kg	J (all detects)
SL-110-SA5A-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.52	1.2	PQL	mg/Kg	J (all detects)
SL-120-SA5A-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.51	1.1	PQL	mg/Kg	J (all detects)
SL-136-SA5A-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.29	1.1	PQL	mg/Kg	J (all detects)
SL-138-SA5A-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.72	1.1	PQL	mg/Kg	J (all detects)
SL-143-SA5A-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.38	1.1	PQL	mg/Kg	J (all detects)
SL-233-SA5A-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.25	1.1	PQL	mg/Kg	J (all detects)
SL-250-SA5A-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.32	1.1	PQL	mg/Kg	J (all detects)
SL-251-SA5A-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.35	1.1	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE091 **Laboratory: LL**

EDD Filename: DE091_v2 **eQAPP Name: CDM_SSFL_110509**

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-008-SA5A-SS-0.0-0.5	MERCURY	J	0.0355	0.103	PQL	mg/Kg	J (all detects)
SL-050-SA5A-SB-4.0-5.0	MERCURY	J	0.0095	0.110	PQL	mg/Kg	J (all detects)
SL-110-SA5A-SS-0.0-0.5	MERCURY	J	0.0620	0.111	PQL	mg/Kg	J (all detects)
SL-119-SA5A-SS-0.0-0.5	MERCURY	J	0.0946	0.120	PQL	mg/Kg	J (all detects)
SL-120-SA5A-SS-0.0-0.5	MERCURY	J	0.0650	0.107	PQL	mg/Kg	J (all detects)
SL-121-SA5A-SS-0.0-0.5	MERCURY	J	0.0042	0.108	PQL	mg/Kg	J (all detects)
SL-122-SA5A-SS-0.0-0.5	MERCURY	J	0.0094	0.106	PQL	mg/Kg	J (all detects)
SL-143-SA5A-SS-0.0-0.5	MERCURY	J	0.0197	0.108	PQL	mg/Kg	J (all detects)
SL-233-SA5A-SS-0.0-0.5	MERCURY	J	0.0284	0.102	PQL	mg/Kg	J (all detects)
SL-251-SA5A-SS-0.0-0.5	MERCURY	J	0.0179	0.110	PQL	mg/Kg	J (all detects)

Method: 8081A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-007-SA5A-SS-0.0-0.5	4,4'-DDT	J	0.11	0.38	PQL	ug/Kg	J (all detects)
SL-008-SA5A-SS-0.0-0.5	4,4'-DDE	J	0.29	0.38	PQL	ug/Kg	J (all detects)
	DIELDRIN	J	0.10	0.38	PQL	ug/Kg	
	ENDRIN ALDEHYDE	J	0.10	0.38	PQL	ug/Kg	
SL-110-SA5A-SS-0.0-0.5	ENDOSULFAN II	J	0.18	0.40	PQL	ug/Kg	J (all detects)
	ENDRIN ALDEHYDE	J	0.18	0.40	PQL	ug/Kg	
	HEPTACHLOR EPOXIDE	J	0.048	0.20	PQL	ug/Kg	
SL-119-SA5A-SS-0.0-0.5	DELTA-BHC	J	0.055	0.21	PQL	ug/Kg	J (all detects)
	ENDOSULFAN II	J	0.21	0.42	PQL	ug/Kg	
SL-120-SA5A-SS-0.0-0.5	4,4'-DDD	J	0.20	0.38	PQL	ug/Kg	J (all detects)
	DIELDRIN	J	0.21	0.38	PQL	ug/Kg	
	ENDRIN ALDEHYDE	J	0.085	0.38	PQL	ug/Kg	
	ENDRIN KETONE	J	0.22	0.38	PQL	ug/Kg	
SL-121-SA5A-SS-0.0-0.5	MIREX	J	0.30	0.38	PQL	ug/Kg	J (all detects)
SL-122-SA5A-SS-0.0-0.5	4,4'-DDE	J	0.086	0.37	PQL	ug/Kg	J (all detects)
	ENDRIN ALDEHYDE	J	0.085	0.37	PQL	ug/Kg	
SL-136-SA5A-SS-0.0-0.5	4,4'-DDE	J	0.13	0.37	PQL	ug/Kg	J (all detects)
	HEPTACHLOR	J	0.12	0.18	PQL	ug/Kg	
SL-137-SA5A-SS-0.0-0.5	ENDRIN ALDEHYDE	J	0.16	0.41	PQL	ug/Kg	J (all detects)
	HEPTACHLOR EPOXIDE	J	0.067	0.20	PQL	ug/Kg	
SL-138-SA5A-SS-0.0-0.5	4,4'-DDE	J	0.11	0.39	PQL	ug/Kg	J (all detects)
SL-143-SA5A-SS-0.0-0.5	DIELDRIN	J	0.66	1.9	PQL	ug/Kg	J (all detects)
	ENDRIN ALDEHYDE	J	1.4	1.9	PQL	ug/Kg	
	HEPTACHLOR EPOXIDE	J	0.52	0.94	PQL	ug/Kg	
SL-233-SA5A-SS-0.0-0.5	ENDOSULFAN II	J	0.13	0.37	PQL	ug/Kg	J (all detects)
	ENDRIN ALDEHYDE	J	0.20	0.37	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE091 **Laboratory: LL**

EDD Filename: DE091_v2 **eQAPP Name: CDM_SSFL_110509**

Method: 8081A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-250-SA5A-SS-0.0-0.5	ENDRIN ALDEHYDE MIREX	J J	0.28 0.21	0.37 0.37	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-251-SA5A-SS-0.0-0.5	4,4'-DDE	J	0.20	0.38	PQL	ug/Kg	J (all detects)

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-120-SA5A-SS-0.0-0.5	Aroclor 5460	J	1.3	3.7	PQL	ug/Kg	J (all detects)
SL-121-SA5A-SS-0.0-0.5	Aroclor 5460	J	5.3	7.3	PQL	ug/Kg	J (all detects)
SL-122-SA5A-SS-0.0-0.5	Aroclor 5460	J	1.7	3.6	PQL	ug/Kg	J (all detects)
SL-136-SA5A-SS-0.0-0.5	Aroclor 5460	J	2.5	3.6	PQL	ug/Kg	J (all detects)
SL-143-SA5A-SS-0.0-0.5	AROCLOR 1260	J	7.5	9.6	PQL	ug/Kg	J (all detects)
SL-250-SA5A-SS-0.0-0.5	Aroclor 5460	J	5.9	7.3	PQL	ug/Kg	J (all detects)

Method: 8151A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-007-SA5A-SS-0.0-0.5	2,4,5-TP (Silvex) MCPA	J J	0.15 170	0.19 280	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-008-SA5A-SS-0.0-0.5	MCPP	J	160	280	PQL	ug/Kg	J (all detects)
SL-110-SA5A-SS-0.0-0.5	DICAMBA DICHLOROPROP	J J	0.55 1.1	1.4 2.0	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-119-SA5A-SS-0.0-0.5	2,4,5-T	J	0.18	0.21	PQL	ug/Kg	J (all detects)
SL-138-SA5A-SS-0.0-0.5	DICAMBA	J	0.65	1.4	PQL	ug/Kg	J (all detects)
SL-233-SA5A-SS-0.0-0.5	MCPA	J	120	270	PQL	ug/Kg	J (all detects)
SL-251-SA5A-SS-0.0-0.5	2,4,5-TP (Silvex) MCPA	J J	0.13 230	0.19 280	PQL PQL	ug/Kg ug/Kg	J (all detects)

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-021-SA5A-SB-3.0-4.0	ETHYLBENZENE m,p-Xylene METHYLENE CHLORIDE	J J J	0.07 0.22 0.55	4.0 4.0 4.0	PQL PQL PQL	ug/Kg ug/Kg ug/Kg	J (all detects)
SL-022-SA5A-SB-4.0-5.0	METHYLENE CHLORIDE TOLUENE	J J	0.92 0.11	4.5 4.5	PQL PQL	ug/Kg ug/Kg	J (all detects)

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Reporting Limit Outliers

Lab Reporting Batch ID: DE091 **Laboratory: LL**

EDD Filename: DE091_v2 **eQAPP Name: CDM_SSFL_110509**

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-050-SA5A-SB-4.0-5.0	ETHYLBENZENE	J	0.15	4.4	PQL	ug/Kg	J (all detects)
	m,p-Xylene	J	0.54	4.4	PQL	ug/Kg	
	METHYLENE CHLORIDE	J	0.52	4.4	PQL	ug/Kg	
	TOLUENE	J	0.12	4.4	PQL	ug/Kg	

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-008-SA5A-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	28	370	PQL	ug/Kg	J (all detects)
SL-021-SA5A-SB-3.0-4.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	27	360	PQL	ug/Kg	J (all detects)
SL-022-SA5A-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	23	360	PQL	ug/Kg	J (all detects)
SL-110-SA5A-SS-0.0-0.5	BENZO(G,H,I)PERYLENE	J	26	190	PQL	ug/Kg	J (all detects)
	BIS(2-ETHYLHEXYL)PHTHALATE	J	91	390	PQL	ug/Kg	
	CHRYSENE	J	49	190	PQL	ug/Kg	
SL-119-SA5A-SS-0.0-0.5	ANTHRACENE	J	39	200	PQL	ug/Kg	J (all detects)
	BENZO(A)ANTHRACENE	J	81	200	PQL	ug/Kg	
	BENZO(A)PYRENE	J	100	200	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	130	200	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	77	200	PQL	ug/Kg	
	BENZOIC ACID	J	240	610	PQL	ug/Kg	
	CARBAZOLE	J	41	200	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	35	200	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	95	200	PQL	ug/Kg	
	PHENANTHRENE	J	190	200	PQL	ug/Kg	
SL-120-SA5A-SS-0.0-0.5	BENZO(A)PYRENE	J	29	180	PQL	ug/Kg	J (all detects)
	BIS(2-ETHYLHEXYL)PHTHALATE	J	47	370	PQL	ug/Kg	
SL-121-SA5A-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	31	370	PQL	ug/Kg	J (all detects)
SL-122-SA5A-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	25	360	PQL	ug/Kg	J (all detects)
SL-136-SA5A-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	34	360	PQL	ug/Kg	J (all detects)
SL-137-SA5A-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	74	390	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	29	200	PQL	ug/Kg	
SL-138-SA5A-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	27	370	PQL	ug/Kg	J (all detects)
SL-143-SA5A-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	44	190	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	34	190	PQL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	46	190	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	27	190	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	33	370	PQL	ug/Kg	
	CHRYSENE	J	50	190	PQL	ug/Kg	
	FLUORANTHENE	J	77	190	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	22	190	PQL	ug/Kg	
	PHENANTHRENE	J	78	190	PQL	ug/Kg	
	PYRENE	J	120	190	PQL	ug/Kg	
SL-233-SA5A-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	24	360	PQL	ug/Kg	J (all detects)
SL-250-SA5A-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	30	370	PQL	ug/Kg	J (all detects)

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Reporting Limit Outliers

Lab Reporting Batch ID: DE091 **Laboratory: LL**

EDD Filename: DE091_v2 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-251-SA5A-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	45	370	PQL	ug/Kg	J (all detects)

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-008-SA5A-SS-0.0-0.5	BENZO(A)PYRENE	J	0.91	1.8	PQL	ug/Kg	J (all detects)
	BENZO(B)FLUORANTHENE	J	1.6	1.8	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.1	1.8	PQL	ug/Kg	
	CHRYSENE	J	1.1	1.8	PQL	ug/Kg	
	FLUORANTHENE	J	1.3	1.8	PQL	ug/Kg	
	PYRENE	J	1.1	1.8	PQL	ug/Kg	
SL-110-SA5A-SS-0.0-0.5	ACENAPHTHENE	J	1.2	2.0	PQL	ug/Kg	J (all detects)
	ACENAPHTHYLENE	J	1.1	2.0	PQL	ug/Kg	
	Butylbenzylphthalate	J	11	21	PQL	ug/Kg	
	FLUORENE	J	1.1	2.0	PQL	ug/Kg	
SL-119-SA5A-SS-0.0-0.5	Di-n-octylphthalate	J	38	110	PQL	ug/Kg	J (all detects)
SL-120-SA5A-SS-0.0-0.5	BENZO(K)FLUORANTHENE	J	5.8	9.2	PQL	ug/Kg	J (all detects)
	DIBENZO(A,H)ANTHRACENE	J	4.8	9.2	PQL	ug/Kg	
	FLUORANTHENE	J	4.2	9.2	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	4.9	9.2	PQL	ug/Kg	
	PYRENE	J	5.6	9.2	PQL	ug/Kg	
SL-121-SA5A-SS-0.0-0.5	ANTHRACENE	J	0.52	1.8	PQL	ug/Kg	J (all detects)
SL-122-SA5A-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	1.5	1.8	PQL	ug/Kg	J (all detects)
	Butylbenzylphthalate	J	10	20	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	0.82	1.8	PQL	ug/Kg	
	Dimethylphthalate	J	12	20	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.1	1.8	PQL	ug/Kg	
	PHENANTHRENE	J	0.99	1.8	PQL	ug/Kg	
SL-136-SA5A-SS-0.0-0.5	BENZO(G,H,I)PERYLENE	J	1.5	1.8	PQL	ug/Kg	J (all detects)
	INDENO(1,2,3-CD)PYRENE	J	1.3	1.8	PQL	ug/Kg	
	NAPHTHALENE	J	1.0	1.8	PQL	ug/Kg	
SL-137-SA5A-SS-0.0-0.5	1-METHYLNAPHTHALENE	J	4.1	9.9	PQL	ug/Kg	J (all detects)
	2-METHYLNAPHTHALENE	J	6.5	9.9	PQL	ug/Kg	
	ANTHRACENE	J	4.4	9.9	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	6.8	9.9	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	6.3	9.9	PQL	ug/Kg	
SL-138-SA5A-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	6.5	9.5	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	8.1	9.5	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	4.1	9.5	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	7.6	9.5	PQL	ug/Kg	
	FLUORANTHENE	J	6.9	9.5	PQL	ug/Kg	
	PYRENE	J	8.7	9.5	PQL	ug/Kg	
SL-143-SA5A-SS-0.0-0.5	ANTHRACENE	J	0.86	1.9	PQL	ug/Kg	J (all detects)
	NAPHTHALENE	J	0.82	1.9	PQL	ug/Kg	
SL-233-SA5A-SS-0.0-0.5	BENZO(G,H,I)PERYLENE	J	1.5	1.8	PQL	ug/Kg	J (all detects)
	INDENO(1,2,3-CD)PYRENE	J	1.3	1.8	PQL	ug/Kg	
	NAPHTHALENE	J	0.85	1.8	PQL	ug/Kg	

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Reporting Limit Outliers

Lab Reporting Batch ID: DE091 **Laboratory: LL**

EDD Filename: DE091_v2 **eQAPP Name: CDM_SSFL_110509**

Method: **8270C SIM**

Matrix: **SO**

SampleID	*Analyte*	*Lab Qual*	*Result*	*Reporting Limit*	*RL Type*	*Units*	*Flag*
SL-250-SA5A-SS-0.0-0.5	ANTHRACENE DIBENZO(A,H)ANTHRACENE	J J	0.54 1.5	1.8 1.8	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-251-SA5A-SS-0.0-0.5	NAPHTHALENE	J	0.90	1.9	PQL	ug/Kg	J (all detects)

LDC #: 25911C4 **VALIDATION COMPLETENESS WORKSHEET** Date: 8/23/4

SDG #: DE091 ADR

Laboratory: Lancaster Laboratories

Reviewer:

2nd Reviewer:

METHOD: Metals (EPA SW 846 Method 6010B/6020A/7000)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	N	Sampling dates:
II.	ICP/MS Tune	N	
III.	Calibration	N	
IV.	Blanks	A	No qual by CCBs.
V.	ICP Interference Check Sample (ICS) Analysis	N	
VI.	Matrix Spike Analysis	N	Al, Ba, Ca, Fe, Mg, Mn, Ti, Zn >4X
VII.	Duplicate Sample Analysis	N A	Cd <5X RL
VIII.	Laboratory Control Samples (LCS)	N	
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	SW	Ba, Cr, Co, Cu, Mn, V J/UJ
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	N	
XV	Field Blanks	N	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:

1	SL-007-SA5A-SS-0.0-0.5	11	SL-233-SA5A-SS-0.0-0.5	21	#1 MS	31	
2	SL-008-SA5A-SS-0.0-0.5	12	SL-250-SA5A-SS-0.0-0.5	22	#1 MSD	32	
3	SL-110-SA5A-SS-0.0-0.5	13	SL-251-SA5A-SS-0.0-0.5	23	#1 Dup	33	
4	SL-119-SA5A-SS-0.0-0.5	14	SL-021-SA5A-SB-3.0-4.0	24		34	
5	SL-120-SA5A-SS-0.0-0.5	15	SL-022-SA5A-SB-4.0-5.0	25		35	
6	SL-121-SA5A-SS-0.0-0.5	16	SL-050-SA5A-SB-4.0-5.0	26		36	
7	SL-136-SA5A-SS-0.0-0.5	17	SL-122-SA5A-SS-0.0-0.5	27		37	
8	SL-137-SA5A-SS-0.0-0.5	18		28		38	
9	SL-138-SA5A-SS-0.0-0.5	19		29		39	
10	SL-143-SA5A-SS-0.0-0.5	20		30		40	

Notes:

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 5A(MS/MSD)
MATRIX SPIKE/MATRIX SPIKE DUPLICATE
SDG No.: DE091
Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: 6216199BKG Matrix Spike Lab Sample ID: 6216199MS Matrix Spike Duplicate Lab Sample ID: 6216199MSD
% Solids for Sample: 89.6
Batch Id(s): P06108A, P06126A, P07026A

Analyte	Mass	BKG Sample Result	C	MS Sample Result	C	MSD Sample Result	C	MS Spike Added	MSD Spike Added	Units	MS %R	Q	MSD %R	Q	RPD	Q	Control Limit %R	Control Limit RPD	M
Aluminum		17193.6049		20162.9420		20534.7777		221.0042	218.8375	MG/KG	1344		1527		2			20	P
Antimony	121	0.2209		0.8922		0.8548		1.2878	1.3260	MG/KG	52	N	48	N	4		75 - 125	20	MS
Arsenic	75	4.4299		6.5097		6.4909		2.1463	2.2100	MG/KG	97		93		0		75 - 125	20	MS
Barium	137	115.7709		134.1647		142.0394		10.7315	11.0502	MG/KG	171		238		6			20	MS
Beryllium	9	0.7916		1.5792		1.7004		0.8585	0.8840	MG/KG	92		103		7		75 - 125	20	MS
Boron		5.0938	B	226.2001		226.1500		221.0042	218.8375	MG/KG	100		101		0		84 - 115	20	P
Cadmium	111	0.2727		1.6533		1.6680		1.0942	1.0942	MG/KG	126	N	128	N	1		75 - 125	20	MS
Calcium		2952.2757		3661.9530		3676.4389		442.0085	437.6751	MG/KG	161		165		0			20	P
Chromium	52	21.5058		33.6324		38.2558		10.7315	11.0502	MG/KG	113		152	N	13		75 - 125	20	MS
Cobalt	59	5.8830		56.8553		59.8037		53.6573	55.2511	MG/KG	95		98		5		75 - 125	20	MS
Copper	63	8.7011		18.1598		18.1643		10.7315	11.0502	MG/KG	88		86		0		75 - 125	20	MS
Iron		20972.0871		21465.0371		20441.6710		110.5021	109.4188	MG/KG	446		-485		5			20	P
Lead	208	5.6340		9.3278		9.3308		3.2194	3.3151	MG/KG	115		112		0		75 - 125	20	MS
Lithium		24.9475		136.8967		136.6422		110.5021	109.4188	MG/KG	101		102		0		82 - 114	20	P
Magnesium		4529.5904		4957.2456		4880.3615		221.0042	218.8375	MG/KG	194		160		2			20	P
Manganese		367.5257		425.9415		380.4534		55.2511	54.7094	MG/KG	106		24		11			20	P
Molybdenum	98	0.4851		10.9997		11.3817		10.7315	11.0502	MG/KG	98		99		3		75 - 125	20	MS
Nickel	60	13.1460		24.9614		26.1890		10.7315	11.0502	MG/KG	110		118		5		75 - 125	20	MS
Phosphorus		375.4520		491.3190		484.4811		110.5021	109.4188	MG/KG	105		100		1		75 - 125	20	P
Potassium		3673.0636		5197.0827		5331.4349		1105.0212	1094.1877	MG/KG	138	N	152	N	3		75 - 125	20	P
Selenium	78	0.1474	B	2.4232		2.8112		2.1463	2.2100	MG/KG	106		121		15		75 - 125	20	MS
Silver	107	0.0332	B	10.5233		10.8204		10.7315	11.0502	MG/KG	98		98		3		75 - 125	20	MS
Sodium		58.5480	B	1134.8723		1126.1905		1105.0212	1094.1877	MG/KG	97		98		1		75 - 125	20	P
Strontium		22.5391		132.3705		130.0289		110.5021	109.4188	MG/KG	99		98		2		75 - 115	20	P
Thallium	203	0.3024		0.6982		0.7737		0.4293	0.4420	MG/KG	92		107		10		75 - 125	20	MS
Tin		2.9911	B	400.0608		395.1166		442.0085	437.6751	MG/KG	90		90		1		80 - 110	20	P
Titanium		1398.9342		1690.2504		1707.9044		110.5021	109.4188	MG/KG	264		282		1			20	P
Vanadium	51	38.9981		51.7256		55.9583		10.7315	11.0502	MG/KG	119		153	N	8		75 - 125	20	MS
Zinc	66	59.7957		73.9183		77.1747		10.7315	11.0502	MG/KG	132		157		4			20	MS
Zirconium		2.1295	B	108.3142		108.4384		110.5021	109.4188	MG/KG	96		97		0		75 - 125	20	P

74X

METHODS:
P = ICP Atomic Emission Spectrometer CV = Cold Vapor
MS = ICP Mass Spectrometry AF = Cold Vapor Atomic Fluorescence

CONCENTRATION QUALIFIERS:
U= Below MDL, B= Below LOQ
FLAGS:
N = Matrix Spike OOS, * = Duplicate OOS

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 9
SERIAL DILUTIONS
SDG No.: DE091
Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: 6216199BKG Serial Dilution Lab Sample ID: 6216199L
Batch ID(s): P06108A, P06126A, P07026A
Concentration Units: UG/L

Analyte	Mass	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Diff.	Q	M
Aluminum		154054.7000		154274.6000		0		P
Antimony	121	1.0290		1.8400	B	79		MS
Arsenic	75	20.6400		22.9600		11		MS
Barium	137	539.4000		609.0000		13	E	MS
Beryllium	9	3.6880		3.3040		10		MS
Boron		45.6400	B	51.1500	B	12		P
Cadmium	111	1.2460		1.2935	B	4		MS
Calcium		26452.3900		28669.4000		8		P
Chromium	52	100.2000		111.4000		11	E	MS
Cobalt	59	27.4100		31.8250		16	E	MS
Copper	63	40.5400		45.1800		11	E	MS
Iron		187909.9000		199036.0500		6		P
Lead	208	26.2500		28.7200		9		MS
Lithium		223.5300		223.3000		0		P
Magnesium		40585.1300		41937.9000		3		P
Manganese		3293.0300		3637.7000		10		P
Molybdenum	98	2.2600		2.6415		17		MS
Nickel	60	61.2500		70.2000		15	E	MS
Phosphorus		3364.0500		3417.9500		2		P
Potassium		32910.6500		34008.5000		3		P
Selenium	78	0.6866	B	1.0000	U	100		MS
Silver	107	0.1545	B	0.3000	U	100		MS
Sodium		524.5900	B	1865.0000	U	100		P
Strontium		201.9500		211.3000		5		P
Thallium	203	1.4090		1.5560	B	10		MS
Tin		26.8000	B	50.0000	U	100		P
Titanium		12534.4500		13737.6000		10		P
Vanadium	51	181.7000		203.9500		12	E	MS
Zinc	66	278.6000		313.4500		13		MS
Zirconium		19.0800	B	42.0000	U	100		P

NOTE: An E in column Q indicates the presence of a chemical or physical interference in the matrix when the % difference is greater than 10%. This applies only when (I) is greater than or equal to 50x MDL for ICP, 100x MDL for ICP-MS (6020), 50x MDL for ICP-MS (200.8), or 25x MDL for GFAA.

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry

CONCENTRATION QUALIFIERS: DE091 4519
U= Below MDL
B= Below LOQ

FLAGS:
E = Matrix Effects exist as proven by Serial Dilution or Spiked Dilution

SAMPLE DELIVERY GROUP

DE092

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
25-Feb-2011	SL-126-SA5A-SS-0.0-0.5	6216870	N	3050B	6010B	III
25-Feb-2011	SL-126-SA5A-SS-0.0-0.5	6216870	N	3050B	6020	III
25-Feb-2011	SL-126-SA5A-SS-0.0-0.5	6216870	N	3060A	7199	III
25-Feb-2011	SL-126-SA5A-SS-0.0-0.5	6216870	N	3550B	8081A	III
25-Feb-2011	SL-126-SA5A-SS-0.0-0.5	6216870	N	3550B	8082	III
25-Feb-2011	SL-126-SA5A-SS-0.0-0.5	6216870	N	3550B	8151A	III
25-Feb-2011	SL-126-SA5A-SS-0.0-0.5	6216870	N	3550B	8270C	III
25-Feb-2011	SL-126-SA5A-SS-0.0-0.5	6216870	N	3550B	8270C SIM	III
25-Feb-2011	SL-126-SA5A-SS-0.0-0.5	6216870	N	Gen Prep	9045M	III
25-Feb-2011	SL-126-SA5A-SS-0.0-0.5	6216870	N	METHOD	300.0	III
25-Feb-2011	SL-126-SA5A-SS-0.0-0.5	6216870	N	METHOD	314.0	III
25-Feb-2011	SL-126-SA5A-SS-0.0-0.5	6216870	N	METHOD	7471A	III
25-Feb-2011	SL-126-SA5A-SS-0.0-0.5DUP	P216870D221025	DUP	METHOD	7471A	III
25-Feb-2011	SL-126-SA5A-SS-0.0-0.5DUP	P216870D221211A	DUP	3050B	6020	III
25-Feb-2011	SL-126-SA5A-SS-0.0-0.5DUP	P216870D221211B	DUP	3050B	6020	III
25-Feb-2011	SL-126-SA5A-SS-0.0-0.5DUP	P216870D221211C	DUP	3050B	6020	III
25-Feb-2011	SL-126-SA5A-SS-0.0-0.5DUP	P216870D221211D	DUP	3050B	6020	III
25-Feb-2011	SL-126-SA5A-SS-0.0-0.5DUP	P216870D221225	DUP	3050B	6010B	III
25-Feb-2011	SL-126-SA5A-SS-0.0-0.5DUP	P216870D221857	DUP	3050B	6010B	III
25-Feb-2011	SL-126-SA5A-SS-0.0-0.5DUP	P216870D270004A	DUP	METHOD	300.0	III
25-Feb-2011	SL-126-SA5A-SS-0.0-0.5DUP	P216870D271722A	DUP	METHOD	314.0	III
25-Feb-2011	SL-126-SA5A-SS-0.0-0.5MSD	P216870M221028	MSD	METHOD	7471A	III
25-Feb-2011	SL-126-SA5A-SS-0.0-0.5MSD	P216870M221217A	MSD	3050B	6020	III
25-Feb-2011	SL-126-SA5A-SS-0.0-0.5MSD	P216870M221217B	MSD	3050B	6020	III
25-Feb-2011	SL-126-SA5A-SS-0.0-0.5MSD	P216870M221217C	MSD	3050B	6020	III
25-Feb-2011	SL-126-SA5A-SS-0.0-0.5MSD	P216870M221217D	MSD	3050B	6020	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
25-Feb-2011	SL-126-SA5A-SS-0.0-0.5MSD	P216870M221232	MSD	3050B	6010B	III
25-Feb-2011	SL-126-SA5A-SS-0.0-0.5MSD	P216870M221904	MSD	3050B	6010B	III
25-Feb-2011	SL-126-SA5A-SS-0.0-0.5MSD	P216870M240708A	MSD	3550B	8151A	III
25-Feb-2011	SL-126-SA5A-SS-0.0-0.5MSD	P216870M241721A	MSD	3550B	8081A	III
25-Feb-2011	SL-126-SA5A-SS-0.0-0.5MSD	P216870M242020A	MSD	3550B	8082	III
25-Feb-2011	SL-126-SA5A-SS-0.0-0.5MSD	P216870M261213	MSD	3550B	8270C SIM	III
25-Feb-2011	SL-126-SA5A-SS-0.0-0.5MS	P216870R221027	MS	METHOD	7471A	III
25-Feb-2011	SL-126-SA5A-SS-0.0-0.5MS	P216870R221214A	MS	3050B	6020	III
25-Feb-2011	SL-126-SA5A-SS-0.0-0.5MS	P216870R221214B	MS	3050B	6020	III
25-Feb-2011	SL-126-SA5A-SS-0.0-0.5MS	P216870R221214C	MS	3050B	6020	III
25-Feb-2011	SL-126-SA5A-SS-0.0-0.5MS	P216870R221214D	MS	3050B	6020	III
25-Feb-2011	SL-126-SA5A-SS-0.0-0.5MS	P216870R221229	MS	3050B	6010B	III
25-Feb-2011	SL-126-SA5A-SS-0.0-0.5MS	P216870R221901	MS	3050B	6010B	III
25-Feb-2011	SL-126-SA5A-SS-0.0-0.5MS	P216870R240641A	MS	3550B	8151A	III
25-Feb-2011	SL-126-SA5A-SS-0.0-0.5MS	P216870R241706A	MS	3550B	8081A	III
25-Feb-2011	SL-126-SA5A-SS-0.0-0.5MS	P216870R241956A	MS	3550B	8082	III
25-Feb-2011	SL-126-SA5A-SS-0.0-0.5MS	P216870R261142	MS	3550B	8270C SIM	III
25-Feb-2011	SL-126-SA5A-SS-0.0-0.5MS	P216870R270019A	MS	METHOD	300.0	III
25-Feb-2011	SL-126-SA5A-SS-0.0-0.5MS	P216870R271746A	MS	METHOD	314.0	III
25-Feb-2011	SL-127-SA5A-SS-0.0-0.5	6216871	N	3050B	6010B	III
25-Feb-2011	SL-127-SA5A-SS-0.0-0.5	6216871	N	3050B	6020	III
25-Feb-2011	SL-127-SA5A-SS-0.0-0.5	6216871	N	3060A	7199	III
25-Feb-2011	SL-127-SA5A-SS-0.0-0.5	6216871	N	3550B	8081A	III
25-Feb-2011	SL-127-SA5A-SS-0.0-0.5	6216871	N	3550B	8082	III
25-Feb-2011	SL-127-SA5A-SS-0.0-0.5	6216871	N	3550B	8151A	III
25-Feb-2011	SL-127-SA5A-SS-0.0-0.5	6216871	N	3550B	8270C	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
25-Feb-2011	SL-127-SA5A-SS-0.0-0.5	6216871	N	3550B	8270C SIM	III
25-Feb-2011	SL-127-SA5A-SS-0.0-0.5	6216871	N	Gen Prep	9045M	III
25-Feb-2011	SL-127-SA5A-SS-0.0-0.5	6216871	N	METHOD	300.0	III
25-Feb-2011	SL-127-SA5A-SS-0.0-0.5	6216871	N	METHOD	314.0	III
25-Feb-2011	SL-127-SA5A-SS-0.0-0.5	6216871	N	METHOD	6850	III
25-Feb-2011	SL-127-SA5A-SS-0.0-0.5	6216871	N	METHOD	7471A	III
25-Feb-2011	SL-132-SA5A-SS-0.0-0.5	6216873	N	3050B	6010B	III
25-Feb-2011	SL-132-SA5A-SS-0.0-0.5	6216873	N	3050B	6020	III
25-Feb-2011	SL-132-SA5A-SS-0.0-0.5	6216873	N	3060A	7199	III
25-Feb-2011	SL-132-SA5A-SS-0.0-0.5	6216873	N	3550B	8081A	III
25-Feb-2011	SL-132-SA5A-SS-0.0-0.5	6216873	N	3550B	8082	III
25-Feb-2011	SL-132-SA5A-SS-0.0-0.5	6216873	N	3550B	8151A	III
25-Feb-2011	SL-132-SA5A-SS-0.0-0.5	6216873	N	3550B	8270C	III
25-Feb-2011	SL-132-SA5A-SS-0.0-0.5	6216873	N	3550B	8270C SIM	III
25-Feb-2011	SL-132-SA5A-SS-0.0-0.5	6216873	N	Gen Prep	9045M	III
25-Feb-2011	SL-132-SA5A-SS-0.0-0.5	6216873	N	METHOD	300.0	III
25-Feb-2011	SL-132-SA5A-SS-0.0-0.5	6216873	N	METHOD	314.0	III
25-Feb-2011	SL-132-SA5A-SS-0.0-0.5	6216873	N	METHOD	7471A	III
25-Feb-2011	SL-053-SA5A-SB-3.0-4.0	6216885	N	3050B	6010B	III
25-Feb-2011	SL-053-SA5A-SB-3.0-4.0	6216885	N	3050B	6020	III
25-Feb-2011	SL-053-SA5A-SB-3.0-4.0	6216885	N	3060A	7199	III
25-Feb-2011	SL-053-SA5A-SB-3.0-4.0	6216885	N	3550B	8082	III
25-Feb-2011	SL-053-SA5A-SB-3.0-4.0	6216885	N	3550B	8270C	III
25-Feb-2011	SL-053-SA5A-SB-3.0-4.0	6216885	N	3550B	8270C SIM	III
25-Feb-2011	SL-053-SA5A-SB-3.0-4.0	6216885	N	5035	8260B	III
25-Feb-2011	SL-053-SA5A-SB-3.0-4.0	6216885	N	5035	8260B SIM	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
25-Feb-2011	SL-053-SA5A-SB-3.0-4.0	6216885	N	Gen Prep	9045M	III
25-Feb-2011	SL-053-SA5A-SB-3.0-4.0	6216885	N	METHOD	300.0	III
25-Feb-2011	SL-053-SA5A-SB-3.0-4.0	6216885	N	METHOD	314.0	III
25-Feb-2011	SL-053-SA5A-SB-3.0-4.0	6216885	N	METHOD	7471A	III
25-Feb-2011	SL-053-SA5A-SB-3.0-4.0DUP	P216885D291325A	DUP	Gen Prep	9045M	III
25-Feb-2011	SL-133-SA5A-SS-0.0-0.5	6216874	N	3050B	6010B	III
25-Feb-2011	SL-133-SA5A-SS-0.0-0.5	6216874	N	3050B	6020	III
25-Feb-2011	SL-133-SA5A-SS-0.0-0.5	6216874	N	3060A	7199	III
25-Feb-2011	SL-133-SA5A-SS-0.0-0.5	6216874	N	3550B	8081A	III
25-Feb-2011	SL-133-SA5A-SS-0.0-0.5	6216874	N	3550B	8082	III
25-Feb-2011	SL-133-SA5A-SS-0.0-0.5	6216874	N	3550B	8151A	III
25-Feb-2011	SL-133-SA5A-SS-0.0-0.5	6216874	N	3550B	8270C	III
25-Feb-2011	SL-133-SA5A-SS-0.0-0.5	6216874	N	3550B	8270C SIM	III
25-Feb-2011	SL-133-SA5A-SS-0.0-0.5	6216874	N	Gen Prep	9045M	III
25-Feb-2011	SL-133-SA5A-SS-0.0-0.5	6216874	N	METHOD	300.0	III
25-Feb-2011	SL-133-SA5A-SS-0.0-0.5	6216874	N	METHOD	314.0	III
25-Feb-2011	SL-133-SA5A-SS-0.0-0.5	6216874	N	METHOD	7471A	III
25-Feb-2011	SL-146-SA5A-SS-0.0-0.5	6216880	N	3050B	6010B	III
25-Feb-2011	SL-146-SA5A-SS-0.0-0.5	6216880	N	3050B	6020	III
25-Feb-2011	SL-146-SA5A-SS-0.0-0.5	6216880	N	3060A	7199	III
25-Feb-2011	SL-146-SA5A-SS-0.0-0.5	6216880	N	3550B	8081A	III
25-Feb-2011	SL-146-SA5A-SS-0.0-0.5	6216880	N	3550B	8082	III
25-Feb-2011	SL-146-SA5A-SS-0.0-0.5	6216880	N	3550B	8151A	III
25-Feb-2011	SL-146-SA5A-SS-0.0-0.5	6216880	N	3550B	8270C	III
25-Feb-2011	SL-146-SA5A-SS-0.0-0.5	6216880	N	3550B	8270C SIM	III
25-Feb-2011	SL-146-SA5A-SS-0.0-0.5	6216880	N	Gen Prep	9045M	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
25-Feb-2011	SL-146-SA5A-SS-0.0-0.5	6216880	N	METHOD	300.0	III
25-Feb-2011	SL-146-SA5A-SS-0.0-0.5	6216880	N	METHOD	314.0	III
25-Feb-2011	SL-146-SA5A-SS-0.0-0.5	6216880	N	METHOD	7471A	III
25-Feb-2011	SL-144-SA5A-SS-0.0-0.5	6216879	N	3050B	6010B	III
25-Feb-2011	SL-144-SA5A-SS-0.0-0.5	6216879	N	3050B	6020	III
25-Feb-2011	SL-144-SA5A-SS-0.0-0.5	6216879	N	3060A	7199	III
25-Feb-2011	SL-144-SA5A-SS-0.0-0.5	6216879	N	3550B	8081A	III
25-Feb-2011	SL-144-SA5A-SS-0.0-0.5	6216879	N	3550B	8082	III
25-Feb-2011	SL-144-SA5A-SS-0.0-0.5	6216879	N	3550B	8151A	III
25-Feb-2011	SL-144-SA5A-SS-0.0-0.5	6216879	N	3550B	8270C	III
25-Feb-2011	SL-144-SA5A-SS-0.0-0.5	6216879	N	3550B	8270C SIM	III
25-Feb-2011	SL-144-SA5A-SS-0.0-0.5	6216879	N	Gen Prep	9045M	III
25-Feb-2011	SL-144-SA5A-SS-0.0-0.5	6216879	N	METHOD	300.0	III
25-Feb-2011	SL-144-SA5A-SS-0.0-0.5	6216879	N	METHOD	314.0	III
25-Feb-2011	SL-144-SA5A-SS-0.0-0.5	6216879	N	METHOD	7471A	III
25-Feb-2011	SL-054-SA5A-SB-4.0-5.0	6216886	N	3050B	6010B	III
25-Feb-2011	SL-054-SA5A-SB-4.0-5.0	6216886	N	3050B	6020	III
25-Feb-2011	SL-054-SA5A-SB-4.0-5.0	6216886	N	3060A	7199	III
25-Feb-2011	SL-054-SA5A-SB-4.0-5.0	6216886	N	3550B	8082	III
25-Feb-2011	SL-054-SA5A-SB-4.0-5.0	6216886	N	3550B	8270C	III
25-Feb-2011	SL-054-SA5A-SB-4.0-5.0	6216886	N	3550B	8270C SIM	III
25-Feb-2011	SL-054-SA5A-SB-4.0-5.0	6216886	N	5035	8260B	III
25-Feb-2011	SL-054-SA5A-SB-4.0-5.0	6216886	N	5035	8260B SIM	III
25-Feb-2011	SL-054-SA5A-SB-4.0-5.0	6216886	N	Gen Prep	9045M	III
25-Feb-2011	SL-054-SA5A-SB-4.0-5.0	6216886	N	METHOD	300.0	III
25-Feb-2011	SL-054-SA5A-SB-4.0-5.0	6216886	N	METHOD	314.0	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
25-Feb-2011	SL-054-SA5A-SB-4.0-5.0	6216886	N	METHOD	7471A	III
25-Feb-2011	SL-054-SA5A-SB-4.0-5.0DUP	P216886D271928A	DUP	3060A	7199	III
25-Feb-2011	SL-054-SA5A-SB-4.0-5.0MS	P216886R271845A	MS	3060A	7199	III
25-Feb-2011	SL-054-SA5A-SB-9.0-10.0	6216887	N	3050B	6010B	III
25-Feb-2011	SL-054-SA5A-SB-9.0-10.0	6216887	N	3050B	6020	III
25-Feb-2011	SL-054-SA5A-SB-9.0-10.0	6216887	N	3060A	7199	III
25-Feb-2011	SL-054-SA5A-SB-9.0-10.0	6216887	N	3550B	8082	III
25-Feb-2011	SL-054-SA5A-SB-9.0-10.0	6216887	N	3550B	8270C	III
25-Feb-2011	SL-054-SA5A-SB-9.0-10.0	6216887	N	3550B	8270C SIM	III
25-Feb-2011	SL-054-SA5A-SB-9.0-10.0	6216887	N	Gen Prep	9045M	III
25-Feb-2011	SL-054-SA5A-SB-9.0-10.0	6216887	N	METHOD	300.0	III
25-Feb-2011	SL-054-SA5A-SB-9.0-10.0	6216887	N	METHOD	314.0	III
25-Feb-2011	SL-054-SA5A-SB-9.0-10.0	6216887	N	METHOD	7471A	III
25-Feb-2011	SL-055-SA5A-SB-2.0-3.0	6216888	N	3050B	6010B	III
25-Feb-2011	SL-055-SA5A-SB-2.0-3.0	6216888	N	3050B	6020	III
25-Feb-2011	SL-055-SA5A-SB-2.0-3.0	6216888	N	3060A	7199	III
25-Feb-2011	SL-055-SA5A-SB-2.0-3.0	6216888	N	3550B	8082	III
25-Feb-2011	SL-055-SA5A-SB-2.0-3.0	6216888	N	3550B	8270C	III
25-Feb-2011	SL-055-SA5A-SB-2.0-3.0	6216888	N	3550B	8270C SIM	III
25-Feb-2011	SL-055-SA5A-SB-2.0-3.0	6216888	N	5035	8260B	III
25-Feb-2011	SL-055-SA5A-SB-2.0-3.0	6216888	N	5035	8260B SIM	III
25-Feb-2011	SL-055-SA5A-SB-2.0-3.0	6216888	N	Gen Prep	9045M	III
25-Feb-2011	SL-055-SA5A-SB-2.0-3.0	6216888	N	METHOD	300.0	III
25-Feb-2011	SL-055-SA5A-SB-2.0-3.0	6216888	N	METHOD	314.0	III
25-Feb-2011	SL-055-SA5A-SB-2.0-3.0	6216888	N	METHOD	7471A	III
25-Feb-2011	SL-171-SA5A-SS-0.0-0.5	6216881	N	3050B	6010B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
25-Feb-2011	SL-171-SA5A-SS-0.0-0.5	6216881	N	3050B	6020	III
25-Feb-2011	SL-171-SA5A-SS-0.0-0.5	6216881	N	3060A	7199	III
25-Feb-2011	SL-171-SA5A-SS-0.0-0.5	6216881	N	3550B	8081A	III
25-Feb-2011	SL-171-SA5A-SS-0.0-0.5	6216881	N	3550B	8082	III
25-Feb-2011	SL-171-SA5A-SS-0.0-0.5	6216881	N	3550B	8151A	III
25-Feb-2011	SL-171-SA5A-SS-0.0-0.5	6216881	N	3550B	8270C	III
25-Feb-2011	SL-171-SA5A-SS-0.0-0.5	6216881	N	3550B	8270C SIM	III
25-Feb-2011	SL-171-SA5A-SS-0.0-0.5	6216881	N	Gen Prep	9045M	III
25-Feb-2011	SL-171-SA5A-SS-0.0-0.5	6216881	N	METHOD	300.0	III
25-Feb-2011	SL-171-SA5A-SS-0.0-0.5	6216881	N	METHOD	314.0	III
25-Feb-2011	SL-171-SA5A-SS-0.0-0.5	6216881	N	METHOD	7471A	III
25-Feb-2011	SL-173-SA5A-SS-0.0-0.5	6216883	N	3050B	6010B	III
25-Feb-2011	SL-173-SA5A-SS-0.0-0.5	6216883	N	3050B	6020	III
25-Feb-2011	SL-173-SA5A-SS-0.0-0.5	6216883	N	3060A	7199	III
25-Feb-2011	SL-173-SA5A-SS-0.0-0.5	6216883	N	3550B	8081A	III
25-Feb-2011	SL-173-SA5A-SS-0.0-0.5	6216883	N	3550B	8082	III
25-Feb-2011	SL-173-SA5A-SS-0.0-0.5	6216883	N	3550B	8151A	III
25-Feb-2011	SL-173-SA5A-SS-0.0-0.5	6216883	N	3550B	8270C	III
25-Feb-2011	SL-173-SA5A-SS-0.0-0.5	6216883	N	3550B	8270C SIM	III
25-Feb-2011	SL-173-SA5A-SS-0.0-0.5	6216883	N	Gen Prep	9045M	III
25-Feb-2011	SL-173-SA5A-SS-0.0-0.5	6216883	N	METHOD	300.0	III
25-Feb-2011	SL-173-SA5A-SS-0.0-0.5	6216883	N	METHOD	314.0	III
25-Feb-2011	SL-173-SA5A-SS-0.0-0.5	6216883	N	METHOD	7471A	III
25-Feb-2011	SL-172-SA5A-SS-0.0-0.5	6216882	N	3050B	6010B	III
25-Feb-2011	SL-172-SA5A-SS-0.0-0.5	6216882	N	3050B	6020	III
25-Feb-2011	SL-172-SA5A-SS-0.0-0.5	6216882	N	3060A	7199	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
25-Feb-2011	SL-172-SA5A-SS-0.0-0.5	6216882	N	3550B	8081A	III
25-Feb-2011	SL-172-SA5A-SS-0.0-0.5	6216882	N	3550B	8082	III
25-Feb-2011	SL-172-SA5A-SS-0.0-0.5	6216882	N	3550B	8151A	III
25-Feb-2011	SL-172-SA5A-SS-0.0-0.5	6216882	N	3550B	8270C	III
25-Feb-2011	SL-172-SA5A-SS-0.0-0.5	6216882	N	3550B	8270C SIM	III
25-Feb-2011	SL-172-SA5A-SS-0.0-0.5	6216882	N	Gen Prep	9045M	III
25-Feb-2011	SL-172-SA5A-SS-0.0-0.5	6216882	N	METHOD	300.0	III
25-Feb-2011	SL-172-SA5A-SS-0.0-0.5	6216882	N	METHOD	314.0	III
25-Feb-2011	SL-172-SA5A-SS-0.0-0.5	6216882	N	METHOD	7471A	III
25-Feb-2011	SL-174-SA5A-SS-0.0-0.5	6216884	N	3050B	6010B	III
25-Feb-2011	SL-174-SA5A-SS-0.0-0.5	6216884	N	3050B	6020	III
25-Feb-2011	SL-174-SA5A-SS-0.0-0.5	6216884	N	3060A	7199	III
25-Feb-2011	SL-174-SA5A-SS-0.0-0.5	6216884	N	3550B	8081A	III
25-Feb-2011	SL-174-SA5A-SS-0.0-0.5	6216884	N	3550B	8082	III
25-Feb-2011	SL-174-SA5A-SS-0.0-0.5	6216884	N	3550B	8151A	III
25-Feb-2011	SL-174-SA5A-SS-0.0-0.5	6216884	N	3550B	8270C	III
25-Feb-2011	SL-174-SA5A-SS-0.0-0.5	6216884	N	3550B	8270C SIM	III
25-Feb-2011	SL-174-SA5A-SS-0.0-0.5	6216884	N	Gen Prep	9045M	III
25-Feb-2011	SL-174-SA5A-SS-0.0-0.5	6216884	N	METHOD	300.0	III
25-Feb-2011	SL-174-SA5A-SS-0.0-0.5	6216884	N	METHOD	314.0	III
25-Feb-2011	SL-174-SA5A-SS-0.0-0.5	6216884	N	METHOD	7471A	III
25-Feb-2011	SL-174-SA5A-SS-0.0-0.5DUP	P216884D270309B	DUP	METHOD	300.0	III
25-Feb-2011	SL-174-SA5A-SS-0.0-0.5MS	P216884R270323B	MS	METHOD	300.0	III
25-Feb-2011	SL-056-SA5A-SB-4.0-5.0	6216889	N	3050B	6010B	III
25-Feb-2011	SL-056-SA5A-SB-4.0-5.0	6216889	N	3050B	6020	III
25-Feb-2011	SL-056-SA5A-SB-4.0-5.0	6216889	N	3060A	7199	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
25-Feb-2011	SL-056-SA5A-SB-4.0-5.0	6216889	N	3550B	8082	III
25-Feb-2011	SL-056-SA5A-SB-4.0-5.0	6216889	N	3550B	8270C	III
25-Feb-2011	SL-056-SA5A-SB-4.0-5.0	6216889	N	3550B	8270C SIM	III
25-Feb-2011	SL-056-SA5A-SB-4.0-5.0	6216889	N	5035	8260B	III
25-Feb-2011	SL-056-SA5A-SB-4.0-5.0	6216889	N	5035	8260B SIM	III
25-Feb-2011	SL-056-SA5A-SB-4.0-5.0	6216889	N	Gen Prep	9045M	III
25-Feb-2011	SL-056-SA5A-SB-4.0-5.0	6216889	N	METHOD	300.0	III
25-Feb-2011	SL-056-SA5A-SB-4.0-5.0	6216889	N	METHOD	314.0	III
25-Feb-2011	SL-056-SA5A-SB-4.0-5.0	6216889	N	METHOD	7471A	III
25-Feb-2011	SL-056-SA5A-SB-7.0-8.0	6216890	N	3050B	6010B	III
25-Feb-2011	SL-056-SA5A-SB-7.0-8.0	6216890	N	3050B	6020	III
25-Feb-2011	SL-056-SA5A-SB-7.0-8.0	6216890	N	3060A	7199	III
25-Feb-2011	SL-056-SA5A-SB-7.0-8.0	6216890	N	3550B	8082	III
25-Feb-2011	SL-056-SA5A-SB-7.0-8.0	6216890	N	3550B	8270C	III
25-Feb-2011	SL-056-SA5A-SB-7.0-8.0	6216890	N	3550B	8270C SIM	III
25-Feb-2011	SL-056-SA5A-SB-7.0-8.0	6216890	N	Gen Prep	9045M	III
25-Feb-2011	SL-056-SA5A-SB-7.0-8.0	6216890	N	METHOD	300.0	III
25-Feb-2011	SL-056-SA5A-SB-7.0-8.0	6216890	N	METHOD	314.0	III
25-Feb-2011	SL-056-SA5A-SB-7.0-8.0	6216890	N	METHOD	7471A	III
25-Feb-2011	SL-056-SA5A-SB-7.0-8.0DUP	P216890D291325B	DUP	Gen Prep	9045M	III
25-Feb-2011	TB-022511	6216891	TB	5030B	8260B	III
25-Feb-2011	TB-022511	6216891	TB	5030B	8260B SIM	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE092 | Laboratory: LL

EDD Filename: PrepDE092_v1 | eQAPP Name: CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: SL-053-SA5A-SB-3.0-4.0 *Collected:* 2/25/2011 9:28:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.7		0.90	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-054-SA5A-SB-4.0-5.0 *Collected:* 2/25/2011 11:25:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.0		0.90	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-054-SA5A-SB-9.0-10.0 *Collected:* 2/25/2011 11:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	4.3		0.92	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-055-SA5A-SB-2.0-3.0 *Collected:* 2/25/2011 12:38:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.4		0.90	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-056-SA5A-SB-4.0-5.0 *Collected:* 2/25/2011 3:43:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.6		0.92	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-056-SA5A-SB-7.0-8.0 *Collected:* 2/25/2011 3:47:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.2		0.93	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-126-SA5A-SS-0.0-0.5 *Collected:* 2/25/2011 8:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.1	J	0.96	MDL	1.2	PQL	mg/Kg	J	Z, Q

Sample ID: SL-127-SA5A-SS-0.0-0.5 *Collected:* 2/25/2011 9:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.5		0.93	MDL	1.2	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE092 | Laboratory: LL

EDD Filename: PrepDE092_v1 | eQAPP Name: CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: SL-132-SA5A-SS-0.0-0.5 *Collected:* 2/25/2011 9:20:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.9		0.90	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-133-SA5A-SS-0.0-0.5 *Collected:* 2/25/2011 10:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.1		0.91	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-144-SA5A-SS-0.0-0.5 *Collected:* 2/25/2011 11:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.8		0.91	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-146-SA5A-SS-0.0-0.5 *Collected:* 2/25/2011 10:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.3		0.92	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-171-SA5A-SS-0.0-0.5 *Collected:* 2/25/2011 1:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.4		0.91	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-172-SA5A-SS-0.0-0.5 *Collected:* 2/25/2011 1:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.1	J	0.90	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-173-SA5A-SS-0.0-0.5 *Collected:* 2/25/2011 1:25:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.7		0.91	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-174-SA5A-SS-0.0-0.5 *Collected:* 2/25/2011 2:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.2		0.95	MDL	1.2	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE092 | Laboratory: LL

EDD Filename: PrepDE092_v1 | eQAPP Name: CDM_SSFL_110509

Method Category: GENCHEM
Method: 300.0 **Matrix:** SO

Method Category: METALS
Method: 6010B **Matrix:** SO

Sample ID: SL-053-SA5A-SB-3.0-4.0 *Collected:* 2/25/2011 9:28:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.41	J	0.985	MDL	5.53	PQL	mg/Kg	J	Z
LITHIUM	22.3		0.24	MDL	2.2	PQL	mg/Kg	J	A
SODIUM	109	J	41.3	MDL	111	PQL	mg/Kg	J	Z
TIN	3.25	J	1.11	MDL	11.1	PQL	mg/Kg	U	B
Zirconium	3.91	J	0.929	MDL	5.53	PQL	mg/Kg	U	B

Sample ID: SL-054-SA5A-SB-4.0-5.0 *Collected:* 2/25/2011 11:25:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.36	J	0.969	MDL	5.44	PQL	mg/Kg	J	Z
LITHIUM	21.8		0.24	MDL	2.2	PQL	mg/Kg	J	A
SODIUM	107	J	40.6	MDL	109	PQL	mg/Kg	J	Z
TIN	2.75	J	1.09	MDL	10.9	PQL	mg/Kg	U	B
Zirconium	3.94	J	0.914	MDL	5.44	PQL	mg/Kg	U	B

Sample ID: SL-054-SA5A-SB-9.0-10.0 *Collected:* 2/25/2011 11:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.01	J	1.02	MDL	5.70	PQL	mg/Kg	J	Z
LITHIUM	25.3		0.25	MDL	2.3	PQL	mg/Kg	J	A
TIN	3.19	J	1.14	MDL	11.4	PQL	mg/Kg	U	B
Zirconium	4.29	J	0.958	MDL	5.70	PQL	mg/Kg	U	B

Sample ID: SL-055-SA5A-SB-2.0-3.0 *Collected:* 2/25/2011 12:38:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LITHIUM	42.4		0.24	MDL	2.2	PQL	mg/Kg	J	A
TIN	3.33	J	1.09	MDL	10.9	PQL	mg/Kg	U	B
Zirconium	4.91	J	0.913	MDL	5.43	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE092 | Laboratory: LL

EDD Filename: PrepDE092_v1 | eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-056-SA5A-SB-4.0-5.0 *Collected:* 2/25/2011 3:43:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.04	J	0.981	MDL	5.51	PQL	mg/Kg	J	Z
LITHIUM	23.1		0.24	MDL	2.2	PQL	mg/Kg	J	A
SODIUM	73.6	J	41.1	MDL	110	PQL	mg/Kg	J	Z
TIN	2.91	J	1.10	MDL	11.0	PQL	mg/Kg	U	B
Zirconium	4.56	J	0.926	MDL	5.51	PQL	mg/Kg	J	Z

Sample ID: SL-056-SA5A-SB-7.0-8.0 *Collected:* 2/25/2011 3:47:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.00	J	0.997	MDL	5.60	PQL	mg/Kg	J	Z
LITHIUM	20.4		0.25	MDL	2.2	PQL	mg/Kg	J	A
SODIUM	109	J	41.8	MDL	112	PQL	mg/Kg	J	Z
TIN	2.94	J	1.12	MDL	11.2	PQL	mg/Kg	U	B
Zirconium	4.12	J	0.941	MDL	5.60	PQL	mg/Kg	U	B

Sample ID: SL-126-SA5A-SS-0.0-0.5 *Collected:* 2/25/2011 8:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LITHIUM	19.8		0.25	MDL	2.3	PQL	mg/Kg	J	A
SODIUM	62.4	J	43.1	MDL	115	PQL	mg/Kg	J	Z
TIN	2.86	J	1.15	MDL	11.5	PQL	mg/Kg	U	B
Zirconium	5.35	J	0.970	MDL	5.77	PQL	mg/Kg	U	B

Sample ID: SL-127-SA5A-SS-0.0-0.5 *Collected:* 2/25/2011 9:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	4.60	J	1.01	MDL	5.69	PQL	mg/Kg	J	Z
LITHIUM	22.1		0.25	MDL	2.3	PQL	mg/Kg	J	A
SODIUM	60.5	J	42.4	MDL	114	PQL	mg/Kg	J	Z
TIN	2.92	J	1.14	MDL	11.4	PQL	mg/Kg	U	B
Zirconium	3.29	J	0.955	MDL	5.69	PQL	mg/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE092 **Laboratory: LL**

EDD Filename: PrepDE092_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6010B** ***Matrix:*** **SO**

Sample ID: SL-132-SA5A-SS-0.0-0.5 ***Collected:*** 2/25/2011 9:20:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	4.50	J	0.987	MDL	5.55	PQL	mg/Kg	J	Z
LITHIUM	21.4		0.24	MDL	2.2	PQL	mg/Kg	J	A
SODIUM	61.4	J	41.4	MDL	111	PQL	mg/Kg	J	Z
TIN	2.65	J	1.11	MDL	11.1	PQL	mg/Kg	U	B
Zirconium	3.64	J	0.932	MDL	5.55	PQL	mg/Kg	U	B

Sample ID: SL-133-SA5A-SS-0.0-0.5 ***Collected:*** 2/25/2011 10:00:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	5.01	J	0.980	MDL	5.50	PQL	mg/Kg	J	Z
LITHIUM	20.6		0.24	MDL	2.2	PQL	mg/Kg	J	A
SODIUM	71.5	J	41.1	MDL	110	PQL	mg/Kg	J	Z
TIN	2.76	J	1.10	MDL	11.0	PQL	mg/Kg	U	B
Zirconium	4.90	J	0.925	MDL	5.50	PQL	mg/Kg	U	B

Sample ID: SL-144-SA5A-SS-0.0-0.5 ***Collected:*** 2/25/2011 11:05:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	4.69	J	1.00	MDL	5.64	PQL	mg/Kg	J	Z
LITHIUM	23.4		0.25	MDL	2.3	PQL	mg/Kg	J	A
SODIUM	72.5	J	42.1	MDL	113	PQL	mg/Kg	J	Z
TIN	2.88	J	1.13	MDL	11.3	PQL	mg/Kg	U	B
Zirconium	4.64	J	0.948	MDL	5.64	PQL	mg/Kg	U	B

Sample ID: SL-146-SA5A-SS-0.0-0.5 ***Collected:*** 2/25/2011 10:45:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.68	J	0.991	MDL	5.57	PQL	mg/Kg	J	Z
LITHIUM	21.0		0.24	MDL	2.2	PQL	mg/Kg	J	A
SODIUM	60.7	J	41.5	MDL	111	PQL	mg/Kg	J	Z
TIN	2.81	J	1.11	MDL	11.1	PQL	mg/Kg	U	B
Zirconium	3.99	J	0.935	MDL	5.57	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE092 | Laboratory: LL

EDD Filename: PrepDE092_v1 | eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-171-SA5A-SS-0.0-0.5 *Collected:* 2/25/2011 1:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	5.43	J	0.981	MDL	5.51	PQL	mg/Kg	J	Z
LITHIUM	20.5		0.24	MDL	2.2	PQL	mg/Kg	J	A
SODIUM	71.2	J	41.1	MDL	110	PQL	mg/Kg	J	Z
TIN	2.59	J	1.10	MDL	11.0	PQL	mg/Kg	U	B
Zirconium	3.27	J	0.926	MDL	5.51	PQL	mg/Kg	U	B

Sample ID: SL-172-SA5A-SS-0.0-0.5 *Collected:* 2/25/2011 1:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	4.11	J	0.983	MDL	5.52	PQL	mg/Kg	J	Z
LITHIUM	23.2		0.24	MDL	2.2	PQL	mg/Kg	J	A
SODIUM	86.6	J	41.2	MDL	110	PQL	mg/Kg	J	Z
TIN	2.83	J	1.10	MDL	11.0	PQL	mg/Kg	U	B
Zirconium	3.97	J	0.927	MDL	5.52	PQL	mg/Kg	U	B

Sample ID: SL-173-SA5A-SS-0.0-0.5 *Collected:* 2/25/2011 1:25:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	4.73	J	0.971	MDL	5.46	PQL	mg/Kg	J	Z
LITHIUM	21.8		0.24	MDL	2.2	PQL	mg/Kg	J	A
TIN	2.71	J	1.09	MDL	10.9	PQL	mg/Kg	U	B
Zirconium	3.72	J	0.917	MDL	5.46	PQL	mg/Kg	U	B

Sample ID: SL-174-SA5A-SS-0.0-0.5 *Collected:* 2/25/2011 2:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	4.45	J	1.05	MDL	5.91	PQL	mg/Kg	J	Z
LITHIUM	22.6		0.26	MDL	2.4	PQL	mg/Kg	J	A
SODIUM	107	J	44.1	MDL	118	PQL	mg/Kg	J	Z
TIN	2.83	J	1.18	MDL	11.8	PQL	mg/Kg	U	B
Zirconium	2.75	J	0.993	MDL	5.91	PQL	mg/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE092 | Laboratory: LL

EDD Filename: PrepDE092_v1 | eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-053-SA5A-SB-3.0-4.0 *Collected:* 2/25/2011 9:28:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.104	J	0.0451	MDL	0.451	PQL	mg/Kg	J	Z

Sample ID: SL-053-SA5A-SB-3.0-4.0 *Collected:* 2/25/2011 9:28:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.919		0.0564	MDL	0.113	PQL	mg/Kg	J	Q, E

Sample ID: SL-053-SA5A-SB-3.0-4.0 *Collected:* 2/25/2011 9:28:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	108		0.122	MDL	0.451	PQL	mg/Kg	J	E, A

Sample ID: SL-053-SA5A-SB-3.0-4.0 *Collected:* 2/25/2011 9:28:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.124	J	0.0677	MDL	0.226	PQL	mg/Kg	J	Z, Q
ARSENIC	7.03		0.0903	MDL	0.451	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.770		0.0181	MDL	0.113	PQL	mg/Kg	J	Q
CADMIUM	0.0709	J	0.0451	MDL	0.113	PQL	mg/Kg	J	Z, Q
CHROMIUM	24.5		0.135	MDL	0.451	PQL	mg/Kg	J	Q, E, A
COBALT	11.6		0.0226	MDL	0.113	PQL	mg/Kg	J	E, A
COPPER	10.6		0.0745	MDL	0.451	PQL	mg/Kg	J	Q, E, A
LEAD	7.18		0.0117	MDL	0.226	PQL	mg/Kg	J	A
NICKEL	21.8		0.113	MDL	0.451	PQL	mg/Kg	J	Q, E, A
THALLIUM	0.429		0.0339	MDL	0.113	PQL	mg/Kg	J	Q
VANADIUM	41.9		0.0248	MDL	0.113	PQL	mg/Kg	J	Q, E, A
ZINC	71.0		0.632	MDL	3.39	PQL	mg/Kg	J	E, A

Sample ID: SL-054-SA5A-SB-4.0-5.0 *Collected:* 2/25/2011 11:25:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.106	J	0.0444	MDL	0.444	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE092 **Laboratory: LL**

EDD Filename: PrepDE092_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 ***Matrix:*** SO

Sample ID: SL-054-SA5A-SB-4.0-5.0 ***Collected:*** 2/25/2011 11:25:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.652		0.0555	MDL	0.111	PQL	mg/Kg	J	Q, E

Sample ID: SL-054-SA5A-SB-4.0-5.0 ***Collected:*** 2/25/2011 11:25:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	92.5		0.120	MDL	0.444	PQL	mg/Kg	J	E, A

Sample ID: SL-054-SA5A-SB-4.0-5.0 ***Collected:*** 2/25/2011 11:25:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.143	J	0.0666	MDL	0.222	PQL	mg/Kg	J	Z, Q
ARSENIC	7.33		0.0888	MDL	0.444	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.898		0.0178	MDL	0.111	PQL	mg/Kg	J	Q
CHROMIUM	29.1		0.133	MDL	0.444	PQL	mg/Kg	J	Q, E, A
COBALT	5.55		0.0222	MDL	0.111	PQL	mg/Kg	J	E, A
COPPER	11.0		0.0733	MDL	0.444	PQL	mg/Kg	J	Q, E, A
LEAD	8.37		0.0115	MDL	0.222	PQL	mg/Kg	J	A
NICKEL	13.1		0.111	MDL	0.444	PQL	mg/Kg	J	Q, E, A
SILVER	0.132		0.0133	MDL	0.111	PQL	mg/Kg	J	Q
THALLIUM	0.321		0.0333	MDL	0.111	PQL	mg/Kg	J	Q
VANADIUM	50.9		0.0244	MDL	0.111	PQL	mg/Kg	J	Q, E, A
ZINC	60.6		0.622	MDL	3.33	PQL	mg/Kg	J	E, A

Sample ID: SL-054-SA5A-SB-9.0-10.0 ***Collected:*** 2/25/2011 11:30:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0821	J	0.0456	MDL	0.456	PQL	mg/Kg	J	Z

Sample ID: SL-054-SA5A-SB-9.0-10.0 ***Collected:*** 2/25/2011 11:30:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.834		0.0570	MDL	0.114	PQL	mg/Kg	J	Q, E

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE092 | Laboratory: LL

EDD Filename: PrepDE092_v1 | eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-054-SA5A-SB-9.0-10.0 *Collected:* 2/25/2011 11:30:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	87.9		0.123	MDL	0.456	PQL	mg/Kg	J	E, A

Sample ID: SL-054-SA5A-SB-9.0-10.0 *Collected:* 2/25/2011 11:30:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.217	J	0.0684	MDL	0.228	PQL	mg/Kg	J	Z, Q
ARSENIC	10.6		0.0913	MDL	0.456	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.928		0.0183	MDL	0.114	PQL	mg/Kg	J	Q
CADMIUM	0.114	J	0.0456	MDL	0.114	PQL	mg/Kg	J	Q
CHROMIUM	34.9		0.137	MDL	0.456	PQL	mg/Kg	J	Q, E, A
COBALT	7.86		0.0228	MDL	0.114	PQL	mg/Kg	J	E, A
COPPER	15.3		0.0753	MDL	0.456	PQL	mg/Kg	J	Q, E, A
LEAD	12.3		0.0119	MDL	0.228	PQL	mg/Kg	J	A
NICKEL	18.5		0.114	MDL	0.456	PQL	mg/Kg	J	Q, E, A
SILVER	0.0597	J	0.0137	MDL	0.114	PQL	mg/Kg	J	Z, Q
THALLIUM	0.301		0.0342	MDL	0.114	PQL	mg/Kg	J	Q
VANADIUM	58.7		0.0251	MDL	0.114	PQL	mg/Kg	J	Q, E, A
ZINC	61.4		0.639	MDL	3.42	PQL	mg/Kg	J	E, A

Sample ID: SL-055-SA5A-SB-2.0-3.0 *Collected:* 2/25/2011 12:38:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.436	J	0.0439	MDL	0.439	PQL	mg/Kg	J	Z

Sample ID: SL-055-SA5A-SB-2.0-3.0 *Collected:* 2/25/2011 12:38:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.23		0.0549	MDL	0.110	PQL	mg/Kg	J	Q, E

Sample ID: SL-055-SA5A-SB-2.0-3.0 *Collected:* 2/25/2011 12:38:00 *Analysis Type:* REA4 *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	200		0.296	MDL	1.10	PQL	mg/Kg	J	E, A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE092 **Laboratory: LL**

EDD Filename: PrepDE092_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 ***Matrix:*** SO

Sample ID: SL-055-SA5A-SB-2.0-3.0 ***Collected:*** 2/25/2011 12:38:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.233		0.0658	MDL	0.219	PQL	mg/Kg	J	Q
ARSENIC	13.8		0.0878	MDL	0.439	PQL	mg/Kg	J	Q, E
BERYLLIUM	1.42		0.0176	MDL	0.110	PQL	mg/Kg	J	Q
CADMIUM	0.159		0.0439	MDL	0.110	PQL	mg/Kg	J	Q
CHROMIUM	45.1		0.132	MDL	0.439	PQL	mg/Kg	J	Q, E, A
COBALT	14.2		0.0219	MDL	0.110	PQL	mg/Kg	J	E, A
COPPER	23.1		0.0724	MDL	0.439	PQL	mg/Kg	J	Q, E, A
LEAD	13.2		0.0114	MDL	0.219	PQL	mg/Kg	J	A
NICKEL	24.8		0.110	MDL	0.439	PQL	mg/Kg	J	Q, E, A
SILVER	0.0297	J	0.0132	MDL	0.110	PQL	mg/Kg	J	Z, Q
THALLIUM	0.538		0.0329	MDL	0.110	PQL	mg/Kg	J	Q
VANADIUM	80.4		0.0241	MDL	0.110	PQL	mg/Kg	J	Q, E, A
ZINC	127		0.614	MDL	3.29	PQL	mg/Kg	J	E, A

Sample ID: SL-056-SA5A-SB-4.0-5.0 ***Collected:*** 2/25/2011 3:43:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.130	J	0.0454	MDL	0.454	PQL	mg/Kg	J	Z

Sample ID: SL-056-SA5A-SB-4.0-5.0 ***Collected:*** 2/25/2011 3:43:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.34		0.0568	MDL	0.114	PQL	mg/Kg	J	Q, E

Sample ID: SL-056-SA5A-SB-4.0-5.0 ***Collected:*** 2/25/2011 3:43:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	122		0.123	MDL	0.454	PQL	mg/Kg	J	E, A

Sample ID: SL-056-SA5A-SB-4.0-5.0 ***Collected:*** 2/25/2011 3:43:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.151	J	0.0681	MDL	0.227	PQL	mg/Kg	J	Z, Q
ARSENIC	7.02		0.0908	MDL	0.454	PQL	mg/Kg	J	Q, E
BERYLLIUM	1.02		0.0182	MDL	0.114	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE092 **Laboratory: LL**

EDD Filename: PrepDE092_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-056-SA5A-SB-4.0-5.0 *Collected:* 2/25/2011 3:43:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.109	J	0.0454	MDL	0.114	PQL	mg/Kg	J	Z, Q
CHROMIUM	28.3		0.136	MDL	0.454	PQL	mg/Kg	J	Q, E, A
COBALT	9.69		0.0227	MDL	0.114	PQL	mg/Kg	J	E, A
COPPER	11.8		0.0749	MDL	0.454	PQL	mg/Kg	J	Q, E, A
LEAD	9.24		0.0118	MDL	0.227	PQL	mg/Kg	J	A
NICKEL	17.3		0.114	MDL	0.454	PQL	mg/Kg	J	Q, E, A
SILVER	0.0644	J	0.0136	MDL	0.114	PQL	mg/Kg	J	Z, Q
THALLIUM	0.343		0.0341	MDL	0.114	PQL	mg/Kg	J	Q
VANADIUM	51.3		0.0250	MDL	0.114	PQL	mg/Kg	J	Q, E, A
ZINC	66.7		0.636	MDL	3.41	PQL	mg/Kg	J	E, A

Sample ID: SL-056-SA5A-SB-7.0-8.0 *Collected:* 2/25/2011 3:47:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.120	J	0.0453	MDL	0.453	PQL	mg/Kg	J	Z

Sample ID: SL-056-SA5A-SB-7.0-8.0 *Collected:* 2/25/2011 3:47:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.767		0.0566	MDL	0.113	PQL	mg/Kg	J	Q, E

Sample ID: SL-056-SA5A-SB-7.0-8.0 *Collected:* 2/25/2011 3:47:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	83.0		0.122	MDL	0.453	PQL	mg/Kg	J	E, A

Sample ID: SL-056-SA5A-SB-7.0-8.0 *Collected:* 2/25/2011 3:47:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.159	J	0.0679	MDL	0.226	PQL	mg/Kg	J	Z, Q
ARSENIC	8.08		0.0905	MDL	0.453	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.824		0.0181	MDL	0.113	PQL	mg/Kg	J	Q
CADMIUM	0.104	J	0.0453	MDL	0.113	PQL	mg/Kg	J	Z, Q
CHROMIUM	25.8		0.136	MDL	0.453	PQL	mg/Kg	J	Q, E, A
COBALT	15.2		0.0226	MDL	0.113	PQL	mg/Kg	J	E, A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE092 **Laboratory: LL**

EDD Filename: PrepDE092_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6020** ***Matrix:*** **SO**

Sample ID: **SL-056-SA5A-SB-7.0-8.0** ***Collected:*** **2/25/2011 3:47:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	11.1		0.0747	MDL	0.453	PQL	mg/Kg	J	Q, E, A
LEAD	6.70		0.0118	MDL	0.226	PQL	mg/Kg	J	A
NICKEL	15.0		0.113	MDL	0.453	PQL	mg/Kg	J	Q, E, A
SILVER	0.0153	J	0.0136	MDL	0.113	PQL	mg/Kg	J	Z, Q
THALLIUM	0.330		0.0339	MDL	0.113	PQL	mg/Kg	J	Q
VANADIUM	48.2		0.0249	MDL	0.113	PQL	mg/Kg	J	Q, E, A
ZINC	67.7		0.634	MDL	3.39	PQL	mg/Kg	J	E, A

Sample ID: **SL-126-SA5A-SS-0.0-0.5** ***Collected:*** **2/25/2011 8:50:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.142	J	0.0475	MDL	0.475	PQL	mg/Kg	J	Z

Sample ID: **SL-126-SA5A-SS-0.0-0.5** ***Collected:*** **2/25/2011 8:50:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.08		0.0594	MDL	0.119	PQL	mg/Kg	J	Q, E

Sample ID: **SL-126-SA5A-SS-0.0-0.5** ***Collected:*** **2/25/2011 8:50:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	118		0.128	MDL	0.475	PQL	mg/Kg	J	E, A

Sample ID: **SL-126-SA5A-SS-0.0-0.5** ***Collected:*** **2/25/2011 8:50:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.227	J	0.0713	MDL	0.238	PQL	mg/Kg	J	Z, Q
ARSENIC	4.79		0.0951	MDL	0.475	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.653		0.0190	MDL	0.119	PQL	mg/Kg	J	Q
CADMIUM	0.334		0.0475	MDL	0.119	PQL	mg/Kg	J	Q
CHROMIUM	22.2		0.143	MDL	0.475	PQL	mg/Kg	J	Q, E, A
COBALT	6.37		0.0238	MDL	0.119	PQL	mg/Kg	J	E, A
COPPER	11.9		0.0784	MDL	0.475	PQL	mg/Kg	J	Q, E, A
LEAD	18.1		0.0124	MDL	0.238	PQL	mg/Kg	J	A
NICKEL	13.4		0.119	MDL	0.475	PQL	mg/Kg	J	Q, E, A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE092 | Laboratory: LL

EDD Filename: PrepDE092_v1 | eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-126-SA5A-SS-0.0-0.5 *Collected:* 2/25/2011 8:50:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0447	J	0.0143	MDL	0.119	PQL	mg/Kg	J	Z, Q
THALLIUM	0.300		0.0357	MDL	0.119	PQL	mg/Kg	J	Q
VANADIUM	40.8		0.0261	MDL	0.119	PQL	mg/Kg	J	Q, E, A
ZINC	125		0.666	MDL	3.57	PQL	mg/Kg	J	E, A

Sample ID: SL-127-SA5A-SS-0.0-0.5 *Collected:* 2/25/2011 9:05:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.179	J	0.0459	MDL	0.459	PQL	mg/Kg	J	Z

Sample ID: SL-127-SA5A-SS-0.0-0.5 *Collected:* 2/25/2011 9:05:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.00		0.0574	MDL	0.115	PQL	mg/Kg	J	Q, E

Sample ID: SL-127-SA5A-SS-0.0-0.5 *Collected:* 2/25/2011 9:05:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	147		0.124	MDL	0.459	PQL	mg/Kg	J	E, A

Sample ID: SL-127-SA5A-SS-0.0-0.5 *Collected:* 2/25/2011 9:05:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.191	J	0.0689	MDL	0.230	PQL	mg/Kg	J	Z, Q
ARSENIC	6.02		0.0919	MDL	0.459	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.811		0.0184	MDL	0.115	PQL	mg/Kg	J	Q
CADMIUM	0.301		0.0459	MDL	0.115	PQL	mg/Kg	J	Q
CHROMIUM	25.5		0.138	MDL	0.459	PQL	mg/Kg	J	Q, E, A
COBALT	7.12		0.0230	MDL	0.115	PQL	mg/Kg	J	E, A
COPPER	12.6		0.0758	MDL	0.459	PQL	mg/Kg	J	Q, E, A
LEAD	11.9		0.0119	MDL	0.230	PQL	mg/Kg	J	A
NICKEL	15.2		0.115	MDL	0.459	PQL	mg/Kg	J	Q, E, A
SILVER	0.0455	J	0.0138	MDL	0.115	PQL	mg/Kg	J	Z, Q
THALLIUM	0.346		0.0345	MDL	0.115	PQL	mg/Kg	J	Q
VANADIUM	48.6		0.0253	MDL	0.115	PQL	mg/Kg	J	Q, E, A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE092 **Laboratory: LL**

EDD Filename: PrepDE092_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-127-SA5A-SS-0.0-0.5 *Collected:* 2/25/2011 9:05:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ZINC	103		0.643	MDL	3.45	PQL	mg/Kg	J	E, A

Sample ID: SL-132-SA5A-SS-0.0-0.5 *Collected:* 2/25/2011 9:20:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.131	J	0.0452	MDL	0.452	PQL	mg/Kg	J	Z

Sample ID: SL-132-SA5A-SS-0.0-0.5 *Collected:* 2/25/2011 9:20:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.760		0.0566	MDL	0.113	PQL	mg/Kg	J	Q, E

Sample ID: SL-132-SA5A-SS-0.0-0.5 *Collected:* 2/25/2011 9:20:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	105		0.122	MDL	0.452	PQL	mg/Kg	J	E, A

Sample ID: SL-132-SA5A-SS-0.0-0.5 *Collected:* 2/25/2011 9:20:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.193	J	0.0679	MDL	0.226	PQL	mg/Kg	J	Z, Q
ARSENIC	5.75		0.0905	MDL	0.452	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.733		0.0181	MDL	0.113	PQL	mg/Kg	J	Q
CADMIUM	0.217		0.0452	MDL	0.113	PQL	mg/Kg	J	Q
CHROMIUM	21.9		0.136	MDL	0.452	PQL	mg/Kg	J	Q, E, A
COBALT	6.24		0.0226	MDL	0.113	PQL	mg/Kg	J	E, A
COPPER	9.58		0.0747	MDL	0.452	PQL	mg/Kg	J	Q, E, A
LEAD	17.8		0.0118	MDL	0.226	PQL	mg/Kg	J	A
NICKEL	13.1		0.113	MDL	0.452	PQL	mg/Kg	J	Q, E, A
SILVER	0.0322	J	0.0136	MDL	0.113	PQL	mg/Kg	J	Z, Q
THALLIUM	0.329		0.0339	MDL	0.113	PQL	mg/Kg	J	Q
VANADIUM	42.4		0.0249	MDL	0.113	PQL	mg/Kg	J	Q, E, A
ZINC	83.3		0.633	MDL	3.39	PQL	mg/Kg	J	E, A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE092 | Laboratory: LL

EDD Filename: PrepDE092_v1 | eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-133-SA5A-SS-0.0-0.5 *Collected:* 2/25/2011 10:00:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.142	J	0.0445	MDL	0.445	PQL	mg/Kg	J	Z

Sample ID: SL-133-SA5A-SS-0.0-0.5 *Collected:* 2/25/2011 10:00:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.726		0.0556	MDL	0.111	PQL	mg/Kg	J	Q, E

Sample ID: SL-133-SA5A-SS-0.0-0.5 *Collected:* 2/25/2011 10:00:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	113		0.120	MDL	0.445	PQL	mg/Kg	J	E, A

Sample ID: SL-133-SA5A-SS-0.0-0.5 *Collected:* 2/25/2011 10:00:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.208	J	0.0667	MDL	0.222	PQL	mg/Kg	J	Z, Q
ARSENIC	5.98		0.0889	MDL	0.445	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.803		0.0178	MDL	0.111	PQL	mg/Kg	J	Q
CADMIUM	0.220		0.0445	MDL	0.111	PQL	mg/Kg	J	Q
CHROMIUM	24.0		0.133	MDL	0.445	PQL	mg/Kg	J	Q, E, A
COBALT	6.79		0.0222	MDL	0.111	PQL	mg/Kg	J	E, A
COPPER	10.7		0.0734	MDL	0.445	PQL	mg/Kg	J	Q, E, A
LEAD	13.5		0.0116	MDL	0.222	PQL	mg/Kg	J	A
NICKEL	14.3		0.111	MDL	0.445	PQL	mg/Kg	J	Q, E, A
SILVER	0.0319	J	0.0133	MDL	0.111	PQL	mg/Kg	J	Z, Q
THALLIUM	0.351		0.0333	MDL	0.111	PQL	mg/Kg	J	Q
VANADIUM	46.2		0.0245	MDL	0.111	PQL	mg/Kg	J	Q, E, A
ZINC	82.5		0.622	MDL	3.33	PQL	mg/Kg	J	E, A

Sample ID: SL-144-SA5A-SS-0.0-0.5 *Collected:* 2/25/2011 11:05:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.165	J	0.0447	MDL	0.447	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE092 | Laboratory: LL

EDD Filename: PrepDE092_v1 | eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-144-SA5A-SS-0.0-0.5 *Collected:* 2/25/2011 11:05:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.919		0.0559	MDL	0.112	PQL	mg/Kg	J	Q, E

Sample ID: SL-144-SA5A-SS-0.0-0.5 *Collected:* 2/25/2011 11:05:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	119		0.121	MDL	0.447	PQL	mg/Kg	J	E, A

Sample ID: SL-144-SA5A-SS-0.0-0.5 *Collected:* 2/25/2011 11:05:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.178	J	0.0671	MDL	0.224	PQL	mg/Kg	J	Z, Q
ARSENIC	5.57		0.0894	MDL	0.447	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.867		0.0179	MDL	0.112	PQL	mg/Kg	J	Q
CADMIUM	0.497		0.0447	MDL	0.112	PQL	mg/Kg	J	Q
CHROMIUM	26.0		0.134	MDL	0.447	PQL	mg/Kg	J	Q, E, A
COBALT	6.75		0.0224	MDL	0.112	PQL	mg/Kg	J	E, A
COPPER	12.3		0.0738	MDL	0.447	PQL	mg/Kg	J	Q, E, A
LEAD	14.0		0.0116	MDL	0.224	PQL	mg/Kg	J	A
NICKEL	14.3		0.112	MDL	0.447	PQL	mg/Kg	J	Q, E, A
SILVER	0.171		0.0134	MDL	0.112	PQL	mg/Kg	J	Q
THALLIUM	0.336		0.0335	MDL	0.112	PQL	mg/Kg	J	Q
VANADIUM	43.7		0.0246	MDL	0.112	PQL	mg/Kg	J	Q, E, A
ZINC	95.3		0.626	MDL	3.35	PQL	mg/Kg	J	E, A

Sample ID: SL-146-SA5A-SS-0.0-0.5 *Collected:* 2/25/2011 10:45:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.231		0.0459	MDL	0.115	PQL	mg/Kg	J	Q

Sample ID: SL-146-SA5A-SS-0.0-0.5 *Collected:* 2/25/2011 10:45:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.159	J	0.0459	MDL	0.459	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE092 **Laboratory: LL**

EDD Filename: PrepDE092_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6020** ***Matrix:*** **SO**

Sample ID: **SL-146-SA5A-SS-0.0-0.5** ***Collected:*** **2/25/2011 10:45:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.09		0.0573	MDL	0.115	PQL	mg/Kg	J	Q, E

Sample ID: **SL-146-SA5A-SS-0.0-0.5** ***Collected:*** **2/25/2011 10:45:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	124		0.124	MDL	0.459	PQL	mg/Kg	J	E, A

Sample ID: **SL-146-SA5A-SS-0.0-0.5** ***Collected:*** **2/25/2011 10:45:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.228	J	0.0688	MDL	0.229	PQL	mg/Kg	J	Z, Q
ARSENIC	6.38		0.0917	MDL	0.459	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.903		0.0183	MDL	0.115	PQL	mg/Kg	J	Q
CHROMIUM	24.1		0.138	MDL	0.459	PQL	mg/Kg	J	Q, E, A
COBALT	6.87		0.0229	MDL	0.115	PQL	mg/Kg	J	E, A
COPPER	11.9		0.0757	MDL	0.459	PQL	mg/Kg	J	Q, E, A
LEAD	15.1		0.0119	MDL	0.229	PQL	mg/Kg	J	A
NICKEL	15.3		0.115	MDL	0.459	PQL	mg/Kg	J	Q, E, A
SILVER	0.140		0.0138	MDL	0.115	PQL	mg/Kg	J	Q
THALLIUM	0.348		0.0344	MDL	0.115	PQL	mg/Kg	J	Q
VANADIUM	47.8		0.0252	MDL	0.115	PQL	mg/Kg	J	Q, E, A
ZINC	188		0.642	MDL	3.44	PQL	mg/Kg	J	E, A

Sample ID: **SL-171-SA5A-SS-0.0-0.5** ***Collected:*** **2/25/2011 1:10:00** ***Analysis Type:*** **REA** ***Dilution:*** **5**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ZINC	181		1.57	MDL	8.43	PQL	mg/Kg	J	E, A

Sample ID: **SL-171-SA5A-SS-0.0-0.5** ***Collected:*** **2/25/2011 1:10:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.177	J	0.0450	MDL	0.450	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE092 | Laboratory: LL

EDD Filename: PrepDE092_v1 | eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-171-SA5A-SS-0.0-0.5 *Collected:* 2/25/2011 1:10:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.740		0.0562	MDL	0.112	PQL	mg/Kg	J	Q, E

Sample ID: SL-171-SA5A-SS-0.0-0.5 *Collected:* 2/25/2011 1:10:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	109		0.121	MDL	0.450	PQL	mg/Kg	J	E, A

Sample ID: SL-171-SA5A-SS-0.0-0.5 *Collected:* 2/25/2011 1:10:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.167	J	0.0674	MDL	0.225	PQL	mg/Kg	J	Z, Q
ARSENIC	4.44		0.0899	MDL	0.450	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.585		0.0180	MDL	0.112	PQL	mg/Kg	J	Q
CADMIUM	0.526		0.0450	MDL	0.112	PQL	mg/Kg	J	Q
CHROMIUM	20.4		0.135	MDL	0.450	PQL	mg/Kg	J	Q, E, A
COBALT	5.54		0.0225	MDL	0.112	PQL	mg/Kg	J	E, A
COPPER	10.2		0.0742	MDL	0.450	PQL	mg/Kg	J	Q, E, A
LEAD	8.50		0.0117	MDL	0.225	PQL	mg/Kg	J	A
NICKEL	12.4		0.112	MDL	0.450	PQL	mg/Kg	J	Q, E, A
SILVER	0.0413	J	0.0135	MDL	0.112	PQL	mg/Kg	J	Z, Q
THALLIUM	0.297		0.0337	MDL	0.112	PQL	mg/Kg	J	Q
VANADIUM	39.9		0.0247	MDL	0.112	PQL	mg/Kg	J	Q, E, A

Sample ID: SL-172-SA5A-SS-0.0-0.5 *Collected:* 2/25/2011 1:45:00 *Analysis Type:* REA *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ZINC	136		1.55	MDL	8.28	PQL	mg/Kg	J	E, A

Sample ID: SL-172-SA5A-SS-0.0-0.5 *Collected:* 2/25/2011 1:45:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.152	J	0.0442	MDL	0.442	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE092 | Laboratory: LL

EDD Filename: PrepDE092_v1 | eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-172-SA5A-SS-0.0-0.5 *Collected:* 2/25/2011 1:45:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.726		0.0552	MDL	0.110	PQL	mg/Kg	J	Q, E

Sample ID: SL-172-SA5A-SS-0.0-0.5 *Collected:* 2/25/2011 1:45:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	123		0.119	MDL	0.442	PQL	mg/Kg	J	E, A

Sample ID: SL-172-SA5A-SS-0.0-0.5 *Collected:* 2/25/2011 1:45:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.148	J	0.0662	MDL	0.221	PQL	mg/Kg	J	Z, Q
ARSENIC	5.11		0.0883	MDL	0.442	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.610		0.0177	MDL	0.110	PQL	mg/Kg	J	Q
CADMIUM	0.760		0.0442	MDL	0.110	PQL	mg/Kg	J	Q
CHROMIUM	21.3		0.132	MDL	0.442	PQL	mg/Kg	J	Q, E, A
COBALT	6.11		0.0221	MDL	0.110	PQL	mg/Kg	J	E, A
COPPER	10.7		0.0729	MDL	0.442	PQL	mg/Kg	J	Q, E, A
LEAD	13.1		0.0115	MDL	0.221	PQL	mg/Kg	J	A
NICKEL	12.9		0.110	MDL	0.442	PQL	mg/Kg	J	Q, E, A
SILVER	0.124		0.0132	MDL	0.110	PQL	mg/Kg	J	Q
THALLIUM	0.298		0.0331	MDL	0.110	PQL	mg/Kg	J	Q
VANADIUM	41.3		0.0243	MDL	0.110	PQL	mg/Kg	J	Q, E, A

Sample ID: SL-173-SA5A-SS-0.0-0.5 *Collected:* 2/25/2011 1:25:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.138	J	0.0441	MDL	0.441	PQL	mg/Kg	J	Z

Sample ID: SL-173-SA5A-SS-0.0-0.5 *Collected:* 2/25/2011 1:25:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.683		0.0551	MDL	0.110	PQL	mg/Kg	J	Q, E

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE092 **Laboratory: LL**

EDD Filename: PrepDE092_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 ***Matrix:*** SO

Sample ID: SL-173-SA5A-SS-0.0-0.5 ***Collected:*** 2/25/2011 1:25:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	106		0.119	MDL	0.441	PQL	mg/Kg	J	E, A

Sample ID: SL-173-SA5A-SS-0.0-0.5 ***Collected:*** 2/25/2011 1:25:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.178	J	0.0661	MDL	0.220	PQL	mg/Kg	J	Z, Q
ARSENIC	4.28		0.0882	MDL	0.441	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.576		0.0176	MDL	0.110	PQL	mg/Kg	J	Q
CADMIUM	1.90		0.0441	MDL	0.110	PQL	mg/Kg	J	Q
CHROMIUM	19.4		0.132	MDL	0.441	PQL	mg/Kg	J	Q, E, A
COBALT	5.47		0.0220	MDL	0.110	PQL	mg/Kg	J	E, A
COPPER	8.96		0.0727	MDL	0.441	PQL	mg/Kg	J	Q, E, A
LEAD	10.6		0.0115	MDL	0.220	PQL	mg/Kg	J	A
NICKEL	11.5		0.110	MDL	0.441	PQL	mg/Kg	J	Q, E, A
SILVER	0.0671	J	0.0132	MDL	0.110	PQL	mg/Kg	J	Z, Q
THALLIUM	0.280		0.0331	MDL	0.110	PQL	mg/Kg	J	Q
VANADIUM	37.4		0.0242	MDL	0.110	PQL	mg/Kg	J	Q, E, A
ZINC	196		0.617	MDL	3.31	PQL	mg/Kg	J	E, A

Sample ID: SL-174-SA5A-SS-0.0-0.5 ***Collected:*** 2/25/2011 2:10:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.152	J	0.0464	MDL	0.464	PQL	mg/Kg	J	Z

Sample ID: SL-174-SA5A-SS-0.0-0.5 ***Collected:*** 2/25/2011 2:10:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.857		0.0579	MDL	0.116	PQL	mg/Kg	J	Q, E

Sample ID: SL-174-SA5A-SS-0.0-0.5 ***Collected:*** 2/25/2011 2:10:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	121		0.125	MDL	0.464	PQL	mg/Kg	J	E, A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE092 | Laboratory: LL

EDD Filename: PrepDE092_v1 | eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-174-SA5A-SS-0.0-0.5 *Collected:* 2/25/2011 2:10:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.159	J	0.0695	MDL	0.232	PQL	mg/Kg	J	Z, Q
ARSENIC	4.86		0.0927	MDL	0.464	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.659		0.0185	MDL	0.116	PQL	mg/Kg	J	Q
CADMIUM	0.337		0.0464	MDL	0.116	PQL	mg/Kg	J	Q
CHROMIUM	21.5		0.139	MDL	0.464	PQL	mg/Kg	J	Q, E, A
COBALT	6.04		0.0232	MDL	0.116	PQL	mg/Kg	J	E, A
COPPER	11.0		0.0765	MDL	0.464	PQL	mg/Kg	J	Q, E, A
LEAD	7.73		0.0121	MDL	0.232	PQL	mg/Kg	J	A
NICKEL	12.8		0.116	MDL	0.464	PQL	mg/Kg	J	Q, E, A
SILVER	0.0447	J	0.0139	MDL	0.116	PQL	mg/Kg	J	Z, Q
THALLIUM	0.308		0.0348	MDL	0.116	PQL	mg/Kg	J	Q
VANADIUM	41.8		0.0255	MDL	0.116	PQL	mg/Kg	J	Q, E, A
ZINC	202		0.649	MDL	3.48	PQL	mg/Kg	J	E, A

Method Category: METALS

Method: 7199 **Matrix:** SO

Sample ID: SL-054-SA5A-SB-4.0-5.0 *Collected:* 2/25/2011 11:25:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.39	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-054-SA5A-SB-9.0-10.0 *Collected:* 2/25/2011 11:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.27	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-055-SA5A-SB-2.0-3.0 *Collected:* 2/25/2011 12:38:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.45	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE092 **Laboratory: LL**

EDD Filename: PrepDE092_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **7199** ***Matrix:*** **SO**

Sample ID: **SL-056-SA5A-SB-4.0-5.0** ***Collected:*** **2/25/2011 3:43:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.43	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: **SL-056-SA5A-SB-7.0-8.0** ***Collected:*** **2/25/2011 3:47:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.50	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: **SL-126-SA5A-SS-0.0-0.5** ***Collected:*** **2/25/2011 8:50:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.89	J	0.24	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: **SL-127-SA5A-SS-0.0-0.5** ***Collected:*** **2/25/2011 9:05:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.28	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: **SL-132-SA5A-SS-0.0-0.5** ***Collected:*** **2/25/2011 9:20:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.44	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: **SL-133-SA5A-SS-0.0-0.5** ***Collected:*** **2/25/2011 10:00:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.30	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: **SL-146-SA5A-SS-0.0-0.5** ***Collected:*** **2/25/2011 10:45:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.61	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: **SL-172-SA5A-SS-0.0-0.5** ***Collected:*** **2/25/2011 1:45:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.34	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE092 | Laboratory: LL

EDD Filename: PrepDE092_v1 | eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 7199 **Matrix:** SO

Sample ID: SL-173-SA5A-SS-0.0-0.5 *Collected:* 2/25/2011 1:25:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.44	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-174-SA5A-SS-0.0-0.5 *Collected:* 2/25/2011 2:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.27	J	0.24	MDL	1.2	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 7471A **Matrix:** SO

Sample ID: SL-053-SA5A-SB-3.0-4.0 *Collected:* 2/25/2011 9:28:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0060	J	0.0030	MDL	0.105	PQL	mg/Kg	J	Z

Sample ID: SL-054-SA5A-SB-4.0-5.0 *Collected:* 2/25/2011 11:25:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0036	J	0.0031	MDL	0.109	PQL	mg/Kg	J	Z

Sample ID: SL-054-SA5A-SB-9.0-10.0 *Collected:* 2/25/2011 11:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0066	J	0.0031	MDL	0.109	PQL	mg/Kg	J	Z

Sample ID: SL-055-SA5A-SB-2.0-3.0 *Collected:* 2/25/2011 12:38:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0058	J	0.0030	MDL	0.105	PQL	mg/Kg	J	Z

Sample ID: SL-126-SA5A-SS-0.0-0.5 *Collected:* 2/25/2011 8:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0053	J	0.0032	MDL	0.113	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE092 | Laboratory: LL

EDD Filename: PrepDE092_v1 | eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 7471A | **Matrix:** SO

Sample ID: SL-133-SA5A-SS-0.0-0.5 *Collected:* 2/25/2011 10:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0847	J	0.0032	MDL	0.112	PQL	mg/Kg	J	Z

Sample ID: SL-144-SA5A-SS-0.0-0.5 *Collected:* 2/25/2011 11:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0374	J	0.0031	MDL	0.107	PQL	mg/Kg	J	Z

Sample ID: SL-146-SA5A-SS-0.0-0.5 *Collected:* 2/25/2011 10:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0134	J	0.0033	MDL	0.115	PQL	mg/Kg	J	Z

Sample ID: SL-171-SA5A-SS-0.0-0.5 *Collected:* 2/25/2011 1:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0189	J	0.0032	MDL	0.112	PQL	mg/Kg	J	Z

Sample ID: SL-172-SA5A-SS-0.0-0.5 *Collected:* 2/25/2011 1:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0189	J	0.0030	MDL	0.106	PQL	mg/Kg	J	Z

Sample ID: SL-173-SA5A-SS-0.0-0.5 *Collected:* 2/25/2011 1:25:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0059	J	0.0031	MDL	0.107	PQL	mg/Kg	J	Z

Sample ID: SL-174-SA5A-SS-0.0-0.5 *Collected:* 2/25/2011 2:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0039	J	0.0033	MDL	0.117	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE092 **Laboratory: LL**

EDD Filename: PrepDE092_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8081A **Matrix:** SO

Sample ID: SL-132-SA5A-SS-0.0-0.5 *Collected:* 2/25/2011 9:20:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDT	0.41		0.074	MDL	0.38	PQL	ug/Kg	J	L
ENDRIN ALDEHYDE	0.082	J	0.074	MDL	0.38	PQL	ug/Kg	J	Z
MIREX	0.12	J	0.074	MDL	0.38	PQL	ug/Kg	J	Z

Sample ID: SL-133-SA5A-SS-0.0-0.5 *Collected:* 2/25/2011 10:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDT	0.50		0.074	MDL	0.38	PQL	ug/Kg	J	L

Sample ID: SL-144-SA5A-SS-0.0-0.5 *Collected:* 2/25/2011 11:05:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEPTACHLOR	0.43		0.068	MDL	0.19	PQL	ug/Kg	J	L

Sample ID: SL-146-SA5A-SS-0.0-0.5 *Collected:* 2/25/2011 10:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEPTACHLOR	0.14	J	0.069	MDL	0.19	PQL	ug/Kg	J	Z, L

Sample ID: SL-171-SA5A-SS-0.0-0.5 *Collected:* 2/25/2011 1:10:00 *Analysis Type:* DL-BASE/NEUTRAL *Dilution:* 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDT	12		0.75	MDL	3.9	PQL	ug/Kg	J	L

Sample ID: SL-171-SA5A-SS-0.0-0.5 *Collected:* 2/25/2011 1:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	0.66		0.075	MDL	0.39	PQL	ug/Kg	J	L
DIELDRIN	1.2		0.075	MDL	0.39	PQL	ug/Kg	J	L
ENDRIN ALDEHYDE	0.095	J	0.075	MDL	0.39	PQL	ug/Kg	J	Z
ENDRIN KETONE	0.15	J	0.075	MDL	0.39	PQL	ug/Kg	J	Z

Sample ID: SL-173-SA5A-SS-0.0-0.5 *Collected:* 2/25/2011 1:25:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	0.14	J	0.075	MDL	0.39	PQL	ug/Kg	J	Z, L

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE092 | Laboratory: LL

EDD Filename: PrepDE092_v1 | eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8081A **Matrix:** SO

Sample ID: SL-173-SA5A-SS-0.0-0.5 *Collected:* 2/25/2011 1:25:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDT	3.0		0.075	MDL	0.39	PQL	ug/Kg	J	L
DIELDRIN	0.24	J	0.075	MDL	0.39	PQL	ug/Kg	J	Z, L

Sample ID: SL-174-SA5A-SS-0.0-0.5 *Collected:* 2/25/2011 2:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDT	1.6		0.078	MDL	0.40	PQL	ug/Kg	J	L
DIELDRIN	2.0		0.078	MDL	0.40	PQL	ug/Kg	J	L
HEPTACHLOR	0.090	J	0.071	MDL	0.20	PQL	ug/Kg	J	Z, L
METHOXYCHLOR	0.49	J	0.40	MDL	2.0	PQL	ug/Kg	J	Z, L
MIREX	0.13	J	0.078	MDL	0.40	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: SL-127-SA5A-SS-0.0-0.5 *Collected:* 2/25/2011 9:05:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	1.7	J	0.45	MDL	2.0	PQL	ug/Kg	J	Z
Aroclor 5460	3.1	J	1.2	MDL	3.8	PQL	ug/Kg	J	Z

Sample ID: SL-133-SA5A-SS-0.0-0.5 *Collected:* 2/25/2011 10:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5460	1.8	J	1.1	MDL	3.7	PQL	ug/Kg	J	Z

Sample ID: SL-146-SA5A-SS-0.0-0.5 *Collected:* 2/25/2011 10:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	1.7	J	0.45	MDL	1.9	PQL	ug/Kg	J	Z
Aroclor 5460	3.3	J	1.1	MDL	3.8	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE092 | Laboratory: LL

EDD Filename: PrepDE092_v1 | eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8151A **Matrix:** SO

Sample ID: SL-126-SA5A-SS-0.0-0.5 *Collected:* 2/25/2011 8:50:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.96	U	0.96	MDL	2.9	PQL	ug/Kg	UJ	Q
MCPP	90	U	90	MDL	300	PQL	ug/Kg	R	Q

Sample ID: SL-146-SA5A-SS-0.0-0.5 *Collected:* 2/25/2011 10:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MCPA	180	J	87	MDL	290	PQL	ug/Kg	J	Z

Sample ID: SL-171-SA5A-SS-0.0-0.5 *Collected:* 2/25/2011 1:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DICHLOROPROP	1.0	J	0.91	MDL	1.9	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SL-053-SA5A-SB-3.0-4.0 *Collected:* 2/25/2011 9:28:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	22	J	19	MDL	380	PQL	ug/Kg	J	Z

Sample ID: SL-054-SA5A-SB-4.0-5.0 *Collected:* 2/25/2011 11:25:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	22	J	19	MDL	370	PQL	ug/Kg	J	Z

Sample ID: SL-054-SA5A-SB-9.0-10.0 *Collected:* 2/25/2011 11:30:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	20	J	19	MDL	380	PQL	ug/Kg	J	Z

Sample ID: SL-055-SA5A-SB-2.0-3.0 *Collected:* 2/25/2011 12:38:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	26	J	19	MDL	380	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE092 **Laboratory: LL**

EDD Filename: PrepDE092_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **8270C** ***Matrix:*** **SO**

Sample ID: **SL-056-SA5A-SB-4.0-5.0** ***Collected:*** **2/25/2011 3:43:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	29	J	19	MDL	380	PQL	ug/Kg	J	Z

Sample ID: **SL-056-SA5A-SB-7.0-8.0** ***Collected:*** **2/25/2011 3:47:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	49	J	19	MDL	390	PQL	ug/Kg	J	Z

Sample ID: **SL-126-SA5A-SS-0.0-0.5** ***Collected:*** **2/25/2011 8:50:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	46	J	20	MDL	400	PQL	ug/Kg	J	Z
Butylbenzylphthalate	22	J	20	MDL	200	PQL	ug/Kg	J	Z
FLUORANTHENE	20	J	20	MDL	200	PQL	ug/Kg	J	Z

Sample ID: **SL-127-SA5A-SS-0.0-0.5** ***Collected:*** **2/25/2011 9:05:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	36	J	19	MDL	390	PQL	ug/Kg	J	Z

Sample ID: **SL-132-SA5A-SS-0.0-0.5** ***Collected:*** **2/25/2011 9:20:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	25	J	19	MDL	370	PQL	ug/Kg	J	Z

Sample ID: **SL-133-SA5A-SS-0.0-0.5** ***Collected:*** **2/25/2011 10:00:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	25	J	19	MDL	380	PQL	ug/Kg	J	Z

Sample ID: **SL-144-SA5A-SS-0.0-0.5** ***Collected:*** **2/25/2011 11:05:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	24	J	19	MDL	380	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE092 **Laboratory: LL**

EDD Filename: PrepDE092_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SL-146-SA5A-SS-0.0-0.5 *Collected:* 2/25/2011 10:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	46	J	19	MDL	190	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	34	J	19	MDL	190	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	55	J	19	MDL	190	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	28	J	19	MDL	190	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	26	J	19	MDL	190	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	27	J	19	MDL	380	PQL	ug/Kg	J	Z
CHRYSENE	54	J	19	MDL	190	PQL	ug/Kg	J	Z
FLUORANTHENE	100	J	19	MDL	190	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	27	J	19	MDL	190	PQL	ug/Kg	J	Z
PHENANTHRENE	70	J	19	MDL	190	PQL	ug/Kg	J	Z
PYRENE	79	J	19	MDL	190	PQL	ug/Kg	J	Z

Sample ID: SL-171-SA5A-SS-0.0-0.5 *Collected:* 2/25/2011 1:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	31	J	19	MDL	380	PQL	ug/Kg	J	Z

Sample ID: SL-172-SA5A-SS-0.0-0.5 *Collected:* 2/25/2011 1:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	18	J	18	MDL	180	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	38	J	18	MDL	180	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	40	J	18	MDL	370	PQL	ug/Kg	J	Z
Butylbenzylphthalate	42	J	18	MDL	180	PQL	ug/Kg	J	Z

Sample ID: SL-173-SA5A-SS-0.0-0.5 *Collected:* 2/25/2011 1:25:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)PYRENE	26	J	19	MDL	190	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	35	J	19	MDL	370	PQL	ug/Kg	J	Z
Di-n-butylphthalate	140	J	19	MDL	190	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE092 | Laboratory: LL

EDD Filename: PrepDE092_v1 | eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SL-174-SA5A-SS-0.0-0.5 *Collected:* 2/25/2011 2:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	27	J	20	MDL	390	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8270C SIM **Matrix:** SO

Sample ID: SL-054-SA5A-SB-4.0-5.0 *Collected:* 2/25/2011 11:25:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(G,H,I)PERYLENE	0.75	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
Di-n-butylphthalate	12	J	6.7	MDL	20	PQL	ug/Kg	U	B
Di-n-octylphthalate	14	J	6.7	MDL	20	PQL	ug/Kg	U	B

Sample ID: SL-126-SA5A-SS-0.0-0.5 *Collected:* 2/25/2011 8:50:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACENAPHTHYLENE	0.60	J	0.40	MDL	2.0	PQL	ug/Kg	J	Z
ANTHRACENE	1.4	J	0.40	MDL	2.0	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	16		0.80	MDL	2.0	PQL	ug/Kg	J	Q
FLUORENE	1.4	J	0.80	MDL	2.0	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	1.8	J	0.80	MDL	2.0	PQL	ug/Kg	J	Z
NAPHTHALENE	1.6	J	0.80	MDL	2.0	PQL	ug/Kg	J	Z, Q

Sample ID: SL-127-SA5A-SS-0.0-0.5 *Collected:* 2/25/2011 9:05:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACENAPHTHYLENE	0.40	J	0.39	MDL	1.9	PQL	ug/Kg	J	Z
ANTHRACENE	0.88	J	0.39	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.0	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.0	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.1	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
Butylbenzylphthalate	8.7	J	7.0	MDL	21	PQL	ug/Kg	U	B
Di-n-octylphthalate	24		7.0	MDL	21	PQL	ug/Kg	U	B
INDENO(1,2,3-CD)PYRENE	0.79	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE092 **Laboratory: LL**

EDD Filename: PrepDE092_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **8270C SIM** ***Matrix:*** **SO**

Sample ID: **SL-132-SA5A-SS-0.0-0.5** ***Collected:*** **2/25/2011 9:20:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	0.66	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	0.94	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	0.99	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
Di-n-butylphthalate	16	J	6.8	MDL	20	PQL	ug/Kg	U	B
Di-n-octylphthalate	20	J	6.8	MDL	20	PQL	ug/Kg	U	B
INDENO(1,2,3-CD)PYRENE	0.77	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
NAPHTHALENE	0.76	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
PHENANTHRENE	1.4	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: **SL-133-SA5A-SS-0.0-0.5** ***Collected:*** **2/25/2011 10:00:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	1.2	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.3	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
Di-n-octylphthalate	15	J	6.8	MDL	20	PQL	ug/Kg	U	B
INDENO(1,2,3-CD)PYRENE	0.94	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
NAPHTHALENE	1.5	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
PHENANTHRENE	1.3	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: **SL-144-SA5A-SS-0.0-0.5** ***Collected:*** **2/25/2011 11:05:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	0.47	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	0.97	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
Di-n-butylphthalate	18	J	6.8	MDL	21	PQL	ug/Kg	U	B
Di-n-octylphthalate	15	J	6.8	MDL	21	PQL	ug/Kg	U	B
NAPHTHALENE	1.5	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: **SL-146-SA5A-SS-0.0-0.5** ***Collected:*** **2/25/2011 10:45:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACENAPHTHYLENE	1.3	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	1.1	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
NAPHTHALENE	1.1	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE092 | Laboratory: LL

EDD Filename: PrepDE092_v1 | eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8270C SIM **Matrix:** SO

Sample ID: SL-171-SA5A-SS-0.0-0.5 *Collected:* 2/25/2011 1:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)PYRENE	1.5	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	0.84	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
Butylbenzylphthalate	11	J	6.8	MDL	20	PQL	ug/Kg	U	B
CHRYSENE	1.6	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z
Di-n-octylphthalate	14	J	6.8	MDL	20	PQL	ug/Kg	U	B
NAPHTHALENE	0.83	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
PHENANTHRENE	1.2	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
PYRENE	1.8	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-172-SA5A-SS-0.0-0.5 *Collected:* 2/25/2011 1:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(G,H,I)PERYLENE	1.1	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
CHRYSENE	0.88	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z
Di-n-butylphthalate	17	J	6.8	MDL	20	PQL	ug/Kg	U	B
Di-n-octylphthalate	14	J	6.8	MDL	20	PQL	ug/Kg	U	B
NAPHTHALENE	1.7	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-173-SA5A-SS-0.0-0.5 *Collected:* 2/25/2011 1:25:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Butylbenzylphthalate	18	J	6.8	MDL	20	PQL	ug/Kg	U	B
DIBENZO(A,H)ANTHRACENE	0.93	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
Di-n-octylphthalate	14	J	6.8	MDL	20	PQL	ug/Kg	U	B
FLUORANTHENE	1.2	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	1.2	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
PHENANTHRENE	0.88	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
PYRENE	0.93	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-174-SA5A-SS-0.0-0.5 *Collected:* 2/25/2011 2:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	1.5	J	0.39	MDL	2.0	PQL	ug/Kg	J	Z
Butylbenzylphthalate	23		7.1	MDL	21	PQL	ug/Kg	U	B
DIBENZO(A,H)ANTHRACENE	1.7	J	0.79	MDL	2.0	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE092 **Laboratory: LL**

EDD Filename: PrepDE092_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C SIM **Matrix:** SO

Sample ID: SL-174-SA5A-SS-0.0-0.5 *Collected:* 2/25/2011 2:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Di-n-butylphthalate	18	J	7.1	MDL	21	PQL	ug/Kg	U	B
Di-n-octylphthalate	14	J	7.1	MDL	21	PQL	ug/Kg	U	B
NAPHTHALENE	1.5	J	0.79	MDL	2.0	PQL	ug/Kg	J	Z

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: SL-053-SA5A-SB-3.0-4.0 *Collected:* 2/25/2011 9:28:00 *Analysis Type:* RES *Dilution:* 1.04

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ETHYLBENZENE	0.19	J	0.07	MDL	4.7	PQL	ug/Kg	J	Z
m,p-Xylene	0.61	J	0.20	MDL	4.7	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	0.60	J	0.28	MDL	4.7	PQL	ug/Kg	U	B
TOLUENE	0.12	J	0.09	MDL	4.7	PQL	ug/Kg	J	Z

Sample ID: SL-054-SA5A-SB-4.0-5.0 *Collected:* 2/25/2011 11:25:00 *Analysis Type:* RES *Dilution:* 0.94

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ETHYLBENZENE	0.07	J	0.06	MDL	4.2	PQL	ug/Kg	J	Z
m,p-Xylene	0.22	J	0.18	MDL	4.2	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	0.60	J	0.25	MDL	4.2	PQL	ug/Kg	U	B

Sample ID: SL-055-SA5A-SB-2.0-3.0 *Collected:* 2/25/2011 12:38:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ETHYLBENZENE	0.11	J	0.07	MDL	4.5	PQL	ug/Kg	J	Z
m,p-Xylene	0.33	J	0.19	MDL	4.5	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	0.49	J	0.27	MDL	4.5	PQL	ug/Kg	U	B

Sample ID: SL-056-SA5A-SB-4.0-5.0 *Collected:* 2/25/2011 3:43:00 *Analysis Type:* RES *Dilution:* 0.87

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.51	J	0.24	MDL	4.0	PQL	ug/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE092 **Laboratory: LL**

EDD Filename: PrepDE092_v1 **eQAPP Name: CDM_SSFL_110509**

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE092 **Laboratory: LL**

EDD Filename: PrepDE092_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
*#	Professional Judgment
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Verification Correlation Coefficient
C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE092 **Laboratory: LL**

EDD Filename: PrepDE092_v1 **eQAPP Name: CDM_SSFL_110509**

F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation
L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery Lower Estimation

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE092 **Laboratory: LL**

EDD Filename: PrepDE092_v1 **eQAPP Name: CDM_SSFL_110509**

R	Continuing Calibration Verification Percent Recovery Lower Rejection
R	Continuing Calibration Verification Percent Recovery Upper Estimation
R	Continuing Calibration Verification Percent Recovery Upper Rejection
R	Continuing Calibration Verification Relative Response Factor
R	Initial Calibration Relative Response Factor
R	Initial Calibration Verification Percent Recovery Lower Estimation
R	Initial Calibration Verification Percent Recovery Lower Rejection
R	Initial Calibration Verification Percent Recovery Upper Estimation
R	Initial Calibration Verification Percent Recovery Upper Rejection
R	Initial Calibration Verification Relative Response Factor
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control Outlier Reports

DE092

Method Blank Outlier Report

Lab Reporting Batch ID: DE092 **Laboratory: LL**

EDD Filename: DE092_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **6010B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P06608BB221207	3/9/2011 12:07:00 PM	CALCIUM PHOSPHORUS TIN	8.61 mg/Kg 1.08 mg/Kg 1.47 mg/Kg	SL-053-SA5A-SB-3.0-4.0 SL-054-SA5A-SB-4.0-5.0 SL-054-SA5A-SB-9.0-10.0 SL-055-SA5A-SB-2.0-3.0 SL-056-SA5A-SB-4.0-5.0 SL-056-SA5A-SB-7.0-8.0 SL-126-SA5A-SS-0.0-0.5 SL-127-SA5A-SS-0.0-0.5 SL-132-SA5A-SS-0.0-0.5 SL-133-SA5A-SS-0.0-0.5 SL-144-SA5A-SS-0.0-0.5 SL-146-SA5A-SS-0.0-0.5 SL-171-SA5A-SS-0.0-0.5 SL-172-SA5A-SS-0.0-0.5 SL-173-SA5A-SS-0.0-0.5 SL-174-SA5A-SS-0.0-0.5
P06608BB221843	3/10/2011 6:43:00 PM	ALUMINUM	5.50 mg/Kg	SL-053-SA5A-SB-3.0-4.0 SL-054-SA5A-SB-4.0-5.0 SL-054-SA5A-SB-9.0-10.0 SL-055-SA5A-SB-2.0-3.0 SL-056-SA5A-SB-4.0-5.0 SL-056-SA5A-SB-7.0-8.0 SL-126-SA5A-SS-0.0-0.5 SL-127-SA5A-SS-0.0-0.5 SL-132-SA5A-SS-0.0-0.5 SL-133-SA5A-SS-0.0-0.5 SL-144-SA5A-SS-0.0-0.5 SL-146-SA5A-SS-0.0-0.5 SL-171-SA5A-SS-0.0-0.5 SL-172-SA5A-SS-0.0-0.5 SL-173-SA5A-SS-0.0-0.5 SL-174-SA5A-SS-0.0-0.5

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-053-SA5A-SB-3.0-4.0(RES)	TIN	3.25 mg/Kg	3.25U mg/Kg
SL-054-SA5A-SB-4.0-5.0(RES)	TIN	2.75 mg/Kg	2.75U mg/Kg
SL-054-SA5A-SB-9.0-10.0(RES)	TIN	3.19 mg/Kg	3.19U mg/Kg
SL-055-SA5A-SB-2.0-3.0(RES)	TIN	3.33 mg/Kg	3.33U mg/Kg
SL-056-SA5A-SB-4.0-5.0(RES)	TIN	2.91 mg/Kg	2.91U mg/Kg
SL-056-SA5A-SB-7.0-8.0(RES)	TIN	2.94 mg/Kg	2.94U mg/Kg
SL-126-SA5A-SS-0.0-0.5(RES)	TIN	2.86 mg/Kg	2.86U mg/Kg
SL-127-SA5A-SS-0.0-0.5(RES)	TIN	2.92 mg/Kg	2.92U mg/Kg
SL-132-SA5A-SS-0.0-0.5(RES)	TIN	2.65 mg/Kg	2.65U mg/Kg
SL-133-SA5A-SS-0.0-0.5(RES)	TIN	2.76 mg/Kg	2.76U mg/Kg
SL-144-SA5A-SS-0.0-0.5(RES)	TIN	2.88 mg/Kg	2.88U mg/Kg
SL-146-SA5A-SS-0.0-0.5(RES)	TIN	2.81 mg/Kg	2.81U mg/Kg
SL-171-SA5A-SS-0.0-0.5(RES)	TIN	2.59 mg/Kg	2.59U mg/Kg
SL-172-SA5A-SS-0.0-0.5(RES)	TIN	2.83 mg/Kg	2.83U mg/Kg
SL-173-SA5A-SS-0.0-0.5(RES)	TIN	2.71 mg/Kg	2.71U mg/Kg
SL-174-SA5A-SS-0.0-0.5(RES)	TIN	2.83 mg/Kg	2.83U mg/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE092 **Laboratory: LL**

EDD Filename: DE092_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **6020**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P06626BB221159A	3/11/2011 11:59:00 AM	COPPER LEAD	0.113 mg/Kg 0.0139 mg/Kg	SL-053-SA5A-SB-3.0-4.0 SL-054-SA5A-SB-4.0-5.0 SL-054-SA5A-SB-9.0-10.0 SL-055-SA5A-SB-2.0-3.0 SL-056-SA5A-SB-4.0-5.0 SL-056-SA5A-SB-7.0-8.0 SL-126-SA5A-SS-0.0-0.5 SL-127-SA5A-SS-0.0-0.5 SL-132-SA5A-SS-0.0-0.5 SL-133-SA5A-SS-0.0-0.5 SL-144-SA5A-SS-0.0-0.5 SL-146-SA5A-SS-0.0-0.5 SL-171-SA5A-SS-0.0-0.5 SL-172-SA5A-SS-0.0-0.5 SL-173-SA5A-SS-0.0-0.5 SL-174-SA5A-SS-0.0-0.5
P06626BB221159C	3/11/2011 11:59:00 AM	MOLYBDENUM	0.0636 mg/Kg	SL-053-SA5A-SB-3.0-4.0 SL-054-SA5A-SB-4.0-5.0 SL-054-SA5A-SB-9.0-10.0 SL-055-SA5A-SB-2.0-3.0 SL-056-SA5A-SB-4.0-5.0 SL-056-SA5A-SB-7.0-8.0 SL-126-SA5A-SS-0.0-0.5 SL-127-SA5A-SS-0.0-0.5 SL-132-SA5A-SS-0.0-0.5 SL-133-SA5A-SS-0.0-0.5 SL-144-SA5A-SS-0.0-0.5 SL-146-SA5A-SS-0.0-0.5 SL-171-SA5A-SS-0.0-0.5 SL-172-SA5A-SS-0.0-0.5 SL-173-SA5A-SS-0.0-0.5 SL-174-SA5A-SS-0.0-0.5

Method: **8260B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB80B212159A	2/28/2011 9:59:00 PM	METHYLENE CHLORIDE	0.57 ug/Kg	SL-053-SA5A-SB-3.0-4.0 SL-054-SA5A-SB-4.0-5.0 SL-055-SA5A-SB-2.0-3.0 SL-056-SA5A-SB-4.0-5.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-053-SA5A-SB-3.0-4.0(RES)	METHYLENE CHLORIDE	0.60 ug/Kg	4.7U ug/Kg
SL-054-SA5A-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.60 ug/Kg	4.2U ug/Kg
SL-055-SA5A-SB-2.0-3.0(RES)	METHYLENE CHLORIDE	0.49 ug/Kg	4.5U ug/Kg
SL-056-SA5A-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.51 ug/Kg	4.0U ug/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE092 **Laboratory: LL**

EDD Filename: DE092_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8270C SIM**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKLA06B261908	3/9/2011 7:08:00 PM	BIS(2-ETHYLHEXYL)PHTHALATE	11 ug/Kg	SL-053-SA5A-SB-3.0-4.0
		Butylbenzylphthalate	6.2 ug/Kg	SL-054-SA5A-SB-4.0-5.0
		Diethylphthalate	7.4 ug/Kg	SL-054-SA5A-SB-9.0-10.0
		Di-n-butylphthalate	13 ug/Kg	SL-055-SA5A-SB-2.0-3.0
		Di-n-octylphthalate	12 ug/Kg	SL-056-SA5A-SB-4.0-5.0
				SL-056-SA5A-SB-7.0-8.0
				SL-126-SA5A-SS-0.0-0.5
				SL-127-SA5A-SS-0.0-0.5
				SL-132-SA5A-SS-0.0-0.5
				SL-133-SA5A-SS-0.0-0.5
				SL-144-SA5A-SS-0.0-0.5
				SL-146-SA5A-SS-0.0-0.5
				SL-171-SA5A-SS-0.0-0.5
				SL-172-SA5A-SS-0.0-0.5
				SL-173-SA5A-SS-0.0-0.5
				SL-174-SA5A-SS-0.0-0.5

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-054-SA5A-SB-4.0-5.0(RES)	Di-n-butylphthalate	12 ug/Kg	20U ug/Kg
SL-054-SA5A-SB-4.0-5.0(RES)	Di-n-octylphthalate	14 ug/Kg	20U ug/Kg
SL-127-SA5A-SS-0.0-0.5(RES)	Butylbenzylphthalate	8.7 ug/Kg	21U ug/Kg
SL-127-SA5A-SS-0.0-0.5(RES)	Di-n-octylphthalate	24 ug/Kg	24U ug/Kg
SL-132-SA5A-SS-0.0-0.5(RES)	Di-n-butylphthalate	16 ug/Kg	20U ug/Kg
SL-132-SA5A-SS-0.0-0.5(RES)	Di-n-octylphthalate	20 ug/Kg	20U ug/Kg
SL-133-SA5A-SS-0.0-0.5(RES)	Di-n-octylphthalate	15 ug/Kg	20U ug/Kg
SL-144-SA5A-SS-0.0-0.5(RES)	Di-n-butylphthalate	18 ug/Kg	21U ug/Kg
SL-144-SA5A-SS-0.0-0.5(RES)	Di-n-octylphthalate	15 ug/Kg	21U ug/Kg
SL-171-SA5A-SS-0.0-0.5(RES)	Butylbenzylphthalate	11 ug/Kg	20U ug/Kg
SL-171-SA5A-SS-0.0-0.5(RES)	Di-n-octylphthalate	14 ug/Kg	20U ug/Kg
SL-172-SA5A-SS-0.0-0.5(RES)	Di-n-butylphthalate	17 ug/Kg	20U ug/Kg
SL-172-SA5A-SS-0.0-0.5(RES)	Di-n-octylphthalate	14 ug/Kg	20U ug/Kg
SL-173-SA5A-SS-0.0-0.5(RES)	Butylbenzylphthalate	18 ug/Kg	20U ug/Kg
SL-173-SA5A-SS-0.0-0.5(RES)	Di-n-octylphthalate	14 ug/Kg	20U ug/Kg
SL-174-SA5A-SS-0.0-0.5(RES)	Butylbenzylphthalate	23 ug/Kg	23U ug/Kg
SL-174-SA5A-SS-0.0-0.5(RES)	Di-n-butylphthalate	18 ug/Kg	21U ug/Kg
SL-174-SA5A-SS-0.0-0.5(RES)	Di-n-octylphthalate	14 ug/Kg	21U ug/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE092 **Laboratory: LL**

EDD Filename: DE092_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C SIM
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-126-SA5A-SS-0.0-0.5MS	BENZO(B)FLUORANTHENE	-	157	43.00-155.00	-	BENZO(B)FLUORANTHENE	
SL-126-SA5A-SS-0.0-0.5MSD	Dimethylphthalate	122	-	74.00-118.00	-	Dimethylphthalate	J (all detects)
(SL-126-SA5A-SS-0.0-0.5)	NAPHTHALENE	104	106	61.00-102.00	-	NAPHTHALENE	

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-126-SA5A-SS-0.0-0.5MS	ARSENIC	159	-	75.00-125.00	-	ARSENIC	
SL-126-SA5A-SS-0.0-0.5MSD	BERYLLIUM	147	-	75.00-125.00	-	BERYLLIUM	
(SL-053-SA5A-SB-3.0-4.0	CADMIUM	139	140	75.00-125.00	-	CADMIUM	
SL -054-SA5A-SB-4.0-5.0	CHROMIUM	157	-	75.00-125.00	-	CHROMIUM	
SL -054-SA5A-SB-9.0-10.0	COPPER	131	-	75.00-125.00	-	COPPER	
SL -055-SA5A-SB-2.0-3.0	LEAD	204	-	75.00-125.00	-	LEAD	
SL -056-SA5A-SB-4.0-5.0	NICKEL	138	-	75.00-125.00	-	NICKEL	
SL -056-SA5A-SB-7.0-8.0	SILVER	146	133	75.00-125.00	-	SILVER	
SL -126-SA5A-SS-0.0-0.5	THALLIUM	149	-	75.00-125.00	-	THALLIUM	J(all detects)
SL -127-SA5A-SS-0.0-0.5	VANADIUM	175	-	75.00-125.00	-	VANADIUM	
SL -132-SA5A-SS-0.0-0.5							Pb No Qual, >4x
SL -133-SA5A-SS-0.0-0.5							
SL -144-SA5A-SS-0.0-0.5							
SL -146-SA5A-SS-0.0-0.5							
SL -171-SA5A-SS-0.0-0.5							
SL -172-SA5A-SS-0.0-0.5							
SL -173-SA5A-SS-0.0-0.5							
SL -174-SA5A-SS-0.0-0.5)							
SL-126-SA5A-SS-0.0-0.5MS	ANTIMONY	43	44	75.00-125.00	-	ANTIMONY	
SL-126-SA5A-SS-0.0-0.5MSD	ZINC	210	31	75.00-125.00	-	ZINC	
(SL-053-SA5A-SB-3.0-4.0							
SL -054-SA5A-SB-4.0-5.0							
SL -054-SA5A-SB-9.0-10.0							
SL -055-SA5A-SB-2.0-3.0							
SL -056-SA5A-SB-4.0-5.0							
SL -056-SA5A-SB-7.0-8.0							
SL -126-SA5A-SS-0.0-0.5							J(all detects) UJ(all non-detects)
SL -127-SA5A-SS-0.0-0.5							
SL -132-SA5A-SS-0.0-0.5							
SL -133-SA5A-SS-0.0-0.5							Zn No Qual, >4x
SL -144-SA5A-SS-0.0-0.5							
SL -146-SA5A-SS-0.0-0.5							
SL -171-SA5A-SS-0.0-0.5							
SL -172-SA5A-SS-0.0-0.5							
SL -173-SA5A-SS-0.0-0.5							
SL -174-SA5A-SS-0.0-0.5)							

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE092 **Laboratory: LL**

EDD Filename: DE092_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-126-SA5A-SS-0.0-0.5MS SL-126-SA5A-SS-0.0-0.5MSD (SL-053-SA5A-SB-3.0-4.0 SL -054-SA5A-SB-4.0-5.0 SL -054-SA5A-SB-9.0-10.0 SL -055-SA5A-SB-2.0-3.0 SL -056-SA5A-SB-4.0-5.0 SL -056-SA5A-SB-7.0-8.0 SL -126-SA5A-SS-0.0-0.5 SL -127-SA5A-SS-0.0-0.5 SL -132-SA5A-SS-0.0-0.5 SL -133-SA5A-SS-0.0-0.5 SL -144-SA5A-SS-0.0-0.5 SL -146-SA5A-SS-0.0-0.5 SL -171-SA5A-SS-0.0-0.5 SL -172-SA5A-SS-0.0-0.5 SL -173-SA5A-SS-0.0-0.5 SL -174-SA5A-SS-0.0-0.5)	MOLYBDENUM	148	135	75.00-125.00	-	MOLYBDENUM	J(all detects)
SL-126-SA5A-SS-0.0-0.5MS SL-126-SA5A-SS-0.0-0.5MSD (SL-053-SA5A-SB-3.0-4.0 SL -054-SA5A-SB-4.0-5.0 SL -054-SA5A-SB-9.0-10.0 SL -055-SA5A-SB-2.0-3.0 SL -056-SA5A-SB-4.0-5.0 SL -056-SA5A-SB-7.0-8.0 SL -126-SA5A-SS-0.0-0.5 SL -127-SA5A-SS-0.0-0.5 SL -132-SA5A-SS-0.0-0.5 SL -133-SA5A-SS-0.0-0.5 SL -144-SA5A-SS-0.0-0.5 SL -146-SA5A-SS-0.0-0.5 SL -171-SA5A-SS-0.0-0.5 SL -172-SA5A-SS-0.0-0.5 SL -173-SA5A-SS-0.0-0.5 SL -174-SA5A-SS-0.0-0.5)	BARIUM	195	19	75.00-125.00	-	BARIUM	No Qual, >4x

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-126-SA5A-SS-0.0-0.5MS	ALUMINUM	1398	1387	75.00-125.00	-	ALUMINUM	
SL-126-SA5A-SS-0.0-0.5MSD	CALCIUM	169	136	75.00-125.00	-	CALCIUM	
(SL-053-SA5A-SB-3.0-4.0	MAGNESIUM	169	-	75.00-125.00	-	MAGNESIUM	
SL -054-SA5A-SB-4.0-5.0	TITANIUM	304	263	75.00-125.00	-	TITANIUM	
SL -054-SA5A-SB-9.0-10.0 SL -055-SA5A-SB-2.0-3.0 SL -056-SA5A-SB-4.0-5.0 SL -056-SA5A-SB-7.0-8.0 SL -126-SA5A-SS-0.0-0.5 SL -127-SA5A-SS-0.0-0.5 SL -132-SA5A-SS-0.0-0.5 SL -133-SA5A-SS-0.0-0.5 SL -144-SA5A-SS-0.0-0.5 SL -146-SA5A-SS-0.0-0.5 SL -171-SA5A-SS-0.0-0.5 SL -172-SA5A-SS-0.0-0.5 SL -173-SA5A-SS-0.0-0.5 SL -174-SA5A-SS-0.0-0.5)							No Qual, >4x

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE092 **Laboratory: LL**

EDD Filename: DE092_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-126-SA5A-SS-0.0-0.5MS **SL-126-SA5A-SS-0.0-0.5MSD** (SL-053-SA5A-SB-3.0-4.0 SL -054-SA5A-SB-4.0-5.0 SL -054-SA5A-SB-9.0-10.0 SL -055-SA5A-SB-2.0-3.0 SL -056-SA5A-SB-4.0-5.0 SL -056-SA5A-SB-7.0-8.0 SL -126-SA5A-SS-0.0-0.5 SL -127-SA5A-SS-0.0-0.5 SL -132-SA5A-SS-0.0-0.5 SL -133-SA5A-SS-0.0-0.5 SL -144-SA5A-SS-0.0-0.5 SL -146-SA5A-SS-0.0-0.5 SL -171-SA5A-SS-0.0-0.5 SL -172-SA5A-SS-0.0-0.5 SL -173-SA5A-SS-0.0-0.5 SL -174-SA5A-SS-0.0-0.5)	IRON	-57	-308	75.00-125.00	-	IRON	No Qual, >4x
SL-126-SA5A-SS-0.0-0.5MS **SL-126-SA5A-SS-0.0-0.5MSD** (SL-053-SA5A-SB-3.0-4.0 SL -054-SA5A-SB-4.0-5.0 SL -054-SA5A-SB-9.0-10.0 SL -055-SA5A-SB-2.0-3.0 SL -056-SA5A-SB-4.0-5.0 SL -056-SA5A-SB-7.0-8.0 SL -126-SA5A-SS-0.0-0.5 SL -127-SA5A-SS-0.0-0.5 SL -132-SA5A-SS-0.0-0.5 SL -133-SA5A-SS-0.0-0.5 SL -144-SA5A-SS-0.0-0.5 SL -146-SA5A-SS-0.0-0.5 SL -171-SA5A-SS-0.0-0.5 SL -172-SA5A-SS-0.0-0.5 SL -173-SA5A-SS-0.0-0.5 SL -174-SA5A-SS-0.0-0.5)	PHOSPHORUS	72	52	75.00-125.00	-	PHOSPHORUS	No Qual, >4x

Method: 300.0
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-126-SA5A-SS-0.0-0.5MS (SL-126-SA5A-SS-0.0-0.5 SL -127-SA5A-SS-0.0-0.5 SL -132-SA5A-SS-0.0-0.5 SL -133-SA5A-SS-0.0-0.5 SL -144-SA5A-SS-0.0-0.5 SL -146-SA5A-SS-0.0-0.5 SL -171-SA5A-SS-0.0-0.5 SL -172-SA5A-SS-0.0-0.5 SL -173-SA5A-SS-0.0-0.5)	FLUORIDE	70	-	80.00-120.00	-	FLUORIDE	J(all detects) UJ(all non-detects)
SL-174-SA5A-SS-0.0-0.5MS (SL-053-SA5A-SB-3.0-4.0 SL -054-SA5A-SB-4.0-5.0 SL -054-SA5A-SB-9.0-10.0 SL -055-SA5A-SB-2.0-3.0 SL -056-SA5A-SB-4.0-5.0 SL -056-SA5A-SB-7.0-8.0 SL -174-SA5A-SS-0.0-0.5)	FLUORIDE	57	-	80.00-120.00	-	FLUORIDE	J(all detects) UJ(all non-detects)

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE092 **Laboratory: LL**

EDD Filename: DE092_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8081A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-126-SA5A-SS-0.0-0.5MS SL-126-SA5A-SS-0.0-0.5MSD (SL-126-SA5A-SS-0.0-0.5)	4,4'-DDE ALDRIN	178 130	200 130	18.00-161.00 16.00-126.00	- -	4,4'-DDE ALDRIN	J(all detects)

Method: 8151A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-126-SA5A-SS-0.0-0.5MSD (SL-126-SA5A-SS-0.0-0.5)	DALAPON DICAMBA DICHLOROPROP	- - -	- 194 -	10.00-125.00 10.00-190.00 33.00-178.00	86 (50.00) - 51 (50.00)	DALAPON DICAMBA DICHLOROPROP	J(all detects)
SL-126-SA5A-SS-0.0-0.5MS SL-126-SA5A-SS-0.0-0.5MSD (SL-126-SA5A-SS-0.0-0.5)	MCPP	0	0	10.00-184.00	-	MCPP	J(all detects) R(all non-detects)
SL-126-SA5A-SS-0.0-0.5MS SL-126-SA5A-SS-0.0-0.5MSD (SL-126-SA5A-SS-0.0-0.5)	DINOSEB	6	-	10.00-46.00	122 (35.00)	DINOSEB	J(all detects) UJ(all non-detects)

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE092 **Laboratory: LL**

EDD Filename: DE092_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 300.0
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-126-SA5A-SS-0.0-0.5DUP	FLUORIDE	200	20.00	
(SL-126-SA5A-SS-0.0-0.5				
SL-127-SA5A-SS-0.0-0.5				
SL-132-SA5A-SS-0.0-0.5				
SL-133-SA5A-SS-0.0-0.5				No Qual
SL-144-SA5A-SS-0.0-0.5				OK by difference
SL-146-SA5A-SS-0.0-0.5				
SL-171-SA5A-SS-0.0-0.5				
SL-172-SA5A-SS-0.0-0.5				
SL-173-SA5A-SS-0.0-0.5)				

Method: 6020
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-126-SA5A-SS-0.0-0.5DUP	ANTIMONY	90	20.00	
(SL-053-SA5A-SB-3.0-4.0	ARSENIC	31	20.00	
SL-054-SA5A-SB-4.0-5.0	BARIUM	36	20.00	
SL-054-SA5A-SB-9.0-10.0	BERYLLIUM	38	20.00	J(all detects)
SL-055-SA5A-SB-2.0-3.0	CADMIUM	51	20.00	UJ(all non-detects)
SL-056-SA5A-SB-4.0-5.0	CHROMIUM	30	20.00	
SL-056-SA5A-SB-7.0-8.0	COBALT	34	20.00	Sb, Be, Cd, Ag, Tl
SL-126-SA5A-SS-0.0-0.5	COPPER	32	20.00	No Qual
SL-127-SA5A-SS-0.0-0.5	MOLYBDENUM	26	20.00	OK by difference
SL-132-SA5A-SS-0.0-0.5	NICKEL	33	20.00	
SL-133-SA5A-SS-0.0-0.5	SILVER	36	20.00	
SL-144-SA5A-SS-0.0-0.5	THALLIUM	35	20.00	
SL-146-SA5A-SS-0.0-0.5	VANADIUM	32	20.00	
SL-171-SA5A-SS-0.0-0.5	ZINC	26	20.00	
SL-172-SA5A-SS-0.0-0.5				
SL-173-SA5A-SS-0.0-0.5				
SL-174-SA5A-SS-0.0-0.5)				

Method: 7471A
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-126-SA5A-SS-0.0-0.5DUP	MERCURY	200	20.00	
(SL-053-SA5A-SB-3.0-4.0				
SL-054-SA5A-SB-4.0-5.0				
SL-054-SA5A-SB-9.0-10.0				
SL-055-SA5A-SB-2.0-3.0				
SL-056-SA5A-SB-4.0-5.0				
SL-056-SA5A-SB-7.0-8.0				
SL-126-SA5A-SS-0.0-0.5				
SL-127-SA5A-SS-0.0-0.5				No Qual
SL-132-SA5A-SS-0.0-0.5				OK by difference
SL-133-SA5A-SS-0.0-0.5				
SL-144-SA5A-SS-0.0-0.5				
SL-146-SA5A-SS-0.0-0.5				
SL-171-SA5A-SS-0.0-0.5				
SL-172-SA5A-SS-0.0-0.5				
SL-173-SA5A-SS-0.0-0.5				
SL-174-SA5A-SS-0.0-0.5)				

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE092 **Laboratory: LL**

EDD Filename: DE092_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7471A
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag

Method: 7199
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-054-SA5A-SB-4.0-5.0DUP (SL-053-SA5A-SB-3.0-4.0 SL -054-SA5A-SB-4.0-5.0 SL -054-SA5A-SB-9.0-10.0 SL -055-SA5A-SB-2.0-3.0 SL -056-SA5A-SB-4.0-5.0 SL -056-SA5A-SB-7.0-8.0 SL -126-SA5A-SS-0.0-0.5 SL -127-SA5A-SS-0.0-0.5 SL -132-SA5A-SS-0.0-0.5 SL -133-SA5A-SS-0.0-0.5 SL -144-SA5A-SS-0.0-0.5 SL -146-SA5A-SS-0.0-0.5 SL -171-SA5A-SS-0.0-0.5 SL -172-SA5A-SS-0.0-0.5 SL -173-SA5A-SS-0.0-0.5 SL -174-SA5A-SS-0.0-0.5)	HEXAVALENT CHROMIUM	21	20.00	No Qual OK by difference

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE092 **Laboratory: LL**

EDD Filename: DE092_v1 **eQAPP Name: CDM_SSFL_110509**

***Method:* 8081A**
***Matrix:* SO**

QC Sample ID (Associated Samples)	*Compound*	*LCS %R*	*LCSD %R*	*%R Limits*	*RPD (Limits)*	*Affected Compounds*	*Flag*
P10606AQ241638A	4,4'-DDD	160	-	60.00-137.00	-	4,4'-DDD	
(SL-126-SA5A-SS-0.0-0.5	4,4'-DDT	175	-	54.00-130.00	-	4,4'-DDT	
SL-127-SA5A-SS-0.0-0.5	DIELDRIN	156	-	65.00-129.00	-	DIELDRIN	
SL-132-SA5A-SS-0.0-0.5	ENDOSULFAN I	148	-	45.00-123.00	-	ENDOSULFAN I	
SL-133-SA5A-SS-0.0-0.5	ENDRIN	153	-	62.00-129.00	-	ENDRIN	
SL-144-SA5A-SS-0.0-0.5	gamma-BHC (Lindane)	130	-	46.00-127.00	-	gamma-BHC (Lindane)	J (all detects)
SL-146-SA5A-SS-0.0-0.5	HEPTACHLOR	155	-	43.00-124.00	-	HEPTACHLOR	
SL-171-SA5A-SS-0.0-0.5	METHOXYCHLOR	174	-	59.00-125.00	-	METHOXYCHLOR	
SL-172-SA5A-SS-0.0-0.5							
SL-173-SA5A-SS-0.0-0.5							
SL-174-SA5A-SS-0.0-0.5)							

Reporting Limit Outliers

Lab Reporting Batch ID: DE092 **Laboratory: LL**

EDD Filename: DE092_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 300.0

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-126-SA5A-SS-0.0-0.5	FLUORIDE	J	1.1	1.2	PQL	mg/Kg	J (all detects)

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-053-SA5A-SB-3.0-4.0	BORON	J	2.41	5.53	PQL	mg/Kg	J (all detects)
	SODIUM	J	109	111	PQL	mg/Kg	
	TIN	J	3.25	11.1	PQL	mg/Kg	
	Zirconium	J	3.91	5.53	PQL	mg/Kg	
SL-054-SA5A-SB-4.0-5.0	BORON	J	3.36	5.44	PQL	mg/Kg	J (all detects)
	SODIUM	J	107	109	PQL	mg/Kg	
	TIN	J	2.75	10.9	PQL	mg/Kg	
	Zirconium	J	3.94	5.44	PQL	mg/Kg	
SL-054-SA5A-SB-9.0-10.0	BORON	J	3.01	5.70	PQL	mg/Kg	J (all detects)
	TIN	J	3.19	11.4	PQL	mg/Kg	
	Zirconium	J	4.29	5.70	PQL	mg/Kg	
SL-055-SA5A-SB-2.0-3.0	TIN	J	3.33	10.9	PQL	mg/Kg	J (all detects)
	Zirconium	J	4.91	5.43	PQL	mg/Kg	
SL-056-SA5A-SB-4.0-5.0	BORON	J	3.04	5.51	PQL	mg/Kg	J (all detects)
	SODIUM	J	73.6	110	PQL	mg/Kg	
	TIN	J	2.91	11.0	PQL	mg/Kg	
	Zirconium	J	4.56	5.51	PQL	mg/Kg	
SL-056-SA5A-SB-7.0-8.0	BORON	J	2.00	5.60	PQL	mg/Kg	J (all detects)
	SODIUM	J	109	112	PQL	mg/Kg	
	TIN	J	2.94	11.2	PQL	mg/Kg	
	Zirconium	J	4.12	5.60	PQL	mg/Kg	
SL-126-SA5A-SS-0.0-0.5	SODIUM	J	62.4	115	PQL	mg/Kg	J (all detects)
	TIN	J	2.86	11.5	PQL	mg/Kg	
	Zirconium	J	5.35	5.77	PQL	mg/Kg	
SL-127-SA5A-SS-0.0-0.5	BORON	J	4.60	5.69	PQL	mg/Kg	J (all detects)
	SODIUM	J	60.5	114	PQL	mg/Kg	
	TIN	J	2.92	11.4	PQL	mg/Kg	
	Zirconium	J	3.29	5.69	PQL	mg/Kg	
SL-132-SA5A-SS-0.0-0.5	BORON	J	4.50	5.55	PQL	mg/Kg	J (all detects)
	SODIUM	J	61.4	111	PQL	mg/Kg	
	TIN	J	2.65	11.1	PQL	mg/Kg	
	Zirconium	J	3.64	5.55	PQL	mg/Kg	
SL-133-SA5A-SS-0.0-0.5	BORON	J	5.01	5.50	PQL	mg/Kg	J (all detects)
	SODIUM	J	71.5	110	PQL	mg/Kg	
	TIN	J	2.76	11.0	PQL	mg/Kg	
	Zirconium	J	4.90	5.50	PQL	mg/Kg	
SL-144-SA5A-SS-0.0-0.5	BORON	J	4.69	5.64	PQL	mg/Kg	J (all detects)
	SODIUM	J	72.5	113	PQL	mg/Kg	
	TIN	J	2.88	11.3	PQL	mg/Kg	
	Zirconium	J	4.64	5.64	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE092 **Laboratory: LL**

EDD Filename: DE092_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-146-SA5A-SS-0.0-0.5	BORON	J	3.68	5.57	PQL	mg/Kg	J (all detects)
	SODIUM	J	60.7	111	PQL	mg/Kg	
	TIN	J	2.81	11.1	PQL	mg/Kg	
	Zirconium	J	3.99	5.57	PQL	mg/Kg	
SL-171-SA5A-SS-0.0-0.5	BORON	J	5.43	5.51	PQL	mg/Kg	J (all detects)
	SODIUM	J	71.2	110	PQL	mg/Kg	
	TIN	J	2.59	11.0	PQL	mg/Kg	
	Zirconium	J	3.27	5.51	PQL	mg/Kg	
SL-172-SA5A-SS-0.0-0.5	BORON	J	4.11	5.52	PQL	mg/Kg	J (all detects)
	SODIUM	J	86.6	110	PQL	mg/Kg	
	TIN	J	2.83	11.0	PQL	mg/Kg	
	Zirconium	J	3.97	5.52	PQL	mg/Kg	
SL-173-SA5A-SS-0.0-0.5	BORON	J	4.73	5.46	PQL	mg/Kg	J (all detects)
	TIN	J	2.71	10.9	PQL	mg/Kg	
	Zirconium	J	3.72	5.46	PQL	mg/Kg	
SL-174-SA5A-SS-0.0-0.5	BORON	J	4.45	5.91	PQL	mg/Kg	J (all detects)
	SODIUM	J	107	118	PQL	mg/Kg	
	TIN	J	2.83	11.8	PQL	mg/Kg	
	Zirconium	J	2.75	5.91	PQL	mg/Kg	

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-053-SA5A-SB-3.0-4.0	ANTIMONY	J	0.124	0.226	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0709	0.113	PQL	mg/Kg	
	SELENIUM	J	0.104	0.451	PQL	mg/Kg	
SL-054-SA5A-SB-4.0-5.0	ANTIMONY	J	0.143	0.222	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.106	0.444	PQL	mg/Kg	
SL-054-SA5A-SB-9.0-10.0	ANTIMONY	J	0.217	0.228	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0821	0.456	PQL	mg/Kg	
	SILVER	J	0.0597	0.114	PQL	mg/Kg	
SL-055-SA5A-SB-2.0-3.0	SELENIUM	J	0.436	0.439	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0297	0.110	PQL	mg/Kg	
SL-056-SA5A-SB-4.0-5.0	ANTIMONY	J	0.151	0.227	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.109	0.114	PQL	mg/Kg	
	SELENIUM	J	0.130	0.454	PQL	mg/Kg	
	SILVER	J	0.0644	0.114	PQL	mg/Kg	
SL-056-SA5A-SB-7.0-8.0	ANTIMONY	J	0.159	0.226	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.104	0.113	PQL	mg/Kg	
	SELENIUM	J	0.120	0.453	PQL	mg/Kg	
	SILVER	J	0.0153	0.113	PQL	mg/Kg	
SL-126-SA5A-SS-0.0-0.5	ANTIMONY	J	0.227	0.238	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.142	0.475	PQL	mg/Kg	
	SILVER	J	0.0447	0.119	PQL	mg/Kg	
SL-127-SA5A-SS-0.0-0.5	ANTIMONY	J	0.191	0.230	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.179	0.459	PQL	mg/Kg	
	SILVER	J	0.0455	0.115	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE092 **Laboratory: LL**

EDD Filename: DE092_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-132-SA5A-SS-0.0-0.5	ANTIMONY	J	0.193	0.226	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.131	0.452	PQL	mg/Kg	
	SILVER	J	0.0322	0.113	PQL	mg/Kg	
SL-133-SA5A-SS-0.0-0.5	ANTIMONY	J	0.208	0.222	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.142	0.445	PQL	mg/Kg	
	SILVER	J	0.0319	0.111	PQL	mg/Kg	
SL-144-SA5A-SS-0.0-0.5	ANTIMONY	J	0.178	0.224	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.165	0.447	PQL	mg/Kg	
SL-146-SA5A-SS-0.0-0.5	ANTIMONY	J	0.228	0.229	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.159	0.459	PQL	mg/Kg	
SL-171-SA5A-SS-0.0-0.5	ANTIMONY	J	0.167	0.225	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.177	0.450	PQL	mg/Kg	
	SILVER	J	0.0413	0.112	PQL	mg/Kg	
SL-172-SA5A-SS-0.0-0.5	ANTIMONY	J	0.148	0.221	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.152	0.442	PQL	mg/Kg	
SL-173-SA5A-SS-0.0-0.5	ANTIMONY	J	0.178	0.220	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.138	0.441	PQL	mg/Kg	
	SILVER	J	0.0671	0.110	PQL	mg/Kg	
SL-174-SA5A-SS-0.0-0.5	ANTIMONY	J	0.159	0.232	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.152	0.464	PQL	mg/Kg	
	SILVER	J	0.0447	0.116	PQL	mg/Kg	

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-054-SA5A-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.39	1.1	PQL	mg/Kg	J (all detects)
SL-054-SA5A-SB-9.0-10.0	HEXAVALENT CHROMIUM	J	0.27	1.2	PQL	mg/Kg	J (all detects)
SL-055-SA5A-SB-2.0-3.0	HEXAVALENT CHROMIUM	J	0.45	1.1	PQL	mg/Kg	J (all detects)
SL-056-SA5A-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.43	1.1	PQL	mg/Kg	J (all detects)
SL-056-SA5A-SB-7.0-8.0	HEXAVALENT CHROMIUM	J	0.50	1.2	PQL	mg/Kg	J (all detects)
SL-126-SA5A-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.89	1.2	PQL	mg/Kg	J (all detects)
SL-127-SA5A-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.28	1.2	PQL	mg/Kg	J (all detects)
SL-132-SA5A-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.44	1.1	PQL	mg/Kg	J (all detects)
SL-133-SA5A-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.30	1.1	PQL	mg/Kg	J (all detects)
SL-146-SA5A-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.61	1.1	PQL	mg/Kg	J (all detects)
SL-172-SA5A-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.34	1.1	PQL	mg/Kg	J (all detects)
SL-173-SA5A-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.44	1.1	PQL	mg/Kg	J (all detects)
SL-174-SA5A-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.27	1.2	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE092 **Laboratory: LL**

EDD Filename: DE092_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-053-SA5A-SB-3.0-4.0	MERCURY	J	0.0060	0.105	PQL	mg/Kg	J (all detects)
SL-054-SA5A-SB-4.0-5.0	MERCURY	J	0.0036	0.109	PQL	mg/Kg	J (all detects)
SL-054-SA5A-SB-9.0-10.0	MERCURY	J	0.0066	0.109	PQL	mg/Kg	J (all detects)
SL-055-SA5A-SB-2.0-3.0	MERCURY	J	0.0058	0.105	PQL	mg/Kg	J (all detects)
SL-126-SA5A-SS-0.0-0.5	MERCURY	J	0.0053	0.113	PQL	mg/Kg	J (all detects)
SL-133-SA5A-SS-0.0-0.5	MERCURY	J	0.0847	0.112	PQL	mg/Kg	J (all detects)
SL-144-SA5A-SS-0.0-0.5	MERCURY	J	0.0374	0.107	PQL	mg/Kg	J (all detects)
SL-146-SA5A-SS-0.0-0.5	MERCURY	J	0.0134	0.115	PQL	mg/Kg	J (all detects)
SL-171-SA5A-SS-0.0-0.5	MERCURY	J	0.0189	0.112	PQL	mg/Kg	J (all detects)
SL-172-SA5A-SS-0.0-0.5	MERCURY	J	0.0189	0.106	PQL	mg/Kg	J (all detects)
SL-173-SA5A-SS-0.0-0.5	MERCURY	J	0.0059	0.107	PQL	mg/Kg	J (all detects)
SL-174-SA5A-SS-0.0-0.5	MERCURY	J	0.0039	0.117	PQL	mg/Kg	J (all detects)

Method: 8081A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-132-SA5A-SS-0.0-0.5	ENDRIN ALDEHYDE MIREX	J J	0.082 0.12	0.38 0.38	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-146-SA5A-SS-0.0-0.5	HEPTACHLOR	J	0.14	0.19	PQL	ug/Kg	J (all detects)
SL-171-SA5A-SS-0.0-0.5	ENDRIN ALDEHYDE ENDRIN KETONE	J J	0.095 0.15	0.39 0.39	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-173-SA5A-SS-0.0-0.5	4,4'-DDD DIELDRIN	J J	0.14 0.24	0.39 0.39	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-174-SA5A-SS-0.0-0.5	HEPTACHLOR METHOXYCHLOR MIREX	J J J	0.090 0.49 0.13	0.20 2.0 0.40	PQL PQL PQL	ug/Kg ug/Kg ug/Kg	J (all detects)

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-127-SA5A-SS-0.0-0.5	AROCLOR 1260 Aroclor 5460	J J	1.7 3.1	2.0 3.8	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-133-SA5A-SS-0.0-0.5	Aroclor 5460	J	1.8	3.7	PQL	ug/Kg	J (all detects)
SL-146-SA5A-SS-0.0-0.5	AROCLOR 1260 Aroclor 5460	J J	1.7 3.3	1.9 3.8	PQL PQL	ug/Kg ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE092 **Laboratory: LL**

EDD Filename: DE092_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8151A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-146-SA5A-SS-0.0-0.5	MCPA	J	180	290	PQL	ug/Kg	J (all detects)
SL-171-SA5A-SS-0.0-0.5	DICHLOROPROP	J	1.0	1.9	PQL	ug/Kg	J (all detects)

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-053-SA5A-SB-3.0-4.0	ETHYLBENZENE	J	0.19	4.7	PQL	ug/Kg	J (all detects)
	m,p-Xylene	J	0.61	4.7	PQL	ug/Kg	
	METHYLENE CHLORIDE	J	0.60	4.7	PQL	ug/Kg	
	TOLUENE	J	0.12	4.7	PQL	ug/Kg	
SL-054-SA5A-SB-4.0-5.0	ETHYLBENZENE	J	0.07	4.2	PQL	ug/Kg	J (all detects)
	m,p-Xylene	J	0.22	4.2	PQL	ug/Kg	
	METHYLENE CHLORIDE	J	0.60	4.2	PQL	ug/Kg	
SL-055-SA5A-SB-2.0-3.0	ETHYLBENZENE	J	0.11	4.5	PQL	ug/Kg	J (all detects)
	m,p-Xylene	J	0.33	4.5	PQL	ug/Kg	
	METHYLENE CHLORIDE	J	0.49	4.5	PQL	ug/Kg	
SL-056-SA5A-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.51	4.0	PQL	ug/Kg	J (all detects)

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-053-SA5A-SB-3.0-4.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	22	380	PQL	ug/Kg	J (all detects)
SL-054-SA5A-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	22	370	PQL	ug/Kg	J (all detects)
SL-054-SA5A-SB-9.0-10.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	20	380	PQL	ug/Kg	J (all detects)
SL-055-SA5A-SB-2.0-3.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	26	380	PQL	ug/Kg	J (all detects)
SL-056-SA5A-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	29	380	PQL	ug/Kg	J (all detects)
SL-056-SA5A-SB-7.0-8.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	49	390	PQL	ug/Kg	J (all detects)
SL-126-SA5A-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	46	400	PQL	ug/Kg	J (all detects)
	Butylbenzylphthalate	J	22	200	PQL	ug/Kg	
	FLUORANTHENE	J	20	200	PQL	ug/Kg	
SL-127-SA5A-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	36	390	PQL	ug/Kg	J (all detects)
SL-132-SA5A-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	25	370	PQL	ug/Kg	J (all detects)
SL-133-SA5A-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	25	380	PQL	ug/Kg	J (all detects)
SL-144-SA5A-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	24	380	PQL	ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE092 **Laboratory: LL**

EDD Filename: DE092_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-146-SA5A-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	46	190	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	34	190	PQL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	55	190	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	28	190	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	26	190	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	27	380	PQL	ug/Kg	
	CHRYSENE	J	54	190	PQL	ug/Kg	
	FLUORANTHENE	J	100	190	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	27	190	PQL	ug/Kg	
	PHENANTHRENE	J	70	190	PQL	ug/Kg	
	PYRENE	J	79	190	PQL	ug/Kg	
SL-171-SA5A-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	31	380	PQL	ug/Kg	J (all detects)
SL-172-SA5A-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	18	180	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	38	180	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	40	370	PQL	ug/Kg	
	Butylbenzylphthalate	J	42	180	PQL	ug/Kg	
SL-173-SA5A-SS-0.0-0.5	BENZO(A)PYRENE	J	26	190	PQL	ug/Kg	J (all detects)
	BIS(2-ETHYLHEXYL)PHTHALATE	J	35	370	PQL	ug/Kg	
	Di-n-butylphthalate	J	140	190	PQL	ug/Kg	
SL-174-SA5A-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	27	390	PQL	ug/Kg	J (all detects)

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-054-SA5A-SB-4.0-5.0	BENZO(G,H,I)PERYLENE	J	0.75	1.9	PQL	ug/Kg	J (all detects)
	Di-n-butylphthalate	J	12	20	PQL	ug/Kg	
	Di-n-octylphthalate	J	14	20	PQL	ug/Kg	
SL-126-SA5A-SS-0.0-0.5	ACENAPHTHYLENE	J	0.60	2.0	PQL	ug/Kg	J (all detects)
	ANTHRACENE	J	1.4	2.0	PQL	ug/Kg	
	FLUORENE	J	1.4	2.0	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.8	2.0	PQL	ug/Kg	
	NAPHTHALENE	J	1.6	2.0	PQL	ug/Kg	
SL-127-SA5A-SS-0.0-0.5	ACENAPHTHYLENE	J	0.40	1.9	PQL	ug/Kg	J (all detects)
	ANTHRACENE	J	0.88	1.9	PQL	ug/Kg	
	BENZO(A)PYRENE	J	1.0	1.9	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.0	1.9	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	1.1	1.9	PQL	ug/Kg	
	Butylbenzylphthalate	J	8.7	21	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	0.79	1.9	PQL	ug/Kg	
SL-132-SA5A-SS-0.0-0.5	ANTHRACENE	J	0.66	1.9	PQL	ug/Kg	J (all detects)
	BENZO(A)ANTHRACENE	J	0.94	1.9	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	0.99	1.9	PQL	ug/Kg	
	Di-n-butylphthalate	J	16	20	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	0.77	1.9	PQL	ug/Kg	
	NAPHTHALENE	J	0.76	1.9	PQL	ug/Kg	
	PHENANTHRENE	J	1.4	1.9	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE092 **Laboratory: LL**

EDD Filename: DE092_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8270C SIM**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-133-SA5A-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	1.2	1.9	PQL	ug/Kg	J (all detects)
	BENZO(K)FLUORANTHENE	J	1.3	1.9	PQL	ug/Kg	
	Di-n-octylphthalate	J	15	20	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	0.94	1.9	PQL	ug/Kg	
	NAPHTHALENE	J	1.5	1.9	PQL	ug/Kg	
	PHENANTHRENE	J	1.3	1.9	PQL	ug/Kg	
SL-144-SA5A-SS-0.0-0.5	ANTHRACENE	J	0.47	1.9	PQL	ug/Kg	J (all detects)
	DIBENZO(A,H)ANTHRACENE	J	0.97	1.9	PQL	ug/Kg	
	Di-n-butylphthalate	J	18	21	PQL	ug/Kg	
	Di-n-octylphthalate	J	15	21	PQL	ug/Kg	
	NAPHTHALENE	J	1.5	1.9	PQL	ug/Kg	
SL-146-SA5A-SS-0.0-0.5	ACENAPHTHYLENE	J	1.3	1.9	PQL	ug/Kg	J (all detects)
	DIBENZO(A,H)ANTHRACENE	J	1.1	1.9	PQL	ug/Kg	
	NAPHTHALENE	J	1.1	1.9	PQL	ug/Kg	
SL-171-SA5A-SS-0.0-0.5	BENZO(A)PYRENE	J	1.5	1.9	PQL	ug/Kg	J (all detects)
	BENZO(G,H,I)PERYLENE	J	0.84	1.9	PQL	ug/Kg	
	Butylbenzylphthalate	J	11	20	PQL	ug/Kg	
	CHRYSENE	J	1.6	1.9	PQL	ug/Kg	
	Di-n-octylphthalate	J	14	20	PQL	ug/Kg	
	NAPHTHALENE	J	0.83	1.9	PQL	ug/Kg	
	PHENANTHRENE	J	1.2	1.9	PQL	ug/Kg	
	PYRENE	J	1.8	1.9	PQL	ug/Kg	
SL-172-SA5A-SS-0.0-0.5	BENZO(G,H,I)PERYLENE	J	1.1	1.9	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	0.88	1.9	PQL	ug/Kg	
	Di-n-butylphthalate	J	17	20	PQL	ug/Kg	
	Di-n-octylphthalate	J	14	20	PQL	ug/Kg	
	NAPHTHALENE	J	1.7	1.9	PQL	ug/Kg	
SL-173-SA5A-SS-0.0-0.5	Butylbenzylphthalate	J	18	20	PQL	ug/Kg	J (all detects)
	DIBENZO(A,H)ANTHRACENE	J	0.93	1.9	PQL	ug/Kg	
	Di-n-octylphthalate	J	14	20	PQL	ug/Kg	
	FLUORANTHENE	J	1.2	1.9	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.2	1.9	PQL	ug/Kg	
	PHENANTHRENE	J	0.88	1.9	PQL	ug/Kg	
	PYRENE	J	0.93	1.9	PQL	ug/Kg	
SL-174-SA5A-SS-0.0-0.5	ANTHRACENE	J	1.5	2.0	PQL	ug/Kg	J (all detects)
	DIBENZO(A,H)ANTHRACENE	J	1.7	2.0	PQL	ug/Kg	
	Di-n-butylphthalate	J	18	21	PQL	ug/Kg	
	Di-n-octylphthalate	J	14	21	PQL	ug/Kg	
	NAPHTHALENE	J	1.5	2.0	PQL	ug/Kg	

LDC #: 25911D4 **VALIDATION COMPLETENESS WORKSHEET** Date: 8-3-11

SDG #: DE092 ADR

Laboratory: Lancaster Laboratories

Reviewer: CR

2nd Reviewer: A

METHOD: Metals (EPA SW 846 Method 6010B/6020A/7000)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	N	Sampling dates:
II.	ICP/MS Tune	—	
III.	Calibration	—	
IV.	Blanks	SW	
V.	ICP Interference Check Sample (ICS) Analysis	N	
VI.	Matrix Spike Analysis	N	MS/D (Al, Ba, Ca, Fe, Pb, Mg, Mn, P, Ti, Zn >4x)
VII.	Duplicate Sample Analysis	N	Dup (Sb, Be, Cd, Hg, Ag, Tl <5x)
VIII.	Laboratory Control Samples (LCS)	A	LCS
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	SW	J/UJ/A
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	↓	
XV	Field Blanks	↓	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:

1	SL-126-SA5A-SS-0.0-0.5	11	SL-053-SA5A-SB-3.0-4.0	21		31	
2	SL-127-SA5A-SS-0.0-0.5	12	SL-054-SA5A-SB-4.0-5.0	22		32	
3	SL-132-SA5A-SS-0.0-0.5	13	SL-054-SA5A-SB-9.0-10.0	23		33	
4	SL-133-SA5A-SS-0.0-0.5	14	SL-055-SA5A-SB-2.0-3.0	24		34	
5	SL-144-SA5A-SS-0.0-0.5	15	SL-056-SA5A-SB-4.0-5.0	25		35	
6	SL-146-SA5A-SS-0.0-0.5	16	SL-056-SA5A-SB-7.0-8.0	26		36	
7	SL-171-SA5A-SS-0.0-0.5	17	(X1) MS	27		37	
8	SL-172-SA5A-SS-0.0-0.5	18	MSD	28		38	
9	SL-173-SA5A-SS-0.0-0.5	19	Dup	29		39	
10	SL-174-SA5A-SS-0.0-0.5	20		30		40	

Notes:

LDC #: 25911B4

VALIDATION FINDINGS WORKSHEET
PB/ICB/CCB QUALIFIED SAMPLES

Page: 1 of 1
Reviewer: CR
2nd Reviewer: [illegible]

METHOD: Trace metals (EPA SW 864 Method 6010B/6020/7000) Soil preparation factor applied: 100x x MS: 2xdil
Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: 1-12

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit	1	2	3	4	5	6	7	8	9	10	11	12
Zr			12.7	6.35	5.4	3.3	3.6	4.9	4.6	4.0	3.3	4.0	3.7	2.8	3.9	3.9

Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: 13-16

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit	13	14	15	16						
Zr			9.1	4.55	4.3	~~4.9~~	~~4.6~~ ok	4.1						

Samples with analyte concentrations within five times the associated ICB, CCB or PB concentration are listed above with the identifications from the Validation Completeness Worksheet. These sample results were qualified as not detected, "U".
Note : a - The listed analyte concentration is the highest ICB, CCB, or PB detected in the analysis of each element.

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 9
SERIAL DILUTIONS
SDG No.: DE092
Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: 6216870BKG Serial Dilution Lab Sample ID: 6216870L
Batch ID(s): P06608B, P06626B
Concentration Units: UG/L

Analyte	Mass	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Diff.	Q	M
Aluminum		104612.5600		110701.9500		6		P
Antimony	121	0.9535	B	1.5000	U	100		MS
Arsenic	75	20.1400		35.6200		77		MS
Barium	137	498.0000		843.5000		69	E	MS
Beryllium	9	2.7460		4.7365		72		MS
Boron		55.5600		81.8000	B	47		P
Cadmium	111	1.4040		1.7915	B	28		MS
Calcium		29102.3200		29989.6000		3		P
Chromium	52	93.4400		158.7500		70	E	MS
Cobalt	59	26.7800		47.2600		76	E	MS
Copper	63	49.8700		84.9000		70	E	MS
Iron		157743.0200		162991.8000		3		P
Lead	208	76.2600		126.6500		66	E	MS
Lithium		171.1000		122.3000		29	E	P
Magnesium		34864.5700		35947.4500		3		P
Manganese		2443.5700		2479.3000		1		P
Molybdenum	98	4.5590		7.9200		74		MS
Nickel	60	56.1600		102.6500		83	E	MS
Phosphorus		5290.6800		5228.6500		1		P
Potassium		33324.5900		32978.2000		1		P
Selenium	78	0.5994	B	1.0070	B	68		MS
Silver	107	0.1879	B	0.3931	B	109		MS
Sodium		540.2900	B	1865.0000	U	100		P
Strontium		171.6200		175.2000		2		P
Thallium	203	1.2620		1.6580	B	31		MS
Tin		24.8200	B	50.0000	U	100		P
Titanium		9288.5000		9474.6000		2		P
Vanadium	51	171.6000		298.8500		74	E	MS
Zinc	66	524.8000		891.0000		70	E	MS
Zirconium		46.3900	B	76.2000	B	64		P

NOTE: An E in column Q indicates the presence of a chemical or physical interference in the matrix when the % difference is greater than 10%. This applies only when (I) is greater than or equal to 50x MDL for ICP, 100x MDL for ICP-MS (6020), 50x MDL for ICP-MS (200.8), or 25x MDL for GFAA.

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry

CONCENTRATION QUALIFIERS: DE092 4214
U= Below MDL
B= Below LOQ
FLAGS:
E = Matrix Effects exist as proven by Serial Dilution or Spiked Dilution

SAMPLE DELIVERY GROUP

DE093

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
28-Feb-2011	SL-145-SA5A-SS-0.0-0.5	6217801	N	3050B	6010B	III
28-Feb-2011	SL-145-SA5A-SS-0.0-0.5	6217801	N	3050B	6020	III
28-Feb-2011	SL-145-SA5A-SS-0.0-0.5	6217801	N	3060A	7199	III
28-Feb-2011	SL-145-SA5A-SS-0.0-0.5	6217801	N	3550B	8081A	III
28-Feb-2011	SL-145-SA5A-SS-0.0-0.5	6217801	N	3550B	8082	III
28-Feb-2011	SL-145-SA5A-SS-0.0-0.5	6217801	N	3550B	8151A	III
28-Feb-2011	SL-145-SA5A-SS-0.0-0.5	6217801	N	3550B	8270C	III
28-Feb-2011	SL-145-SA5A-SS-0.0-0.5	6217801	N	3550B	8270C SIM	III
28-Feb-2011	SL-145-SA5A-SS-0.0-0.5	6217801	N	Gen Prep	9045M	III
28-Feb-2011	SL-145-SA5A-SS-0.0-0.5	6217801	N	METHOD	300.0	III
28-Feb-2011	SL-145-SA5A-SS-0.0-0.5	6217801	N	METHOD	314.0	III
28-Feb-2011	SL-145-SA5A-SS-0.0-0.5	6217801	N	METHOD	7471A	III
28-Feb-2011	SL-111-SA5A-SS-0.0-0.5	6217800	N	3050B	6010B	III
28-Feb-2011	SL-111-SA5A-SS-0.0-0.5	6217800	N	3050B	6020	III
28-Feb-2011	SL-111-SA5A-SS-0.0-0.5	6217800	N	3060A	7199	III
28-Feb-2011	SL-111-SA5A-SS-0.0-0.5	6217800	N	3550B	8081A	III
28-Feb-2011	SL-111-SA5A-SS-0.0-0.5	6217800	N	3550B	8082	III
28-Feb-2011	SL-111-SA5A-SS-0.0-0.5	6217800	N	3550B	8151A	III
28-Feb-2011	SL-111-SA5A-SS-0.0-0.5	6217800	N	3550B	8270C	III
28-Feb-2011	SL-111-SA5A-SS-0.0-0.5	6217800	N	3550B	8270C SIM	III
28-Feb-2011	SL-111-SA5A-SS-0.0-0.5	6217800	N	Gen Prep	9045M	III
28-Feb-2011	SL-111-SA5A-SS-0.0-0.5	6217800	N	METHOD	300.0	III
28-Feb-2011	SL-111-SA5A-SS-0.0-0.5	6217800	N	METHOD	314.0	III
28-Feb-2011	SL-111-SA5A-SS-0.0-0.5	6217800	N	METHOD	7471A	III
28-Feb-2011	SL-253-SA5A-SS-0.0-0.5	6217802	N	3050B	6010B	III
28-Feb-2011	SL-253-SA5A-SS-0.0-0.5	6217802	N	3050B	6020	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
28-Feb-2011	SL-253-SA5A-SS-0.0-0.5	6217802	N	3060A	7199	III
28-Feb-2011	SL-253-SA5A-SS-0.0-0.5	6217802	N	3550B	8081A	III
28-Feb-2011	SL-253-SA5A-SS-0.0-0.5	6217802	N	3550B	8082	III
28-Feb-2011	SL-253-SA5A-SS-0.0-0.5	6217802	N	3550B	8151A	III
28-Feb-2011	SL-253-SA5A-SS-0.0-0.5	6217802	N	3550B	8270C	III
28-Feb-2011	SL-253-SA5A-SS-0.0-0.5	6217802	N	3550B	8270C SIM	III
28-Feb-2011	SL-253-SA5A-SS-0.0-0.5	6217802	N	Gen Prep	9045M	III
28-Feb-2011	SL-253-SA5A-SS-0.0-0.5	6217802	N	METHOD	300.0	III
28-Feb-2011	SL-253-SA5A-SS-0.0-0.5	6217802	N	METHOD	314.0	III
28-Feb-2011	SL-253-SA5A-SS-0.0-0.5	6217802	N	METHOD	7471A	III
28-Feb-2011	SL-253-SA5A-SS-0.0-0.5DUP	P217802D291225B	DUP	Gen Prep	9045M	III
28-Feb-2011	SL-087-SA5A-SS-0.0-0.5	6217791	N	3050B	6010B	III
28-Feb-2011	SL-087-SA5A-SS-0.0-0.5	6217791	N	3050B	6020	III
28-Feb-2011	SL-087-SA5A-SS-0.0-0.5	6217791	N	3060A	7199	III
28-Feb-2011	SL-087-SA5A-SS-0.0-0.5	6217791	N	3550B	8081A	III
28-Feb-2011	SL-087-SA5A-SS-0.0-0.5	6217791	N	3550B	8082	III
28-Feb-2011	SL-087-SA5A-SS-0.0-0.5	6217791	N	3550B	8151A	III
28-Feb-2011	SL-087-SA5A-SS-0.0-0.5	6217791	N	3550B	8270C	III
28-Feb-2011	SL-087-SA5A-SS-0.0-0.5	6217791	N	3550B	8270C SIM	III
28-Feb-2011	SL-087-SA5A-SS-0.0-0.5	6217791	N	Gen Prep	9045M	III
28-Feb-2011	SL-087-SA5A-SS-0.0-0.5	6217791	N	METHOD	300.0	III
28-Feb-2011	SL-087-SA5A-SS-0.0-0.5	6217791	N	METHOD	314.0	III
28-Feb-2011	SL-087-SA5A-SS-0.0-0.5	6217791	N	METHOD	7471A	III
28-Feb-2011	SL-087-SA5A-SS-0.0-0.5MS	6217792	MS	3050B	6010B	III
28-Feb-2011	SL-087-SA5A-SS-0.0-0.5MS	6217792	MS	3050B	6020	III
28-Feb-2011	SL-087-SA5A-SS-0.0-0.5MS	6217792	MS	3060A	7199	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
28-Feb-2011	SL-087-SA5A-SS-0.0-0.5MS	6217792	MS	3550B	8081A	III
28-Feb-2011	SL-087-SA5A-SS-0.0-0.5MS	6217792	MS	3550B	8082	III
28-Feb-2011	SL-087-SA5A-SS-0.0-0.5MS	6217792	MS	3550B	8151A	III
28-Feb-2011	SL-087-SA5A-SS-0.0-0.5MS	6217792	MS	3550B	8270C	III
28-Feb-2011	SL-087-SA5A-SS-0.0-0.5MS	6217792	MS	3550B	8270C SIM	III
28-Feb-2011	SL-087-SA5A-SS-0.0-0.5MS	6217792	MS	METHOD	300.0	III
28-Feb-2011	SL-087-SA5A-SS-0.0-0.5MS	6217792	MS	METHOD	314.0	III
28-Feb-2011	SL-087-SA5A-SS-0.0-0.5MS	6217792	MS	METHOD	7471A	III
28-Feb-2011	SL-087-SA5A-SS-0.0-0.5MSD	6217793	MSD	3050B	6010B	III
28-Feb-2011	SL-087-SA5A-SS-0.0-0.5MSD	6217793	MSD	3050B	6020	III
28-Feb-2011	SL-087-SA5A-SS-0.0-0.5MSD	6217793	MSD	3550B	8081A	III
28-Feb-2011	SL-087-SA5A-SS-0.0-0.5MSD	6217793	MSD	3550B	8082	III
28-Feb-2011	SL-087-SA5A-SS-0.0-0.5MSD	6217793	MSD	3550B	8151A	III
28-Feb-2011	SL-087-SA5A-SS-0.0-0.5MSD	6217793	MSD	3550B	8270C	III
28-Feb-2011	SL-087-SA5A-SS-0.0-0.5MSD	6217793	MSD	3550B	8270C SIM	III
28-Feb-2011	SL-087-SA5A-SS-0.0-0.5MSD	6217793	MSD	METHOD	7471A	III
28-Feb-2011	SL-087-SA5A-SS-0.0-0.5DUP	6217794	DUP	3050B	6010B	III
28-Feb-2011	SL-087-SA5A-SS-0.0-0.5DUP	6217794	DUP	3050B	6020	III
28-Feb-2011	SL-087-SA5A-SS-0.0-0.5DUP	6217794	DUP	3060A	7199	III
28-Feb-2011	SL-087-SA5A-SS-0.0-0.5DUP	6217794	DUP	Gen Prep	9045M	III
28-Feb-2011	SL-087-SA5A-SS-0.0-0.5DUP	6217794	DUP	METHOD	300.0	III
28-Feb-2011	SL-087-SA5A-SS-0.0-0.5DUP	6217794	DUP	METHOD	314.0	III
28-Feb-2011	SL-087-SA5A-SS-0.0-0.5DUP	6217794	DUP	METHOD	7471A	III
28-Feb-2011	DUP-05-SA5A-QC-022811	6217790	FD	3050B	6010B	III
28-Feb-2011	DUP-05-SA5A-QC-022811	6217790	FD	3050B	6020	III
28-Feb-2011	DUP-05-SA5A-QC-022811	6217790	FD	3060A	7199	III

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IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
28-Feb-2011	DUP-05-SA5A-QC-022811	6217790	FD	3550B	8081A	III
28-Feb-2011	DUP-05-SA5A-QC-022811	6217790	FD	3550B	8082	III
28-Feb-2011	DUP-05-SA5A-QC-022811	6217790	FD	3550B	8151A	III
28-Feb-2011	DUP-05-SA5A-QC-022811	6217790	FD	3550B	8270C	III
28-Feb-2011	DUP-05-SA5A-QC-022811	6217790	FD	3550B	8270C SIM	III
28-Feb-2011	DUP-05-SA5A-QC-022811	6217790	FD	Gen Prep	9045M	III
28-Feb-2011	DUP-05-SA5A-QC-022811	6217790	FD	METHOD	300.0	III
28-Feb-2011	DUP-05-SA5A-QC-022811	6217790	FD	METHOD	314.0	III
28-Feb-2011	DUP-05-SA5A-QC-022811	6217790	FD	METHOD	7471A	III
28-Feb-2011	EB02-SA5A-022811	6217804	EB	3005A	6010B	III
28-Feb-2011	EB02-SA5A-022811	6217804	EB	3020A	6020	III
28-Feb-2011	EB02-SA5A-022811	6217804	EB	3510C	8081A	III
28-Feb-2011	EB02-SA5A-022811	6217804	EB	3510C	8082	III
28-Feb-2011	EB02-SA5A-022811	6217804	EB	3510C	8270C	III
28-Feb-2011	EB02-SA5A-022811	6217804	EB	3510C	8270C SIM	III
28-Feb-2011	EB02-SA5A-022811	6217804	EB	Gen Prep	300.0	III
28-Feb-2011	EB02-SA5A-022811	6217804	EB	Gen Prep	314.0	III
28-Feb-2011	EB02-SA5A-022811	6217804	EB	Gen Prep	7199	III
28-Feb-2011	EB02-SA5A-022811	6217804	EB	METHOD	7470A	III
28-Feb-2011	EB02-SA5A-022811	6217804	EB	METHOD	8151A	III
28-Feb-2011	SL-106-SA5A-SS-0.0-0.5	6217796	N	3050B	6010B	III
28-Feb-2011	SL-106-SA5A-SS-0.0-0.5	6217796	N	3050B	6020	III
28-Feb-2011	SL-106-SA5A-SS-0.0-0.5	6217796	N	3060A	7199	III
28-Feb-2011	SL-106-SA5A-SS-0.0-0.5	6217796	N	3550B	8081A	III
28-Feb-2011	SL-106-SA5A-SS-0.0-0.5	6217796	N	3550B	8082	III
28-Feb-2011	SL-106-SA5A-SS-0.0-0.5	6217796	N	3550B	8151A	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
28-Feb-2011	SL-106-SA5A-SS-0.0-0.5	6217796	N	3550B	8270C	III
28-Feb-2011	SL-106-SA5A-SS-0.0-0.5	6217796	N	3550B	8270C SIM	III
28-Feb-2011	SL-106-SA5A-SS-0.0-0.5	6217796	N	Gen Prep	9045M	III
28-Feb-2011	SL-106-SA5A-SS-0.0-0.5	6217796	N	METHOD	300.0	III
28-Feb-2011	SL-106-SA5A-SS-0.0-0.5	6217796	N	METHOD	314.0	III
28-Feb-2011	SL-106-SA5A-SS-0.0-0.5	6217796	N	METHOD	7471A	III
28-Feb-2011	SL-106-SA5A-SS-0.0-0.5DUP	P217796D271117B	DUP	METHOD	314.0	III
28-Feb-2011	SL-106-SA5A-SS-0.0-0.5MS	P217796R271141B	MS	METHOD	314.0	III
28-Feb-2011	SL-105-SA5A-SS-0.0-0.5	6217795	N	3050B	6010B	III
28-Feb-2011	SL-105-SA5A-SS-0.0-0.5	6217795	N	3050B	6020	III
28-Feb-2011	SL-105-SA5A-SS-0.0-0.5	6217795	N	3060A	7199	III
28-Feb-2011	SL-105-SA5A-SS-0.0-0.5	6217795	N	3550B	8081A	III
28-Feb-2011	SL-105-SA5A-SS-0.0-0.5	6217795	N	3550B	8082	III
28-Feb-2011	SL-105-SA5A-SS-0.0-0.5	6217795	N	3550B	8151A	III
28-Feb-2011	SL-105-SA5A-SS-0.0-0.5	6217795	N	3550B	8270C	III
28-Feb-2011	SL-105-SA5A-SS-0.0-0.5	6217795	N	3550B	8270C SIM	III
28-Feb-2011	SL-105-SA5A-SS-0.0-0.5	6217795	N	Gen Prep	9045M	III
28-Feb-2011	SL-105-SA5A-SS-0.0-0.5	6217795	N	METHOD	300.0	III
28-Feb-2011	SL-105-SA5A-SS-0.0-0.5	6217795	N	METHOD	314.0	III
28-Feb-2011	SL-105-SA5A-SS-0.0-0.5	6217795	N	METHOD	7471A	III
28-Feb-2011	SL-107-SA5A-SS-0.0-0.5	6217797	N	3050B	6010B	III
28-Feb-2011	SL-107-SA5A-SS-0.0-0.5	6217797	N	3050B	6020	III
28-Feb-2011	SL-107-SA5A-SS-0.0-0.5	6217797	N	3060A	7199	III
28-Feb-2011	SL-107-SA5A-SS-0.0-0.5	6217797	N	3550B	8081A	III
28-Feb-2011	SL-107-SA5A-SS-0.0-0.5	6217797	N	3550B	8082	III
28-Feb-2011	SL-107-SA5A-SS-0.0-0.5	6217797	N	3550B	8151A	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
28-Feb-2011	SL-107-SA5A-SS-0.0-0.5	6217797	N	3550B	8270C	III
28-Feb-2011	SL-107-SA5A-SS-0.0-0.5	6217797	N	3550B	8270C SIM	III
28-Feb-2011	SL-107-SA5A-SS-0.0-0.5	6217797	N	Gen Prep	9045M	III
28-Feb-2011	SL-107-SA5A-SS-0.0-0.5	6217797	N	METHOD	300.0	III
28-Feb-2011	SL-107-SA5A-SS-0.0-0.5	6217797	N	METHOD	314.0	III
28-Feb-2011	SL-107-SA5A-SS-0.0-0.5	6217797	N	METHOD	7471A	III
28-Feb-2011	SL-108-SA5A-SS-0.0-0.5	6217798	N	3050B	6010B	III
28-Feb-2011	SL-108-SA5A-SS-0.0-0.5	6217798	N	3050B	6020	III
28-Feb-2011	SL-108-SA5A-SS-0.0-0.5	6217798	N	3060A	7199	III
28-Feb-2011	SL-108-SA5A-SS-0.0-0.5	6217798	N	3550B	8081A	III
28-Feb-2011	SL-108-SA5A-SS-0.0-0.5	6217798	N	3550B	8082	III
28-Feb-2011	SL-108-SA5A-SS-0.0-0.5	6217798	N	3550B	8151A	III
28-Feb-2011	SL-108-SA5A-SS-0.0-0.5	6217798	N	3550B	8270C	III
28-Feb-2011	SL-108-SA5A-SS-0.0-0.5	6217798	N	3550B	8270C SIM	III
28-Feb-2011	SL-108-SA5A-SS-0.0-0.5	6217798	N	Gen Prep	9045M	III
28-Feb-2011	SL-108-SA5A-SS-0.0-0.5	6217798	N	METHOD	300.0	III
28-Feb-2011	SL-108-SA5A-SS-0.0-0.5	6217798	N	METHOD	314.0	III
28-Feb-2011	SL-108-SA5A-SS-0.0-0.5	6217798	N	METHOD	7471A	III
28-Feb-2011	SL-109-SA5A-SS-0.0-0.5	6217799	N	3050B	6010B	III
28-Feb-2011	SL-109-SA5A-SS-0.0-0.5	6217799	N	3050B	6020	III
28-Feb-2011	SL-109-SA5A-SS-0.0-0.5	6217799	N	3060A	7199	III
28-Feb-2011	SL-109-SA5A-SS-0.0-0.5	6217799	N	3550B	8081A	III
28-Feb-2011	SL-109-SA5A-SS-0.0-0.5	6217799	N	3550B	8082	III
28-Feb-2011	SL-109-SA5A-SS-0.0-0.5	6217799	N	3550B	8151A	III
28-Feb-2011	SL-109-SA5A-SS-0.0-0.5	6217799	N	3550B	8270C	III
28-Feb-2011	SL-109-SA5A-SS-0.0-0.5	6217799	N	3550B	8270C SIM	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
28-Feb-2011	SL-109-SA5A-SS-0.0-0.5	6217799	N	Gen Prep	9045M	III
28-Feb-2011	SL-109-SA5A-SS-0.0-0.5	6217799	N	METHOD	300.0	III
28-Feb-2011	SL-109-SA5A-SS-0.0-0.5	6217799	N	METHOD	314.0	III
28-Feb-2011	SL-109-SA5A-SS-0.0-0.5	6217799	N	METHOD	7471A	III
28-Feb-2011	SL-237-SA5A-SB-4.0-5.0	6217806	N	3050B	6010B	III
28-Feb-2011	SL-237-SA5A-SB-4.0-5.0	6217806	N	3050B	6020	III
28-Feb-2011	SL-237-SA5A-SB-4.0-5.0	6217806	N	3060A	7199	III
28-Feb-2011	SL-237-SA5A-SB-4.0-5.0	6217806	N	3550B	8082	III
28-Feb-2011	SL-237-SA5A-SB-4.0-5.0	6217806	N	3550B	8270C	III
28-Feb-2011	SL-237-SA5A-SB-4.0-5.0	6217806	N	3550B	8270C SIM	III
28-Feb-2011	SL-237-SA5A-SB-4.0-5.0	6217806	N	5035	8260B	III
28-Feb-2011	SL-237-SA5A-SB-4.0-5.0	6217806	N	5035	8260B SIM	III
28-Feb-2011	SL-237-SA5A-SB-4.0-5.0	6217806	N	Gen Prep	9045M	III
28-Feb-2011	SL-237-SA5A-SB-4.0-5.0	6217806	N	METHOD	300.0	III
28-Feb-2011	SL-237-SA5A-SB-4.0-5.0	6217806	N	METHOD	314.0	III
28-Feb-2011	SL-237-SA5A-SB-4.0-5.0	6217806	N	METHOD	7471A	III
28-Feb-2011	EB03-SA5A-022811	6217805	EB	3005A	6010B	III
28-Feb-2011	EB03-SA5A-022811	6217805	EB	3020A	6020	III
28-Feb-2011	EB03-SA5A-022811	6217805	EB	3510C	8081A	III
28-Feb-2011	EB03-SA5A-022811	6217805	EB	3510C	8082	III
28-Feb-2011	EB03-SA5A-022811	6217805	EB	3510C	8270C	III
28-Feb-2011	EB03-SA5A-022811	6217805	EB	3510C	8270C SIM	III
28-Feb-2011	EB03-SA5A-022811	6217805	EB	Gen Prep	300.0	III
28-Feb-2011	EB03-SA5A-022811	6217805	EB	Gen Prep	314.0	III
28-Feb-2011	EB03-SA5A-022811	6217805	EB	Gen Prep	7199	III
28-Feb-2011	EB03-SA5A-022811	6217805	EB	METHOD	7470A	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
28-Feb-2011	EB03-SA5A-022811	6217805	EB	METHOD	8151A	III
28-Feb-2011	SL-237-SA5A-SB-9.0-10.0	6217807	N	3050B	6010B	III
28-Feb-2011	SL-237-SA5A-SB-9.0-10.0	6217807	N	3050B	6020	III
28-Feb-2011	SL-237-SA5A-SB-9.0-10.0	6217807	N	3060A	7199	III
28-Feb-2011	SL-237-SA5A-SB-9.0-10.0	6217807	N	3550B	8082	III
28-Feb-2011	SL-237-SA5A-SB-9.0-10.0	6217807	N	3550B	8270C	III
28-Feb-2011	SL-237-SA5A-SB-9.0-10.0	6217807	N	3550B	8270C SIM	III
28-Feb-2011	SL-237-SA5A-SB-9.0-10.0	6217807	N	Gen Prep	9045M	III
28-Feb-2011	SL-237-SA5A-SB-9.0-10.0	6217807	N	METHOD	300.0	III
28-Feb-2011	SL-237-SA5A-SB-9.0-10.0	6217807	N	METHOD	314.0	III
28-Feb-2011	SL-237-SA5A-SB-9.0-10.0	6217807	N	METHOD	7471A	III
28-Feb-2011	SL-255-SA5A-SS-0.0-0.5	6217803	N	3050B	6010B	III
28-Feb-2011	SL-255-SA5A-SS-0.0-0.5	6217803	N	3050B	6020	III
28-Feb-2011	SL-255-SA5A-SS-0.0-0.5	6217803	N	3060A	7199	III
28-Feb-2011	SL-255-SA5A-SS-0.0-0.5	6217803	N	3550B	8081A	III
28-Feb-2011	SL-255-SA5A-SS-0.0-0.5	6217803	N	3550B	8082	III
28-Feb-2011	SL-255-SA5A-SS-0.0-0.5	6217803	N	3550B	8151A	III
28-Feb-2011	SL-255-SA5A-SS-0.0-0.5	6217803	N	3550B	8270C	III
28-Feb-2011	SL-255-SA5A-SS-0.0-0.5	6217803	N	3550B	8270C SIM	III
28-Feb-2011	SL-255-SA5A-SS-0.0-0.5	6217803	N	Gen Prep	9045M	III
28-Feb-2011	SL-255-SA5A-SS-0.0-0.5	6217803	N	METHOD	300.0	III
28-Feb-2011	SL-255-SA5A-SS-0.0-0.5	6217803	N	METHOD	314.0	III
28-Feb-2011	SL-255-SA5A-SS-0.0-0.5	6217803	N	METHOD	7471A	III
28-Feb-2011	SL-255-SA5A-SS-0.0-0.5DUP	P217803D271116B	DUP	METHOD	300.0	III
28-Feb-2011	SL-255-SA5A-SS-0.0-0.5MS	P217803R271130B	MS	METHOD	300.0	III
28-Feb-2011	TB-022811	6217808	TB	5030B	8260B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
28-Feb-2011	TB-022811	6217808	TB	5030B	8260B SIM	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE093 | Laboratory: LL

EDD Filename: DE093_v1 | eQAPP Name: CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: DUP-05-SA5A-QC-022811 *Collected:* 2/28/2011 12:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.5		0.95	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-087-SA5A-SS-0.0-0.5 *Collected:* 2/28/2011 12:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.8		0.94	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-105-SA5A-SS-0.0-0.5 *Collected:* 2/28/2011 2:22:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.8		0.94	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-106-SA5A-SS-0.0-0.5 *Collected:* 2/28/2011 2:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.7		0.92	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-107-SA5A-SS-0.0-0.5 *Collected:* 2/28/2011 2:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.3		0.95	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-108-SA5A-SS-0.0-0.5 *Collected:* 2/28/2011 2:56:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.9		0.97	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-109-SA5A-SS-0.0-0.5 *Collected:* 2/28/2011 3:12:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.7		0.94	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-111-SA5A-SS-0.0-0.5 *Collected:* 2/28/2011 10:25:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.6		1.0	MDL	1.3	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE093 **Laboratory: LL**

EDD Filename: DE093_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: GENCHEM

Method: 300.0 **Matrix: SO**

Sample ID: SL-145-SA5A-SS-0.0-0.5 *Collected:* 2/28/2011 9:42:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.9		0.93	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-253-SA5A-SS-0.0-0.5 *Collected:* 2/28/2011 11:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.1		0.97	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-255-SA5A-SS-0.0-0.5 *Collected:* 2/28/2011 3:58:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.0	J	0.87	MDL	1.1	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 6010B **Matrix: AQ**

Sample ID: EB03-SA5A-022811 *Collected:* 2/28/2011 3:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
IRON	0.0665	J	0.0522	MDL	0.200	PQL	mg/L	J	Z
MANGANESE	0.00088	J	0.00084	MDL	0.0050	PQL	mg/L	J	Z

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: DUP-05-SA5A-QC-022811 *Collected:* 2/28/2011 12:05:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	3400		21.0	MDL	58.3	PQL	mg/Kg	J	Q
SODIUM	67.9	J	43.5	MDL	117	PQL	mg/Kg	J	Z
TIN	2.90	J	1.17	MDL	11.7	PQL	mg/Kg	U	B
Zirconium	1.18	J	0.979	MDL	5.83	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE093 **Laboratory: LL**

EDD Filename: DE093_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6010B** ***Matrix:*** **SO**

Sample ID: **SL-087-SA5A-SS-0.0-0.5** ***Collected:*** **2/28/2011 12:00:00** ***Analysis Type:*** **REA** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	3310		20.5	MDL	56.9	PQL	mg/Kg	J	Q
SODIUM	76.1	J	42.5	MDL	114	PQL	mg/Kg	J	Z
TIN	2.91	J	1.14	MDL	11.4	PQL	mg/Kg	U	B
Zirconium	1.12	J	0.956	MDL	5.69	PQL	mg/Kg	J	Z

Sample ID: **SL-105-SA5A-SS-0.0-0.5** ***Collected:*** **2/28/2011 2:22:00** ***Analysis Type:*** **REA** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	3650		20.8	MDL	57.7	PQL	mg/Kg	J	Q
SODIUM	77.4	J	43.1	MDL	115	PQL	mg/Kg	J	Z
TIN	2.94	J	1.15	MDL	11.5	PQL	mg/Kg	U	B
Zirconium	1.45	J	0.970	MDL	5.77	PQL	mg/Kg	J	Z

Sample ID: **SL-106-SA5A-SS-0.0-0.5** ***Collected:*** **2/28/2011 2:05:00** ***Analysis Type:*** **REA** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	3480		20.4	MDL	56.7	PQL	mg/Kg	J	Q
SODIUM	80.5	J	42.3	MDL	113	PQL	mg/Kg	J	Z
TIN	2.96	J	1.13	MDL	11.3	PQL	mg/Kg	U	B
Zirconium	3.12	J	0.953	MDL	5.67	PQL	mg/Kg	J	Z

Sample ID: **SL-107-SA5A-SS-0.0-0.5** ***Collected:*** **2/28/2011 2:40:00** ***Analysis Type:*** **REA** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	3790		20.7	MDL	57.4	PQL	mg/Kg	J	Q
SODIUM	103	J	42.8	MDL	115	PQL	mg/Kg	J	Z
TIN	3.14	J	1.15	MDL	11.5	PQL	mg/Kg	U	B
Zirconium	1.64	J	0.964	MDL	5.74	PQL	mg/Kg	J	Z

Sample ID: **SL-108-SA5A-SS-0.0-0.5** ***Collected:*** **2/28/2011 2:56:00** ***Analysis Type:*** **REA** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	2960		21.6	MDL	59.9	PQL	mg/Kg	J	Q
SODIUM	70.1	J	44.7	MDL	120	PQL	mg/Kg	J	Z
TIN	2.90	J	1.20	MDL	12.0	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE093 **Laboratory: LL**

EDD Filename: DE093_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6010B** ***Matrix:*** **SO**

Sample ID: **SL-109-SA5A-SS-0.0-0.5** ***Collected:*** **2/28/2011 3:12:00** ***Analysis Type:*** **REA** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	2880		20.7	MDL	57.5	PQL	mg/Kg	J	Q
SODIUM	68.1	J	42.9	MDL	115	PQL	mg/Kg	J	Z
TIN	2.63	J	1.15	MDL	11.5	PQL	mg/Kg	U	B
Zirconium	1.08	J	0.967	MDL	5.75	PQL	mg/Kg	J	Z

Sample ID: **SL-111-SA5A-SS-0.0-0.5** ***Collected:*** **2/28/2011 10:25:00** ***Analysis Type:*** **REA** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	5.28	J	1.10	MDL	6.16	PQL	mg/Kg	J	Z
POTASSIUM	2430		22.2	MDL	61.6	PQL	mg/Kg	J	Q
SODIUM	52.1	J	46.0	MDL	123	PQL	mg/Kg	J	Z
TIN	2.62	J	1.23	MDL	12.3	PQL	mg/Kg	U	B

Sample ID: **SL-145-SA5A-SS-0.0-0.5** ***Collected:*** **2/28/2011 9:42:00** ***Analysis Type:*** **REA** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	2770		20.0	MDL	55.6	PQL	mg/Kg	J	Q
SODIUM	59.1	J	41.5	MDL	111	PQL	mg/Kg	J	Z
TIN	2.72	J	1.11	MDL	11.1	PQL	mg/Kg	U	B
Zirconium	1.01	J	0.935	MDL	5.56	PQL	mg/Kg	J	Z

Sample ID: **SL-237-SA5A-SB-4.0-5.0** ***Collected:*** **2/28/2011 3:35:00** ***Analysis Type:*** **REA** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	3550		19.8	MDL	54.9	PQL	mg/Kg	J	Q
TIN	2.67	J	1.10	MDL	11.0	PQL	mg/Kg	U	B
Zirconium	1.42	J	0.923	MDL	5.49	PQL	mg/Kg	J	Z

Sample ID: **SL-237-SA5A-SB-9.0-10.0** ***Collected:*** **2/28/2011 3:40:00** ***Analysis Type:*** **REA** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	4.99	J	0.985	MDL	5.53	PQL	mg/Kg	J	Z
POTASSIUM	2790		19.9	MDL	55.3	PQL	mg/Kg	J	Q
TIN	2.56	J	1.11	MDL	11.1	PQL	mg/Kg	U	B
Zirconium	2.89	J	0.929	MDL	5.53	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE093 **Laboratory: LL**

EDD Filename: DE093_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-253-SA5A-SS-0.0-0.5 *Collected:* 2/28/2011 11:10:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	3720		21.3	MDL	59.2	PQL	mg/Kg	J	Q
SODIUM	55.6	J	44.2	MDL	118	PQL	mg/Kg	J	Z
TIN	2.74	J	1.18	MDL	11.8	PQL	mg/Kg	U	B

Sample ID: SL-255-SA5A-SS-0.0-0.5 *Collected:* 2/28/2011 3:58:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.28	J	0.954	MDL	5.36	PQL	mg/Kg	J	Z
POTASSIUM	575		19.3	MDL	53.6	PQL	mg/Kg	J	Q
SODIUM	58.4	J	40.0	MDL	107	PQL	mg/Kg	J	Z
TIN	1.67	J	1.07	MDL	10.7	PQL	mg/Kg	U	B
Zirconium	1.61	J	0.900	MDL	5.36	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 6020 **Matrix:** AQ

Sample ID: EB03-SA5A-022811 *Collected:* 2/28/2011 3:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	0.000066	J	0.000052	MDL	0.0010	PQL	mg/L	J	Z

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: DUP-05-SA5A-QC-022811 *Collected:* 2/28/2011 12:05:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.236	J	0.0713	MDL	0.238	PQL	mg/Kg	J	Z, Q
ARSENIC	7.71		0.0951	MDL	0.476	PQL	mg/Kg	J	Q
BERYLLIUM	0.937		0.0190	MDL	0.119	PQL	mg/Kg	J	Q
CHROMIUM	30.3		0.143	MDL	0.476	PQL	mg/Kg	J	Q
COBALT	7.72		0.0238	MDL	0.119	PQL	mg/Kg	J	Q
LEAD	14.4		0.0124	MDL	0.238	PQL	mg/Kg	J	Q, A
NICKEL	18.6		0.119	MDL	0.476	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE093 **Laboratory: LL**

EDD Filename: DE093_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6020** ***Matrix:*** **SO**

Sample ID: **DUP-05-SA5A-QC-022811** ***Collected:*** **2/28/2011 12:05:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0525	J	0.0143	MDL	0.119	PQL	mg/Kg	J	Z, Q
THALLIUM	0.412		0.0357	MDL	0.119	PQL	mg/Kg	J	Q

Sample ID: **DUP-05-SA5A-QC-022811** ***Collected:*** **2/28/2011 12:05:00** ***Analysis Type:*** **REA5** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.226	J	0.0476	MDL	0.476	PQL	mg/Kg	J	Z

Sample ID: **DUP-05-SA5A-QC-022811** ***Collected:*** **2/28/2011 12:05:00** ***Analysis Type:*** **REA7** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.243		0.0476	MDL	0.119	PQL	mg/Kg	J	Q
COPPER	11.6		0.0785	MDL	0.476	PQL	mg/Kg	J	Q, A

Sample ID: **DUP-05-SA5A-QC-022811** ***Collected:*** **2/28/2011 12:05:00** ***Analysis Type:*** **REA9** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.07		0.0595	MDL	0.119	PQL	mg/Kg	J	Q, E

Sample ID: **SL-087-SA5A-SS-0.0-0.5** ***Collected:*** **2/28/2011 12:00:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.259		0.0690	MDL	0.230	PQL	mg/Kg	J	Q
ARSENIC	7.16		0.0919	MDL	0.460	PQL	mg/Kg	J	Q
BERYLLIUM	0.922		0.0184	MDL	0.115	PQL	mg/Kg	J	Q
CHROMIUM	29.6		0.138	MDL	0.460	PQL	mg/Kg	J	Q
COBALT	7.59		0.0230	MDL	0.115	PQL	mg/Kg	J	Q
LEAD	13.3		0.0120	MDL	0.230	PQL	mg/Kg	J	Q, A
NICKEL	17.2		0.115	MDL	0.460	PQL	mg/Kg	J	Q
SILVER	0.0838	J	0.0138	MDL	0.115	PQL	mg/Kg	J	Z, Q
THALLIUM	0.316		0.0345	MDL	0.115	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE093 **Laboratory: LL**

EDD Filename: DE093_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-087-SA5A-SS-0.0-0.5 *Collected:* 2/28/2011 12:00:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.200	J	0.0460	MDL	0.460	PQL	mg/Kg	J	Z

Sample ID: SL-087-SA5A-SS-0.0-0.5 *Collected:* 2/28/2011 12:00:00 *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	9.40		0.0774	MDL	0.469	PQL	mg/Kg	J	Q, A

Sample ID: SL-087-SA5A-SS-0.0-0.5 *Collected:* 2/28/2011 12:00:00 *Analysis Type:* REA8 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.186		0.0469	MDL	0.117	PQL	mg/Kg	J	Q

Sample ID: SL-087-SA5A-SS-0.0-0.5 *Collected:* 2/28/2011 12:00:00 *Analysis Type:* REA9 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.738		0.0586	MDL	0.117	PQL	mg/Kg	J	Q, E

Sample ID: SL-105-SA5A-SS-0.0-0.5 *Collected:* 2/28/2011 2:22:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.282		0.0700	MDL	0.233	PQL	mg/Kg	J	Q
ARSENIC	7.13		0.0933	MDL	0.466	PQL	mg/Kg	J	Q
BERYLLIUM	0.990		0.0187	MDL	0.117	PQL	mg/Kg	J	Q
CHROMIUM	32.7		0.140	MDL	0.466	PQL	mg/Kg	J	Q
COBALT	9.43		0.0233	MDL	0.117	PQL	mg/Kg	J	Q
LEAD	26.1		0.0121	MDL	0.233	PQL	mg/Kg	J	Q, A
NICKEL	21.7		0.117	MDL	0.466	PQL	mg/Kg	J	Q
SILVER	0.0723	J	0.0140	MDL	0.117	PQL	mg/Kg	J	Z, Q
THALLIUM	0.380		0.0350	MDL	0.117	PQL	mg/Kg	J	Q

Sample ID: SL-105-SA5A-SS-0.0-0.5 *Collected:* 2/28/2011 2:22:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.193	J	0.0466	MDL	0.466	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE093 **Laboratory: LL**

EDD Filename: DE093_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 ***Matrix:*** SO

Sample ID: SL-105-SA5A-SS-0.0-0.5 ***Collected:*** 2/28/2011 2:22:00 ***Analysis Type:*** REA7 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.526		0.0462	MDL	0.115	PQL	mg/Kg	J	Q
COPPER	15.0		0.0762	MDL	0.462	PQL	mg/Kg	J	Q, A

Sample ID: SL-105-SA5A-SS-0.0-0.5 ***Collected:*** 2/28/2011 2:22:00 ***Analysis Type:*** REA9 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	14.5		0.0577	MDL	0.115	PQL	mg/Kg	J	Q, E

Sample ID: SL-106-SA5A-SS-0.0-0.5 ***Collected:*** 2/28/2011 2:05:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.230		0.0680	MDL	0.227	PQL	mg/Kg	J	Q
ARSENIC	9.96		0.0907	MDL	0.454	PQL	mg/Kg	J	Q
BERYLLIUM	1.19		0.0181	MDL	0.113	PQL	mg/Kg	J	Q
CHROMIUM	35.4		0.136	MDL	0.454	PQL	mg/Kg	J	Q
COBALT	10.1		0.0227	MDL	0.113	PQL	mg/Kg	J	Q
LEAD	11.8		0.0118	MDL	0.227	PQL	mg/Kg	J	Q, A
NICKEL	22.2		0.113	MDL	0.454	PQL	mg/Kg	J	Q
SILVER	0.0714	J	0.0136	MDL	0.113	PQL	mg/Kg	J	Z, Q
THALLIUM	0.428		0.0340	MDL	0.113	PQL	mg/Kg	J	Q

Sample ID: SL-106-SA5A-SS-0.0-0.5 ***Collected:*** 2/28/2011 2:05:00 ***Analysis Type:*** REA5 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.223	J	0.0454	MDL	0.454	PQL	mg/Kg	J	Z

Sample ID: SL-106-SA5A-SS-0.0-0.5 ***Collected:*** 2/28/2011 2:05:00 ***Analysis Type:*** REA7 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	15.8		0.0741	MDL	0.449	PQL	mg/Kg	J	Q, A

Sample ID: SL-106-SA5A-SS-0.0-0.5 ***Collected:*** 2/28/2011 2:05:00 ***Analysis Type:*** REA8 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.167		0.0449	MDL	0.112	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE093 **Laboratory: LL**

EDD Filename: DE093_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6020** ***Matrix:*** **SO**

Sample ID: **SL-106-SA5A-SS-0.0-0.5** ***Collected:*** **2/28/2011 2:05:00** ***Analysis Type:*** **REA9** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.02		0.0562	MDL	0.112	PQL	mg/Kg	J	Q, E

Sample ID: **SL-107-SA5A-SS-0.0-0.5** ***Collected:*** **2/28/2011 2:40:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.206	J	0.0695	MDL	0.232	PQL	mg/Kg	J	Z, Q
ARSENIC	5.96		0.0927	MDL	0.463	PQL	mg/Kg	J	Q
BERYLLIUM	0.634		0.0185	MDL	0.116	PQL	mg/Kg	J	Q
CHROMIUM	25.3		0.139	MDL	0.463	PQL	mg/Kg	J	Q
COBALT	7.36		0.0232	MDL	0.116	PQL	mg/Kg	J	Q
LEAD	59.7		0.0120	MDL	0.232	PQL	mg/Kg	J	Q, A
NICKEL	18.5		0.116	MDL	0.463	PQL	mg/Kg	J	Q
SILVER	0.106	J	0.0139	MDL	0.116	PQL	mg/Kg	J	Z, Q
THALLIUM	0.264		0.0348	MDL	0.116	PQL	mg/Kg	J	Q

Sample ID: **SL-107-SA5A-SS-0.0-0.5** ***Collected:*** **2/28/2011 2:40:00** ***Analysis Type:*** **REA5** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.180	J	0.0463	MDL	0.463	PQL	mg/Kg	J	Z

Sample ID: **SL-107-SA5A-SS-0.0-0.5** ***Collected:*** **2/28/2011 2:40:00** ***Analysis Type:*** **REA7** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.750		0.0473	MDL	0.118	PQL	mg/Kg	J	Q
COPPER	18.4		0.0780	MDL	0.473	PQL	mg/Kg	J	Q, A

Sample ID: **SL-107-SA5A-SS-0.0-0.5** ***Collected:*** **2/28/2011 2:40:00** ***Analysis Type:*** **REA9** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.41		0.0591	MDL	0.118	PQL	mg/Kg	J	Q, E

Sample ID: **SL-108-SA5A-SS-0.0-0.5** ***Collected:*** **2/28/2011 2:56:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.280		0.0726	MDL	0.242	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE093 **Laboratory: LL**

EDD Filename: DE093_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 ***Matrix:*** SO

Sample ID: SL-108-SA5A-SS-0.0-0.5 ***Collected:*** 2/28/2011 2:56:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	8.54		0.0969	MDL	0.484	PQL	mg/Kg	J	Q
BERYLLIUM	0.825		0.0194	MDL	0.121	PQL	mg/Kg	J	Q
CHROMIUM	25.8		0.145	MDL	0.484	PQL	mg/Kg	J	Q
COBALT	7.48		0.0242	MDL	0.121	PQL	mg/Kg	J	Q
LEAD	27.8		0.0126	MDL	0.242	PQL	mg/Kg	J	Q, A
NICKEL	18.2		0.121	MDL	0.484	PQL	mg/Kg	J	Q
SILVER	0.0506	J	0.0145	MDL	0.121	PQL	mg/Kg	J	Z, Q
THALLIUM	0.326		0.0363	MDL	0.121	PQL	mg/Kg	J	Q

Sample ID: SL-108-SA5A-SS-0.0-0.5 ***Collected:*** 2/28/2011 2:56:00 ***Analysis Type:*** REA5 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.233	J	0.0484	MDL	0.484	PQL	mg/Kg	J	Z

Sample ID: SL-108-SA5A-SS-0.0-0.5 ***Collected:*** 2/28/2011 2:56:00 ***Analysis Type:*** REA7 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	12.3		0.0768	MDL	0.466	PQL	mg/Kg	J	Q, A

Sample ID: SL-108-SA5A-SS-0.0-0.5 ***Collected:*** 2/28/2011 2:56:00 ***Analysis Type:*** REA8 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.112	J	0.0466	MDL	0.116	PQL	mg/Kg	J	Z, Q

Sample ID: SL-108-SA5A-SS-0.0-0.5 ***Collected:*** 2/28/2011 2:56:00 ***Analysis Type:*** REA9 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.801		0.0582	MDL	0.116	PQL	mg/Kg	J	Q, E

Sample ID: SL-109-SA5A-SS-0.0-0.5 ***Collected:*** 2/28/2011 3:12:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.197	J	0.0697	MDL	0.232	PQL	mg/Kg	J	Z, Q
ARSENIC	5.77		0.0930	MDL	0.465	PQL	mg/Kg	J	Q
BERYLLIUM	0.603		0.0186	MDL	0.116	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE093 **Laboratory: LL**

EDD Filename: DE093_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6020** ***Matrix:*** **SO**

Sample ID: **SL-109-SA5A-SS-0.0-0.5** ***Collected:*** **2/28/2011 3:12:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHROMIUM	27.6		0.139	MDL	0.465	PQL	mg/Kg	J	Q
COBALT	6.46		0.0232	MDL	0.116	PQL	mg/Kg	J	Q
LEAD	17.9		0.0121	MDL	0.232	PQL	mg/Kg	J	Q, A
NICKEL	15.1		0.116	MDL	0.465	PQL	mg/Kg	J	Q
SILVER	0.135		0.0139	MDL	0.116	PQL	mg/Kg	J	Q
THALLIUM	0.250		0.0349	MDL	0.116	PQL	mg/Kg	J	Q

Sample ID: **SL-109-SA5A-SS-0.0-0.5** ***Collected:*** **2/28/2011 3:12:00** ***Analysis Type:*** **REA5** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.136	J	0.0465	MDL	0.465	PQL	mg/Kg	J	Z

Sample ID: **SL-109-SA5A-SS-0.0-0.5** ***Collected:*** **2/28/2011 3:12:00** ***Analysis Type:*** **REA7** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.214		0.0460	MDL	0.115	PQL	mg/Kg	J	Q
COPPER	14.2		0.0759	MDL	0.460	PQL	mg/Kg	J	Q, A

Sample ID: **SL-109-SA5A-SS-0.0-0.5** ***Collected:*** **2/28/2011 3:12:00** ***Analysis Type:*** **REA9** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	6.42		0.0575	MDL	0.115	PQL	mg/Kg	J	Q, E

Sample ID: **SL-111-SA5A-SS-0.0-0.5** ***Collected:*** **2/28/2011 10:25:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.202	J	0.0754	MDL	0.251	PQL	mg/Kg	J	Z, Q
ARSENIC	3.97		0.101	MDL	0.503	PQL	mg/Kg	J	Q
BERYLLIUM	0.623		0.0201	MDL	0.126	PQL	mg/Kg	J	Q
CHROMIUM	21.9		0.151	MDL	0.503	PQL	mg/Kg	J	Q
COBALT	5.56		0.0251	MDL	0.126	PQL	mg/Kg	J	Q
LEAD	33.9		0.0131	MDL	0.251	PQL	mg/Kg	J	Q, A
NICKEL	11.6		0.126	MDL	0.503	PQL	mg/Kg	J	Q
SILVER	0.414		0.0151	MDL	0.126	PQL	mg/Kg	J	Q
THALLIUM	0.281		0.0377	MDL	0.126	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE093 **Laboratory: LL**

EDD Filename: DE093_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6020** ***Matrix:*** **SO**

Sample ID: SL-111-SA5A-SS-0.0-0.5 ***Collected:*** 2/28/2011 10:25:00 ***Analysis Type:*** REA5 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0990	J	0.0503	MDL	0.503	PQL	mg/Kg	J	Z

Sample ID: SL-111-SA5A-SS-0.0-0.5 ***Collected:*** 2/28/2011 10:25:00 ***Analysis Type:*** REA7 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	7.75		0.0821	MDL	0.498	PQL	mg/Kg	J	Q, A

Sample ID: SL-111-SA5A-SS-0.0-0.5 ***Collected:*** 2/28/2011 10:25:00 ***Analysis Type:*** REA8 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.226		0.0498	MDL	0.124	PQL	mg/Kg	J	Q

Sample ID: SL-111-SA5A-SS-0.0-0.5 ***Collected:*** 2/28/2011 10:25:00 ***Analysis Type:*** REA9 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.637		0.0622	MDL	0.124	PQL	mg/Kg	J	Q, E

Sample ID: SL-145-SA5A-SS-0.0-0.5 ***Collected:*** 2/28/2011 9:42:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.190	J	0.0674	MDL	0.225	PQL	mg/Kg	J	Z, Q
ARSENIC	5.20		0.0899	MDL	0.449	PQL	mg/Kg	J	Q
BERYLLIUM	0.728		0.0180	MDL	0.112	PQL	mg/Kg	J	Q
CHROMIUM	21.1		0.135	MDL	0.449	PQL	mg/Kg	J	Q
COBALT	6.30		0.0225	MDL	0.112	PQL	mg/Kg	J	Q
LEAD	9.64		0.0117	MDL	0.225	PQL	mg/Kg	J	Q, A
NICKEL	12.8		0.112	MDL	0.449	PQL	mg/Kg	J	Q
SILVER	0.620		0.0135	MDL	0.112	PQL	mg/Kg	J	Q
THALLIUM	0.337		0.0337	MDL	0.112	PQL	mg/Kg	J	Q

Sample ID: SL-145-SA5A-SS-0.0-0.5 ***Collected:*** 2/28/2011 9:42:00 ***Analysis Type:*** REA5 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.108	J	0.0449	MDL	0.449	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE093 **Laboratory: LL**

EDD Filename: DE093_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 ***Matrix:*** SO

Sample ID: SL-145-SA5A-SS-0.0-0.5 ***Collected:*** 2/28/2011 9:42:00 ***Analysis Type:*** REA7 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.173		0.0458	MDL	0.115	PQL	mg/Kg	J	Q
COPPER	8.68		0.0756	MDL	0.458	PQL	mg/Kg	J	Q, A

Sample ID: SL-145-SA5A-SS-0.0-0.5 ***Collected:*** 2/28/2011 9:42:00 ***Analysis Type:*** REA9 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.691		0.0573	MDL	0.115	PQL	mg/Kg	J	Q, E

Sample ID: SL-237-SA5A-SB-4.0-5.0 ***Collected:*** 2/28/2011 3:35:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.149	J	0.0640	MDL	0.213	PQL	mg/Kg	J	Z, Q
ARSENIC	5.12		0.0854	MDL	0.427	PQL	mg/Kg	J	Q
BERYLLIUM	0.843		0.0171	MDL	0.107	PQL	mg/Kg	J	Q
CHROMIUM	21.9		0.128	MDL	0.427	PQL	mg/Kg	J	Q
COBALT	7.66		0.0213	MDL	0.107	PQL	mg/Kg	J	Q
LEAD	6.91		0.0111	MDL	0.213	PQL	mg/Kg	J	Q, A
NICKEL	15.4		0.107	MDL	0.427	PQL	mg/Kg	J	Q
SILVER	0.0718	J	0.0128	MDL	0.107	PQL	mg/Kg	J	Z, Q
THALLIUM	0.404		0.0320	MDL	0.107	PQL	mg/Kg	J	Q

Sample ID: SL-237-SA5A-SB-4.0-5.0 ***Collected:*** 2/28/2011 3:35:00 ***Analysis Type:*** REA5 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.162	J	0.0427	MDL	0.427	PQL	mg/Kg	J	Z

Sample ID: SL-237-SA5A-SB-4.0-5.0 ***Collected:*** 2/28/2011 3:35:00 ***Analysis Type:*** REA7 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.324		0.0435	MDL	0.109	PQL	mg/Kg	J	Q
COPPER	10.5		0.0718	MDL	0.435	PQL	mg/Kg	J	Q, A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE093 **Laboratory: LL**

EDD Filename: DE093_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 ***Matrix:*** SO

Sample ID: SL-237-SA5A-SB-4.0-5.0 ***Collected:*** 2/28/2011 3:35:00 ***Analysis Type:*** REA9 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.17		0.0544	MDL	0.109	PQL	mg/Kg	J	Q, E

Sample ID: SL-237-SA5A-SB-9.0-10.0 ***Collected:*** 2/28/2011 3:40:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.108	J	0.0657	MDL	0.219	PQL	mg/Kg	J	Z, Q
ARSENIC	3.49		0.0876	MDL	0.438	PQL	mg/Kg	J	Q
BERYLLIUM	0.464		0.0175	MDL	0.110	PQL	mg/Kg	J	Q
CHROMIUM	17.4		0.131	MDL	0.438	PQL	mg/Kg	J	Q
COBALT	5.14		0.0219	MDL	0.110	PQL	mg/Kg	J	Q
LEAD	5.66		0.0114	MDL	0.219	PQL	mg/Kg	J	Q, A
NICKEL	10.5		0.110	MDL	0.438	PQL	mg/Kg	J	Q
SILVER	0.0270	J	0.0131	MDL	0.110	PQL	mg/Kg	J	Z, Q
THALLIUM	0.247		0.0329	MDL	0.110	PQL	mg/Kg	J	Q

Sample ID: SL-237-SA5A-SB-9.0-10.0 ***Collected:*** 2/28/2011 3:40:00 ***Analysis Type:*** REA5 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0897	J	0.0438	MDL	0.438	PQL	mg/Kg	J	Z

Sample ID: SL-237-SA5A-SB-9.0-10.0 ***Collected:*** 2/28/2011 3:40:00 ***Analysis Type:*** REA7 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.142		0.0438	MDL	0.110	PQL	mg/Kg	J	Q
COPPER	8.86		0.0723	MDL	0.438	PQL	mg/Kg	J	Q, A

Sample ID: SL-237-SA5A-SB-9.0-10.0 ***Collected:*** 2/28/2011 3:40:00 ***Analysis Type:*** REA9 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	2.82		0.0548	MDL	0.110	PQL	mg/Kg	J	Q, E

Sample ID: SL-253-SA5A-SS-0.0-0.5 ***Collected:*** 2/28/2011 11:10:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.235		0.0704	MDL	0.235	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE093 **Laboratory: LL**

EDD Filename: DE093_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 ***Matrix:*** SO

Sample ID: SL-253-SA5A-SS-0.0-0.5 ***Collected:*** 2/28/2011 11:10:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	4.62		0.0938	MDL	0.469	PQL	mg/Kg	J	Q
BERYLLIUM	0.651		0.0188	MDL	0.117	PQL	mg/Kg	J	Q
CHROMIUM	19.6		0.141	MDL	0.469	PQL	mg/Kg	J	Q
COBALT	5.83		0.0235	MDL	0.117	PQL	mg/Kg	J	Q
LEAD	17.9		0.0122	MDL	0.235	PQL	mg/Kg	J	Q, A
NICKEL	12.5		0.117	MDL	0.469	PQL	mg/Kg	J	Q
SILVER	1.04		0.0141	MDL	0.117	PQL	mg/Kg	J	Q
THALLIUM	0.314		0.0352	MDL	0.117	PQL	mg/Kg	J	Q

Sample ID: SL-253-SA5A-SS-0.0-0.5 ***Collected:*** 2/28/2011 11:10:00 ***Analysis Type:*** REA5 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.147	J	0.0469	MDL	0.469	PQL	mg/Kg	J	Z

Sample ID: SL-253-SA5A-SS-0.0-0.5 ***Collected:*** 2/28/2011 11:10:00 ***Analysis Type:*** REA7 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.409		0.0478	MDL	0.120	PQL	mg/Kg	J	Q
COPPER	12.6		0.0789	MDL	0.478	PQL	mg/Kg	J	Q, A

Sample ID: SL-253-SA5A-SS-0.0-0.5 ***Collected:*** 2/28/2011 11:10:00 ***Analysis Type:*** REA9 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.20		0.0598	MDL	0.120	PQL	mg/Kg	J	Q, E

Sample ID: SL-255-SA5A-SS-0.0-0.5 ***Collected:*** 2/28/2011 3:58:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.105	J	0.0643	MDL	0.214	PQL	mg/Kg	J	Z, Q
ARSENIC	3.17		0.0857	MDL	0.429	PQL	mg/Kg	J	Q
BERYLLIUM	0.174		0.0171	MDL	0.107	PQL	mg/Kg	J	Q
CHROMIUM	13.3		0.129	MDL	0.429	PQL	mg/Kg	J	Q
COBALT	2.38		0.0214	MDL	0.107	PQL	mg/Kg	J	Q
LEAD	2.22		0.0111	MDL	0.214	PQL	mg/Kg	J	Q, A
NICKEL	6.90		0.107	MDL	0.429	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE093 | Laboratory: LL

EDD Filename: DE093_v1 | eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-255-SA5A-SS-0.0-0.5 *Collected:* 2/28/2011 3:58:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
THALLIUM	0.0581	J	0.0321	MDL	0.107	PQL	mg/Kg	J	Z, Q

Sample ID: SL-255-SA5A-SS-0.0-0.5 *Collected:* 2/28/2011 3:58:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.178	J	0.0429	MDL	0.429	PQL	mg/Kg	J	Z

Sample ID: SL-255-SA5A-SS-0.0-0.5 *Collected:* 2/28/2011 3:58:00 *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.207		0.0424	MDL	0.106	PQL	mg/Kg	J	Q
COPPER	4.88		0.0700	MDL	0.424	PQL	mg/Kg	J	Q, A

Sample ID: SL-255-SA5A-SS-0.0-0.5 *Collected:* 2/28/2011 3:58:00 *Analysis Type:* REA9 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.917		0.0531	MDL	0.106	PQL	mg/Kg	J	Q, E

Method Category: METALS

Method: 7199 **Matrix:** SO

Sample ID: DUP-05-SA5A-QC-022811 *Collected:* 2/28/2011 12:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.74	J	0.24	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-087-SA5A-SS-0.0-0.5 *Collected:* 2/28/2011 12:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.64	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-105-SA5A-SS-0.0-0.5 *Collected:* 2/28/2011 2:22:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.82	J	0.24	MDL	1.2	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE093 **Laboratory: LL**

EDD Filename: DE093_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 7199 ***Matrix:*** SO

Sample ID: SL-106-SA5A-SS-0.0-0.5 ***Collected:*** 2/28/2011 2:05:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.40	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-107-SA5A-SS-0.0-0.5 ***Collected:*** 2/28/2011 2:40:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.92	J	0.24	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-108-SA5A-SS-0.0-0.5 ***Collected:*** 2/28/2011 2:56:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.55	J	0.24	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-111-SA5A-SS-0.0-0.5 ***Collected:*** 2/28/2011 10:25:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	1.0	J	0.25	MDL	1.3	PQL	mg/Kg	J	Z

Sample ID: SL-237-SA5A-SB-4.0-5.0 ***Collected:*** 2/28/2011 3:35:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.44	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-237-SA5A-SB-9.0-10.0 ***Collected:*** 2/28/2011 3:40:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.31	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-253-SA5A-SS-0.0-0.5 ***Collected:*** 2/28/2011 11:10:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.43	J	0.24	MDL	1.2	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE093 **Laboratory: LL**

EDD Filename: DE093_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 7471A **Matrix:** SO

Sample ID: DUP-05-SA5A-QC-022811 *Collected:* 2/28/2011 12:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0082	J	0.0033	MDL	0.114	PQL	mg/Kg	J	Z, FD

Sample ID: SL-087-SA5A-SS-0.0-0.5 *Collected:* 2/28/2011 12:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0155	J	0.0033	MDL	0.115	PQL	mg/Kg	J	Z, FD

Sample ID: SL-105-SA5A-SS-0.0-0.5 *Collected:* 2/28/2011 2:22:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0311	J	0.0032	MDL	0.113	PQL	mg/Kg	J	Z

Sample ID: SL-106-SA5A-SS-0.0-0.5 *Collected:* 2/28/2011 2:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0245	J	0.0031	MDL	0.107	PQL	mg/Kg	U	B

Sample ID: SL-107-SA5A-SS-0.0-0.5 *Collected:* 2/28/2011 2:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0308	J	0.0033	MDL	0.114	PQL	mg/Kg	U	B

Sample ID: SL-108-SA5A-SS-0.0-0.5 *Collected:* 2/28/2011 2:56:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0177	J	0.0033	MDL	0.115	PQL	mg/Kg	U	B

Sample ID: SL-109-SA5A-SS-0.0-0.5 *Collected:* 2/28/2011 3:12:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0196	J	0.0033	MDL	0.115	PQL	mg/Kg	U	B

Sample ID: SL-111-SA5A-SS-0.0-0.5 *Collected:* 2/28/2011 10:25:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0331	J	0.0035	MDL	0.121	PQL	mg/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE093 **Laboratory: LL**

EDD Filename: DE093_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 7471A **Matrix: SO**

Sample ID: SL-145-SA5A-SS-0.0-0.5 *Collected:* 2/28/2011 9:42:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0707	J	0.0033	MDL	0.115	PQL	mg/Kg	J	Z

Sample ID: SL-237-SA5A-SB-4.0-5.0 *Collected:* 2/28/2011 3:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0181	J	0.0030	MDL	0.105	PQL	mg/Kg	U	B

Sample ID: SL-237-SA5A-SB-9.0-10.0 *Collected:* 2/28/2011 3:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0419	J	0.0031	MDL	0.108	PQL	mg/Kg	U	B

Sample ID: SL-253-SA5A-SS-0.0-0.5 *Collected:* 2/28/2011 11:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0272	J	0.0034	MDL	0.118	PQL	mg/Kg	U	B

Method Category: SVOA

Method: 8081A **Matrix: SO**

Sample ID: DUP-05-SA5A-QC-022811 *Collected:* 2/28/2011 12:05:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDE	0.30	J	0.078	MDL	0.40	PQL	ug/Kg	J	Z, FD
4,4'-DDT	0.40		0.078	MDL	0.40	PQL	ug/Kg	J	FD

Sample ID: SL-087-SA5A-SS-0.0-0.5 *Collected:* 2/28/2011 12:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDE	0.22	U	0.22	MDL	0.40	PQL	ug/Kg	UJ	FD
4,4'-DDT	0.39	U	0.39	MDL	0.40	PQL	ug/Kg	UJ	FD

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE093 **Laboratory: LL**

EDD Filename: DE093_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8081A **Matrix: SO**

Sample ID: SL-106-SA5A-SS-0.0-0.5 *Collected:* 2/28/2011 2:05:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDE	0.15	J	0.076	MDL	0.39	PQL	ug/Kg	J	Z

Sample ID: SL-108-SA5A-SS-0.0-0.5 *Collected:* 2/28/2011 2:56:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDE	2.5		0.080	MDL	0.41	PQL	ug/Kg	J	S

Sample ID: SL-111-SA5A-SS-0.0-0.5 *Collected:* 2/28/2011 10:25:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDT	2.6		0.084	MDL	0.43	PQL	ug/Kg	J	S

Sample ID: SL-145-SA5A-SS-0.0-0.5 *Collected:* 2/28/2011 9:42:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDT	0.70		0.076	MDL	0.39	PQL	ug/Kg	J	S

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: DUP-05-SA5A-QC-022811 *Collected:* 2/28/2011 12:05:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	0.46	U	0.46	MDL	2.0	PQL	ug/Kg	UJ	FD
Aroclor 5460	1.2	U	1.2	MDL	3.9	PQL	ug/Kg	UJ	FD

Sample ID: SL-087-SA5A-SS-0.0-0.5 *Collected:* 2/28/2011 12:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	0.68	J	0.46	MDL	2.0	PQL	ug/Kg	J	Z, FD
Aroclor 5460	1.2	J	1.2	MDL	3.9	PQL	ug/Kg	J	Z, FD

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE093 **Laboratory: LL**

EDD Filename: DE093_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **8082** ***Matrix:*** **SO**

Sample ID: **SL-106-SA5A-SS-0.0-0.5** ***Collected:*** **2/28/2011 2:05:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	0.88	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: **SL-107-SA5A-SS-0.0-0.5** ***Collected:*** **2/28/2011 2:40:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **5**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	8.4	J	2.3	MDL	10	PQL	ug/Kg	J	Z

Sample ID: **SL-108-SA5A-SS-0.0-0.5** ***Collected:*** **2/28/2011 2:56:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	0.72	J	0.47	MDL	2.1	PQL	ug/Kg	J	Z

Sample ID: **SL-109-SA5A-SS-0.0-0.5** ***Collected:*** **2/28/2011 3:12:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	3.4	J	0.77	MDL	4.0	PQL	ug/Kg	J	Z
AROCLOR 1260	2.7	J	0.92	MDL	4.0	PQL	ug/Kg	J	Z

Sample ID: **SL-111-SA5A-SS-0.0-0.5** ***Collected:*** **2/28/2011 10:25:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **5**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	5.8	J	2.5	MDL	11	PQL	ug/Kg	J	Z
Aroclor 5460	16	J	6.3	MDL	21	PQL	ug/Kg	J	Z

Sample ID: **SL-253-SA5A-SS-0.0-0.5** ***Collected:*** **2/28/2011 11:10:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	1.1	J	0.47	MDL	2.1	PQL	ug/Kg	J	Z
Aroclor 5460	3.2	J	1.2	MDL	4.0	PQL	ug/Kg	J	Z

Sample ID: **SL-255-SA5A-SS-0.0-0.5** ***Collected:*** **2/28/2011 3:58:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **5**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	5.6	J	2.1	MDL	9.2	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE093 **Laboratory: LL**

EDD Filename: DE093_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8151A **Matrix:** SO

Sample ID: DUP-05-SA5A-QC-022811 *Collected:* 2/28/2011 12:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DB	20		0.74	MDL	2.0	PQL	ug/Kg	J	FD
DICHLOROPROP	1.4	J	0.95	MDL	2.0	PQL	ug/Kg	J	Z, FD

Sample ID: SL-087-SA5A-SS-0.0-0.5 *Collected:* 2/28/2011 12:00:00 *Analysis Type:* DL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DB	39	U	39	MDL	39	PQL	ug/Kg	UJ	FD

Sample ID: SL-087-SA5A-SS-0.0-0.5 *Collected:* 2/28/2011 12:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DICHLOROPROP	3.4		0.94	MDL	2.0	PQL	ug/Kg	J	FD
DINOSEB	0.94	U	0.94	MDL	2.8	PQL	ug/Kg	UJ	Q

Sample ID: SL-109-SA5A-SS-0.0-0.5 *Collected:* 2/28/2011 3:12:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MCPA	160	J	89	MDL	290	PQL	ug/Kg	J	Z

Sample ID: SL-253-SA5A-SS-0.0-0.5 *Collected:* 2/28/2011 11:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-D	2.0	J	1.4	MDL	4.3	PQL	ug/Kg	J	Z
DICHLOROPROP	1.1	J	0.97	MDL	2.1	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SL-087-SA5A-SS-0.0-0.5 *Collected:* 2/28/2011 12:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZIDINE	1400	U	1400	MDL	3900	PQL	ug/Kg	UJ	Q

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE093 **Laboratory: LL**

EDD Filename: DE093_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **8270C** ***Matrix:*** **SO**

Sample ID: **SL-105-SA5A-SS-0.0-0.5** ***Collected:*** **2/28/2011 2:22:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	42	J	20	MDL	200	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	33	J	20	MDL	200	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	24	J	20	MDL	200	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	28	J	20	MDL	200	PQL	ug/Kg	J	Z
CHRYSENE	58	J	20	MDL	200	PQL	ug/Kg	J	Z
FLUORANTHENE	81	J	20	MDL	200	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	21	J	20	MDL	200	PQL	ug/Kg	J	Z
PHENANTHRENE	29	J	20	MDL	200	PQL	ug/Kg	J	Z
PYRENE	96	J	20	MDL	200	PQL	ug/Kg	J	Z

Sample ID: **SL-107-SA5A-SS-0.0-0.5** ***Collected:*** **2/28/2011 2:40:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	27	J	20	MDL	200	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	68	J	20	MDL	200	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	73	J	20	MDL	200	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	130	J	20	MDL	200	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	89	J	20	MDL	200	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	76	J	20	MDL	200	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	54	J	20	MDL	400	PQL	ug/Kg	U	B
Butylbenzylphthalate	22	J	20	MDL	200	PQL	ug/Kg	J	Z
CARBAZOLE	33	J	20	MDL	200	PQL	ug/Kg	J	Z
CHRYSENE	150	J	20	MDL	200	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	38	J	20	MDL	200	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	72	J	20	MDL	200	PQL	ug/Kg	J	Z
PHENANTHRENE	96	J	20	MDL	200	PQL	ug/Kg	J	Z

Sample ID: **SL-108-SA5A-SS-0.0-0.5** ***Collected:*** **2/28/2011 2:56:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	34	J	20	MDL	400	PQL	ug/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE093 **Laboratory: LL**

EDD Filename: DE093_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C **Matrix: SO**

Sample ID: SL-109-SA5A-SS-0.0-0.5 *Collected:* 2/28/2011 3:12:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	27	J	20	MDL	390	PQL	ug/Kg	U	B

Sample ID: SL-145-SA5A-SS-0.0-0.5 *Collected:* 2/28/2011 9:42:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	23	J	19	MDL	390	PQL	ug/Kg	U	B

Sample ID: SL-237-SA5A-SB-9.0-10.0 *Collected:* 2/28/2011 3:40:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)PYRENE	71	J	18	MDL	180	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	35	J	18	MDL	180	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	61	J	18	MDL	370	PQL	ug/Kg	U	B
CHRYSENE	100	J	18	MDL	180	PQL	ug/Kg	J	Z
Di-n-butylphthalate	32	J	18	MDL	180	PQL	ug/Kg	J	Z
PHENANTHRENE	40	J	18	MDL	180	PQL	ug/Kg	J	Z
PYRENE	37	J	18	MDL	180	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8270C SIM **Matrix: AQ**

Sample ID: EB02-SA5A-022811 *Collected:* 2/28/2011 12:35:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	0.15	J	0.054	MDL	1.1	PQL	ug/L	U	B
Diethylphthalate	0.077	J	0.054	MDL	1.1	PQL	ug/L	U	B
Di-n-butylphthalate	0.39	J	0.054	MDL	1.1	PQL	ug/L	J	Z
NAPHTHALENE	0.035	J	0.032	MDL	0.054	PQL	ug/L	J	Z
PHENANTHRENE	0.020	J	0.011	MDL	0.054	PQL	ug/L	J	Z

Sample ID: EB03-SA5A-022811 *Collected:* 2/28/2011 3:40:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	0.16	J	0.053	MDL	1.1	PQL	ug/L	U	B
Diethylphthalate	0.10	J	0.053	MDL	1.1	PQL	ug/L	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE093 **Laboratory: LL**

EDD Filename: DE093_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C SIM **Matrix:** AQ

Sample ID: EB03-SA5A-022811 *Collected:* 2/28/2011 3:40:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Di-n-butylphthalate	0.32	J	0.053	MDL	1.1	PQL	ug/L	U	B
NAPHTHALENE	0.035	J	0.032	MDL	0.053	PQL	ug/L	J	Z

Method Category: SVOA

Method: 8270C SIM **Matrix:** SO

Sample ID: DUP-05-SA5A-QC-022811 *Collected:* 2/28/2011 12:05:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACENAPHTHENE	0.79	U	0.79	MDL	2.0	PQL	ug/Kg	UJ	FD
ACENAPHTHYLENE	0.39	U	0.39	MDL	2.0	PQL	ug/Kg	UJ	FD
ANTHRACENE	0.39	U	0.39	MDL	2.0	PQL	ug/Kg	UJ	FD
BENZO(A)ANTHRACENE	0.79	U	0.79	MDL	2.0	PQL	ug/Kg	UJ	FD
BENZO(A)PYRENE	0.79	U	0.79	MDL	2.0	PQL	ug/Kg	UJ	FD
BENZO(B)FLUORANTHENE	1.5	J	0.79	MDL	2.0	PQL	ug/Kg	J	Z, FD
BENZO(G,H,I)PERYLENE	0.79	U	0.79	MDL	2.0	PQL	ug/Kg	UJ	FD
BENZO(K)FLUORANTHENE	0.79	U	0.79	MDL	2.0	PQL	ug/Kg	UJ	FD
BIS(2-ETHYLHEXYL)PHTHALATE	7.1	U	7.1	MDL	21	PQL	ug/Kg	UJ	FD
CHRYSENE	0.53	J	0.39	MDL	2.0	PQL	ug/Kg	J	Z, FD
DIBENZO(A,H)ANTHRACENE	0.79	U	0.79	MDL	2.0	PQL	ug/Kg	UJ	FD
Di-n-octylphthalate	7.1	U	7.1	MDL	21	PQL	ug/Kg	UJ	FD
FLUORANTHENE	0.79	U	0.79	MDL	2.0	PQL	ug/Kg	UJ	FD
FLUORENE	0.79	U	0.79	MDL	2.0	PQL	ug/Kg	UJ	FD
INDENO(1,2,3-CD)PYRENE	0.79	U	0.79	MDL	2.0	PQL	ug/Kg	UJ	FD
PHENANTHRENE	0.79	U	0.79	MDL	2.0	PQL	ug/Kg	UJ	FD
PYRENE	0.79	U	0.79	MDL	2.0	PQL	ug/Kg	UJ	FD

Sample ID: SL-087-SA5A-SS-0.0-0.5 *Collected:* 2/28/2011 12:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACENAPHTHENE	0.78	J	0.78	MDL	1.9	PQL	ug/Kg	J	Z, FD
ACENAPHTHYLENE	0.67	J	0.39	MDL	1.9	PQL	ug/Kg	J	Z, FD
ANTHRACENE	1.6	J	0.39	MDL	1.9	PQL	ug/Kg	J	Z, FD
BENZO(A)ANTHRACENE	2.8		0.78	MDL	1.9	PQL	ug/Kg	J	FD

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE093 **Laboratory: LL**

EDD Filename: DE093_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **8270C SIM** ***Matrix:*** **SO**

Sample ID: **SL-087-SA5A-SS-0.0-0.5** ***Collected:*** **2/28/2011 12:00:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)PYRENE	3.3		0.78	MDL	1.9	PQL	ug/Kg	J	FD
BENZO(B)FLUORANTHENE	12		0.78	MDL	1.9	PQL	ug/Kg	J	FD
BENZO(G,H,I)PERYLENE	1.4	J	0.78	MDL	1.9	PQL	ug/Kg	J	Z, FD
BENZO(K)FLUORANTHENE	3.1		0.78	MDL	1.9	PQL	ug/Kg	J	FD
BIS(2-ETHYLHEXYL)PHTHALATE	16	J	7.0	MDL	21	PQL	ug/Kg	J	Z, FD
CHRYSENE	4.4		0.39	MDL	1.9	PQL	ug/Kg	J	FD
DIBENZO(A,H)ANTHRACENE	0.94	J	0.78	MDL	1.9	PQL	ug/Kg	J	Z, FD
Di-n-octylphthalate	14	J	7.0	MDL	21	PQL	ug/Kg	J	Z, FD
FLUORANTHENE	7.0		0.78	MDL	1.9	PQL	ug/Kg	J	FD
FLUORENE	1.4	J	0.78	MDL	1.9	PQL	ug/Kg	J	Z, FD
INDENO(1,2,3-CD)PYRENE	1.5	J	0.78	MDL	1.9	PQL	ug/Kg	J	Z, FD
PHENANTHRENE	3.6		0.78	MDL	1.9	PQL	ug/Kg	J	FD
PYRENE	6.6		0.78	MDL	1.9	PQL	ug/Kg	J	FD

Sample ID: **SL-105-SA5A-SS-0.0-0.5** ***Collected:*** **2/28/2011 2:22:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **5**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	2.4	J	1.9	MDL	9.7	PQL	ug/Kg	J	Z

Sample ID: **SL-106-SA5A-SS-0.0-0.5** ***Collected:*** **2/28/2011 2:05:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	1.6	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: **SL-108-SA5A-SS-0.0-0.5** ***Collected:*** **2/28/2011 2:56:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **5**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	2.4	J	2.0	MDL	10	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	8.7	J	4.0	MDL	10	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	8.3	J	4.0	MDL	10	PQL	ug/Kg	J	Z

Sample ID: **SL-109-SA5A-SS-0.0-0.5** ***Collected:*** **2/28/2011 3:12:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Di-n-octylphthalate	13	J	7.0	MDL	21	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE093 **Laboratory: LL**

EDD Filename: DE093_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **8270C SIM** ***Matrix:*** **SO**

Sample ID: **SL-111-SA5A-SS-0.0-0.5** ***Collected:*** **2/28/2011 10:25:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	0.51	J	0.42	MDL	2.1	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	1.3	J	0.83	MDL	2.1	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.8	J	0.83	MDL	2.1	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.3	J	0.83	MDL	2.1	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.5	J	0.83	MDL	2.1	PQL	ug/Kg	J	Z
Di-n-octylphthalate	12	J	7.5	MDL	22	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	0.94	J	0.83	MDL	2.1	PQL	ug/Kg	J	Z
PHENANTHRENE	1.5	J	0.83	MDL	2.1	PQL	ug/Kg	J	Z

Sample ID: **SL-145-SA5A-SS-0.0-0.5** ***Collected:*** **2/28/2011 9:42:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **5**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	6.7	J	3.8	MDL	9.5	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	7.3	J	3.8	MDL	9.5	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	4.0	J	3.8	MDL	9.5	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	5.3	J	3.8	MDL	9.5	PQL	ug/Kg	J	Z
PHENANTHRENE	6.7	J	3.8	MDL	9.5	PQL	ug/Kg	J	Z

Sample ID: **SL-237-SA5A-SB-4.0-5.0** ***Collected:*** **2/28/2011 3:35:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Di-n-octylphthalate	11	J	6.6	MDL	20	PQL	ug/Kg	J	Z
NAPHTHALENE	0.86	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: **SL-237-SA5A-SB-9.0-10.0** ***Collected:*** **2/28/2011 3:40:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACENAPHTHYLENE	0.60	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.7	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	1.2	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
Di-n-octylphthalate	12	J	6.6	MDL	20	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	0.74	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
NAPHTHALENE	0.75	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE093 **Laboratory: LL**

EDD Filename: DE093_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C SIM **Matrix:** SO

Sample ID: SL-253-SA5A-SS-0.0-0.5 *Collected:* 2/28/2011 11:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	1.3	J	0.79	MDL	2.0	PQL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	1.4	J	0.79	MDL	2.0	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.3	J	0.79	MDL	2.0	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	11	J	7.1	MDL	21	PQL	ug/Kg	J	Z
Di-n-octylphthalate	11	J	7.1	MDL	21	PQL	ug/Kg	J	Z
FLUORENE	1.6	J	0.79	MDL	2.0	PQL	ug/Kg	J	Z
PYRENE	1.9	J	0.79	MDL	2.0	PQL	ug/Kg	J	Z

Sample ID: SL-255-SA5A-SS-0.0-0.5 *Collected:* 2/28/2011 3:58:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Di-n-octylphthalate	10	J	6.5	MDL	19	PQL	ug/Kg	J	Z

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: SL-237-SA5A-SB-4.0-5.0 *Collected:* 2/28/2011 3:35:00 *Analysis Type:* RES *Dilution:* 0.84

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.45	J	0.22	MDL	3.7	PQL	ug/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE093 **Laboratory: LL**

EDD Filename: DE093_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
*#	Professional Judgment
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Verification Correlation Coefficient
C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE093 **Laboratory: LL**

EDD Filename: DE093_v1 **eQAPP Name: CDM_SSFL_110509**

F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation
L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery Lower Estimation

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE093 **Laboratory: LL**

EDD Filename: DE093_v1 **eQAPP Name: CDM_SSFL_110509**

R	Continuing Calibration Verification Percent Recovery Lower Rejection
R	Continuing Calibration Verification Percent Recovery Upper Estimation
R	Continuing Calibration Verification Percent Recovery Upper Rejection
R	Continuing Calibration Verification Relative Response Factor
R	Initial Calibration Relative Response Factor
R	Initial Calibration Verification Percent Recovery Lower Estimation
R	Initial Calibration Verification Percent Recovery Lower Rejection
R	Initial Calibration Verification Percent Recovery Upper Estimation
R	Initial Calibration Verification Percent Recovery Upper Rejection
R	Initial Calibration Verification Relative Response Factor
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control Outlier Reports

DE093

Method Blank Outlier Report

Lab Reporting Batch ID: DE093 **Laboratory: LL**

EDD Filename: DE093_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **6010B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P06708BB220305	3/11/2011 3:05:00 AM	PHOSPHORUS TIN	1.25 mg/Kg 1.43 mg/Kg	DUP-05-SA5A-QC-022811 SL-087-SA5A-SS-0.0-0.5 SL-105-SA5A-SS-0.0-0.5 SL-106-SA5A-SS-0.0-0.5 SL-107-SA5A-SS-0.0-0.5 SL-108-SA5A-SS-0.0-0.5 SL-109-SA5A-SS-0.0-0.5 SL-111-SA5A-SS-0.0-0.5 SL-145-SA5A-SS-0.0-0.5 SL-237-SA5A-SB-4.0-5.0 SL-237-SA5A-SB-9.0-10.0 SL-253-SA5A-SS-0.0-0.5 SL-255-SA5A-SS-0.0-0.5

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
DUP-05-SA5A-QC-022811(REA)	TIN	2.90 mg/Kg	2.90U mg/Kg
SL-087-SA5A-SS-0.0-0.5(REA)	TIN	2.91 mg/Kg	2.91U mg/Kg
SL-105-SA5A-SS-0.0-0.5(REA)	TIN	2.94 mg/Kg	2.94U mg/Kg
SL-106-SA5A-SS-0.0-0.5(REA)	TIN	2.96 mg/Kg	2.96U mg/Kg
SL-107-SA5A-SS-0.0-0.5(REA)	TIN	3.14 mg/Kg	3.14U mg/Kg
SL-108-SA5A-SS-0.0-0.5(REA)	TIN	2.90 mg/Kg	2.90U mg/Kg
SL-109-SA5A-SS-0.0-0.5(REA)	TIN	2.63 mg/Kg	2.63U mg/Kg
SL-111-SA5A-SS-0.0-0.5(REA)	TIN	2.62 mg/Kg	2.62U mg/Kg
SL-145-SA5A-SS-0.0-0.5(REA)	TIN	2.72 mg/Kg	2.72U mg/Kg
SL-237-SA5A-SB-4.0-5.0(REA)	TIN	2.67 mg/Kg	2.67U mg/Kg
SL-237-SA5A-SB-9.0-10.0(REA)	TIN	2.56 mg/Kg	2.56U mg/Kg
SL-253-SA5A-SS-0.0-0.5(REA)	TIN	2.74 mg/Kg	2.74U mg/Kg
SL-255-SA5A-SS-0.0-0.5(REA)	TIN	1.67 mg/Kg	1.67U mg/Kg

Method: **6020**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P07326AB221209A	3/15/2011 12:09:00 PM	COPPER	0.118 mg/Kg	DUP-05-SA5A-QC-022811 SL-087-SA5A-SS-0.0-0.5 SL-105-SA5A-SS-0.0-0.5 SL-106-SA5A-SS-0.0-0.5 SL-107-SA5A-SS-0.0-0.5 SL-108-SA5A-SS-0.0-0.5 SL-109-SA5A-SS-0.0-0.5 SL-111-SA5A-SS-0.0-0.5 SL-145-SA5A-SS-0.0-0.5 SL-237-SA5A-SB-4.0-5.0 SL-237-SA5A-SB-9.0-10.0 SL-253-SA5A-SS-0.0-0.5 SL-255-SA5A-SS-0.0-0.5

Method Blank Outlier Report

Lab Reporting Batch ID: DE093 **Laboratory: LL**

EDD Filename: DE093_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8260B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB83B210135A	3/2/2011 1:35:00 AM	METHYLENE CHLORIDE	0.47 ug/Kg	SL-237-SA5A-SB-4.0-5.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-237-SA5A-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.45 ug/Kg	3.7U ug/Kg

Method: **8270C**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKLB06B260537	3/14/2011 5:37:00 AM	BIS(2-ETHYLHEXYL)PHTHALATE	17 ug/Kg	DUP-05-SA5A-QC-022811 SL-087-SA5A-SS-0.0-0.5 SL-105-SA5A-SS-0.0-0.5 SL-106-SA5A-SS-0.0-0.5 SL-107-SA5A-SS-0.0-0.5 SL-108-SA5A-SS-0.0-0.5 SL-109-SA5A-SS-0.0-0.5 SL-111-SA5A-SS-0.0-0.5 SL-145-SA5A-SS-0.0-0.5 SL-237-SA5A-SB-4.0-5.0 SL-237-SA5A-SB-9.0-10.0 SL-253-SA5A-SS-0.0-0.5 SL-255-SA5A-SS-0.0-0.5

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-107-SA5A-SS-0.0-0.5(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	54 ug/Kg	400U ug/Kg
SL-108-SA5A-SS-0.0-0.5(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	34 ug/Kg	400U ug/Kg
SL-109-SA5A-SS-0.0-0.5(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	27 ug/Kg	390U ug/Kg
SL-145-SA5A-SS-0.0-0.5(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	23 ug/Kg	390U ug/Kg
SL-237-SA5A-SB-9.0-10.0(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	61 ug/Kg	370U ug/Kg

Method: **8270C SIM**
Matrix: **AQ**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKWC06B260128	3/16/2011 1:28:00 AM	BIS(2-ETHYLHEXYL)PHTHALATE Diethylphthalate Di-n-butylphthalate	0.13 ug/L 0.053 ug/L 0.066 ug/L	EB02-SA5A-022811 EB03-SA5A-022811

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
EB02-SA5A-022811(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	0.15 ug/L	1.1U ug/L

Method Blank Outlier Report

Lab Reporting Batch ID: DE093 **Laboratory: LL**

EDD Filename: DE093_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8270C SIM**
Matrix: **AQ**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
EB02-SA5A-022811(RES)	Diethylphthalate	0.077 ug/L	1.1U ug/L
EB03-SA5A-022811(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	0.16 ug/L	1.1U ug/L
EB03-SA5A-022811(RES)	Diethylphthalate	0.10 ug/L	1.1U ug/L
EB03-SA5A-022811(RES)	Di-n-butylphthalate	0.32 ug/L	1.1U ug/L

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE093 **Laboratory: LL**

EDD Filename: DE093_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-087-SA5A-SS-0.0-0.5MS SL-087-SA5A-SS-0.0-0.5MSD (SL-087-SA5A-SS-0.0-0.5)	ANILINE	110	113	35.00-95.00	-	ANILINE	J (all detects)
SL-087-SA5A-SS-0.0-0.5MS SL-087-SA5A-SS-0.0-0.5MSD (SL-087-SA5A-SS-0.0-0.5)	BENZIDINE	25	31	35.00-141.00	-	BENZIDINE	J(all detects) UJ(all non-detects)

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-087-SA5A-SS-0.0-0.5MS SL-087-SA5A-SS-0.0-0.5MSD (DUP-05-SA5A-QC-022811 SL -087-SA5A-SS-0.0-0.5 SL -105-SA5A-SS-0.0-0.5 SL -106-SA5A-SS-0.0-0.5 SL -107-SA5A-SS-0.0-0.5 SL -108-SA5A-SS-0.0-0.5 SL -109-SA5A-SS-0.0-0.5 SL -111-SA5A-SS-0.0-0.5 SL -145-SA5A-SS-0.0-0.5 SL -237-SA5A-SB-4.0-5.0 SL -237-SA5A-SB-9.0-10.0 SL -253-SA5A-SS-0.0-0.5 SL -255-SA5A-SS-0.0-0.5)	ARSENIC BERYLLIUM CHROMIUM COBALT LEAD NICKEL SILVER THALLIUM VANADIUM ZINC	195 154 158 126 177 154 155 150 180 230	197 165 173 130 230 158 155 162 202 239	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	- - - - - - - - - -	ARSENIC BERYLLIUM CHROMIUM COBALT LEAD NICKEL SILVER THALLIUM VANADIUM ZINC	J(all detects) V, Zn No Qual, >4x
SL-087-SA5A-SS-0.0-0.5MS SL-087-SA5A-SS-0.0-0.5MSD (DUP-05-SA5A-QC-022811 SL -087-SA5A-SS-0.0-0.5 SL -105-SA5A-SS-0.0-0.5 SL -106-SA5A-SS-0.0-0.5 SL -107-SA5A-SS-0.0-0.5 SL -108-SA5A-SS-0.0-0.5 SL -109-SA5A-SS-0.0-0.5 SL -111-SA5A-SS-0.0-0.5 SL -145-SA5A-SS-0.0-0.5 SL -237-SA5A-SB-4.0-5.0 SL -237-SA5A-SB-9.0-10.0 SL -253-SA5A-SS-0.0-0.5 SL -255-SA5A-SS-0.0-0.5)	ANTIMONY	66	53	75.00-125.00	-	ANTIMONY	J(all detects) UJ(all non-detects)
SL-087-SA5A-SS-0.0-0.5MS SL-087-SA5A-SS-0.0-0.5MSD (DUP-05-SA5A-QC-022811 SL -087-SA5A-SS-0.0-0.5 SL -105-SA5A-SS-0.0-0.5 SL -106-SA5A-SS-0.0-0.5 SL -107-SA5A-SS-0.0-0.5 SL -108-SA5A-SS-0.0-0.5 SL -109-SA5A-SS-0.0-0.5 SL -111-SA5A-SS-0.0-0.5 SL -145-SA5A-SS-0.0-0.5 SL -237-SA5A-SB-4.0-5.0 SL -237-SA5A-SB-9.0-10.0 SL -253-SA5A-SS-0.0-0.5 SL -255-SA5A-SS-0.0-0.5)	BARIUM	204	262	75.00-125.00	-	BARIUM	No Qual, >4x

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE093 **Laboratory: LL**

EDD Filename: DE093_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-087-SA5A-SS-0.0-0.5MS SL-087-SA5A-SS-0.0-0.5MSD (DUP-05-SA5A-QC-022811 SL -087-SA5A-SS-0.0-0.5 SL -105-SA5A-SS-0.0-0.5 SL -106-SA5A-SS-0.0-0.5 SL -107-SA5A-SS-0.0-0.5 SL -108-SA5A-SS-0.0-0.5 SL -109-SA5A-SS-0.0-0.5 SL -111-SA5A-SS-0.0-0.5 SL -145-SA5A-SS-0.0-0.5 SL -237-SA5A-SB-4.0-5.0 SL -237-SA5A-SB-9.0-10.0 SL -253-SA5A-SS-0.0-0.5 SL -255-SA5A-SS-0.0-0.5)	ALUMINUM CALCIUM MAGNESIUM POTASSIUM TITANIUM	1385 131 190 128 226	1359 135 - - 202	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	- - - - -	ALUMINUM CALCIUM MAGNESIUM POTASSIUM TITANIUM	J(all detects) Al, Ca, Mg, Ti No Qual, >4x
SL-087-SA5A-SS-0.0-0.5MS SL-087-SA5A-SS-0.0-0.5MSD (DUP-05-SA5A-QC-022811 SL -087-SA5A-SS-0.0-0.5 SL -105-SA5A-SS-0.0-0.5 SL -106-SA5A-SS-0.0-0.5 SL -107-SA5A-SS-0.0-0.5 SL -108-SA5A-SS-0.0-0.5 SL -109-SA5A-SS-0.0-0.5 SL -111-SA5A-SS-0.0-0.5 SL -145-SA5A-SS-0.0-0.5 SL -237-SA5A-SB-4.0-5.0 SL -237-SA5A-SB-9.0-10.0 SL -253-SA5A-SS-0.0-0.5 SL -255-SA5A-SS-0.0-0.5)	IRON	-142	-858	75.00-125.00	-	IRON	No Qual, >4x
SL-087-SA5A-SS-0.0-0.5MS SL-087-SA5A-SS-0.0-0.5MSD (DUP-05-SA5A-QC-022811 SL -087-SA5A-SS-0.0-0.5 SL -105-SA5A-SS-0.0-0.5 SL -106-SA5A-SS-0.0-0.5 SL -107-SA5A-SS-0.0-0.5 SL -108-SA5A-SS-0.0-0.5 SL -109-SA5A-SS-0.0-0.5 SL -111-SA5A-SS-0.0-0.5 SL -145-SA5A-SS-0.0-0.5 SL -237-SA5A-SB-4.0-5.0 SL -237-SA5A-SB-9.0-10.0 SL -253-SA5A-SS-0.0-0.5 SL -255-SA5A-SS-0.0-0.5)	MANGANESE	129	72	75.00-125.00	-	MANGANESE	No Qual, >4x

Method: 300.0
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-087-SA5A-SS-0.0-0.5MS (DUP-05-SA5A-QC-022811 SL -087-SA5A-SS-0.0-0.5 SL -105-SA5A-SS-0.0-0.5 SL -106-SA5A-SS-0.0-0.5 SL -107-SA5A-SS-0.0-0.5 SL -108-SA5A-SS-0.0-0.5 SL -109-SA5A-SS-0.0-0.5 SL -111-SA5A-SS-0.0-0.5 SL -145-SA5A-SS-0.0-0.5 SL -253-SA5A-SS-0.0-0.5)	FLUORIDE	41	-	80.00-120.00	-	FLUORIDE	J(all detects) UJ(all non-detects)

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE093 **Laboratory: LL**

EDD Filename: DE093_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-087-SA5A-SS-0.0-0.5MS SL-087-SA5A-SS-0.0-0.5MSD (DUP-05-SA5A-QC-022811 SL-087-SA5A-SS-0.0-0.5 SL-105-SA5A-SS-0.0-0.5 SL-106-SA5A-SS-0.0-0.5 SL-107-SA5A-SS-0.0-0.5 SL-108-SA5A-SS-0.0-0.5 SL-109-SA5A-SS-0.0-0.5 SL-111-SA5A-SS-0.0-0.5 SL-145-SA5A-SS-0.0-0.5 SL-237-SA5A-SB-4.0-5.0 SL-237-SA5A-SB-9.0-10.0 SL-253-SA5A-SS-0.0-0.5 SL-255-SA5A-SS-0.0-0.5)	CADMIUM COPPER	144 130	155 156	75.00-125.00 75.00-125.00	- -	CADMIUM COPPER	J(all detects)
SL-087-SA5A-SS-0.0-0.5MS SL-087-SA5A-SS-0.0-0.5MSD (DUP-05-SA5A-QC-022811 SL-087-SA5A-SS-0.0-0.5 SL-105-SA5A-SS-0.0-0.5 SL-106-SA5A-SS-0.0-0.5 SL-107-SA5A-SS-0.0-0.5 SL-108-SA5A-SS-0.0-0.5 SL-109-SA5A-SS-0.0-0.5 SL-111-SA5A-SS-0.0-0.5 SL-145-SA5A-SS-0.0-0.5 SL-237-SA5A-SB-4.0-5.0 SL-237-SA5A-SB-9.0-10.0 SL-253-SA5A-SS-0.0-0.5 SL-255-SA5A-SS-0.0-0.5)	MOLYBDENUM	178	199	75.00-125.00	-	MOLYBDENUM	J(all detects)

Method: 8081A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-087-SA5A-SS-0.0-0.5MSD (SL-087-SA5A-SS-0.0-0.5)	DELTA-BHC ENDOSULFAN I HEPTACHLOR	- - -	- - 151	23.00-140.00 16.00-137.00 13.00-126.00	67 (50.00) 71 (50.00) 68 (50.00)	DELTA-BHC ENDOSULFAN I HEPTACHLOR	J(all detects)

Method: 8151A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-087-SA5A-SS-0.0-0.5MS SL-087-SA5A-SS-0.0-0.5MSD (SL-087-SA5A-SS-0.0-0.5)	2,4,5-T 2,4-DB DALAPON MCPP	- 430 - -	- 470 - -	10.00-156.00 10.00-201.00 10.00-125.00 10.00-184.00	63 (35.00) - 53 (50.00) 96 (50.00)	2,4,5-T 2,4-DB DALAPON MCPP	J(all detects)
SL-087-SA5A-SS-0.0-0.5MS SL-087-SA5A-SS-0.0-0.5MSD (SL-087-SA5A-SS-0.0-0.5)	DINOSEB	8	8	10.00-46.00	-	DINOSEB	J(all detects) UJ(all non-detects)

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE093 **Laboratory: LL**

EDD Filename: DE093_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 300.0
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-255-SA5A-SS-0.0-0.5DUP (SL-237-SA5A-SB-4.0-5.0 SL-237-SA5A-SB-9.0-10.0 SL-255-SA5A-SS-0.0-0.5)	FLUORIDE	200	20.00	No Qual OK by difference

Method: 6010B
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-087-SA5A-SS-0.0-0.5DUP (DUP-05-SA5A-QC-022811 SL-087-SA5A-SS-0.0-0.5 SL-105-SA5A-SS-0.0-0.5 SL-106-SA5A-SS-0.0-0.5 SL-107-SA5A-SS-0.0-0.5 SL-108-SA5A-SS-0.0-0.5 SL-109-SA5A-SS-0.0-0.5 SL-111-SA5A-SS-0.0-0.5 SL-145-SA5A-SS-0.0-0.5 SL-237-SA5A-SB-4.0-5.0 SL-237-SA5A-SB-9.0-10.0 SL-253-SA5A-SS-0.0-0.5 SL-255-SA5A-SS-0.0-0.5)	Zirconium	53	20.00	No Qual OK by difference

Method: 6020
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-087-SA5A-SS-0.0-0.5DUP (DUP-05-SA5A-QC-022811 SL-087-SA5A-SS-0.0-0.5 SL-105-SA5A-SS-0.0-0.5 SL-106-SA5A-SS-0.0-0.5 SL-107-SA5A-SS-0.0-0.5 SL-108-SA5A-SS-0.0-0.5 SL-109-SA5A-SS-0.0-0.5 SL-111-SA5A-SS-0.0-0.5 SL-145-SA5A-SS-0.0-0.5 SL-237-SA5A-SB-4.0-5.0 SL-237-SA5A-SB-9.0-10.0 SL-253-SA5A-SS-0.0-0.5 SL-255-SA5A-SS-0.0-0.5)	MOLYBDENUM	38	20.00	J(all detects) UJ(all non-detects)

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE093 **Laboratory: LL**

EDD Filename: DE093_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7471A
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-087-SA5A-SS-0.0-0.5DUP (DUP-05-SA5A-QC-022811 SL-087-SA5A-SS-0.0-0.5 SL-105-SA5A-SS-0.0-0.5 SL-106-SA5A-SS-0.0-0.5 SL-107-SA5A-SS-0.0-0.5 SL-108-SA5A-SS-0.0-0.5 SL-109-SA5A-SS-0.0-0.5 SL-111-SA5A-SS-0.0-0.5 SL-145-SA5A-SS-0.0-0.5 SL-237-SA5A-SB-4.0-5.0 SL-237-SA5A-SB-9.0-10.0 SL-253-SA5A-SS-0.0-0.5 SL-255-SA5A-SS-0.0-0.5)	MERCURY	50	20.00	No Qual OK by difference

Surrogate Outlier Report

Lab Reporting Batch ID: DE093 **Laboratory: LL**

EDD Filename: DE093_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8081A
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-105-SA5A-SS-0.0-0.5	DECACHLOROBIPHENYL	171	20.00-120.00	All Target Analytes	J (all detects)
SL-107-SA5A-SS-0.0-0.5	DECACHLOROBIPHENYL	241	20.00-120.00	All Target Analytes	No Qual, Diluted Out
SL-107-SA5A-SS-0.0-0.5	TETRACHLORO-M-XYLENE	44	50.00-130.00	All Target Analytes	No Qual Diluted Out
SL-108-SA5A-SS-0.0-0.5	DECACHLOROBIPHENYL	196	20.00-120.00	All Target Analytes	J(all detects)
SL-111-SA5A-SS-0.0-0.5	DECACHLOROBIPHENYL	156	20.00-120.00	All Target Analytes	J(all detects)
SL-145-SA5A-SS-0.0-0.5	DECACHLOROBIPHENYL	129	20.00-120.00	All Target Analytes	J(all detects)

Method: 8082
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-111-SA5A-SS-0.0-0.5	DECACHLOROBIPHENYL	141	45.00-120.00	All Target Analytes	No Qual, Diluted Out
SL-255-SA5A-SS-0.0-0.5	DECACHLOROBIPHENYL	124	45.00-120.00	All Target Analytes	No Qual, Diluted Out

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE093 | Laboratory: LL

EDD Filename: DE093_v1 | eQAPP Name: CDM_SSFL_110509

Method: 8270C
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P2WALCSQ262324 (EB02-SA5A-022811 EB03-SA5A-022811)	ANILINE	106	-	49.00-101.00	-	ANILINE	J (all detects)

Method: 8270C SIM
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P3WCLCSQ260159 (EB02-SA5A-022811 EB03-SA5A-022811)	ACENAPHTHENE	110	-	74.00-109.00	-	ACENAPHTHENE	J(all detects)

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P3LBLCSQ260602 (DUP-05-SA5A-QC-022811 SL-087-SA5A-SS-0.0-0.5 SL-105-SA5A-SS-0.0-0.5 SL-106-SA5A-SS-0.0-0.5 SL-107-SA5A-SS-0.0-0.5 SL-108-SA5A-SS-0.0-0.5 SL-109-SA5A-SS-0.0-0.5 SL-111-SA5A-SS-0.0-0.5 SL-145-SA5A-SS-0.0-0.5 SL-237-SA5A-SB-4.0-5.0 SL-237-SA5A-SB-9.0-10.0 SL-253-SA5A-SS-0.0-0.5 SL-255-SA5A-SS-0.0-0.5)	ANILINE	104	-	34.00-94.00	-	ANILINE	J(all detects)

Method: 8081A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P10671AQ240751A (DUP-05-SA5A-QC-022811 SL-087-SA5A-SS-0.0-0.5 SL-105-SA5A-SS-0.0-0.5 SL-106-SA5A-SS-0.0-0.5 SL-107-SA5A-SS-0.0-0.5 SL-108-SA5A-SS-0.0-0.5 SL-109-SA5A-SS-0.0-0.5 SL-111-SA5A-SS-0.0-0.5 SL-145-SA5A-SS-0.0-0.5 SL-253-SA5A-SS-0.0-0.5 SL-255-SA5A-SS-0.0-0.5)	ENDOSULFAN I	128	-	45.00-123.00	-	ENDOSULFAN I	J(all detects)

Field Duplicate RPD Report

Lab Reporting Batch ID: DE093 **Laboratory: LL**

EDD Filename: DE093_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 160.3M
Matrix: SO

Analyte	Concentration (%)		Sample RPD	eQAPP RPD	Flag
	SL-087-SA5A-SS-0.0-0.5	DUP-05-SA5A-QC-022811			
MOISTURE	14.7	15.9	8		No Qualifiers Applied

Method: 300.0
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-087-SA5A-SS-0.0-0.5	DUP-05-SA5A-QC-022811			
FLUORIDE	1.8	1.5	18	50.00	No Qualifiers Applied

Method: 6010B
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-087-SA5A-SS-0.0-0.5	DUP-05-SA5A-QC-022811			
ALUMINUM	18900	17500	8	50.00	No Qualifiers Applied
BORON	7.26	6.79	7	50.00	
CALCIUM	2750	2650	4	50.00	
IRON	23900	22800	5	50.00	
LITHIUM	26.3	25.0	5	50.00	
MAGNESIUM	5010	4930	2	50.00	
MANGANESE	304	306	1	50.00	
PHOSPHORUS	399	418	5	50.00	
POTASSIUM	3310	3400	3	50.00	
SODIUM	76.1	67.9	11	50.00	
STRONTIUM	20.1	19.1	5	50.00	
TIN	2.91	2.90	0	50.00	
TITANIUM	1260	1230	2	50.00	
Zirconium	1.12	1.18	5	50.00	

Method: 6020
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-087-SA5A-SS-0.0-0.5	DUP-05-SA5A-QC-022811			
ANTIMONY	0.259	0.236	9	50.00	No Qualifiers Applied
ARSENIC	7.16	7.71	7	50.00	
BARIUM	142	146	3	50.00	
BERYLLIUM	0.922	0.937	2	50.00	
CADMIUM	0.186	0.243	27	50.00	
CHROMIUM	29.6	30.3	2	50.00	
COBALT	7.59	7.72	2	50.00	
COPPER	9.40	11.6	21	50.00	
LEAD	13.3	14.4	8	50.00	
MOLYBDENUM	0.738	1.07	37	50.00	
NICKEL	17.2	18.6	8	50.00	
SELENIUM	0.200	0.226	12	50.00	
SILVER	0.0838	0.0525	46	50.00	
THALLIUM	0.316	0.412	26	50.00	
VANADIUM	54.8	56.7	3	50.00	
ZINC	74.2	82.8	11	50.00	

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Field Duplicate RPD Report

Lab Reporting Batch ID: DE093 **Laboratory: LL**

EDD Filename: DE093_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7199
Matrix: SO

Analyte	Concentration (mg/Kg) SL-087-SA5A-SS-0.0-0.5	Concentration (mg/Kg) DUP-05-SA5A-QC-022811	Sample RPD	eQAPP RPD	Flag
HEXAVALENT CHROMIUM	0.64	0.74	14	50.00	No Qualifiers Applied

Method: 7471A
Matrix: SO

Analyte	Concentration (mg/Kg) SL-087-SA5A-SS-0.0-0.5	Concentration (mg/Kg) DUP-05-SA5A-QC-022811	Sample RPD	eQAPP RPD	Flag
MERCURY	0.0155	0.0082	62	50.00	J(all detects)

Method: 8081A
Matrix: SO

Analyte	Concentration (ug/Kg) SL-087-SA5A-SS-0.0-0.5	Concentration (ug/Kg) DUP-05-SA5A-QC-022811	Sample RPD	eQAPP RPD	Flag
4,4'-DDE	0.40 U	0.30	200	50.00	J(all detects)
4,4'-DDT	0.40 U	0.40	200	50.00	UJ(all non-detects)

Method: 8082
Matrix: SO

Analyte	Concentration (ug/Kg) SL-087-SA5A-SS-0.0-0.5	Concentration (ug/Kg) DUP-05-SA5A-QC-022811	Sample RPD	eQAPP RPD	Flag
AROCLOR 1260	0.68	2.0 U	200	50.00	J(all detects)
Aroclor 5460	1.2	3.9 U	200	50.00	UJ(all non-detects)

Method: 8151A
Matrix: SO

Analyte	Concentration (ug/Kg) SL-087-SA5A-SS-0.0-0.5	Concentration (ug/Kg) DUP-05-SA5A-QC-022811	Sample RPD	eQAPP RPD	Flag
2,4-DB	39 U	20	200	50.00	J(all detects)
DICHLOROPROP	3.4	1.4	83	50.00	UJ(all non-detects)

Field Duplicate RPD Report

Lab Reporting Batch ID: DE093 **Laboratory: LL**

EDD Filename: DE093_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C SIM
Matrix: SO

Analyte	Concentration (ug/Kg) SL-087-SA5A-SS-0.0-0.5	Concentration (ug/Kg) DUP-05-SA5A-QC-022811	Sample RPD	eQAPP RPD	Flag
ACENAPHTHENE	0.78	2.0 U	200	50.00	J(all detects) UJ(all non-detects)
ACENAPHTHYLENE	0.67	2.0 U	200	50.00	
ANTHRACENE	1.6	2.0 U	200	50.00	
BENZO(A)ANTHRACENE	2.8	2.0 U	200	50.00	
BENZO(A)PYRENE	3.3	2.0 U	200	50.00	
BENZO(B)FLUORANTHENE	12	1.5	156	50.00	
BENZO(G,H,I)PERYLENE	1.4	2.0 U	200	50.00	
BENZO(K)FLUORANTHENE	3.1	2.0 U	200	50.00	
BIS(2-ETHYLHEXYL)PHTHALATE	16	21 U	200	50.00	
CHRYSENE	4.4	0.53	157	50.00	
DIBENZO(A,H)ANTHRACENE	0.94	2.0 U	200	50.00	
Di-n-octylphthalate	14	21 U	200	50.00	
FLUORANTHENE	7.0	2.0 U	200	50.00	
FLUORENE	1.4	2.0 U	200	50.00	
INDENO(1,2,3-CD)PYRENE	1.5	2.0 U	200	50.00	
PHENANTHRENE	3.6	2.0 U	200	50.00	
PYRENE	6.6	2.0 U	200	50.00	

Method: 9045M
Matrix: SO

Analyte	Concentration (pH unit) SL-087-SA5A-SS-0.0-0.5	Concentration (pH unit) DUP-05-SA5A-QC-022811	Sample RPD	eQAPP RPD	Flag
PH	6.42	6.28	2	50.00	No Qualifiers Applied

Method: ASTM D1498
Matrix: SO

Analyte	Concentration (mV) SL-087-SA5A-SS-0.0-0.5	Concentration (mV) DUP-05-SA5A-QC-022811	Sample RPD	eQAPP RPD	Flag
Oxidation Reduction Potential	390	380	3		No Qualifiers Applied

Reporting Limit Outliers

Lab Reporting Batch ID: DE093 | Laboratory: LL

EDD Filename: DE093_v1 | eQAPP Name: CDM_SSFL_110509

Method: 6010B

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB03-SA5A-022811	IRON	J	0.0665	0.200	PQL	mg/L	J (all detects)
	MANGANESE	J	0.00088	0.0050	PQL	mg/L	

Method: 6020

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB03-SA5A-022811	LEAD	J	0.000066	0.0010	PQL	mg/L	J (all detects)

Method: 8270C SIM

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB02-SA5A-022811	BIS(2-ETHYLHEXYL)PHTHALATE	J	0.15	1.1	PQL	ug/L	J (all detects)
	Diethylphthalate	J	0.077	1.1	PQL	ug/L	
	Di-n-butylphthalate	J	0.39	1.1	PQL	ug/L	
	NAPHTHALENE	J	0.035	0.054	PQL	ug/L	
	PHENANTHRENE	J	0.020	0.054	PQL	ug/L	
EB03-SA5A-022811	BIS(2-ETHYLHEXYL)PHTHALATE	J	0.16	1.1	PQL	ug/L	J (all detects)
	Diethylphthalate	J	0.10	1.1	PQL	ug/L	
	Di-n-butylphthalate	J	0.32	1.1	PQL	ug/L	
	NAPHTHALENE	J	0.035	0.053	PQL	ug/L	

Method: 300.0

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-255-SA5A-SS-0.0-0.5	FLUORIDE	J	1.0	1.1	PQL	mg/Kg	J (all detects)

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-05-SA5A-QC-022811	SODIUM	J	67.9	117	PQL	mg/Kg	J (all detects)
	TIN	J	2.90	11.7	PQL	mg/Kg	
	Zirconium	J	1.18	5.83	PQL	mg/Kg	
SL-087-SA5A-SS-0.0-0.5	SODIUM	J	76.1	114	PQL	mg/Kg	J (all detects)
	TIN	J	2.91	11.4	PQL	mg/Kg	
	Zirconium	J	1.12	5.69	PQL	mg/Kg	
SL-105-SA5A-SS-0.0-0.5	SODIUM	J	77.4	115	PQL	mg/Kg	J (all detects)
	TIN	J	2.94	11.5	PQL	mg/Kg	
	Zirconium	J	1.45	5.77	PQL	mg/Kg	

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Reporting Limit Outliers

Lab Reporting Batch ID: DE093 **Laboratory: LL**

EDD Filename: DE093_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-106-SA5A-SS-0.0-0.5	SODIUM	J	80.5	113	PQL	mg/Kg	J (all detects)
	TIN	J	2.96	11.3	PQL	mg/Kg	
	Zirconium	J	3.12	5.67	PQL	mg/Kg	
SL-107-SA5A-SS-0.0-0.5	SODIUM	J	103	115	PQL	mg/Kg	J (all detects)
	TIN	J	3.14	11.5	PQL	mg/Kg	
	Zirconium	J	1.64	5.74	PQL	mg/Kg	
SL-108-SA5A-SS-0.0-0.5	SODIUM	J	70.1	120	PQL	mg/Kg	J (all detects)
	TIN	J	2.90	12.0	PQL	mg/Kg	
SL-109-SA5A-SS-0.0-0.5	SODIUM	J	68.1	115	PQL	mg/Kg	J (all detects)
	TIN	J	2.63	11.5	PQL	mg/Kg	
	Zirconium	J	1.08	5.75	PQL	mg/Kg	
SL-111-SA5A-SS-0.0-0.5	BORON	J	5.28	6.16	PQL	mg/Kg	J (all detects)
	SODIUM	J	52.1	123	PQL	mg/Kg	
	TIN	J	2.62	12.3	PQL	mg/Kg	
SL-145-SA5A-SS-0.0-0.5	SODIUM	J	59.1	111	PQL	mg/Kg	J (all detects)
	TIN	J	2.72	11.1	PQL	mg/Kg	
	Zirconium	J	1.01	5.56	PQL	mg/Kg	
SL-237-SA5A-SB-4.0-5.0	TIN	J	2.67	11.0	PQL	mg/Kg	J (all detects)
	Zirconium	J	1.42	5.49	PQL	mg/Kg	
SL-237-SA5A-SB-9.0-10.0	BORON	J	4.99	5.53	PQL	mg/Kg	J (all detects)
	TIN	J	2.56	11.1	PQL	mg/Kg	
	Zirconium	J	2.89	5.53	PQL	mg/Kg	
SL-253-SA5A-SS-0.0-0.5	SODIUM	J	55.6	118	PQL	mg/Kg	J (all detects)
	TIN	J	2.74	11.8	PQL	mg/Kg	
SL-255-SA5A-SS-0.0-0.5	BORON	J	2.28	5.36	PQL	mg/Kg	J (all detects)
	SODIUM	J	58.4	107	PQL	mg/Kg	
	TIN	J	1.67	10.7	PQL	mg/Kg	
	Zirconium	J	1.61	5.36	PQL	mg/Kg	

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-05-SA5A-QC-022811	ANTIMONY	J	0.236	0.238	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.226	0.476	PQL	mg/Kg	
	SILVER	J	0.0525	0.119	PQL	mg/Kg	
SL-087-SA5A-SS-0.0-0.5	SELENIUM	J	0.200	0.460	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0838	0.115	PQL	mg/Kg	
SL-105-SA5A-SS-0.0-0.5	SELENIUM	J	0.193	0.466	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0723	0.117	PQL	mg/Kg	
SL-106-SA5A-SS-0.0-0.5	SELENIUM	J	0.223	0.454	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0714	0.113	PQL	mg/Kg	
SL-107-SA5A-SS-0.0-0.5	ANTIMONY	J	0.206	0.232	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.180	0.463	PQL	mg/Kg	
	SILVER	J	0.106	0.116	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE093 **Laboratory: LL**

EDD Filename: DE093_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-108-SA5A-SS-0.0-0.5	CADMIUM	J	0.112	0.116	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.233	0.484	PQL	mg/Kg	
	SILVER	J	0.0506	0.121	PQL	mg/Kg	
SL-109-SA5A-SS-0.0-0.5	ANTIMONY	J	0.197	0.232	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.136	0.465	PQL	mg/Kg	
SL-111-SA5A-SS-0.0-0.5	ANTIMONY	J	0.202	0.251	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0990	0.503	PQL	mg/Kg	
SL-145-SA5A-SS-0.0-0.5	ANTIMONY	J	0.190	0.225	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.108	0.449	PQL	mg/Kg	
SL-237-SA5A-SB-4.0-5.0	ANTIMONY	J	0.149	0.213	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.162	0.427	PQL	mg/Kg	
	SILVER	J	0.0718	0.107	PQL	mg/Kg	
SL-237-SA5A-SB-9.0-10.0	ANTIMONY	J	0.108	0.219	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0897	0.438	PQL	mg/Kg	
	SILVER	J	0.0270	0.110	PQL	mg/Kg	
SL-253-SA5A-SS-0.0-0.5	SELENIUM	J	0.147	0.469	PQL	mg/Kg	J (all detects)
SL-255-SA5A-SS-0.0-0.5	ANTIMONY	J	0.105	0.214	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.178	0.429	PQL	mg/Kg	
	THALLIUM	J	0.0581	0.107	PQL	mg/Kg	

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-05-SA5A-QC-022811	HEXAVALENT CHROMIUM	J	0.74	1.2	PQL	mg/Kg	J (all detects)
SL-087-SA5A-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.64	1.2	PQL	mg/Kg	J (all detects)
SL-105-SA5A-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.82	1.2	PQL	mg/Kg	J (all detects)
SL-106-SA5A-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.40	1.1	PQL	mg/Kg	J (all detects)
SL-107-SA5A-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.92	1.2	PQL	mg/Kg	J (all detects)
SL-108-SA5A-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.55	1.2	PQL	mg/Kg	J (all detects)
SL-111-SA5A-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	1.0	1.3	PQL	mg/Kg	J (all detects)
SL-237-SA5A-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.44	1.1	PQL	mg/Kg	J (all detects)
SL-237-SA5A-SB-9.0-10.0	HEXAVALENT CHROMIUM	J	0.31	1.1	PQL	mg/Kg	J (all detects)
SL-253-SA5A-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.43	1.2	PQL	mg/Kg	J (all detects)

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-05-SA5A-QC-022811	MERCURY	J	0.0082	0.114	PQL	mg/Kg	J (all detects)

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Reporting Limit Outliers

Lab Reporting Batch ID: DE093 **Laboratory: LL**

EDD Filename: DE093_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-087-SA5A-SS-0.0-0.5	MERCURY	J	0.0155	0.115	PQL	mg/Kg	J (all detects)
SL-105-SA5A-SS-0.0-0.5	MERCURY	J	0.0311	0.113	PQL	mg/Kg	J (all detects)
SL-106-SA5A-SS-0.0-0.5	MERCURY	J	0.0245	0.107	PQL	mg/Kg	J (all detects)
SL-107-SA5A-SS-0.0-0.5	MERCURY	J	0.0308	0.114	PQL	mg/Kg	J (all detects)
SL-108-SA5A-SS-0.0-0.5	MERCURY	J	0.0177	0.115	PQL	mg/Kg	J (all detects)
SL-109-SA5A-SS-0.0-0.5	MERCURY	J	0.0196	0.115	PQL	mg/Kg	J (all detects)
SL-111-SA5A-SS-0.0-0.5	MERCURY	J	0.0331	0.121	PQL	mg/Kg	J (all detects)
SL-145-SA5A-SS-0.0-0.5	MERCURY	J	0.0707	0.115	PQL	mg/Kg	J (all detects)
SL-237-SA5A-SB-4.0-5.0	MERCURY	J	0.0181	0.105	PQL	mg/Kg	J (all detects)
SL-237-SA5A-SB-9.0-10.0	MERCURY	J	0.0419	0.108	PQL	mg/Kg	J (all detects)
SL-253-SA5A-SS-0.0-0.5	MERCURY	J	0.0272	0.118	PQL	mg/Kg	J (all detects)

Method: 8081A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-05-SA5A-QC-022811	4,4'-DDE	J	0.30	0.40	PQL	ug/Kg	J (all detects)
SL-106-SA5A-SS-0.0-0.5	4,4'-DDE	J	0.15	0.39	PQL	ug/Kg	J (all detects)

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-087-SA5A-SS-0.0-0.5	AROCLOR 1260 Aroclor 5460	J J	0.68 1.2	2.0 3.9	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-106-SA5A-SS-0.0-0.5	AROCLOR 1254	J	0.88	1.9	PQL	ug/Kg	J (all detects)
SL-107-SA5A-SS-0.0-0.5	AROCLOR 1260	J	8.4	10	PQL	ug/Kg	J (all detects)
SL-108-SA5A-SS-0.0-0.5	AROCLOR 1260	J	0.72	2.1	PQL	ug/Kg	J (all detects)
SL-109-SA5A-SS-0.0-0.5	AROCLOR 1254 AROCLOR 1260	J J	3.4 2.7	4.0 4.0	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-111-SA5A-SS-0.0-0.5	AROCLOR 1260 Aroclor 5460	J J	5.8 16	11 21	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-253-SA5A-SS-0.0-0.5	AROCLOR 1260 Aroclor 5460	J J	1.1 3.2	2.1 4.0	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-255-SA5A-SS-0.0-0.5	AROCLOR 1260	J	5.6	9.2	PQL	ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE093 **Laboratory: LL**

EDD Filename: DE093_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8151A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-05-SA5A-QC-022811	DICHLOROPROP	J	1.4	2.0	PQL	ug/Kg	J (all detects)
SL-109-SA5A-SS-0.0-0.5	MCPA	J	160	290	PQL	ug/Kg	J (all detects)
SL-253-SA5A-SS-0.0-0.5	2,4-D	J	2.0	4.3	PQL	ug/Kg	J (all detects)
	DICHLOROPROP	J	1.1	2.1	PQL	ug/Kg	

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-237-SA5A-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.45	3.7	PQL	ug/Kg	J (all detects)

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-105-SA5A-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	42	200	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	33	200	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	24	200	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	28	200	PQL	ug/Kg	
	CHRYSENE	J	58	200	PQL	ug/Kg	
	FLUORANTHENE	J	81	200	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	21	200	PQL	ug/Kg	
	PHENANTHRENE	J	29	200	PQL	ug/Kg	
	PYRENE	J	96	200	PQL	ug/Kg	
SL-107-SA5A-SS-0.0-0.5	ANTHRACENE	J	27	200	PQL	ug/Kg	J (all detects)
	BENZO(A)ANTHRACENE	J	68	200	PQL	ug/Kg	
	BENZO(A)PYRENE	J	73	200	PQL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	130	200	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	89	200	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	76	200	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	54	400	PQL	ug/Kg	
	Butylbenzylphthalate	J	22	200	PQL	ug/Kg	
	CARBAZOLE	J	33	200	PQL	ug/Kg	
	CHRYSENE	J	150	200	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	38	200	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	72	200	PQL	ug/Kg	
	PHENANTHRENE	J	96	200	PQL	ug/Kg	
SL-108-SA5A-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	34	400	PQL	ug/Kg	J (all detects)
SL-109-SA5A-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	27	390	PQL	ug/Kg	J (all detects)
SL-145-SA5A-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	23	390	PQL	ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE093 **Laboratory: LL**

EDD Filename: DE093_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-237-SA5A-SB-9.0-10.0	BENZO(A)PYRENE	J	71	180	PQL	ug/Kg	J (all detects)
	BENZO(B)FLUORANTHENE	J	35	180	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	61	370	PQL	ug/Kg	
	CHRYSENE	J	100	180	PQL	ug/Kg	
	Di-n-butylphthalate	J	32	180	PQL	ug/Kg	
	PHENANTHRENE	J	40	180	PQL	ug/Kg	
	PYRENE	J	37	180	PQL	ug/Kg	

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-05-SA5A-QC-022811	BENZO(B)FLUORANTHENE	J	1.5	2.0	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	0.53	2.0	PQL	ug/Kg	
SL-087-SA5A-SS-0.0-0.5	ACENAPHTHENE	J	0.78	1.9	PQL	ug/Kg	J (all detects)
	ACENAPHTHYLENE	J	0.67	1.9	PQL	ug/Kg	
	ANTHRACENE	J	1.6	1.9	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.4	1.9	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	16	21	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	0.94	1.9	PQL	ug/Kg	
	Di-n-octylphthalate	J	14	21	PQL	ug/Kg	
	FLUORENE	J	1.4	1.9	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.5	1.9	PQL	ug/Kg	
SL-105-SA5A-SS-0.0-0.5	ANTHRACENE	J	2.4	9.7	PQL	ug/Kg	J (all detects)
SL-106-SA5A-SS-0.0-0.5	BENZO(B)FLUORANTHENE	J	1.6	1.9	PQL	ug/Kg	J (all detects)
SL-108-SA5A-SS-0.0-0.5	ANTHRACENE	J	2.4	10	PQL	ug/Kg	J (all detects)
	BENZO(G,H,I)PERYLENE	J	8.7	10	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	8.3	10	PQL	ug/Kg	
SL-109-SA5A-SS-0.0-0.5	Di-n-octylphthalate	J	13	21	PQL	ug/Kg	J (all detects)
SL-111-SA5A-SS-0.0-0.5	ANTHRACENE	J	0.51	2.1	PQL	ug/Kg	J (all detects)
	BENZO(A)ANTHRACENE	J	1.3	2.1	PQL	ug/Kg	
	BENZO(A)PYRENE	J	1.8	2.1	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.3	2.1	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	1.5	2.1	PQL	ug/Kg	
	Di-n-octylphthalate	J	12	22	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	0.94	2.1	PQL	ug/Kg	
	PHENANTHRENE	J	1.5	2.1	PQL	ug/Kg	
SL-145-SA5A-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	6.7	9.5	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	7.3	9.5	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	4.0	9.5	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	5.3	9.5	PQL	ug/Kg	
	PHENANTHRENE	J	6.7	9.5	PQL	ug/Kg	
SL-237-SA5A-SB-4.0-5.0	Di-n-octylphthalate	J	11	20	PQL	ug/Kg	J (all detects)
	NAPHTHALENE	J	0.86	1.8	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE093 **Laboratory: LL**

EDD Filename: DE093_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8270C SIM**

Matrix: **SO**

SampleID	*Analyte*	*Lab Qual*	*Result*	*Reporting Limit*	*RL Type*	*Units*	*Flag*
SL-237-SA5A-SB-9.0-10.0	ACENAPHTHYLENE	J	0.60	1.8	PQL	ug/Kg	J (all detects)
	BENZO(K)FLUORANTHENE	J	1.7	1.8	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	1.2	1.8	PQL	ug/Kg	
	Di-n-octylphthalate	J	12	20	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	0.74	1.8	PQL	ug/Kg	
	NAPHTHALENE	J	0.75	1.8	PQL	ug/Kg	
SL-253-SA5A-SS-0.0-0.5	1-METHYLNAPHTHALENE	J	1.3	2.0	PQL	ug/Kg	J (all detects)
	2-METHYLNAPHTHALENE	J	1.4	2.0	PQL	ug/Kg	
	BENZO(A)PYRENE	J	1.3	2.0	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	11	21	PQL	ug/Kg	
	Di-n-octylphthalate	J	11	21	PQL	ug/Kg	
	FLUORENE	J	1.6	2.0	PQL	ug/Kg	
	PYRENE	J	1.9	2.0	PQL	ug/Kg	
SL-255-SA5A-SS-0.0-0.5	Di-n-octylphthalate	J	10	19	PQL	ug/Kg	J (all detects)

LDC #: 25911E4

SDG #: DE093

Laboratory: Lancaster Laboratories

VALIDATION COMPLETENESS WORKSHEET

ADR

Date: 8-3-11

Reviewer: CR

2nd Reviewer: A

METHOD: Metals (EPA SW 846 Method 6010B/6020A/7000)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	N	Sampling dates:
II.	ICP/MS Tune	—	
III.	Calibration	—	
IV.	Blanks	SW	
V.	ICP Interference Check Sample (ICS) Analysis	N	
VI.	Matrix Spike Analysis	N	MS/D (Al, Ba, Ca, Fe, Mg, Mn, Ti, V, Zn > 4X)
VII.	Duplicate Sample Analysis	N	Dup (Hg, Zr < 5x)
VIII.	Laboratory Control Samples (LCS)	A	LCS/D
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	SW	Cu: 30%, Pb: 11% : J/UJ
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	—	
XV	Field Blanks	SW	EB = 12, 13

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:

1	DUP-05-SA5A-QC-022811 D	11	SL-255-SA5A-SS-0.0-0.5	21		31	
2	SL-087-SA5A-SS-0.0-0.5 D	12	EB02-SA5A-022811	22		32	
3	SL-105-SA5A-SS-0.0-0.5	13	EB03-SA5A-022811	23		33	
4	SL-106-SA5A-SS-0.0-0.5	14	SL-237-SA5A-SB-4.0-5.0	24		34	
5	SL-107-SA5A-SS-0.0-0.5	15	SL-237-SA5A-SB-9.0-10.0	25		35	
6	SL-108-SA5A-SS-0.0-0.5	16	SL-087-SA5A-SS-0.0-0.5MS	26		36	
7	SL-109-SA5A-SS-0.0-0.5	17	SL-087-SA5A-SS-0.0-0.5MSD	27		37	
8	SL-111-SA5A-SS-0.0-0.5	18	SL-087-SA5A-SS-0.0-0.5DUP	28		38	
9	SL-145-SA5A-SS-0.0-0.5	19		29		39	
10	SL-253-SA5A-SS-0.0-0.5	20		30		40	

Notes:

LDC #: 25911E4

VALIDATION FINDINGS WORKSHEET
PB/ICB/CCB QUALIFIED SAMPLES

Page: 1 of
Reviewer: CL
2nd Reviewer:

METHOD: Trace metals (EPA SW 864 Method 6010B/6020/7000)
Sample Concentration units, unless otherwise noted: mg/Kg

Soil preparation factor applied: 16~~0~~x
Associated Samples: 4-11, 14, 15

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit	4	5	6	7	8	10	14	15				
Hg			0.076	0.06	0.025	0.031	0.018	0.020	0.033	0.027	0.018	0.042				

Samples with analyte concentrations within five times the associated ICB, CCB or PB concentration are listed above with the identifications from the Validation Completeness Worksheet. These sample results were qualified as not detected, "U".
Note : a - The listed analyte concentration is the highest ICB, CCB, or PB detected in the analysis of each element.

LDC #: 25911E4

VALIDATION FINDINGS WORKSHEET
Field Blanks

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: Trace Metals (EPA SW846 6010B/7000)
Y N N/A Were field blanks identified in this SDG?
Y N N/A Were target analytes detected in the field blanks?
Blank units: ug/L **Associated sample units:** mg/Kg
Sampling date: 2/28/11 Soil factor applied 100x
Field blank type: (circle one) Field Blank / Rinsate / Other: Associated Samples: All Soil

Analyte	Blank ID	Sample Identification										
	13	Action Level	No Qualifiers									
Fe	66.5	33.25										
Pb	0.066	0.033										
Mn	0.88	0.44										

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
Samples with analyte concentrations within five times the associated field blank concentration are listed above, these sample results were qualified as not detected, "U".

SAMPLE DELIVERY GROUP

DE094

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
01-Mar-2011	SL-256-SA5A-SS-0.0-0.5	6218905	N	3050B	6010B	III
01-Mar-2011	SL-256-SA5A-SS-0.0-0.5	6218905	N	3050B	6020	III
01-Mar-2011	SL-256-SA5A-SS-0.0-0.5	6218905	N	3060A	7199	III
01-Mar-2011	SL-256-SA5A-SS-0.0-0.5	6218905	N	3550B	8081A	III
01-Mar-2011	SL-256-SA5A-SS-0.0-0.5	6218905	N	3550B	8082	III
01-Mar-2011	SL-256-SA5A-SS-0.0-0.5	6218905	N	3550B	8151A	III
01-Mar-2011	SL-256-SA5A-SS-0.0-0.5	6218905	N	3550B	8270C	III
01-Mar-2011	SL-256-SA5A-SS-0.0-0.5	6218905	N	3550B	8270C SIM	III
01-Mar-2011	SL-256-SA5A-SS-0.0-0.5	6218905	N	Gen Prep	9045M	III
01-Mar-2011	SL-256-SA5A-SS-0.0-0.5	6218905	N	METHOD	300.0	III
01-Mar-2011	SL-256-SA5A-SS-0.0-0.5	6218905	N	METHOD	314.0	III
01-Mar-2011	SL-256-SA5A-SS-0.0-0.5	6218905	N	METHOD	7471A	III
01-Mar-2011	SL-256-SA5A-SS-0.0-0.5MS	6218906	MS	3050B	6010B	III
01-Mar-2011	SL-256-SA5A-SS-0.0-0.5MS	6218906	MS	3050B	6020	III
01-Mar-2011	SL-256-SA5A-SS-0.0-0.5MS	6218906	MS	3060A	7199	III
01-Mar-2011	SL-256-SA5A-SS-0.0-0.5MS	6218906	MS	3550B	8081A	III
01-Mar-2011	SL-256-SA5A-SS-0.0-0.5MS	6218906	MS	3550B	8082	III
01-Mar-2011	SL-256-SA5A-SS-0.0-0.5MS	6218906	MS	3550B	8151A	III
01-Mar-2011	SL-256-SA5A-SS-0.0-0.5MS	6218906	MS	3550B	8270C	III
01-Mar-2011	SL-256-SA5A-SS-0.0-0.5MS	6218906	MS	3550B	8270C SIM	III
01-Mar-2011	SL-256-SA5A-SS-0.0-0.5MS	6218906	MS	METHOD	300.0	III
01-Mar-2011	SL-256-SA5A-SS-0.0-0.5MS	6218906	MS	METHOD	314.0	III
01-Mar-2011	SL-256-SA5A-SS-0.0-0.5MS	6218906	MS	METHOD	7471A	III
01-Mar-2011	SL-256-SA5A-SS-0.0-0.5MSD	6218907	MSD	3050B	6010B	III
01-Mar-2011	SL-256-SA5A-SS-0.0-0.5MSD	6218907	MSD	3050B	6020	III
01-Mar-2011	SL-256-SA5A-SS-0.0-0.5MSD	6218907	MSD	3550B	8081A	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
01-Mar-2011	SL-256-SA5A-SS-0.0-0.5MSD	6218907	MSD	3550B	8082	III
01-Mar-2011	SL-256-SA5A-SS-0.0-0.5MSD	6218907	MSD	3550B	8151A	III
01-Mar-2011	SL-256-SA5A-SS-0.0-0.5MSD	6218907	MSD	3550B	8270C	III
01-Mar-2011	SL-256-SA5A-SS-0.0-0.5MSD	6218907	MSD	3550B	8270C SIM	III
01-Mar-2011	SL-256-SA5A-SS-0.0-0.5MSD	6218907	MSD	METHOD	7471A	III
01-Mar-2011	SL-256-SA5A-SS-0.0-0.5DUP	6218908	DUP	3050B	6010B	III
01-Mar-2011	SL-256-SA5A-SS-0.0-0.5DUP	6218908	DUP	3050B	6020	III
01-Mar-2011	SL-256-SA5A-SS-0.0-0.5DUP	6218908	DUP	3060A	7199	III
01-Mar-2011	SL-256-SA5A-SS-0.0-0.5DUP	6218908	DUP	Gen Prep	9045M	III
01-Mar-2011	SL-256-SA5A-SS-0.0-0.5DUP	6218908	DUP	METHOD	300.0	III
01-Mar-2011	SL-256-SA5A-SS-0.0-0.5DUP	6218908	DUP	METHOD	314.0	III
01-Mar-2011	SL-256-SA5A-SS-0.0-0.5DUP	6218908	DUP	METHOD	7471A	III
01-Mar-2011	DUP-06-SA5A-QC-030111	6218894	FD	3050B	6010B	III
01-Mar-2011	DUP-06-SA5A-QC-030111	6218894	FD	3050B	6020	III
01-Mar-2011	DUP-06-SA5A-QC-030111	6218894	FD	3060A	7199	III
01-Mar-2011	DUP-06-SA5A-QC-030111	6218894	FD	3550B	8081A	III
01-Mar-2011	DUP-06-SA5A-QC-030111	6218894	FD	3550B	8082	III
01-Mar-2011	DUP-06-SA5A-QC-030111	6218894	FD	3550B	8151A	III
01-Mar-2011	DUP-06-SA5A-QC-030111	6218894	FD	3550B	8270C	III
01-Mar-2011	DUP-06-SA5A-QC-030111	6218894	FD	3550B	8270C SIM	III
01-Mar-2011	DUP-06-SA5A-QC-030111	6218894	FD	Gen Prep	9045M	III
01-Mar-2011	DUP-06-SA5A-QC-030111	6218894	FD	METHOD	300.0	III
01-Mar-2011	DUP-06-SA5A-QC-030111	6218894	FD	METHOD	314.0	III
01-Mar-2011	DUP-06-SA5A-QC-030111	6218894	FD	METHOD	7471A	III
01-Mar-2011	SL-257-SA5A-SS-0.0-0.5	6218909	N	3050B	6010B	III
01-Mar-2011	SL-257-SA5A-SS-0.0-0.5	6218909	N	3050B	6020	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
01-Mar-2011	SL-257-SA5A-SS-0.0-0.5	6218909	N	3060A	7199	III
01-Mar-2011	SL-257-SA5A-SS-0.0-0.5	6218909	N	3550B	8081A	III
01-Mar-2011	SL-257-SA5A-SS-0.0-0.5	6218909	N	3550B	8082	III
01-Mar-2011	SL-257-SA5A-SS-0.0-0.5	6218909	N	3550B	8151A	III
01-Mar-2011	SL-257-SA5A-SS-0.0-0.5	6218909	N	3550B	8270C	III
01-Mar-2011	SL-257-SA5A-SS-0.0-0.5	6218909	N	3550B	8270C SIM	III
01-Mar-2011	SL-257-SA5A-SS-0.0-0.5	6218909	N	Gen Prep	9045M	III
01-Mar-2011	SL-257-SA5A-SS-0.0-0.5	6218909	N	METHOD	300.0	III
01-Mar-2011	SL-257-SA5A-SS-0.0-0.5	6218909	N	METHOD	314.0	III
01-Mar-2011	SL-257-SA5A-SS-0.0-0.5	6218909	N	METHOD	6850	III
01-Mar-2011	SL-257-SA5A-SS-0.0-0.5	6218909	N	METHOD	7471A	III
01-Mar-2011	SL-072-SA5A-SS-0.0-0.5	6218896	N	3050B	6010B	III
01-Mar-2011	SL-072-SA5A-SS-0.0-0.5	6218896	N	3050B	6020	III
01-Mar-2011	SL-072-SA5A-SS-0.0-0.5	6218896	N	3060A	7199	III
01-Mar-2011	SL-072-SA5A-SS-0.0-0.5	6218896	N	3550B	8081A	III
01-Mar-2011	SL-072-SA5A-SS-0.0-0.5	6218896	N	3550B	8082	III
01-Mar-2011	SL-072-SA5A-SS-0.0-0.5	6218896	N	3550B	8151A	III
01-Mar-2011	SL-072-SA5A-SS-0.0-0.5	6218896	N	3550B	8270C	III
01-Mar-2011	SL-072-SA5A-SS-0.0-0.5	6218896	N	3550B	8270C SIM	III
01-Mar-2011	SL-072-SA5A-SS-0.0-0.5	6218896	N	Gen Prep	9045M	III
01-Mar-2011	SL-072-SA5A-SS-0.0-0.5	6218896	N	METHOD	300.0	III
01-Mar-2011	SL-072-SA5A-SS-0.0-0.5	6218896	N	METHOD	314.0	III
01-Mar-2011	SL-072-SA5A-SS-0.0-0.5	6218896	N	METHOD	7471A	III
01-Mar-2011	SL-076-SA5A-SS-0.0-0.5	6218897	N	3050B	6010B	III
01-Mar-2011	SL-076-SA5A-SS-0.0-0.5	6218897	N	3050B	6020	III
01-Mar-2011	SL-076-SA5A-SS-0.0-0.5	6218897	N	3060A	7199	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
01-Mar-2011	SL-076-SA5A-SS-0.0-0.5	6218897	N	3550B	8081A	III
01-Mar-2011	SL-076-SA5A-SS-0.0-0.5	6218897	N	3550B	8082	III
01-Mar-2011	SL-076-SA5A-SS-0.0-0.5	6218897	N	3550B	8151A	III
01-Mar-2011	SL-076-SA5A-SS-0.0-0.5	6218897	N	3550B	8270C	III
01-Mar-2011	SL-076-SA5A-SS-0.0-0.5	6218897	N	3550B	8270C SIM	III
01-Mar-2011	SL-076-SA5A-SS-0.0-0.5	6218897	N	Gen Prep	9045M	III
01-Mar-2011	SL-076-SA5A-SS-0.0-0.5	6218897	N	METHOD	300.0	III
01-Mar-2011	SL-076-SA5A-SS-0.0-0.5	6218897	N	METHOD	314.0	III
01-Mar-2011	SL-076-SA5A-SS-0.0-0.5	6218897	N	METHOD	6850	III
01-Mar-2011	SL-076-SA5A-SS-0.0-0.5	6218897	N	METHOD	7471A	III
01-Mar-2011	SL-076-SA5A-SS-0.0-0.5MSD	P218897M241419A	MSD	METHOD	6850	III
01-Mar-2011	SL-076-SA5A-SS-0.0-0.5MS	P218897R241400A	MS	METHOD	6850	III
01-Mar-2011	SL-244-SA5A-SB-4.0-5.0	6218911	N	3050B	6010B	III
01-Mar-2011	SL-244-SA5A-SB-4.0-5.0	6218911	N	3050B	6020	III
01-Mar-2011	SL-244-SA5A-SB-4.0-5.0	6218911	N	3060A	7199	III
01-Mar-2011	SL-244-SA5A-SB-4.0-5.0	6218911	N	3550B	8082	III
01-Mar-2011	SL-244-SA5A-SB-4.0-5.0	6218911	N	3550B	8270C	III
01-Mar-2011	SL-244-SA5A-SB-4.0-5.0	6218911	N	3550B	8270C SIM	III
01-Mar-2011	SL-244-SA5A-SB-4.0-5.0	6218911	N	5035	8260B	III
01-Mar-2011	SL-244-SA5A-SB-4.0-5.0	6218911	N	5035	8260B SIM	III
01-Mar-2011	SL-244-SA5A-SB-4.0-5.0	6218911	N	Gen Prep	9045M	III
01-Mar-2011	SL-244-SA5A-SB-4.0-5.0	6218911	N	METHOD	300.0	III
01-Mar-2011	SL-244-SA5A-SB-4.0-5.0	6218911	N	METHOD	314.0	III
01-Mar-2011	SL-244-SA5A-SB-4.0-5.0	6218911	N	METHOD	7471A	III
01-Mar-2011	SL-244-SA5A-SB-9.0-10.0	6218912	N	3050B	6010B	III
01-Mar-2011	SL-244-SA5A-SB-9.0-10.0	6218912	N	3050B	6020	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
01-Mar-2011	SL-244-SA5A-SB-9.0-10.0	6218912	N	3060A	7199	III
01-Mar-2011	SL-244-SA5A-SB-9.0-10.0	6218912	N	3550B	8082	III
01-Mar-2011	SL-244-SA5A-SB-9.0-10.0	6218912	N	3550B	8270C	III
01-Mar-2011	SL-244-SA5A-SB-9.0-10.0	6218912	N	3550B	8270C SIM	III
01-Mar-2011	SL-244-SA5A-SB-9.0-10.0	6218912	N	Gen Prep	9045M	III
01-Mar-2011	SL-244-SA5A-SB-9.0-10.0	6218912	N	METHOD	300.0	III
01-Mar-2011	SL-244-SA5A-SB-9.0-10.0	6218912	N	METHOD	314.0	III
01-Mar-2011	SL-244-SA5A-SB-9.0-10.0	6218912	N	METHOD	7471A	III
01-Mar-2011	SL-077-SA5A-SS-0.0-0.5	6218898	N	3050B	6010B	III
01-Mar-2011	SL-077-SA5A-SS-0.0-0.5	6218898	N	3050B	6020	III
01-Mar-2011	SL-077-SA5A-SS-0.0-0.5	6218898	N	3060A	7199	III
01-Mar-2011	SL-077-SA5A-SS-0.0-0.5	6218898	N	3550B	8081A	III
01-Mar-2011	SL-077-SA5A-SS-0.0-0.5	6218898	N	3550B	8082	III
01-Mar-2011	SL-077-SA5A-SS-0.0-0.5	6218898	N	3550B	8151A	III
01-Mar-2011	SL-077-SA5A-SS-0.0-0.5	6218898	N	3550B	8270C	III
01-Mar-2011	SL-077-SA5A-SS-0.0-0.5	6218898	N	3550B	8270C SIM	III
01-Mar-2011	SL-077-SA5A-SS-0.0-0.5	6218898	N	Gen Prep	9045M	III
01-Mar-2011	SL-077-SA5A-SS-0.0-0.5	6218898	N	METHOD	300.0	III
01-Mar-2011	SL-077-SA5A-SS-0.0-0.5	6218898	N	METHOD	314.0	III
01-Mar-2011	SL-077-SA5A-SS-0.0-0.5	6218898	N	METHOD	7471A	III
01-Mar-2011	SL-078-SA5A-SS-0.0-0.5	6218899	N	3050B	6010B	III
01-Mar-2011	SL-078-SA5A-SS-0.0-0.5	6218899	N	3050B	6020	III
01-Mar-2011	SL-078-SA5A-SS-0.0-0.5	6218899	N	3060A	7199	III
01-Mar-2011	SL-078-SA5A-SS-0.0-0.5	6218899	N	3550B	8081A	III
01-Mar-2011	SL-078-SA5A-SS-0.0-0.5	6218899	N	3550B	8082	III
01-Mar-2011	SL-078-SA5A-SS-0.0-0.5	6218899	N	3550B	8151A	III

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IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
01-Mar-2011	SL-078-SA5A-SS-0.0-0.5	6218899	N	3550B	8270C	III
01-Mar-2011	SL-078-SA5A-SS-0.0-0.5	6218899	N	3550B	8270C SIM	III
01-Mar-2011	SL-078-SA5A-SS-0.0-0.5	6218899	N	Gen Prep	9045M	III
01-Mar-2011	SL-078-SA5A-SS-0.0-0.5	6218899	N	METHOD	300.0	III
01-Mar-2011	SL-078-SA5A-SS-0.0-0.5	6218899	N	METHOD	314.0	III
01-Mar-2011	SL-078-SA5A-SS-0.0-0.5	6218899	N	METHOD	6850	III
01-Mar-2011	SL-078-SA5A-SS-0.0-0.5	6218899	N	METHOD	7471A	III
01-Mar-2011	EB04-SA5A-030111	6218910	EB	3005A	6010B	III
01-Mar-2011	EB04-SA5A-030111	6218910	EB	3020A	6020	III
01-Mar-2011	EB04-SA5A-030111	6218910	EB	3510C	8081A	III
01-Mar-2011	EB04-SA5A-030111	6218910	EB	3510C	8082	III
01-Mar-2011	EB04-SA5A-030111	6218910	EB	3510C	8270C	III
01-Mar-2011	EB04-SA5A-030111	6218910	EB	3510C	8270C SIM	III
01-Mar-2011	EB04-SA5A-030111	6218910	EB	Gen Prep	300.0	III
01-Mar-2011	EB04-SA5A-030111	6218910	EB	Gen Prep	314.0	III
01-Mar-2011	EB04-SA5A-030111	6218910	EB	Gen Prep	7199	III
01-Mar-2011	EB04-SA5A-030111	6218910	EB	METHOD	7470A	III
01-Mar-2011	EB04-SA5A-030111	6218910	EB	METHOD	8151A	III
01-Mar-2011	SL-066-SA5A-SS-0.0-0.5	6218895	N	3050B	6010B	III
01-Mar-2011	SL-066-SA5A-SS-0.0-0.5	6218895	N	3050B	6020	III
01-Mar-2011	SL-066-SA5A-SS-0.0-0.5	6218895	N	3060A	7199	III
01-Mar-2011	SL-066-SA5A-SS-0.0-0.5	6218895	N	3550B	8081A	III
01-Mar-2011	SL-066-SA5A-SS-0.0-0.5	6218895	N	3550B	8082	III
01-Mar-2011	SL-066-SA5A-SS-0.0-0.5	6218895	N	3550B	8151A	III
01-Mar-2011	SL-066-SA5A-SS-0.0-0.5	6218895	N	3550B	8270C	III
01-Mar-2011	SL-066-SA5A-SS-0.0-0.5	6218895	N	3550B	8270C SIM	III

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Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
01-Mar-2011	SL-066-SA5A-SS-0.0-0.5	6218895	N	Gen Prep	9045M	III
01-Mar-2011	SL-066-SA5A-SS-0.0-0.5	6218895	N	METHOD	300.0	III
01-Mar-2011	SL-066-SA5A-SS-0.0-0.5	6218895	N	METHOD	314.0	III
01-Mar-2011	SL-066-SA5A-SS-0.0-0.5	6218895	N	METHOD	7471A	III
01-Mar-2011	SL-066-SA5A-SS-0.0-0.5DUP	P218895D271324A	DUP	METHOD	300.0	III
01-Mar-2011	SL-066-SA5A-SS-0.0-0.5DUP	P218895D271414A	DUP	METHOD	314.0	III
01-Mar-2011	SL-066-SA5A-SS-0.0-0.5DUP	P218895D291440A	DUP	Gen Prep	9045M	III
01-Mar-2011	SL-066-SA5A-SS-0.0-0.5MS	P218895R271338A	MS	METHOD	300.0	III
01-Mar-2011	SL-066-SA5A-SS-0.0-0.5MS	P218895R271438A	MS	METHOD	314.0	III
01-Mar-2011	SL-103-SA5A-SS-0.0-0.5	6218900	N	3050B	6010B	III
01-Mar-2011	SL-103-SA5A-SS-0.0-0.5	6218900	N	3050B	6020	III
01-Mar-2011	SL-103-SA5A-SS-0.0-0.5	6218900	N	3060A	7199	III
01-Mar-2011	SL-103-SA5A-SS-0.0-0.5	6218900	N	3550B	8081A	III
01-Mar-2011	SL-103-SA5A-SS-0.0-0.5	6218900	N	3550B	8082	III
01-Mar-2011	SL-103-SA5A-SS-0.0-0.5	6218900	N	3550B	8151A	III
01-Mar-2011	SL-103-SA5A-SS-0.0-0.5	6218900	N	3550B	8270C	III
01-Mar-2011	SL-103-SA5A-SS-0.0-0.5	6218900	N	3550B	8270C SIM	III
01-Mar-2011	SL-103-SA5A-SS-0.0-0.5	6218900	N	Gen Prep	9045M	III
01-Mar-2011	SL-103-SA5A-SS-0.0-0.5	6218900	N	METHOD	300.0	III
01-Mar-2011	SL-103-SA5A-SS-0.0-0.5	6218900	N	METHOD	314.0	III
01-Mar-2011	SL-103-SA5A-SS-0.0-0.5	6218900	N	METHOD	7471A	III
01-Mar-2011	SL-104-SA5A-SS-0.0-0.5	6218901	N	3050B	6010B	III
01-Mar-2011	SL-104-SA5A-SS-0.0-0.5	6218901	N	3050B	6020	III
01-Mar-2011	SL-104-SA5A-SS-0.0-0.5	6218901	N	3060A	7199	III
01-Mar-2011	SL-104-SA5A-SS-0.0-0.5	6218901	N	3550B	8081A	III
01-Mar-2011	SL-104-SA5A-SS-0.0-0.5	6218901	N	3550B	8082	III

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IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
01-Mar-2011	SL-104-SA5A-SS-0.0-0.5	6218901	N	3550B	8151A	III
01-Mar-2011	SL-104-SA5A-SS-0.0-0.5	6218901	N	3550B	8270C	III
01-Mar-2011	SL-104-SA5A-SS-0.0-0.5	6218901	N	3550B	8270C SIM	III
01-Mar-2011	SL-104-SA5A-SS-0.0-0.5	6218901	N	Gen Prep	9045M	III
01-Mar-2011	SL-104-SA5A-SS-0.0-0.5	6218901	N	METHOD	300.0	III
01-Mar-2011	SL-104-SA5A-SS-0.0-0.5	6218901	N	METHOD	314.0	III
01-Mar-2011	SL-104-SA5A-SS-0.0-0.5	6218901	N	METHOD	7471A	III
01-Mar-2011	SL-191-SA5A-SS-0.0-0.5	6218902	N	3050B	6010B	III
01-Mar-2011	SL-191-SA5A-SS-0.0-0.5	6218902	N	3050B	6020	III
01-Mar-2011	SL-191-SA5A-SS-0.0-0.5	6218902	N	3060A	7199	III
01-Mar-2011	SL-191-SA5A-SS-0.0-0.5	6218902	N	3550B	8081A	III
01-Mar-2011	SL-191-SA5A-SS-0.0-0.5	6218902	N	3550B	8082	III
01-Mar-2011	SL-191-SA5A-SS-0.0-0.5	6218902	N	3550B	8151A	III
01-Mar-2011	SL-191-SA5A-SS-0.0-0.5	6218902	N	3550B	8270C	III
01-Mar-2011	SL-191-SA5A-SS-0.0-0.5	6218902	N	3550B	8270C SIM	III
01-Mar-2011	SL-191-SA5A-SS-0.0-0.5	6218902	N	Gen Prep	9045M	III
01-Mar-2011	SL-191-SA5A-SS-0.0-0.5	6218902	N	METHOD	300.0	III
01-Mar-2011	SL-191-SA5A-SS-0.0-0.5	6218902	N	METHOD	314.0	III
01-Mar-2011	SL-191-SA5A-SS-0.0-0.5	6218902	N	METHOD	6850	III
01-Mar-2011	SL-191-SA5A-SS-0.0-0.5	6218902	N	METHOD	7471A	III
01-Mar-2011	SL-194-SA5A-SS-0.0-0.3	6218903	N	3050B	6010B	III
01-Mar-2011	SL-194-SA5A-SS-0.0-0.3	6218903	N	3050B	6020	III
01-Mar-2011	SL-194-SA5A-SS-0.0-0.3	6218903	N	3060A	7199	III
01-Mar-2011	SL-194-SA5A-SS-0.0-0.3	6218903	N	3550B	8081A	III
01-Mar-2011	SL-194-SA5A-SS-0.0-0.3	6218903	N	3550B	8082	III
01-Mar-2011	SL-194-SA5A-SS-0.0-0.3	6218903	N	3550B	8151A	III

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IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
01-Mar-2011	SL-194-SA5A-SS-0.0-0.3	6218903	N	3550B	8270C	III
01-Mar-2011	SL-194-SA5A-SS-0.0-0.3	6218903	N	3550B	8270C SIM	III
01-Mar-2011	SL-194-SA5A-SS-0.0-0.3	6218903	N	Gen Prep	9045M	III
01-Mar-2011	SL-194-SA5A-SS-0.0-0.3	6218903	N	METHOD	300.0	III
01-Mar-2011	SL-194-SA5A-SS-0.0-0.3	6218903	N	METHOD	314.0	III
01-Mar-2011	SL-194-SA5A-SS-0.0-0.3	6218903	N	METHOD	7471A	III
01-Mar-2011	SL-195-SA5A-SS-0.0-0.2	6218904	N	3050B	6010B	III
01-Mar-2011	SL-195-SA5A-SS-0.0-0.2	6218904	N	3050B	6020	III
01-Mar-2011	SL-195-SA5A-SS-0.0-0.2	6218904	N	3060A	7199	III
01-Mar-2011	SL-195-SA5A-SS-0.0-0.2	6218904	N	3550B	8081A	III
01-Mar-2011	SL-195-SA5A-SS-0.0-0.2	6218904	N	3550B	8082	III
01-Mar-2011	SL-195-SA5A-SS-0.0-0.2	6218904	N	3550B	8151A	III
01-Mar-2011	SL-195-SA5A-SS-0.0-0.2	6218904	N	3550B	8270C	III
01-Mar-2011	SL-195-SA5A-SS-0.0-0.2	6218904	N	3550B	8270C SIM	III
01-Mar-2011	SL-195-SA5A-SS-0.0-0.2	6218904	N	Gen Prep	9045M	III
01-Mar-2011	SL-195-SA5A-SS-0.0-0.2	6218904	N	METHOD	300.0	III
01-Mar-2011	SL-195-SA5A-SS-0.0-0.2	6218904	N	METHOD	314.0	III
01-Mar-2011	SL-195-SA5A-SS-0.0-0.2	6218904	N	METHOD	7471A	III
01-Mar-2011	TB-030111	6218913	TB	5030B	8260B	III
01-Mar-2011	TB-030111	6218913	TB	5030B	8260B SIM	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE094 | Laboratory: LL

EDD Filename: DE094_v1 | eQAPP Name: CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: DUP-06-SA5A-QC-030111 *Collected:* 3/1/2011 9:00:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.3		0.90	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-066-SA5A-SS-0.0-0.5 *Collected:* 3/1/2011 1:18:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.3		0.91	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-072-SA5A-SS-0.0-0.5 *Collected:* 3/1/2011 9:58:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.5		0.90	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-076-SA5A-SS-0.0-0.5 *Collected:* 3/1/2011 10:17:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.6		0.86	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-077-SA5A-SS-0.0-0.5 *Collected:* 3/1/2011 10:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	4.9		0.94	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-078-SA5A-SS-0.0-0.5 *Collected:* 3/1/2011 11:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.5		0.89	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-103-SA5A-SS-0.0-0.5 *Collected:* 3/1/2011 1:35:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.1	J	1.0	MDL	1.3	PQL	mg/Kg	J	Z, Q

Sample ID: SL-104-SA5A-SS-0.0-0.5 *Collected:* 3/1/2011 1:52:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.2	J	0.95	MDL	1.2	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE094 **Laboratory: LL**

EDD Filename: DE094_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **GENCHEM**

Method: **300.0** ***Matrix:*** **SO**

Sample ID: SL-191-SA5A-SS-0.0-0.5 ***Collected:*** 3/1/2011 2:37:00 PM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.0	U	1.0	MDL	1.3	PQL	mg/Kg	UJ	Q

Sample ID: SL-194-SA5A-SS-0.0-0.3 ***Collected:*** 3/1/2011 3:02:00 PM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	0.96	U	0.96	MDL	1.2	PQL	mg/Kg	UJ	Q

Sample ID: SL-195-SA5A-SS-0.0-0.2 ***Collected:*** 3/1/2011 3:20:00 PM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.9		1.1	MDL	1.4	PQL	mg/Kg	J	Q

Sample ID: SL-244-SA5A-SB-4.0-5.0 ***Collected:*** 3/1/2011 10:42:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.4		0.92	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-244-SA5A-SB-9.0-10.0 ***Collected:*** 3/1/2011 10:44:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	4.3		0.93	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-256-SA5A-SS-0.0-0.5 ***Collected:*** 3/1/2011 8:57:00 AM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.7		0.90	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-257-SA5A-SS-0.0-0.5 ***Collected:*** 3/1/2011 9:18:00 AM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.9		0.90	MDL	1.1	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE094 **Laboratory: LL**

EDD Filename: DE094_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6010B** ***Matrix:*** **AQ**

Sample ID: **EB04-SA5A-030111** ***Collected:*** **3/1/2011 11:45:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LITHIUM	0.0066	J	0.0024	MDL	0.0200	PQL	mg/L	U	B

Method Category: **METALS**

Method: **6010B** ***Matrix:*** **SO**

Sample ID: **DUP-06-SA5A-QC-030111** ***Collected:*** **3/1/2011 9:00:00 AM** ***Analysis Type:*** **REA** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	4.43	J	0.966	MDL	5.43	PQL	mg/Kg	J	Z
PHOSPHORUS	312		0.608	MDL	10.9	PQL	mg/Kg	J	Q
SODIUM	85.0	J	40.5	MDL	109	PQL	mg/Kg	J	Z
TIN	2.64	J	1.09	MDL	10.9	PQL	mg/Kg	U	B
Zirconium	1.20	J	0.912	MDL	5.43	PQL	mg/Kg	J	Z

Sample ID: **SL-066-SA5A-SS-0.0-0.5** ***Collected:*** **3/1/2011 1:18:00 PM** ***Analysis Type:*** **REA** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	534		0.611	MDL	10.9	PQL	mg/Kg	J	Q
SODIUM	94.6	J	40.7	MDL	109	PQL	mg/Kg	J	Z
TIN	3.02	J	1.09	MDL	10.9	PQL	mg/Kg	U	B

Sample ID: **SL-072-SA5A-SS-0.0-0.5** ***Collected:*** **3/1/2011 9:58:00 AM** ***Analysis Type:*** **REA** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	530		0.616	MDL	11.0	PQL	mg/Kg	J	Q
SODIUM	102	J	41.0	MDL	110	PQL	mg/Kg	J	Z
TIN	3.06	J	1.10	MDL	11.0	PQL	mg/Kg	U	B

Sample ID: **SL-076-SA5A-SS-0.0-0.5** ***Collected:*** **3/1/2011 10:17:00** ***Analysis Type:*** **REA** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	733		0.588	MDL	10.5	PQL	mg/Kg	J	Q
TIN	2.66	J	1.05	MDL	10.5	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE094 **Laboratory: LL**

EDD Filename: DE094_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6010B** ***Matrix:*** **SO**

Sample ID: **SL-077-SA5A-SS-0.0-0.5** ***Collected:*** **3/1/2011 10:45:00** ***Analysis Type:*** **REA** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	571		0.648	MDL	11.6	PQL	mg/Kg	J	Q
TIN	3.78	J	1.16	MDL	11.6	PQL	mg/Kg	U	B
Zirconium	1.12	J	0.973	MDL	5.79	PQL	mg/Kg	J	Z

Sample ID: **SL-078-SA5A-SS-0.0-0.5** ***Collected:*** **3/1/2011 11:05:00** ***Analysis Type:*** **REA** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	622		0.620	MDL	11.1	PQL	mg/Kg	J	Q
TIN	3.20	J	1.11	MDL	11.1	PQL	mg/Kg	U	B

Sample ID: **SL-103-SA5A-SS-0.0-0.5** ***Collected:*** **3/1/2011 1:35:00 PM** ***Analysis Type:*** **REA** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	412		0.690	MDL	12.3	PQL	mg/Kg	J	Q
SODIUM	91.0	J	46.0	MDL	123	PQL	mg/Kg	J	Z
TIN	3.43	J	1.23	MDL	12.3	PQL	mg/Kg	U	B
Zirconium	1.05	J	1.03	MDL	6.16	PQL	mg/Kg	J	Z

Sample ID: **SL-104-SA5A-SS-0.0-0.5** ***Collected:*** **3/1/2011 1:52:00 PM** ***Analysis Type:*** **REA** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	428		0.640	MDL	11.4	PQL	mg/Kg	J	Q
SODIUM	91.9	J	42.6	MDL	114	PQL	mg/Kg	J	Z
TIN	3.36	J	1.14	MDL	11.4	PQL	mg/Kg	U	B
Zirconium	1.48	J	0.959	MDL	5.71	PQL	mg/Kg	J	Z

Sample ID: **SL-191-SA5A-SS-0.0-0.5** ***Collected:*** **3/1/2011 2:37:00 PM** ***Analysis Type:*** **REA** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	537		0.703	MDL	12.5	PQL	mg/Kg	J	Q
TIN	4.00	J	1.25	MDL	12.5	PQL	mg/Kg	U	B
Zirconium	1.40	J	1.05	MDL	6.27	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE094 **Laboratory: LL**

EDD Filename: DE094_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6010B** ***Matrix:*** **SO**

Sample ID: **SL-194-SA5A-SS-0.0-0.3** ***Collected:*** **3/1/2011 3:02:00 PM** ***Analysis Type:*** **REA** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	627		0.656	MDL	11.7	PQL	mg/Kg	J	Q
TIN	2.64	J	1.17	MDL	11.7	PQL	mg/Kg	U	B

Sample ID: **SL-195-SA5A-SS-0.0-0.2** ***Collected:*** **3/1/2011 3:20:00 PM** ***Analysis Type:*** **REA** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	835		0.784	MDL	14.0	PQL	mg/Kg	J	Q
TIN	3.56	J	1.40	MDL	14.0	PQL	mg/Kg	U	B
Zirconium	1.80	J	1.18	MDL	7.00	PQL	mg/Kg	J	Z

Sample ID: **SL-244-SA5A-SB-4.0-5.0** ***Collected:*** **3/1/2011 10:42:00** ***Analysis Type:*** **REA** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	145		0.635	MDL	11.3	PQL	mg/Kg	J	Q
TIN	3.06	J	1.13	MDL	11.3	PQL	mg/Kg	U	B
Zirconium	1.80	J	0.953	MDL	5.67	PQL	mg/Kg	J	Z

Sample ID: **SL-244-SA5A-SB-9.0-10.0** ***Collected:*** **3/1/2011 10:44:00** ***Analysis Type:*** **REA** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	161		0.634	MDL	11.3	PQL	mg/Kg	J	Q
TIN	4.21	J	1.13	MDL	11.3	PQL	mg/Kg	U	B

Sample ID: **SL-256-SA5A-SS-0.0-0.5** ***Collected:*** **3/1/2011 8:57:00 AM** ***Analysis Type:*** **REA** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	4.46	J	0.996	MDL	5.59	PQL	mg/Kg	J	Z
PHOSPHORUS	352		0.627	MDL	11.2	PQL	mg/Kg	J	Q
SODIUM	87.9	J	41.7	MDL	112	PQL	mg/Kg	J	Z
TIN	2.62	J	1.12	MDL	11.2	PQL	mg/Kg	U	B
Zirconium	1.37	J	0.940	MDL	5.59	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE094 **Laboratory: LL**

EDD Filename: DE094_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B ***Matrix:*** SO

Sample ID: SL-257-SA5A-SS-0.0-0.5 ***Collected:*** 3/1/2011 9:18:00 AM ***Analysis Type:*** REA ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	5.33	J	0.990	MDL	5.56	PQL	mg/Kg	J	Z
PHOSPHORUS	477		0.623	MDL	11.1	PQL	mg/Kg	J	Q
TIN	2.96	J	1.11	MDL	11.1	PQL	mg/Kg	U	B
Zirconium	0.953	J	0.934	MDL	5.56	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 6020 ***Matrix:*** SO

Sample ID: DUP-06-SA5A-QC-030111 ***Collected:*** 3/1/2011 9:00:00 AM ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.246		0.0657	MDL	0.219	PQL	mg/Kg	J	Q, E
ARSENIC	5.80		0.0877	MDL	0.438	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.674		0.0175	MDL	0.110	PQL	mg/Kg	J	Q
CADMIUM	0.450		0.0438	MDL	0.110	PQL	mg/Kg	J	Q
CHROMIUM	22.7		0.131	MDL	0.438	PQL	mg/Kg	J	Q, E, A
COBALT	6.95		0.0219	MDL	0.110	PQL	mg/Kg	J	Q, E, A
COPPER	7.97		0.0723	MDL	0.438	PQL	mg/Kg	J	Q, E
LEAD	6.85		0.0114	MDL	0.219	PQL	mg/Kg	J	Q, A
NICKEL	12.7		0.110	MDL	0.438	PQL	mg/Kg	J	Q, E, A
SILVER	0.0317	J	0.0131	MDL	0.110	PQL	mg/Kg	J	Z, Q
THALLIUM	0.315		0.0329	MDL	0.110	PQL	mg/Kg	J	Q
VANADIUM	46.1		0.0241	MDL	0.110	PQL	mg/Kg	J	Q, E, A
ZINC	167		0.614	MDL	3.29	PQL	mg/Kg	J	E, E, A

Sample ID: DUP-06-SA5A-QC-030111 ***Collected:*** 3/1/2011 9:00:00 AM ***Analysis Type:*** REA7 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.165	J	0.0438	MDL	0.438	PQL	mg/Kg	J	Z

Sample ID: DUP-06-SA5A-QC-030111 ***Collected:*** 3/1/2011 9:00:00 AM ***Analysis Type:*** REA9 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	91.3		0.118	MDL	0.438	PQL	mg/Kg	J	E, A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE094 **Laboratory: LL**

EDD Filename: DE094_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6020** ***Matrix:*** **SO**

Sample ID: **SL-066-SA5A-SS-0.0-0.5** ***Collected:*** **3/1/2011 1:18:00 PM** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.589		0.0654	MDL	0.218	PQL	mg/Kg	J	Q, E
ARSENIC	14.3		0.0872	MDL	0.436	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.867		0.0174	MDL	0.109	PQL	mg/Kg	J	Q
CADMIUM	0.338		0.0436	MDL	0.109	PQL	mg/Kg	J	Q
CHROMIUM	36.4		0.131	MDL	0.436	PQL	mg/Kg	J	Q, E, A
COBALT	15.7		0.0218	MDL	0.109	PQL	mg/Kg	J	Q, E, A
COPPER	29.5		0.0720	MDL	0.436	PQL	mg/Kg	J	Q, E
NICKEL	23.0		0.109	MDL	0.436	PQL	mg/Kg	J	Q, E, A
SILVER	0.187		0.0131	MDL	0.109	PQL	mg/Kg	J	Q
THALLIUM	0.391		0.0327	MDL	0.109	PQL	mg/Kg	J	Q
VANADIUM	57.2		0.0240	MDL	0.109	PQL	mg/Kg	J	Q, E, A
ZINC	116		0.611	MDL	3.27	PQL	mg/Kg	J	E, E, A

Sample ID: **SL-066-SA5A-SS-0.0-0.5** ***Collected:*** **3/1/2011 1:18:00 PM** ***Analysis Type:*** **REA5** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	17.9		0.0113	MDL	0.218	PQL	mg/Kg	J	Q, A

Sample ID: **SL-066-SA5A-SS-0.0-0.5** ***Collected:*** **3/1/2011 1:18:00 PM** ***Analysis Type:*** **REA7** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.225	J	0.0436	MDL	0.436	PQL	mg/Kg	J	Z

Sample ID: **SL-066-SA5A-SS-0.0-0.5** ***Collected:*** **3/1/2011 1:18:00 PM** ***Analysis Type:*** **REA9** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	124		0.118	MDL	0.436	PQL	mg/Kg	J	E, A

Sample ID: **SL-072-SA5A-SS-0.0-0.5** ***Collected:*** **3/1/2011 9:58:00 AM** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.228		0.0660	MDL	0.220	PQL	mg/Kg	J	Q, E
ARSENIC	11.9		0.0880	MDL	0.440	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.791		0.0176	MDL	0.110	PQL	mg/Kg	J	Q
CADMIUM	0.227		0.0440	MDL	0.110	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE094 **Laboratory: LL**

EDD Filename: DE094_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 ***Matrix:*** SO

Sample ID: SL-072-SA5A-SS-0.0-0.5 ***Collected:*** 3/1/2011 9:58:00 AM ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHROMIUM	29.1		0.132	MDL	0.440	PQL	mg/Kg	J	Q, E, A
COBALT	12.4		0.0220	MDL	0.110	PQL	mg/Kg	J	Q, E, A
COPPER	26.3		0.0726	MDL	0.440	PQL	mg/Kg	J	Q, E
LEAD	12.0		0.0114	MDL	0.220	PQL	mg/Kg	J	Q, A
NICKEL	19.3		0.110	MDL	0.440	PQL	mg/Kg	J	Q, E, A
SILVER	0.0900	J	0.0132	MDL	0.110	PQL	mg/Kg	J	Z, Q
THALLIUM	0.372		0.0330	MDL	0.110	PQL	mg/Kg	J	Q
VANADIUM	57.5		0.0242	MDL	0.110	PQL	mg/Kg	J	Q, E, A
ZINC	94.4		0.616	MDL	3.30	PQL	mg/Kg	J	E, E, A

Sample ID: SL-072-SA5A-SS-0.0-0.5 ***Collected:*** 3/1/2011 9:58:00 AM ***Analysis Type:*** REA7 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.219	J	0.0440	MDL	0.440	PQL	mg/Kg	J	Z

Sample ID: SL-072-SA5A-SS-0.0-0.5 ***Collected:*** 3/1/2011 9:58:00 AM ***Analysis Type:*** REA9 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	123		0.119	MDL	0.440	PQL	mg/Kg	J	E, A

Sample ID: SL-076-SA5A-SS-0.0-0.5 ***Collected:*** 3/1/2011 10:17:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.678		0.0642	MDL	0.214	PQL	mg/Kg	J	Q, E
ARSENIC	30.4		0.0856	MDL	0.428	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.554		0.0171	MDL	0.107	PQL	mg/Kg	J	Q
CADMIUM	0.341		0.0428	MDL	0.107	PQL	mg/Kg	J	Q
CHROMIUM	26.7		0.128	MDL	0.428	PQL	mg/Kg	J	Q, E, A
COBALT	45.6		0.0214	MDL	0.107	PQL	mg/Kg	J	Q, E, A
COPPER	50.9		0.0706	MDL	0.428	PQL	mg/Kg	J	Q, E
LEAD	12.0		0.0111	MDL	0.214	PQL	mg/Kg	J	Q, A
NICKEL	19.1		0.107	MDL	0.428	PQL	mg/Kg	J	Q, E, A
SILVER	0.0546	J	0.0128	MDL	0.107	PQL	mg/Kg	J	Z, Q
THALLIUM	0.361		0.0321	MDL	0.107	PQL	mg/Kg	J	Q
VANADIUM	69.6		0.0235	MDL	0.107	PQL	mg/Kg	J	Q, E, A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE094 **Laboratory: LL**

EDD Filename: DE094_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 ***Matrix:*** SO

Sample ID: SL-076-SA5A-SS-0.0-0.5 ***Collected:*** 3/1/2011 10:17:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ZINC	117		0.599	MDL	3.21	PQL	mg/Kg	J	E, E, A

Sample ID: SL-076-SA5A-SS-0.0-0.5 ***Collected:*** 3/1/2011 10:17:00 ***Analysis Type:*** REA7 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.144	J	0.0428	MDL	0.428	PQL	mg/Kg	J	Z

Sample ID: SL-076-SA5A-SS-0.0-0.5 ***Collected:*** 3/1/2011 10:17:00 ***Analysis Type:*** REA9 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	128		0.116	MDL	0.428	PQL	mg/Kg	J	E, A

Sample ID: SL-077-SA5A-SS-0.0-0.5 ***Collected:*** 3/1/2011 10:45:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.396		0.0681	MDL	0.227	PQL	mg/Kg	J	Q, E
ARSENIC	18.2		0.0908	MDL	0.454	PQL	mg/Kg	J	Q, E
BERYLLIUM	1.86		0.0182	MDL	0.114	PQL	mg/Kg	J	Q
CADMIUM	0.166		0.0454	MDL	0.114	PQL	mg/Kg	J	Q
CHROMIUM	47.4		0.136	MDL	0.454	PQL	mg/Kg	J	Q, E, A
COBALT	14.8		0.0227	MDL	0.114	PQL	mg/Kg	J	Q, E, A
COPPER	33.7		0.0749	MDL	0.454	PQL	mg/Kg	J	Q, E
NICKEL	33.1		0.114	MDL	0.454	PQL	mg/Kg	J	Q, E, A
SILVER	0.132		0.0136	MDL	0.114	PQL	mg/Kg	J	Q
THALLIUM	0.580		0.0341	MDL	0.114	PQL	mg/Kg	J	Q
VANADIUM	82.7		0.0250	MDL	0.114	PQL	mg/Kg	J	Q, E, A
ZINC	146		0.636	MDL	3.41	PQL	mg/Kg	J	E, E, A

Sample ID: SL-077-SA5A-SS-0.0-0.5 ***Collected:*** 3/1/2011 10:45:00 ***Analysis Type:*** REA5 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	14.0		0.0118	MDL	0.227	PQL	mg/Kg	J	Q, A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE094 **Laboratory: LL**

EDD Filename: DE094_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 ***Matrix:*** SO

Sample ID: SL-077-SA5A-SS-0.0-0.5 ***Collected:*** 3/1/2011 10:45:00 ***Analysis Type:*** REA7 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.365	J	0.0454	MDL	0.454	PQL	mg/Kg	J	Z

Sample ID: SL-077-SA5A-SS-0.0-0.5 ***Collected:*** 3/1/2011 10:45:00 ***Analysis Type:*** REA9 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	169		0.123	MDL	0.454	PQL	mg/Kg	J	E, A

Sample ID: SL-078-SA5A-SS-0.0-0.5 ***Collected:*** 3/1/2011 11:05:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.209	J	0.0651	MDL	0.217	PQL	mg/Kg	J	Z, Q, E
ARSENIC	11.4		0.0868	MDL	0.434	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.864		0.0174	MDL	0.108	PQL	mg/Kg	J	Q
CHROMIUM	32.0		0.130	MDL	0.434	PQL	mg/Kg	J	Q, E, A
COBALT	12.0		0.0217	MDL	0.108	PQL	mg/Kg	J	Q, E, A
COPPER	23.3		0.0716	MDL	0.434	PQL	mg/Kg	J	Q, E
LEAD	11.2		0.0113	MDL	0.217	PQL	mg/Kg	J	Q, A
NICKEL	21.2		0.108	MDL	0.434	PQL	mg/Kg	J	Q, E, A
SILVER	0.103	J	0.0130	MDL	0.108	PQL	mg/Kg	J	Z, Q
THALLIUM	0.442		0.0325	MDL	0.108	PQL	mg/Kg	J	Q
VANADIUM	60.8		0.0239	MDL	0.108	PQL	mg/Kg	J	Q, E, A
ZINC	99.6		0.607	MDL	3.25	PQL	mg/Kg	J	E, E, A

Sample ID: SL-078-SA5A-SS-0.0-0.5 ***Collected:*** 3/1/2011 11:05:00 ***Analysis Type:*** REA5 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.140		0.0434	MDL	0.108	PQL	mg/Kg	J	Q

Sample ID: SL-078-SA5A-SS-0.0-0.5 ***Collected:*** 3/1/2011 11:05:00 ***Analysis Type:*** REA7 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.200	J	0.0434	MDL	0.434	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE094 **Laboratory: LL**

EDD Filename: DE094_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6020** ***Matrix:*** **SO**

Sample ID: **SL-078-SA5A-SS-0.0-0.5** ***Collected:*** **3/1/2011 11:05:00** ***Analysis Type:*** **REA9** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	152		0.117	MDL	0.434	PQL	mg/Kg	J	E, A

Sample ID: **SL-103-SA5A-SS-0.0-0.5** ***Collected:*** **3/1/2011 1:35:00 PM** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.260		0.0739	MDL	0.246	PQL	mg/Kg	J	Q, E
ARSENIC	10.5		0.0986	MDL	0.493	PQL	mg/Kg	J	Q, E
BERYLLIUM	1.22		0.0197	MDL	0.123	PQL	mg/Kg	J	Q
CADMIUM	0.324		0.0493	MDL	0.123	PQL	mg/Kg	J	Q
CHROMIUM	39.1		0.148	MDL	0.493	PQL	mg/Kg	J	Q, E, A
COBALT	9.80		0.0246	MDL	0.123	PQL	mg/Kg	J	Q, E, A
COPPER	21.0		0.0813	MDL	0.493	PQL	mg/Kg	J	Q, E
NICKEL	23.8		0.123	MDL	0.493	PQL	mg/Kg	J	Q, E, A
SILVER	0.140		0.0148	MDL	0.123	PQL	mg/Kg	J	Q
THALLIUM	0.427		0.0370	MDL	0.123	PQL	mg/Kg	J	Q
VANADIUM	69.8		0.0271	MDL	0.123	PQL	mg/Kg	J	Q, E, A
ZINC	115		0.690	MDL	3.70	PQL	mg/Kg	J	E, E, A

Sample ID: **SL-103-SA5A-SS-0.0-0.5** ***Collected:*** **3/1/2011 1:35:00 PM** ***Analysis Type:*** **REA5** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	21.1		0.0128	MDL	0.246	PQL	mg/Kg	J	Q, A

Sample ID: **SL-103-SA5A-SS-0.0-0.5** ***Collected:*** **3/1/2011 1:35:00 PM** ***Analysis Type:*** **REA7** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.156	J	0.0493	MDL	0.493	PQL	mg/Kg	J	Z

Sample ID: **SL-103-SA5A-SS-0.0-0.5** ***Collected:*** **3/1/2011 1:35:00 PM** ***Analysis Type:*** **REA9** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	162		0.133	MDL	0.493	PQL	mg/Kg	J	E, A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE094 **Laboratory: LL**

EDD Filename: DE094_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6020** ***Matrix:*** **SO**

Sample ID: **SL-104-SA5A-SS-0.0-0.5** ***Collected:*** **3/1/2011 1:52:00 PM** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.731		0.0685	MDL	0.228	PQL	mg/Kg	J	Q, E
ARSENIC	10.4		0.0914	MDL	0.457	PQL	mg/Kg	J	Q, E
BERYLLIUM	1.17		0.0183	MDL	0.114	PQL	mg/Kg	J	Q
CADMIUM	0.418		0.0457	MDL	0.114	PQL	mg/Kg	J	Q
CHROMIUM	35.6		0.137	MDL	0.457	PQL	mg/Kg	J	Q, E, A
COBALT	11.2		0.0228	MDL	0.114	PQL	mg/Kg	J	Q, E, A
COPPER	20.9		0.0754	MDL	0.457	PQL	mg/Kg	J	Q, E
NICKEL	25.5		0.114	MDL	0.457	PQL	mg/Kg	J	Q, E, A
SILVER	0.119		0.0137	MDL	0.114	PQL	mg/Kg	J	Q
THALLIUM	0.459		0.0343	MDL	0.114	PQL	mg/Kg	J	Q
VANADIUM	64.9		0.0251	MDL	0.114	PQL	mg/Kg	J	Q, E, A
ZINC	132		0.640	MDL	3.43	PQL	mg/Kg	J	E, E, A

Sample ID: **SL-104-SA5A-SS-0.0-0.5** ***Collected:*** **3/1/2011 1:52:00 PM** ***Analysis Type:*** **REA5** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	19.8		0.0119	MDL	0.228	PQL	mg/Kg	J	Q, A

Sample ID: **SL-104-SA5A-SS-0.0-0.5** ***Collected:*** **3/1/2011 1:52:00 PM** ***Analysis Type:*** **REA7** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.232	J	0.0457	MDL	0.457	PQL	mg/Kg	J	Z

Sample ID: **SL-104-SA5A-SS-0.0-0.5** ***Collected:*** **3/1/2011 1:52:00 PM** ***Analysis Type:*** **REA9** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	161		0.123	MDL	0.457	PQL	mg/Kg	J	E, A

Sample ID: **SL-191-SA5A-SS-0.0-0.5** ***Collected:*** **3/1/2011 2:37:00 PM** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	1.00		0.0746	MDL	0.249	PQL	mg/Kg	J	Q, E
ARSENIC	5.45		0.0994	MDL	0.497	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.422		0.0199	MDL	0.124	PQL	mg/Kg	J	Q
CADMIUM	5.68		0.0497	MDL	0.124	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE094 **Laboratory: LL**

EDD Filename: DE094_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6020** ***Matrix:*** **SO**

Sample ID: **SL-191-SA5A-SS-0.0-0.5** ***Collected:*** **3/1/2011 2:37:00 PM** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHROMIUM	77.1		0.149	MDL	0.497	PQL	mg/Kg	J	Q, E, A
COBALT	8.81		0.0249	MDL	0.124	PQL	mg/Kg	J	Q, E, A
COPPER	63.2		0.0820	MDL	0.497	PQL	mg/Kg	J	Q, E
NICKEL	80.4		0.124	MDL	0.497	PQL	mg/Kg	J	Q, E, A
SILVER	2.18		0.0149	MDL	0.124	PQL	mg/Kg	J	Q
THALLIUM	0.307		0.0373	MDL	0.124	PQL	mg/Kg	J	Q
VANADIUM	40.8		0.0273	MDL	0.124	PQL	mg/Kg	J	Q, E, A

Sample ID: **SL-191-SA5A-SS-0.0-0.5** ***Collected:*** **3/1/2011 2:37:00 PM** ***Analysis Type:*** **REA5** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	100		0.0129	MDL	0.249	PQL	mg/Kg	J	Q, A

Sample ID: **SL-191-SA5A-SS-0.0-0.5** ***Collected:*** **3/1/2011 2:37:00 PM** ***Analysis Type:*** **REA6** ***Dilution:*** **20**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ZINC	944		6.96	MDL	37.3	PQL	mg/Kg	J	E, E, A

Sample ID: **SL-191-SA5A-SS-0.0-0.5** ***Collected:*** **3/1/2011 2:37:00 PM** ***Analysis Type:*** **REA7** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.166	J	0.0497	MDL	0.497	PQL	mg/Kg	J	Z

Sample ID: **SL-191-SA5A-SS-0.0-0.5** ***Collected:*** **3/1/2011 2:37:00 PM** ***Analysis Type:*** **REA9** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	139		0.134	MDL	0.497	PQL	mg/Kg	J	E, A

Sample ID: **SL-194-SA5A-SS-0.0-0.3** ***Collected:*** **3/1/2011 3:02:00 PM** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	5.49		0.0919	MDL	0.460	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.644		0.0184	MDL	0.115	PQL	mg/Kg	J	Q
CADMIUM	0.773		0.0460	MDL	0.115	PQL	mg/Kg	J	Q
CHROMIUM	35.7		0.138	MDL	0.460	PQL	mg/Kg	J	Q, E, A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE094 **Laboratory: LL**

EDD Filename: DE094_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 ***Matrix:*** SO

Sample ID: SL-194-SA5A-SS-0.0-0.3 ***Collected:*** 3/1/2011 3:02:00 PM ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COBALT	8.63		0.0230	MDL	0.115	PQL	mg/Kg	J	Q, E, A
COPPER	29.3		0.0758	MDL	0.460	PQL	mg/Kg	J	Q, E
NICKEL	39.8		0.115	MDL	0.460	PQL	mg/Kg	J	Q, E, A
SILVER	0.257		0.0138	MDL	0.115	PQL	mg/Kg	J	Q
THALLIUM	0.221		0.0345	MDL	0.115	PQL	mg/Kg	J	Q
VANADIUM	52.7		0.0253	MDL	0.115	PQL	mg/Kg	J	Q, E, A

Sample ID: SL-194-SA5A-SS-0.0-0.3 ***Collected:*** 3/1/2011 3:02:00 PM ***Analysis Type:*** REA5 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.452		0.0689	MDL	0.230	PQL	mg/Kg	J	Q, E
LEAD	56.0		0.0119	MDL	0.230	PQL	mg/Kg	J	Q, A

Sample ID: SL-194-SA5A-SS-0.0-0.3 ***Collected:*** 3/1/2011 3:02:00 PM ***Analysis Type:*** REA6 ***Dilution:*** 20

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ZINC	580		6.43	MDL	34.5	PQL	mg/Kg	J	E, E, A

Sample ID: SL-194-SA5A-SS-0.0-0.3 ***Collected:*** 3/1/2011 3:02:00 PM ***Analysis Type:*** REA9 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	93.2		0.124	MDL	0.460	PQL	mg/Kg	J	E, A

Sample ID: SL-195-SA5A-SS-0.0-0.2 ***Collected:*** 3/1/2011 3:20:00 PM ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.283		0.0824	MDL	0.275	PQL	mg/Kg	J	Q, E
ARSENIC	7.32		0.110	MDL	0.549	PQL	mg/Kg	J	Q, E
BERYLLIUM	1.06		0.0220	MDL	0.137	PQL	mg/Kg	J	Q
CADMIUM	0.770		0.0549	MDL	0.137	PQL	mg/Kg	J	Q
CHROMIUM	34.4		0.165	MDL	0.549	PQL	mg/Kg	J	Q, E, A
COBALT	12.1		0.0275	MDL	0.137	PQL	mg/Kg	J	Q, E, A
COPPER	20.1		0.0906	MDL	0.549	PQL	mg/Kg	J	Q, E
LEAD	17.3		0.0143	MDL	0.275	PQL	mg/Kg	J	Q, A
NICKEL	25.9		0.137	MDL	0.549	PQL	mg/Kg	J	Q, E, A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE094 **Laboratory: LL**

EDD Filename: DE094_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6020** ***Matrix:*** **SO**

Sample ID: **SL-195-SA5A-SS-0.0-0.2** ***Collected:*** **3/1/2011 3:20:00 PM** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.124	J	0.0165	MDL	0.137	PQL	mg/Kg	J	Z, Q
THALLIUM	0.439		0.0412	MDL	0.137	PQL	mg/Kg	J	Q
VANADIUM	70.2		0.0302	MDL	0.137	PQL	mg/Kg	J	Q, E, A
ZINC	176		0.769	MDL	4.12	PQL	mg/Kg	J	E, E, A

Sample ID: **SL-195-SA5A-SS-0.0-0.2** ***Collected:*** **3/1/2011 3:20:00 PM** ***Analysis Type:*** **REA7** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.332	J	0.0549	MDL	0.549	PQL	mg/Kg	J	Z

Sample ID: **SL-195-SA5A-SS-0.0-0.2** ***Collected:*** **3/1/2011 3:20:00 PM** ***Analysis Type:*** **REA9** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	150		0.148	MDL	0.549	PQL	mg/Kg	J	E, A

Sample ID: **SL-244-SA5A-SB-4.0-5.0** ***Collected:*** **3/1/2011 10:42:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.167	J	0.0674	MDL	0.225	PQL	mg/Kg	J	Z, Q, E
ARSENIC	6.56		0.0898	MDL	0.449	PQL	mg/Kg	J	Q, E
BERYLLIUM	1.12		0.0180	MDL	0.112	PQL	mg/Kg	J	Q
CADMIUM	0.113		0.0449	MDL	0.112	PQL	mg/Kg	J	Q
CHROMIUM	22.7		0.135	MDL	0.449	PQL	mg/Kg	J	Q, E, A
COBALT	10.1		0.0225	MDL	0.112	PQL	mg/Kg	J	Q, E, A
COPPER	7.70		0.0741	MDL	0.449	PQL	mg/Kg	J	Q, E
LEAD	8.19		0.0117	MDL	0.225	PQL	mg/Kg	J	Q, A
NICKEL	14.5		0.112	MDL	0.449	PQL	mg/Kg	J	Q, E, A
SILVER	0.110	J	0.0135	MDL	0.112	PQL	mg/Kg	J	Z, Q
THALLIUM	0.351		0.0337	MDL	0.112	PQL	mg/Kg	J	Q
VANADIUM	46.2		0.0247	MDL	0.112	PQL	mg/Kg	J	Q, E, A
ZINC	66.1		0.629	MDL	3.37	PQL	mg/Kg	J	E, E, A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE094 **Laboratory: LL**

EDD Filename: DE094_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 ***Matrix:*** SO

Sample ID: SL-244-SA5A-SB-4.0-5.0 ***Collected:*** 3/1/2011 10:42:00 ***Analysis Type:*** REA7 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.108	J	0.0449	MDL	0.449	PQL	mg/Kg	J	Z

Sample ID: SL-244-SA5A-SB-4.0-5.0 ***Collected:*** 3/1/2011 10:42:00 ***Analysis Type:*** REA9 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	151		0.121	MDL	0.449	PQL	mg/Kg	J	E, A

Sample ID: SL-244-SA5A-SB-9.0-10.0 ***Collected:*** 3/1/2011 10:44:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.106	J	0.0679	MDL	0.226	PQL	mg/Kg	J	Z, Q, E
ARSENIC	7.37		0.0905	MDL	0.453	PQL	mg/Kg	J	Q, E
BERYLLIUM	1.60		0.0181	MDL	0.113	PQL	mg/Kg	J	Q
CADMIUM	0.0454	J	0.0453	MDL	0.113	PQL	mg/Kg	J	Z, Q
CHROMIUM	20.5		0.136	MDL	0.453	PQL	mg/Kg	J	Q, E, A
COBALT	5.67		0.0226	MDL	0.113	PQL	mg/Kg	J	Q, E, A
COPPER	12.8		0.0747	MDL	0.453	PQL	mg/Kg	J	Q, E
LEAD	12.6		0.0118	MDL	0.226	PQL	mg/Kg	J	Q, A
NICKEL	10.1		0.113	MDL	0.453	PQL	mg/Kg	J	Q, E, A
SILVER	0.0373	J	0.0136	MDL	0.113	PQL	mg/Kg	J	Z, Q
THALLIUM	0.446		0.0339	MDL	0.113	PQL	mg/Kg	J	Q
VANADIUM	51.4		0.0249	MDL	0.113	PQL	mg/Kg	J	Q, E, A
ZINC	133		0.634	MDL	3.39	PQL	mg/Kg	J	E, E, A

Sample ID: SL-244-SA5A-SB-9.0-10.0 ***Collected:*** 3/1/2011 10:44:00 ***Analysis Type:*** REA7 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.324	J	0.0453	MDL	0.453	PQL	mg/Kg	J	Z

Sample ID: SL-244-SA5A-SB-9.0-10.0 ***Collected:*** 3/1/2011 10:44:00 ***Analysis Type:*** REA9 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	153		0.122	MDL	0.453	PQL	mg/Kg	J	E, A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE094 **Laboratory: LL**

EDD Filename: DE094_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 ***Matrix:*** SO

Sample ID: SL-256-SA5A-SS-0.0-0.5 ***Collected:*** 3/1/2011 8:57:00 AM ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.161	J	0.0671	MDL	0.224	PQL	mg/Kg	J	Z, Q, E
ARSENIC	5.69		0.0895	MDL	0.448	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.606		0.0179	MDL	0.112	PQL	mg/Kg	J	Q
CADMIUM	0.388		0.0448	MDL	0.112	PQL	mg/Kg	J	Q
CHROMIUM	21.3		0.134	MDL	0.448	PQL	mg/Kg	J	Q, E, A
COBALT	6.10		0.0224	MDL	0.112	PQL	mg/Kg	J	Q, E, A
COPPER	6.93		0.0738	MDL	0.448	PQL	mg/Kg	J	Q, E
LEAD	5.42		0.0116	MDL	0.224	PQL	mg/Kg	J	Q, A
NICKEL	11.3		0.112	MDL	0.448	PQL	mg/Kg	J	Q, E, A
SILVER	0.0242	J	0.0134	MDL	0.112	PQL	mg/Kg	J	Z, Q
THALLIUM	0.232		0.0336	MDL	0.112	PQL	mg/Kg	J	Q
VANADIUM	42.1		0.0246	MDL	0.112	PQL	mg/Kg	J	Q, E, A
ZINC	157		0.627	MDL	3.36	PQL	mg/Kg	J	E, E, A

Sample ID: SL-256-SA5A-SS-0.0-0.5 ***Collected:*** 3/1/2011 8:57:00 AM ***Analysis Type:*** REA7 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.144	J	0.0448	MDL	0.448	PQL	mg/Kg	J	Z

Sample ID: SL-256-SA5A-SS-0.0-0.5 ***Collected:*** 3/1/2011 8:57:00 AM ***Analysis Type:*** REA9 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	83.8		0.121	MDL	0.448	PQL	mg/Kg	J	E, A

Sample ID: SL-257-SA5A-SS-0.0-0.5 ***Collected:*** 3/1/2011 9:18:00 AM ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.169	J	0.0667	MDL	0.222	PQL	mg/Kg	J	Z, Q, E
ARSENIC	5.23		0.0890	MDL	0.445	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.530		0.0178	MDL	0.111	PQL	mg/Kg	J	Q
CADMIUM	0.728		0.0445	MDL	0.111	PQL	mg/Kg	J	Q
CHROMIUM	21.5		0.133	MDL	0.445	PQL	mg/Kg	J	Q, E, A
COBALT	5.61		0.0222	MDL	0.111	PQL	mg/Kg	J	Q, E, A
COPPER	9.20		0.0734	MDL	0.445	PQL	mg/Kg	J	Q, E
LEAD	8.39		0.0116	MDL	0.222	PQL	mg/Kg	J	Q, A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE094 **Laboratory: LL**

EDD Filename: DE094_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-257-SA5A-SS-0.0-0.5 *Collected:* 3/1/2011 9:18:00 AM *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NICKEL	10.1		0.111	MDL	0.445	PQL	mg/Kg	J	Q, E, A
SILVER	0.0295	J	0.0133	MDL	0.111	PQL	mg/Kg	J	Z, Q
THALLIUM	0.262		0.0334	MDL	0.111	PQL	mg/Kg	J	Q
VANADIUM	36.5		0.0245	MDL	0.111	PQL	mg/Kg	J	Q, E, A
ZINC	162		0.623	MDL	3.34	PQL	mg/Kg	J	E, E, A

Sample ID: SL-257-SA5A-SS-0.0-0.5 *Collected:* 3/1/2011 9:18:00 AM *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.144	J	0.0445	MDL	0.445	PQL	mg/Kg	J	Z

Sample ID: SL-257-SA5A-SS-0.0-0.5 *Collected:* 3/1/2011 9:18:00 AM *Analysis Type:* REA9 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	72.7		0.120	MDL	0.445	PQL	mg/Kg	J	E, A

Method Category: METALS

Method: 7199 **Matrix:** AQ

Sample ID: EB04-SA5A-030111 *Collected:* 3/1/2011 11:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	5.0	U	5.0	MDL	10.0	PQL	ug/L	UJ	H

Method Category: METALS

Method: 7199 **Matrix:** SO

Sample ID: DUP-06-SA5A-QC-030111 *Collected:* 3/1/2011 9:00:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.24	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z, FD

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE094 **Laboratory: LL**

EDD Filename: DE094_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 7199 **Matrix:** SO

Sample ID: SL-076-SA5A-SS-0.0-0.5 *Collected:* 3/1/2011 10:17:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.36	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-194-SA5A-SS-0.0-0.3 *Collected:* 3/1/2011 3:02:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.61	J	0.24	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-195-SA5A-SS-0.0-0.2 *Collected:* 3/1/2011 3:20:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.57	J	0.28	MDL	1.4	PQL	mg/Kg	J	Z

Sample ID: SL-244-SA5A-SB-9.0-10.0 *Collected:* 3/1/2011 10:44:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.35	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-256-SA5A-SS-0.0-0.5 *Collected:* 3/1/2011 8:57:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.23	U	0.23	MDL	1.1	PQL	mg/Kg	UJ	FD

Sample ID: SL-257-SA5A-SS-0.0-0.5 *Collected:* 3/1/2011 9:18:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.25	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 7471A **Matrix:** SO

Sample ID: DUP-06-SA5A-QC-030111 *Collected:* 3/1/2011 9:00:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0031	U	0.0031	MDL	0.110	PQL	mg/Kg	UJ	FD

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE094 **Laboratory: LL**

EDD Filename: DE094_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 7471A **Matrix:** SO

Sample ID: SL-076-SA5A-SS-0.0-0.5 **Collected:** 3/1/2011 10:17:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0114	J	0.0029	MDL	0.102	PQL	mg/Kg	J	Z

Sample ID: SL-103-SA5A-SS-0.0-0.5 **Collected:** 3/1/2011 1:35:00 PM **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0051	J	0.0034	MDL	0.118	PQL	mg/Kg	J	Z

Sample ID: SL-194-SA5A-SS-0.0-0.3 **Collected:** 3/1/2011 3:02:00 PM **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0167	J	0.0033	MDL	0.114	PQL	mg/Kg	J	Z

Sample ID: SL-195-SA5A-SS-0.0-0.2 **Collected:** 3/1/2011 3:20:00 PM **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0106	J	0.0038	MDL	0.132	PQL	mg/Kg	J	Z

Sample ID: SL-244-SA5A-SB-4.0-5.0 **Collected:** 3/1/2011 10:42:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0055	J	0.0033	MDL	0.114	PQL	mg/Kg	J	Z

Sample ID: SL-256-SA5A-SS-0.0-0.5 **Collected:** 3/1/2011 8:57:00 AM **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0133	J	0.0032	MDL	0.111	PQL	mg/Kg	J	Z, FD

Method Category: SVOA

Method: 8081A **Matrix:** SO

Sample ID: DUP-06-SA5A-QC-030111 **Collected:** 3/1/2011 9:00:00 AM **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MIREX	0.11	J	0.074	MDL	0.38	PQL	ug/Kg	J	Z, FD

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE094 **Laboratory: LL**

EDD Filename: DE094_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **8081A** ***Matrix:*** **SO**

Sample ID: **SL-066-SA5A-SS-0.0-0.5** ***Collected:*** **3/1/2011 1:18:00 PM** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	0.20	U	0.20	MDL	0.39	PQL	ug/Kg	UJ	S
4,4'-DDE	0.078	U	0.078	MDL	0.39	PQL	ug/Kg	UJ	S
4,4'-DDT	1.2		0.075	MDL	0.39	PQL	ug/Kg	J	S
ALDRIN	0.075	U	0.075	MDL	0.19	PQL	ug/Kg	UJ	S
ALPHA-BHC	0.039	U	0.039	MDL	0.19	PQL	ug/Kg	UJ	S
BETA-BHC	0.068	U	0.068	MDL	0.19	PQL	ug/Kg	UJ	S
Chlordane	1.9	U	1.9	MDL	3.9	PQL	ug/Kg	UJ	S
DELTA-BHC	0.041	U	0.041	MDL	0.19	PQL	ug/Kg	UJ	S
DIELDRIN	0.075	U	0.075	MDL	0.39	PQL	ug/Kg	UJ	S
ENDOSULFAN I	0.050	U	0.050	MDL	0.19	PQL	ug/Kg	UJ	S
ENDOSULFAN II	0.087	U	0.087	MDL	0.39	PQL	ug/Kg	UJ	S
ENDOSULFAN SULFATE	0.075	U	0.075	MDL	0.39	PQL	ug/Kg	UJ	S
ENDRIN	0.075	U	0.075	MDL	0.39	PQL	ug/Kg	UJ	S
ENDRIN ALDEHYDE	0.075	U	0.075	MDL	0.39	PQL	ug/Kg	UJ	S
ENDRIN KETONE	0.075	U	0.075	MDL	0.39	PQL	ug/Kg	UJ	S
gamma-BHC (Lindane)	0.039	U	0.039	MDL	0.19	PQL	ug/Kg	UJ	S
HEPTACHLOR	0.068	U	0.068	MDL	0.19	PQL	ug/Kg	UJ	S
HEPTACHLOR EPOXIDE	0.039	U	0.039	MDL	0.19	PQL	ug/Kg	UJ	S
METHOXYCHLOR	0.39	U	0.39	MDL	1.9	PQL	ug/Kg	UJ	S
MIREX	0.075	U	0.075	MDL	0.39	PQL	ug/Kg	UJ	S
TOXAPHENE	2.5	U	2.5	MDL	7.5	PQL	ug/Kg	UJ	S

Sample ID: **SL-072-SA5A-SS-0.0-0.5** ***Collected:*** **3/1/2011 9:58:00 AM** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ENDRIN KETONE	0.23	J	0.074	MDL	0.38	PQL	ug/Kg	J	Z

Sample ID: **SL-076-SA5A-SS-0.0-0.5** ***Collected:*** **3/1/2011 10:17:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ENDOSULFAN II	0.10	J	0.071	MDL	0.37	PQL	ug/Kg	J	Z, L
gamma-BHC (Lindane)	0.069	J	0.037	MDL	0.18	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE094 **Laboratory: LL**

EDD Filename: DE094_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **8081A** ***Matrix:*** **SO**

Sample ID: **SL-077-SA5A-SS-0.0-0.5** ***Collected:*** **3/1/2011 10:45:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ENDOSULFAN SULFATE	0.10	J	0.077	MDL	0.40	PQL	ug/Kg	J	Z
ENDRIN KETONE	0.15	J	0.077	MDL	0.40	PQL	ug/Kg	J	Z
METHOXYCHLOR	0.66	J	0.40	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: **SL-103-SA5A-SS-0.0-0.5** ***Collected:*** **3/1/2011 1:35:00 PM** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDT	2.2		0.084	MDL	0.43	PQL	ug/Kg	J	S

Sample ID: **SL-195-SA5A-SS-0.0-0.2** ***Collected:*** **3/1/2011 3:20:00 PM** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDE	0.31	J	0.092	MDL	0.48	PQL	ug/Kg	J	Z, S

Sample ID: **SL-256-SA5A-SS-0.0-0.5** ***Collected:*** **3/1/2011 8:57:00 AM** ***Analysis Type:*** **DL-BASE/NEUTRAL** ***Dilution:*** **5**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DIELDRIN	4.2		0.37	MDL	1.9	PQL	ug/Kg	J	Q

Sample ID: **SL-256-SA5A-SS-0.0-0.5** ***Collected:*** **3/1/2011 8:57:00 AM** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	1.3		0.075	MDL	0.38	PQL	ug/Kg	J	Q, S
4,4'-DDE	0.075	U	0.075	MDL	0.38	PQL	ug/Kg	UJ	S
4,4'-DDT	1.3		0.075	MDL	0.38	PQL	ug/Kg	J	S
ALDRIN	0.075	U	0.075	MDL	0.19	PQL	ug/Kg	UJ	S
ALPHA-BHC	0.038	U	0.038	MDL	0.19	PQL	ug/Kg	UJ	S
BETA-BHC	0.068	U	0.068	MDL	0.19	PQL	ug/Kg	UJ	S
Chlordane	11	U	11	MDL	11	PQL	ug/Kg	UJ	S
DELTA-BHC	0.041	U	0.041	MDL	0.19	PQL	ug/Kg	UJ	S
ENDOSULFAN I	0.050	U	0.050	MDL	0.19	PQL	ug/Kg	UJ	S
ENDOSULFAN II	0.075	U	0.075	MDL	0.38	PQL	ug/Kg	UJ	S
ENDOSULFAN SULFATE	0.075	U	0.075	MDL	0.38	PQL	ug/Kg	UJ	S
ENDRIN	0.075	U	0.075	MDL	0.38	PQL	ug/Kg	R	Q
ENDRIN ALDEHYDE	0.075	U	0.075	MDL	0.38	PQL	ug/Kg	UJ	S

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE094 **Laboratory: LL**

EDD Filename: DE094_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8081A **Matrix: SO**

Sample ID: SL-256-SA5A-SS-0.0-0.5 *Collected:* 3/1/2011 8:57:00 AM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ENDRIN KETONE	0.075	U	0.075	MDL	0.38	PQL	ug/Kg	UJ	S
gamma-BHC (Lindane)	0.038	U	0.038	MDL	0.19	PQL	ug/Kg	UJ	S
HEPTACHLOR	0.068	U	0.068	MDL	0.19	PQL	ug/Kg	UJ	S
HEPTACHLOR EPOXIDE	0.038	U	0.038	MDL	0.19	PQL	ug/Kg	UJ	S
METHOXYCHLOR	0.38	U	0.38	MDL	1.9	PQL	ug/Kg	UJ	S
MIREX	0.34	J	0.075	MDL	0.38	PQL	ug/Kg	J	Z, S, FD
TOXAPHENE	2.5	U	2.5	MDL	7.5	PQL	ug/Kg	UJ	S

Sample ID: SL-257-SA5A-SS-0.0-0.5 *Collected:* 3/1/2011 9:18:00 AM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDT	1.5		0.074	MDL	0.38	PQL	ug/Kg	J	S
ENDOSULFAN II	0.11	J	0.074	MDL	0.38	PQL	ug/Kg	J	Z, L, S
ENDRIN ALDEHYDE	0.35	J	0.074	MDL	0.38	PQL	ug/Kg	J	Z, S
ENDRIN KETONE	0.59		0.074	MDL	0.38	PQL	ug/Kg	J	S
HEPTACHLOR EPOXIDE	0.16	J	0.038	MDL	0.19	PQL	ug/Kg	J	Z, S
MIREX	0.84		0.074	MDL	0.38	PQL	ug/Kg	J	S

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: DUP-06-SA5A-QC-030111 *Collected:* 3/1/2011 9:00:00 AM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	5.1	J	2.2	MDL	9.6	PQL	ug/Kg	J	Z, FD

Sample ID: SL-066-SA5A-SS-0.0-0.5 *Collected:* 3/1/2011 1:18:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	12	J	3.7	MDL	19	PQL	ug/Kg	J	Z
Aroclor 5460	18	J	11	MDL	37	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE094 **Laboratory: LL**

EDD Filename: DE094_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **8082** ***Matrix:*** **SO**

Sample ID: **SL-103-SA5A-SS-0.0-0.5** ***Collected:*** **3/1/2011 1:35:00 PM** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1248	0.71	J	0.42	MDL	2.2	PQL	ug/Kg	J	Z
AROCLOR 1254	1.8	J	0.42	MDL	2.2	PQL	ug/Kg	J	Z
AROCLOR 1260	2.1	J	0.49	MDL	2.2	PQL	ug/Kg	J	Z

Sample ID: **SL-195-SA5A-SS-0.0-0.2** ***Collected:*** **3/1/2011 3:20:00 PM** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1016	0.46	U	0.46	MDL	2.4	PQL	ug/Kg	R	S
AROCLOR 1221	0.46	U	0.46	MDL	2.4	PQL	ug/Kg	R	S
AROCLOR 1232	0.46	U	0.46	MDL	2.4	PQL	ug/Kg	R	S
AROCLOR 1242	0.46	U	0.46	MDL	2.4	PQL	ug/Kg	R	S
AROCLOR 1248	0.94	J	0.46	MDL	2.4	PQL	ug/Kg	J	Z, S
AROCLOR 1254	3.3		0.46	MDL	2.4	PQL	ug/Kg	J	S
AROCLOR 1260	5.1		0.55	MDL	2.4	PQL	ug/Kg	J	S
Aroclor 1262	0.46	U	0.46	MDL	2.4	PQL	ug/Kg	R	S
Aroclor 1268	0.46	U	0.46	MDL	2.4	PQL	ug/Kg	R	S
Aroclor 5432	1.4	U	1.4	MDL	4.6	PQL	ug/Kg	R	S
Aroclor 5442	1.4	U	1.4	MDL	4.6	PQL	ug/Kg	R	S
Aroclor 5460	1.4	U	1.4	MDL	4.6	PQL	ug/Kg	R	S

Sample ID: **SL-256-SA5A-SS-0.0-0.5** ***Collected:*** **3/1/2011 8:57:00 AM** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	0.44	U	0.44	MDL	1.9	PQL	ug/Kg	UJ	FD

Method Category: **SVOA**

Method: **8151A** ***Matrix:*** **SO**

Sample ID: **DUP-06-SA5A-QC-030111** ***Collected:*** **3/1/2011 9:00:00 AM** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DB	1.5	J	0.70	MDL	1.9	PQL	ug/Kg	J	Z, FD

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE094 **Laboratory: LL**

EDD Filename: DE094_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **8151A** ***Matrix:*** **SO**

Sample ID: **SL-066-SA5A-SS-0.0-0.5** ***Collected:*** **3/1/2011 1:18:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DICAMBA	0.46	J	0.45	MDL	1.4	PQL	ug/Kg	J	Z

Sample ID: **SL-072-SA5A-SS-0.0-0.5** ***Collected:*** **3/1/2011 9:58:00 AM** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MCPA	130	J	85	MDL	280	PQL	ug/Kg	J	Z

Sample ID: **SL-076-SA5A-SS-0.0-0.5** ***Collected:*** **3/1/2011 10:17:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MCPA	130	J	82	MDL	270	PQL	ug/Kg	J	Z

Sample ID: **SL-103-SA5A-SS-0.0-0.5** ***Collected:*** **3/1/2011 1:35:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MCPA	200	J	96	MDL	320	PQL	ug/Kg	J	Z
MCPP	200	J	95	MDL	320	PQL	ug/Kg	J	Z

Sample ID: **SL-104-SA5A-SS-0.0-0.5** ***Collected:*** **3/1/2011 1:52:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DICAMBA	0.60	J	0.48	MDL	1.4	PQL	ug/Kg	J	Z

Sample ID: **SL-194-SA5A-SS-0.0-0.3** ***Collected:*** **3/1/2011 3:02:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MCPP	180	J	90	MDL	300	PQL	ug/Kg	J	Z

Sample ID: **SL-195-SA5A-SS-0.0-0.2** ***Collected:*** **3/1/2011 3:20:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DICAMBA	0.60	J	0.56	MDL	1.7	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE094 **Laboratory: LL**

EDD Filename: DE094_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8151A **Matrix:** SO

Sample ID: SL-256-SA5A-SS-0.0-0.5 *Collected:* 3/1/2011 8:57:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DB	0.70	U	0.70	MDL	1.9	PQL	ug/Kg	UJ	FD

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SL-066-SA5A-SS-0.0-0.5 *Collected:* 3/1/2011 1:18:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	25	J	19	MDL	190	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	91	J	19	MDL	190	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	74	J	19	MDL	190	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	89	J	19	MDL	190	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	47	J	19	MDL	190	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	49	J	19	MDL	190	PQL	ug/Kg	J	Z
CARBAZOLE	22	J	19	MDL	190	PQL	ug/Kg	J	Z
CHRYSENE	120	J	19	MDL	190	PQL	ug/Kg	J	Z
Di-n-butylphthalate	40	J	19	MDL	190	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	40	J	19	MDL	190	PQL	ug/Kg	J	Z
PHENANTHRENE	170	J	19	MDL	190	PQL	ug/Kg	J	Z

Sample ID: SL-103-SA5A-SS-0.0-0.5 *Collected:* 3/1/2011 1:35:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHRYSENE	30	J	21	MDL	210	PQL	ug/Kg	J	Z
FLUORANTHENE	47	J	21	MDL	210	PQL	ug/Kg	J	Z
PHENANTHRENE	30	J	21	MDL	210	PQL	ug/Kg	J	Z
PYRENE	39	J	21	MDL	210	PQL	ug/Kg	J	Z

Sample ID: SL-104-SA5A-SS-0.0-0.5 *Collected:* 3/1/2011 1:52:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHRYSENE	20	J	20	MDL	200	PQL	ug/Kg	J	Z
FLUORANTHENE	34	J	20	MDL	200	PQL	ug/Kg	J	Z
PYRENE	28	J	20	MDL	200	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE094 **Laboratory: LL**

EDD Filename: DE094_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SL-191-SA5A-SS-0.0-0.5 *Collected:* 3/1/2011 2:37:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Butylbenzylphthalate	63	J	21	MDL	210	PQL	ug/Kg	J	Z
Di-n-butylphthalate	110	J	21	MDL	210	PQL	ug/Kg	J	Z

Sample ID: SL-194-SA5A-SS-0.0-0.3 *Collected:* 3/1/2011 3:02:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CARBAZOLE	31	J	20	MDL	200	PQL	ug/Kg	J	Z
DIBENZOFURAN	110	J	20	MDL	200	PQL	ug/Kg	J	Z

Sample ID: SL-195-SA5A-SS-0.0-0.2 *Collected:* 3/1/2011 3:20:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DIBENZOFURAN	31	J	23	MDL	230	PQL	ug/Kg	J	Z
FLUORANTHENE	38	J	23	MDL	230	PQL	ug/Kg	J	Z
PHENANTHRENE	100	J	23	MDL	230	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8270C SIM **Matrix:** AQ

Sample ID: EB04-SA5A-030111 *Collected:* 3/1/2011 11:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	0.34	J	0.052	MDL	1.0	PQL	ug/L	U	B
Butylbenzylphthalate	0.071	J	0.052	MDL	1.0	PQL	ug/L	J	Z
CHRYSENE	0.025	J	0.010	MDL	0.052	PQL	ug/L	J	Z
Diethylphthalate	0.074	J	0.052	MDL	1.0	PQL	ug/L	U	B
Di-n-butylphthalate	0.33	J	0.052	MDL	1.0	PQL	ug/L	U	B
NAPHTHALENE	0.033	J	0.031	MDL	0.052	PQL	ug/L	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE094 **Laboratory: LL**

EDD Filename: DE094_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **8270C SIM** ***Matrix:*** **SO**

Sample ID: **DUP-06-SA5A-QC-030111** ***Collected:*** **3/1/2011 9:00:00 AM** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **5**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	3.8	U	3.8	MDL	9.4	PQL	ug/Kg	UJ	FD
BENZO(A)PYRENE	3.8	J	3.8	MDL	9.4	PQL	ug/Kg	J	Z, FD
BENZO(B)FLUORANTHENE	21		3.8	MDL	9.4	PQL	ug/Kg	J	FD
BENZO(G,H,I)PERYLENE	3.9	J	3.8	MDL	9.4	PQL	ug/Kg	J	Z, FD
BENZO(K)FLUORANTHENE	3.8	U	3.8	MDL	9.4	PQL	ug/Kg	UJ	FD
BIS(2-ETHYLHEXYL)PHTHALATE	38	J	34	MDL	100	PQL	ug/Kg	J	Z, FD
CHRYSENE	7.5	J	1.9	MDL	9.4	PQL	ug/Kg	J	Z, FD
FLUORANTHENE	3.9	J	3.8	MDL	9.4	PQL	ug/Kg	J	Z, FD
INDENO(1,2,3-CD)PYRENE	3.8	U	3.8	MDL	9.4	PQL	ug/Kg	UJ	FD
PYRENE	5.3	J	3.8	MDL	9.4	PQL	ug/Kg	J	Z, FD

Sample ID: **SL-076-SA5A-SS-0.0-0.5** ***Collected:*** **3/1/2011 10:17:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **5**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	7.3	J	3.6	MDL	8.9	PQL	ug/Kg	J	Z
CHRYSENE	5.1	J	1.8	MDL	8.9	PQL	ug/Kg	J	Z
FLUORANTHENE	5.6	J	3.6	MDL	8.9	PQL	ug/Kg	J	Z
PYRENE	5.6	J	3.6	MDL	8.9	PQL	ug/Kg	J	Z

Sample ID: **SL-077-SA5A-SS-0.0-0.5** ***Collected:*** **3/1/2011 10:45:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	8.0	J	6.9	MDL	21	PQL	ug/Kg	J	Z
Di-n-octylphthalate	11	J	6.9	MDL	21	PQL	ug/Kg	J	Z

Sample ID: **SL-078-SA5A-SS-0.0-0.5** ***Collected:*** **3/1/2011 11:05:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Di-n-octylphthalate	11	J	6.6	MDL	20	PQL	ug/Kg	J	Z

Sample ID: **SL-103-SA5A-SS-0.0-0.5** ***Collected:*** **3/1/2011 1:35:00 PM** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **5**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	4.8	J	4.2	MDL	10	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	5.8	J	4.2	MDL	10	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE094 **Laboratory: LL**

EDD Filename: DE094_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **8270C SIM** ***Matrix:*** **SO**

Sample ID: **SL-103-SA5A-SS-0.0-0.5** ***Collected:*** **3/1/2011 1:35:00 PM** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **5**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(K)FLUORANTHENE	4.9	J	4.2	MDL	10	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	48	J	37	MDL	110	PQL	ug/Kg	J	Z

Sample ID: **SL-104-SA5A-SS-0.0-0.5** ***Collected:*** **3/1/2011 1:52:00 PM** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **5**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	5.3	J	4.0	MDL	9.9	PQL	ug/Kg	J	Z
PHENANTHRENE	5.9	J	4.0	MDL	9.9	PQL	ug/Kg	J	Z

Sample ID: **SL-191-SA5A-SS-0.0-0.5** ***Collected:*** **3/1/2011 2:37:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** **5**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	9.1	J	4.2	MDL	10	PQL	ug/Kg	J	Z
ACENAPHTHYLENE	4.5	J	2.1	MDL	10	PQL	ug/Kg	J	Z
NAPHTHALENE	7.5	J	4.2	MDL	10	PQL	ug/Kg	J	Z

Sample ID: **SL-194-SA5A-SS-0.0-0.3** ***Collected:*** **3/1/2011 3:02:00 PM** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **5**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACENAPHTHENE	6.7	J	4.0	MDL	9.9	PQL	ug/Kg	J	Z
ACENAPHTHYLENE	9.1	J	2.0	MDL	9.9	PQL	ug/Kg	J	Z
FLUORENE	8.3	J	4.0	MDL	9.9	PQL	ug/Kg	J	Z

Sample ID: **SL-195-SA5A-SS-0.0-0.2** ***Collected:*** **3/1/2011 3:20:00 PM** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **5**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	9.6	J	4.6	MDL	23	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	14	J	9.2	MDL	23	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	100	J	83	MDL	250	PQL	ug/Kg	J	Z

Sample ID: **SL-256-SA5A-SS-0.0-0.5** ***Collected:*** **3/1/2011 8:57:00 AM** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	1.2	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z, FD
BENZO(A)PYRENE	1.6	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z, FD

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE094 **Laboratory: LL**

EDD Filename: DE094_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **8270C SIM** ***Matrix:*** **SO**

Sample ID: **SL-256-SA5A-SS-0.0-0.5** ***Collected:*** **3/1/2011 8:57:00 AM** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	1.9		0.75	MDL	1.9	PQL	ug/Kg	J	Q, FD
BENZO(G,H,I)PERYLENE	1.1	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z, Q, FD
BENZO(K)FLUORANTHENE	0.75	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z, FD
BIS(2-ETHYLHEXYL)PHTHALATE	6.7	U	6.7	MDL	20	PQL	ug/Kg	UJ	FD
CHRYSENE	1.3	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z, FD
FLUORANTHENE	0.80	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z, FD
INDENO(1,2,3-CD)PYRENE	0.89	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z, Q, FD
PYRENE	0.86	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z, FD

Method Category: **VOA**

Method: **8260B** ***Matrix:*** **AQ**

Sample ID: **TB-030111** ***Collected:*** **3/1/2011 4:30:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZENE	0.5	J	0.5	MDL	5	PQL	ug/L	J	Z

Method Category: **VOA**

Method: **8260B** ***Matrix:*** **SO**

Sample ID: **SL-244-SA5A-SB-4.0-5.0** ***Collected:*** **3/1/2011 10:42:00** ***Analysis Type:*** **RES** ***Dilution:*** **0.84**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ETHYLBENZENE	0.15	J	0.06	MDL	3.9	PQL	ug/Kg	J	Z
m,p-Xylene	0.51	J	0.16	MDL	3.9	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	0.72	J	0.23	MDL	3.9	PQL	ug/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE094 **Laboratory: LL**

EDD Filename: DE094_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
*#	Professional Judgment
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Verification Correlation Coefficient
C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE094 **Laboratory: LL**

EDD Filename: DE094_v1 **eQAPP Name: CDM_SSFL_110509**

F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation
L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery Lower Estimation

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE094 **Laboratory: LL**

EDD Filename: DE094_v1 **eQAPP Name: CDM_SSFL_110509**

R	Continuing Calibration Verification Percent Recovery Lower Rejection
R	Continuing Calibration Verification Percent Recovery Upper Estimation
R	Continuing Calibration Verification Percent Recovery Upper Rejection
R	Continuing Calibration Verification Relative Response Factor
R	Initial Calibration Relative Response Factor
R	Initial Calibration Verification Percent Recovery Lower Estimation
R	Initial Calibration Verification Percent Recovery Lower Rejection
R	Initial Calibration Verification Percent Recovery Upper Estimation
R	Initial Calibration Verification Percent Recovery Upper Rejection
R	Initial Calibration Verification Relative Response Factor
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control Outlier Reports

DE094

QC Outlier Report: HoldingTimes

Lab Reporting Batch ID: DE094 **Laboratory: LL**
EDD Filename: DE094_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7199 **Preparation Method: Gen Prep**
Matrix: AQ

Sample ID	Type	Actual	Criteria	Units	Flag
EB04-SA5A-030111 (RES)	Sampling To Analysis	26.00	24.00	HOURS	J (all detects) UJ (all non-detects)

Method Blank Outlier Report

Lab Reporting Batch ID: DE094 **Laboratory: LL**

EDD Filename: DE094_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **6010B**
Matrix: **AQ**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P06848CB221929	3/10/2011 7:29:00 PM	LITHIUM	0.0049 mg/L	EB04-SA5A-030111

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
EB04-SA5A-030111(RES)	LITHIUM	0.0066 mg/L	0.0066U mg/L

Method: **6010B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P06908DB220545	3/11/2011 5:45:00 AM	CALCIUM PHOSPHORUS TIN	7.51 mg/Kg 1.37 mg/Kg 1.47 mg/Kg	DUP-06-SA5A-QC-030111 SL-066-SA5A-SS-0.0-0.5 SL-072-SA5A-SS-0.0-0.5 SL-076-SA5A-SS-0.0-0.5 SL-077-SA5A-SS-0.0-0.5 SL-078-SA5A-SS-0.0-0.5 SL-103-SA5A-SS-0.0-0.5 SL-104-SA5A-SS-0.0-0.5 SL-191-SA5A-SS-0.0-0.5 SL-194-SA5A-SS-0.0-0.3 SL-195-SA5A-SS-0.0-0.2 SL-244-SA5A-SB-4.0-5.0 SL-244-SA5A-SB-9.0-10.0 SL-256-SA5A-SS-0.0-0.5 SL-257-SA5A-SS-0.0-0.5

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
DUP-06-SA5A-QC-030111(REA)	TIN	2.64 mg/Kg	2.64U mg/Kg
SL-066-SA5A-SS-0.0-0.5(REA)	TIN	3.02 mg/Kg	3.02U mg/Kg
SL-072-SA5A-SS-0.0-0.5(REA)	TIN	3.06 mg/Kg	3.06U mg/Kg
SL-076-SA5A-SS-0.0-0.5(REA)	TIN	2.66 mg/Kg	2.66U mg/Kg
SL-077-SA5A-SS-0.0-0.5(REA)	TIN	3.78 mg/Kg	3.78U mg/Kg
SL-078-SA5A-SS-0.0-0.5(REA)	TIN	3.20 mg/Kg	3.20U mg/Kg
SL-103-SA5A-SS-0.0-0.5(REA)	TIN	3.43 mg/Kg	3.43U mg/Kg
SL-104-SA5A-SS-0.0-0.5(REA)	TIN	3.36 mg/Kg	3.36U mg/Kg
SL-191-SA5A-SS-0.0-0.5(REA)	TIN	4.00 mg/Kg	4.00U mg/Kg
SL-194-SA5A-SS-0.0-0.3(REA)	TIN	2.64 mg/Kg	2.64U mg/Kg
SL-195-SA5A-SS-0.0-0.2(REA)	TIN	3.56 mg/Kg	3.56U mg/Kg
SL-244-SA5A-SB-4.0-5.0(REA)	TIN	3.06 mg/Kg	3.06U mg/Kg
SL-244-SA5A-SB-9.0-10.0(REA)	TIN	4.21 mg/Kg	4.21U mg/Kg
SL-256-SA5A-SS-0.0-0.5(REA)	TIN	2.62 mg/Kg	2.62U mg/Kg
SL-257-SA5A-SS-0.0-0.5(REA)	TIN	2.96 mg/Kg	2.96U mg/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE094 **Laboratory: LL**

EDD Filename: DE094_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **6020**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P06926BB221308A	3/12/2011 1:08:00 PM	COPPER	0.241 mg/Kg	DUP-06-SA5A-QC-030111 SL-066-SA5A-SS-0.0-0.5 SL-072-SA5A-SS-0.0-0.5 SL-076-SA5A-SS-0.0-0.5 SL-077-SA5A-SS-0.0-0.5 SL-078-SA5A-SS-0.0-0.5 SL-103-SA5A-SS-0.0-0.5 SL-104-SA5A-SS-0.0-0.5 SL-191-SA5A-SS-0.0-0.5 SL-194-SA5A-SS-0.0-0.3 SL-195-SA5A-SS-0.0-0.2 SL-244-SA5A-SB-4.0-5.0 SL-244-SA5A-SB-9.0-10.0 SL-256-SA5A-SS-0.0-0.5 SL-257-SA5A-SS-0.0-0.5

Method: **8260B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB84B211702A	3/3/2011 5:02:00 PM	METHYLENE CHLORIDE TOLUENE	1.1 ug/Kg 0.12 ug/Kg	SL-244-SA5A-SB-4.0-5.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-244-SA5A-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.72 ug/Kg	3.9U ug/Kg

Method: **8270C**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKLC06B262326	3/14/2011 11:26:00 PM	BIS(2-ETHYLHEXYL)PHTHALATE	44 ug/Kg	DUP-06-SA5A-QC-030111 SL-066-SA5A-SS-0.0-0.5 SL-072-SA5A-SS-0.0-0.5 SL-076-SA5A-SS-0.0-0.5 SL-077-SA5A-SS-0.0-0.5 SL-078-SA5A-SS-0.0-0.5 SL-103-SA5A-SS-0.0-0.5 SL-104-SA5A-SS-0.0-0.5 SL-191-SA5A-SS-0.0-0.5 SL-194-SA5A-SS-0.0-0.3 SL-195-SA5A-SS-0.0-0.2 SL-244-SA5A-SB-4.0-5.0 SL-244-SA5A-SB-9.0-10.0 SL-256-SA5A-SS-0.0-0.5 SL-257-SA5A-SS-0.0-0.5

Method Blank Outlier Report

Lab Reporting Batch ID: DE094 **Laboratory: LL**

EDD Filename: DE094_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8270C SIM**
Matrix: **AQ**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKWC06B260128	3/16/2011 1:28:00 AM	BIS(2-ETHYLHEXYL)PHTHALATE Diethylphthalate Di-n-butylphthalate	0.13 ug/L 0.053 ug/L 0.066 ug/L	EB04-SA5A-030111

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
EB04-SA5A-030111(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	0.34 ug/L	1.0U ug/L
EB04-SA5A-030111(RES)	Diethylphthalate	0.074 ug/L	1.0U ug/L
EB04-SA5A-030111(RES)	Di-n-butylphthalate	0.33 ug/L	1.0U ug/L

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE094 **Laboratory: LL**

EDD Filename: DE094_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-256-SA5A-SS-0.0-0.5MS SL-256-SA5A-SS-0.0-0.5MSD (SL-256-SA5A-SS-0.0-0.5)	ANILINE	110	113	35.00-95.00	-	ANILINE	J (all detects)

Method: 8270C SIM
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-256-SA5A-SS-0.0-0.5MSD (SL-256-SA5A-SS-0.0-0.5)	BENZO(B)FLUORANTHENE	-	162	43.00-155.00	-	BENZO(B)FLUORANTHENE	J(all detects)
	BENZO(G,H,I)PERYLENE	-	-	33.00-141.00	42 (30.00)	BENZO(G,H,I)PERYLENE	
	BIS(2-ETHYLHEXYL)PHTHALAT	-	4512	39.00-167.00	188 (30.00)	BIS(2-ETHYLHEXYL)PHTHALA	
	Butylbenzylphthalate	-	-	57.00-173.00	31 (30.00)	Butylbenzylphthalate	
	DIBENZO(A,H)ANTHRACENE	-	-	22.00-133.00	32 (30.00)	DIBENZO(A,H)ANTHRACENE	
	Di-n-octylphthalate	-	234	40.00-192.00	58 (30.00)	Di-n-octylphthalate	
	INDENO(1,2,3-CD)PYRENE	-	-	21.00-143.00	34 (30.00)	INDENO(1,2,3-CD)PYRENE	

Method: 300.0
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-066-SA5A-SS-0.0-0.5MS (DUP-06-SA5A-QC-030111 SL-066-SA5A-SS-0.0-0.5 SL-072-SA5A-SS-0.0-0.5 SL-076-SA5A-SS-0.0-0.5 SL-077-SA5A-SS-0.0-0.5 SL-078-SA5A-SS-0.0-0.5 SL-103-SA5A-SS-0.0-0.5 SL-104-SA5A-SS-0.0-0.5 SL-191-SA5A-SS-0.0-0.5 SL-194-SA5A-SS-0.0-0.3)	FLUORIDE	52	-	80.00-120.00	-	FLUORIDE	J(all detects) UJ(all non-detects)
SL-256-SA5A-SS-0.0-0.5MS (SL-195-SA5A-SS-0.0-0.2 SL-244-SA5A-SB-4.0-5.0 SL-244-SA5A-SB-9.0-10.0 SL-256-SA5A-SS-0.0-0.5 SL-257-SA5A-SS-0.0-0.5)	FLUORIDE	75	-	80.00-120.00	-	FLUORIDE	J(all detects) UJ(all non-detects)

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE094 **Laboratory: LL**

EDD Filename: DE094_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **6020**

Matrix: **SO**

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-256-SA5A-SS-0.0-0.5MS	ARSENIC	136	150	75.00-125.00	-	ARSENIC	
SL-256-SA5A-SS-0.0-0.5MSD	BERYLLIUM	136	163	75.00-125.00	-	BERYLLIUM	
(DUP-06-SA5A-QC-030111	CADMIUM	145	159	75.00-125.00	-	CADMIUM	
SL-066-SA5A-SS-0.0-0.5	CHROMIUM	-	150	75.00-125.00	-	CHROMIUM	
SL-072-SA5A-SS-0.0-0.5	COBALT	129	138	75.00-125.00	-	COBALT	
SL-076-SA5A-SS-0.0-0.5	COPPER	128	146	75.00-125.00	-	COPPER	
SL-077-SA5A-SS-0.0-0.5	LEAD	148	200	75.00-125.00	-	LEAD	
SL-078-SA5A-SS-0.0-0.5	NICKEL	131	144	75.00-125.00	-	NICKEL	
SL-103-SA5A-SS-0.0-0.5	SILVER	144	146	75.00-125.00	-	SILVER	J(all detects)
SL-104-SA5A-SS-0.0-0.5	THALLIUM	138	151	75.00-125.00	-	THALLIUM	
SL-191-SA5A-SS-0.0-0.5	VANADIUM	-	159	75.00-125.00	-	VANADIUM	
SL-194-SA5A-SS-0.0-0.3							
SL-195-SA5A-SS-0.0-0.2							
SL-244-SA5A-SB-4.0-5.0							
SL-244-SA5A-SB-9.0-10.0							
SL-256-SA5A-SS-0.0-0.5							
SL-257-SA5A-SS-0.0-0.5)							
SL-256-SA5A-SS-0.0-0.5MS	ZINC	-91	271	75.00-125.00	24 (20.00)	ZINC	
SL-256-SA5A-SS-0.0-0.5MSD							
(DUP-06-SA5A-QC-030111							
SL-066-SA5A-SS-0.0-0.5							
SL-072-SA5A-SS-0.0-0.5							
SL-076-SA5A-SS-0.0-0.5							
SL-077-SA5A-SS-0.0-0.5							
SL-078-SA5A-SS-0.0-0.5							
SL-103-SA5A-SS-0.0-0.5							J(all detects)
SL-104-SA5A-SS-0.0-0.5							UJ(all non-detects)
SL-191-SA5A-SS-0.0-0.5							
SL-194-SA5A-SS-0.0-0.3							No Qual %R, >4x
SL-195-SA5A-SS-0.0-0.2							
SL-244-SA5A-SB-4.0-5.0							
SL-244-SA5A-SB-9.0-10.0							
SL-256-SA5A-SS-0.0-0.5							
SL-257-SA5A-SS-0.0-0.5)							
SL-256-SA5A-SS-0.0-0.5MS	ANTIMONY	201	-	75.00-125.00	66 (20.00)	ANTIMONY	
SL-256-SA5A-SS-0.0-0.5MSD							
(DUP-06-SA5A-QC-030111							
SL-066-SA5A-SS-0.0-0.5							
SL-072-SA5A-SS-0.0-0.5							
SL-076-SA5A-SS-0.0-0.5							
SL-077-SA5A-SS-0.0-0.5							
SL-078-SA5A-SS-0.0-0.5							
SL-103-SA5A-SS-0.0-0.5							J(all detects)
SL-104-SA5A-SS-0.0-0.5							UJ(all non-detects)
SL-191-SA5A-SS-0.0-0.5							
SL-194-SA5A-SS-0.0-0.3							
SL-195-SA5A-SS-0.0-0.2							
SL-244-SA5A-SB-4.0-5.0							
SL-244-SA5A-SB-9.0-10.0							
SL-256-SA5A-SS-0.0-0.5							
SL-257-SA5A-SS-0.0-0.5)							

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE094 **Laboratory: LL**

EDD Filename: DE094_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-256-SA5A-SS-0.0-0.5MSD	BARIUM	-	154	75.00-125.00	-	BARIUM	
(DUP-06-SA5A-QC-030111							
SL-066-SA5A-SS-0.0-0.5							
SL-072-SA5A-SS-0.0-0.5							
SL-076-SA5A-SS-0.0-0.5							
SL-077-SA5A-SS-0.0-0.5							
SL-078-SA5A-SS-0.0-0.5							
SL-103-SA5A-SS-0.0-0.5							
SL-104-SA5A-SS-0.0-0.5							No Qual, >4x
SL-191-SA5A-SS-0.0-0.5							
SL-194-SA5A-SS-0.0-0.3							
SL-195-SA5A-SS-0.0-0.2							
SL-244-SA5A-SB-4.0-5.0							
SL-244-SA5A-SB-9.0-10.0							
SL-256-SA5A-SS-0.0-0.5							
SL-257-SA5A-SS-0.0-0.5)							

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-256-SA5A-SS-0.0-0.5MS	ALUMINUM	1026	1025	75.00-125.00	-	ALUMINUM	
SL-256-SA5A-SS-0.0-0.5MSD	IRON	1003	1059	75.00-125.00	-	IRON	
(DUP-06-SA5A-QC-030111	MAGNESIUM	301	211	75.00-125.00	-	MAGNESIUM	
SL-066-SA5A-SS-0.0-0.5	MANGANESE	-	148	75.00-125.00	-	MANGANESE	
SL-072-SA5A-SS-0.0-0.5	TITANIUM	304	273	75.00-125.00	-	TITANIUM	
SL-076-SA5A-SS-0.0-0.5							
SL-077-SA5A-SS-0.0-0.5							
SL-078-SA5A-SS-0.0-0.5							
SL-103-SA5A-SS-0.0-0.5							No Qual, >4x
SL-104-SA5A-SS-0.0-0.5							
SL-191-SA5A-SS-0.0-0.5							
SL-194-SA5A-SS-0.0-0.3							
SL-195-SA5A-SS-0.0-0.2							
SL-244-SA5A-SB-4.0-5.0							
SL-244-SA5A-SB-9.0-10.0							
SL-256-SA5A-SS-0.0-0.5							
SL-257-SA5A-SS-0.0-0.5)							
SL-256-SA5A-SS-0.0-0.5MS	CALCIUM	-104	9	75.00-125.00	-	CALCIUM	
SL-256-SA5A-SS-0.0-0.5MSD							
(DUP-06-SA5A-QC-030111							
SL-066-SA5A-SS-0.0-0.5							
SL-072-SA5A-SS-0.0-0.5							
SL-076-SA5A-SS-0.0-0.5							
SL-077-SA5A-SS-0.0-0.5							
SL-078-SA5A-SS-0.0-0.5							
SL-103-SA5A-SS-0.0-0.5							No Qual, >4x
SL-104-SA5A-SS-0.0-0.5							
SL-191-SA5A-SS-0.0-0.5							
SL-194-SA5A-SS-0.0-0.3							
SL-195-SA5A-SS-0.0-0.2							
SL-244-SA5A-SB-4.0-5.0							
SL-244-SA5A-SB-9.0-10.0							
SL-256-SA5A-SS-0.0-0.5							
SL-257-SA5A-SS-0.0-0.5)							

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE094 **Laboratory: LL**

EDD Filename: DE094_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-256-SA5A-SS-0.0-0.5MS (DUP-06-SA5A-QC-030111 SL-066-SA5A-SS-0.0-0.5 SL-072-SA5A-SS-0.0-0.5 SL-076-SA5A-SS-0.0-0.5 SL-077-SA5A-SS-0.0-0.5 SL-078-SA5A-SS-0.0-0.5 SL-103-SA5A-SS-0.0-0.5 SL-104-SA5A-SS-0.0-0.5 SL-191-SA5A-SS-0.0-0.5 SL-194-SA5A-SS-0.0-0.3 SL-195-SA5A-SS-0.0-0.2 SL-244-SA5A-SB-4.0-5.0 SL-244-SA5A-SB-9.0-10.0 SL-256-SA5A-SS-0.0-0.5 SL-257-SA5A-SS-0.0-0.5)	PHOSPHORUS	63	-	75.00-125.00	-	PHOSPHORUS	J(all detects) UJ(all non-detects)

Method: 8081A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-256-SA5A-SS-0.0-0.5MSD (SL-256-SA5A-SS-0.0-0.5)	DIELDRIN	-	273	19.00-154.00	-	DIELDRIN	J(all detects)
SL-256-SA5A-SS-0.0-0.5MS SL-256-SA5A-SS-0.0-0.5MSD (SL-256-SA5A-SS-0.0-0.5)	4,4'-DDD ENDRIN	-21 0	- 0	16.00-163.00 11.00-149.00	- -	4,4'-DDD ENDRIN	J(all detects) R(all non-detects)

Method: 8151A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-256-SA5A-SS-0.0-0.5MSD (SL-256-SA5A-SS-0.0-0.5)	2,4,5-T DALAPON	- -	- -	10.00-156.00 10.00-125.00	39 (35.00) 200 (50.00)	2,4,5-T DALAPON	J(all detects)

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE094 **Laboratory: LL**

EDD Filename: DE094_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-256-SA5A-SS-0.0-0.5DUP	Zirconium	37	20.00	
(DUP-06-SA5A-QC-030111				
SL -066-SA5A-SS-0.0-0.5				
SL -072-SA5A-SS-0.0-0.5				
SL -076-SA5A-SS-0.0-0.5				
SL -077-SA5A-SS-0.0-0.5				
SL -078-SA5A-SS-0.0-0.5				
SL -103-SA5A-SS-0.0-0.5				No Qual
SL -104-SA5A-SS-0.0-0.5				OK by difference
SL -191-SA5A-SS-0.0-0.5				
SL -194-SA5A-SS-0.0-0.3				
SL -195-SA5A-SS-0.0-0.2				
SL -244-SA5A-SB-4.0-5.0				
SL -244-SA5A-SB-9.0-10.0				
SL -256-SA5A-SS-0.0-0.5				
SL -257-SA5A-SS-0.0-0.5)				

Method: 6020
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-256-SA5A-SS-0.0-0.5DUP	ANTIMONY	38	20.00	
(DUP-06-SA5A-QC-030111	ARSENIC	46	20.00	
SL -066-SA5A-SS-0.0-0.5	BARIUM	36	20.00	
SL -072-SA5A-SS-0.0-0.5	BERYLLIUM	31	20.00	
SL -076-SA5A-SS-0.0-0.5	CADMIUM	52	20.00	
SL -077-SA5A-SS-0.0-0.5	CHROMIUM	35	20.00	J(all detects)
SL -078-SA5A-SS-0.0-0.5	COBALT	29	20.00	UJ(all non-detects)
SL -103-SA5A-SS-0.0-0.5	COPPER	22	20.00	
SL -104-SA5A-SS-0.0-0.5	NICKEL	31	20.00	Sb, Be, Cd, Ag
SL -191-SA5A-SS-0.0-0.5	SILVER	25	20.00	No Qual
SL -194-SA5A-SS-0.0-0.3	VANADIUM	34	20.00	OK by difference
SL -195-SA5A-SS-0.0-0.2	ZINC	43	20.00	
SL -244-SA5A-SB-4.0-5.0				
SL -244-SA5A-SB-9.0-10.0				
SL -256-SA5A-SS-0.0-0.5				
SL -257-SA5A-SS-0.0-0.5)				

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE094 **Laboratory: LL**

EDD Filename: DE094_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P2WALCSQ262324 (EB04-SA5A-030111)	ANILINE	106	-	49.00-101.00	-	ANILINE	J (all detects)

Method: 8270C SIM
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P3WCLCSQ260159 (EB04-SA5A-030111)	ACENAPHTHENE	110	-	74.00-109.00	-	ACENAPHTHENE	J(all detects)

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P06926BQ221311A (DUP-06-SA5A-QC-030111 SL-066-SA5A-SS-0.0-0.5 SL-072-SA5A-SS-0.0-0.5 SL-076-SA5A-SS-0.0-0.5 SL-077-SA5A-SS-0.0-0.5 SL-078-SA5A-SS-0.0-0.5 SL-103-SA5A-SS-0.0-0.5 SL-104-SA5A-SS-0.0-0.5 SL-191-SA5A-SS-0.0-0.5 SL-194-SA5A-SS-0.0-0.3 SL-195-SA5A-SS-0.0-0.2 SL-244-SA5A-SB-4.0-5.0 SL-244-SA5A-SB-9.0-10.0 SL-256-SA5A-SS-0.0-0.5 SL-257-SA5A-SS-0.0-0.5)	ANTIMONY	124	-	80.00-120.00	-	ANTIMONY	No Qual SRM within QC limits

Method: 8081A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P10637AQ241655A (DUP-06-SA5A-QC-030111 SL-066-SA5A-SS-0.0-0.5 SL-072-SA5A-SS-0.0-0.5 SL-076-SA5A-SS-0.0-0.5 SL-077-SA5A-SS-0.0-0.5 SL-078-SA5A-SS-0.0-0.5 SL-103-SA5A-SS-0.0-0.5 SL-104-SA5A-SS-0.0-0.5 SL-191-SA5A-SS-0.0-0.5 SL-194-SA5A-SS-0.0-0.3 SL-195-SA5A-SS-0.0-0.2 SL-256-SA5A-SS-0.0-0.5 SL-257-SA5A-SS-0.0-0.5)	ENDOSULFAN I ENDOSULFAN II	131 162	- -	45.00-123.00 63.00-127.00	- -	ENDOSULFAN I ENDOSULFAN II	J(all detects)

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE094 **Laboratory: LL**

EDD Filename: DE094_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8260B**

Matrix: **SO**

QC Sample ID (Associated Samples)	*Compound*	*LCS %R*	*LCSD %R*	*%R Limits*	*RPD (Limits)*	*Affected Compounds*	*Flag*
LCSB84Q211517A (SL-244-SA5A-SB-4.0-5.0)	BROMOCHLOROMETHANE	126	-	79.00-124.00	-	BROMOCHLOROMETHANE	J(all detects)

Surrogate Outlier Report

Lab Reporting Batch ID: DE094 **Laboratory: LL**

EDD Filename: DE094_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8081A
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-066-SA5A-SS-0.0-0.5	DECACHLOROBIPHENYL	142	20.00-120.00	All Target Analytes	J(all detects)
SL-066-SA5A-SS-0.0-0.5	TETRACHLORO-M-XYLENE	45	50.00-130.00	All Target Analytes	J(all detects) UJ(all non-detects)
SL-103-SA5A-SS-0.0-0.5	DECACHLOROBIPHENYL	169	20.00-120.00	All Target Analytes	J(all detects)
SL-191-SA5A-SS-0.0-0.5	DECACHLOROBIPHENYL	466	20.00-120.00	All Target Analytes	No Qual, Diluted Out
SL-194-SA5A-SS-0.0-0.3	DECACHLOROBIPHENYL TETRACHLORO-M-XYLENE	385 198	20.00-120.00 50.00-130.00	All Target Analytes	No Qual, Diluted Out
SL-195-SA5A-SS-0.0-0.2	DECACHLOROBIPHENYL	182	20.00-120.00	All Target Analytes	J(all detects)
SL-256-SA5A-SS-0.0-0.5	TETRACHLORO-M-XYLENE	46	50.00-130.00	All Target Analytes	J(all detects) UJ(all non-detects)
SL-257-SA5A-SS-0.0-0.5	DECACHLOROBIPHENYL	137	20.00-120.00	All Target Analytes	J(all detects)

Method: 8082
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
DUP-06-SA5A-QC-030111	DECACHLOROBIPHENYL	131	45.00-120.00	All Target Analytes	No Qual, Diluted Out
SL-066-SA5A-SS-0.0-0.5	DECACHLOROBIPHENYL	149	45.00-120.00	All Target Analytes	No Qual, Diluted Out
SL-076-SA5A-SS-0.0-0.5	DECACHLOROBIPHENYL	141	45.00-120.00	All Target Analytes	J(all detects)
SL-077-SA5A-SS-0.0-0.5	DECACHLOROBIPHENYL	125	45.00-120.00	All Target Analytes	J(all detects)
SL-078-SA5A-SS-0.0-0.5	DECACHLOROBIPHENYL TETRACHLORO-M-XYLENE	197 142	45.00-120.00 53.00-139.00	All Target Analytes	J(all detects)
SL-191-SA5A-SS-0.0-0.5	DECACHLOROBIPHENYL	134	45.00-120.00	All Target Analytes	No Qual, Diluted Out
SL-195-SA5A-SS-0.0-0.2	DECACHLOROBIPHENYL	4	45.00-120.00	All Target Analytes	J(all detects) R(all non-detects)

Method: 8270C SIM
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-194-SA5A-SS-0.0-0.3	Nitrobenzene-d5	134	40.00-130.00	No Affected Compounds	No Qualifiers

Field Duplicate RPD Report

Lab Reporting Batch ID: DE094 **Laboratory: LL**

EDD Filename: DE094_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 160.3M
Matrix: SO

Analyte	Concentration (%)		Sample RPD	eQAPP RPD	Flag
	SL-256-SA5A-SS-0.0-0.5	DUP-06-SA5A-QC-030111			
MOISTURE	11.5	11.4	1		No Qualifiers Applied

Method: 300.0
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-256-SA5A-SS-0.0-0.5	DUP-06-SA5A-QC-030111			
FLUORIDE	1.7	1.3	27	50.00	No Qualifiers Applied

Method: 6010B
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-256-SA5A-SS-0.0-0.5	DUP-06-SA5A-QC-030111			
ALUMINUM	12200	13000	6	50.00	No Qualifiers Applied
BORON	4.46	4.43	1	50.00	
CALCIUM	4390	3990	10	50.00	
IRON	16700	17600	5	50.00	
LITHIUM	18.5	19.6	6	50.00	
MAGNESIUM	3990	4310	8	50.00	
MANGANESE	246	258	5	50.00	
PHOSPHORUS	352	312	12	50.00	
POTASSIUM	2040	2020	1	50.00	
SODIUM	87.9	85.0	3	50.00	
STRONTIUM	17.7	17.7	0	50.00	
TIN	2.62	2.64	1	50.00	
TITANIUM	1080	1200	11	50.00	
Zirconium	1.37	1.20	13	50.00	

Method: 6020
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-256-SA5A-SS-0.0-0.5	DUP-06-SA5A-QC-030111			
ANTIMONY	0.161	0.246	42	50.00	No Qualifiers Applied
ARSENIC	5.69	5.80	2	50.00	
BARIUM	83.8	91.3	9	50.00	
BERYLLIUM	0.606	0.674	11	50.00	
CADMIUM	0.388	0.450	15	50.00	
CHROMIUM	21.3	22.7	6	50.00	
COBALT	6.10	6.95	13	50.00	
COPPER	6.93	7.97	14	50.00	
LEAD	5.42	6.85	23	50.00	
MOLYBDENUM	0.372	0.311	18	50.00	
NICKEL	11.3	12.7	12	50.00	
SELENIUM	0.144	0.165	14	50.00	
SILVER	0.0242	0.0317	27	50.00	
THALLIUM	0.232	0.315	30	50.00	
VANADIUM	42.1	46.1	9	50.00	
ZINC	157	167	6	50.00	

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Field Duplicate RPD Report

Lab Reporting Batch ID: DE094 **Laboratory: LL**

EDD Filename: DE094_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7199
Matrix: SO

Analyte	Concentration (mg/Kg) SL-256-SA5A-SS-0.0-0.5	Concentration (mg/Kg) DUP-06-SA5A-QC-030111	Sample RPD	eQAPP RPD	Flag
HEXAVALENT CHROMIUM	1.1 U	0.24	200	50.00	J(all detects) UJ(all non-detects)

Method: 7471A
Matrix: SO

Analyte	Concentration (mg/Kg) SL-256-SA5A-SS-0.0-0.5	Concentration (mg/Kg) DUP-06-SA5A-QC-030111	Sample RPD	eQAPP RPD	Flag
MERCURY	0.0133	0.110 U	200	50.00	J(all detects) UJ(all non-detects)

Method: 8081A
Matrix: SO

Analyte	Concentration (ug/Kg) SL-256-SA5A-SS-0.0-0.5	Concentration (ug/Kg) DUP-06-SA5A-QC-030111	Sample RPD	eQAPP RPD	Flag
4,4'-DDD	1.3	1.9	37	50.00	No Qualifiers Applied
4,4'-DDT	1.3	0.96	30	50.00	
DIELDRIN	4.2	4.4	5	50.00	
MIREX	0.34	0.11	102	50.00	J(all detects)

Method: 8082
Matrix: SO

Analyte	Concentration (ug/Kg) SL-256-SA5A-SS-0.0-0.5	Concentration (ug/Kg) DUP-06-SA5A-QC-030111	Sample RPD	eQAPP RPD	Flag
AROCLOR 1260	1.9 U	5.1	200	50.00	J(all detects) UJ(all non-detects)

Method: 8151A
Matrix: SO

Analyte	Concentration (ug/Kg) SL-256-SA5A-SS-0.0-0.5	Concentration (ug/Kg) DUP-06-SA5A-QC-030111	Sample RPD	eQAPP RPD	Flag
2,4-DB	1.9 U	1.5	200	50.00	J(all detects) UJ(all non-detects)

Field Duplicate RPD Report

Lab Reporting Batch ID: DE094 **Laboratory: LL**

EDD Filename: DE094_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C SIM
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-256-SA5A-SS-0.0-0.5	DUP-06-SA5A-QC-030111			
BENZO(A)ANTHRACENE	1.2	9.4 U	200	50.00	J(all detects) UJ(all non-detects)
BENZO(A)PYRENE	1.6	3.8	81	50.00	
BENZO(B)FLUORANTHENE	1.9	21	167	50.00	
BENZO(G,H,I)PERYLENE	1.1	3.9	112	50.00	
BENZO(K)FLUORANTHENE	0.75	9.4 U	200	50.00	
BIS(2-ETHYLHEXYL)PHTHALATE	20 U	38	200	50.00	
CHRYSENE	1.3	7.5	141	50.00	
FLUORANTHENE	0.80	3.9	132	50.00	
INDENO(1,2,3-CD)PYRENE	0.89	9.4 U	200	50.00	
PYRENE	0.86	5.3	144	50.00	

Method: 9045M
Matrix: SO

Analyte	Concentration (pH unit)		Sample RPD	eQAPP RPD	Flag
	SL-256-SA5A-SS-0.0-0.5	DUP-06-SA5A-QC-030111			
PH	8.05	7.94	1	50.00	No Qualifiers Applied

Method: ASTM D1498
Matrix: SO

Analyte	Concentration (mV)		Sample RPD	eQAPP RPD	Flag
	SL-256-SA5A-SS-0.0-0.5	DUP-06-SA5A-QC-030111			
Oxidation Reduction Potential	437	328	28		No Qualifiers Applied

Reporting Limit Outliers

Lab Reporting Batch ID: DE094 **Laboratory: LL**

EDD Filename: DE094_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB04-SA5A-030111	LITHIUM	J	0.0066	0.0200	PQL	mg/L	J (all detects)

Method: 8260B

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
TB-030111	BENZENE	J	0.5	5	PQL	ug/L	J (all detects)

Method: 8270C SIM

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB04-SA5A-030111	BIS(2-ETHYLHEXYL)PHTHALATE	J	0.34	1.0	PQL	ug/L	J (all detects)
	Butylbenzylphthalate	J	0.071	1.0	PQL	ug/L	
	CHRYSENE	J	0.025	0.052	PQL	ug/L	
	Diethylphthalate	J	0.074	1.0	PQL	ug/L	
	Di-n-butylphthalate	J	0.33	1.0	PQL	ug/L	
	NAPHTHALENE	J	0.033	0.052	PQL	ug/L	

Method: 300.0

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-103-SA5A-SS-0.0-0.5	FLUORIDE	J	1.1	1.3	PQL	mg/Kg	J (all detects)

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-06-SA5A-QC-030111	BORON	J	4.43	5.43	PQL	mg/Kg	J (all detects)
	SODIUM	J	85.0	109	PQL	mg/Kg	
	TIN	J	2.64	10.9	PQL	mg/Kg	
	Zirconium	J	1.20	5.43	PQL	mg/Kg	
SL-066-SA5A-SS-0.0-0.5	SODIUM	J	94.6	109	PQL	mg/Kg	J (all detects)
	TIN	J	3.02	10.9	PQL	mg/Kg	
SL-072-SA5A-SS-0.0-0.5	SODIUM	J	102	110	PQL	mg/Kg	J (all detects)
	TIN	J	3.06	11.0	PQL	mg/Kg	
SL-076-SA5A-SS-0.0-0.5	TIN	J	2.66	10.5	PQL	mg/Kg	J (all detects)
SL-077-SA5A-SS-0.0-0.5	TIN	J	3.78	11.6	PQL	mg/Kg	J (all detects)
	Zirconium	J	1.12	5.79	PQL	mg/Kg	

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Reporting Limit Outliers

Lab Reporting Batch ID: DE094 **Laboratory: LL**

EDD Filename: DE094_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-078-SA5A-SS-0.0-0.5	TIN	J	3.20	11.1	PQL	mg/Kg	J (all detects)
SL-103-SA5A-SS-0.0-0.5	SODIUM	J	91.0	123	PQL	mg/Kg	J (all detects)
	TIN	J	3.43	12.3	PQL	mg/Kg	
	Zirconium	J	1.05	6.16	PQL	mg/Kg	
SL-104-SA5A-SS-0.0-0.5	SODIUM	J	91.9	114	PQL	mg/Kg	J (all detects)
	TIN	J	3.36	11.4	PQL	mg/Kg	
	Zirconium	J	1.48	5.71	PQL	mg/Kg	
SL-191-SA5A-SS-0.0-0.5	TIN	J	4.00	12.5	PQL	mg/Kg	J (all detects)
	Zirconium	J	1.40	6.27	PQL	mg/Kg	
SL-194-SA5A-SS-0.0-0.3	TIN	J	2.64	11.7	PQL	mg/Kg	J (all detects)
SL-195-SA5A-SS-0.0-0.2	TIN	J	3.56	14.0	PQL	mg/Kg	J (all detects)
	Zirconium	J	1.80	7.00	PQL	mg/Kg	
SL-244-SA5A-SB-4.0-5.0	TIN	J	3.06	11.3	PQL	mg/Kg	J (all detects)
	Zirconium	J	1.80	5.67	PQL	mg/Kg	
SL-244-SA5A-SB-9.0-10.0	TIN	J	4.21	11.3	PQL	mg/Kg	J (all detects)
SL-256-SA5A-SS-0.0-0.5	BORON	J	4.46	5.59	PQL	mg/Kg	J (all detects)
	SODIUM	J	87.9	112	PQL	mg/Kg	
	TIN	J	2.62	11.2	PQL	mg/Kg	
	Zirconium	J	1.37	5.59	PQL	mg/Kg	
SL-257-SA5A-SS-0.0-0.5	BORON	J	5.33	5.56	PQL	mg/Kg	J (all detects)
	TIN	J	2.96	11.1	PQL	mg/Kg	
	Zirconium	J	0.953	5.56	PQL	mg/Kg	

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-06-SA5A-QC-030111	SELENIUM	J	0.165	0.438	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0317	0.110	PQL	mg/Kg	
SL-066-SA5A-SS-0.0-0.5	SELENIUM	J	0.225	0.436	PQL	mg/Kg	J (all detects)
SL-072-SA5A-SS-0.0-0.5	SELENIUM	J	0.219	0.440	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0900	0.110	PQL	mg/Kg	
SL-076-SA5A-SS-0.0-0.5	SELENIUM	J	0.144	0.428	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0546	0.107	PQL	mg/Kg	
SL-077-SA5A-SS-0.0-0.5	SELENIUM	J	0.365	0.454	PQL	mg/Kg	J (all detects)
SL-078-SA5A-SS-0.0-0.5	ANTIMONY	J	0.209	0.217	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.200	0.434	PQL	mg/Kg	
	SILVER	J	0.103	0.108	PQL	mg/Kg	
SL-103-SA5A-SS-0.0-0.5	SELENIUM	J	0.156	0.493	PQL	mg/Kg	J (all detects)
SL-104-SA5A-SS-0.0-0.5	SELENIUM	J	0.232	0.457	PQL	mg/Kg	J (all detects)
SL-191-SA5A-SS-0.0-0.5	SELENIUM	J	0.166	0.497	PQL	mg/Kg	J (all detects)
SL-195-SA5A-SS-0.0-0.2	SELENIUM	J	0.332	0.549	PQL	mg/Kg	J (all detects)
	SILVER	J	0.124	0.137	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE094 **Laboratory: LL**

EDD Filename: DE094_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-244-SA5A-SB-4.0-5.0	ANTIMONY	J	0.167	0.225	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.108	0.449	PQL	mg/Kg	
	SILVER	J	0.110	0.112	PQL	mg/Kg	
SL-244-SA5A-SB-9.0-10.0	ANTIMONY	J	0.106	0.226	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0454	0.113	PQL	mg/Kg	
	SELENIUM	J	0.324	0.453	PQL	mg/Kg	
	SILVER	J	0.0373	0.113	PQL	mg/Kg	
SL-256-SA5A-SS-0.0-0.5	ANTIMONY	J	0.161	0.224	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.144	0.448	PQL	mg/Kg	
	SILVER	J	0.0242	0.112	PQL	mg/Kg	
SL-257-SA5A-SS-0.0-0.5	ANTIMONY	J	0.169	0.222	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.144	0.445	PQL	mg/Kg	
	SILVER	J	0.0295	0.111	PQL	mg/Kg	

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-06-SA5A-QC-030111	HEXAVALENT CHROMIUM	J	0.24	1.1	PQL	mg/Kg	J (all detects)
SL-076-SA5A-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.36	1.1	PQL	mg/Kg	J (all detects)
SL-194-SA5A-SS-0.0-0.3	HEXAVALENT CHROMIUM	J	0.61	1.2	PQL	mg/Kg	J (all detects)
SL-195-SA5A-SS-0.0-0.2	HEXAVALENT CHROMIUM	J	0.57	1.4	PQL	mg/Kg	J (all detects)
SL-244-SA5A-SB-9.0-10.0	HEXAVALENT CHROMIUM	J	0.35	1.2	PQL	mg/Kg	J (all detects)
SL-257-SA5A-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.25	1.1	PQL	mg/Kg	J (all detects)

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-076-SA5A-SS-0.0-0.5	MERCURY	J	0.0114	0.102	PQL	mg/Kg	J (all detects)
SL-103-SA5A-SS-0.0-0.5	MERCURY	J	0.0051	0.118	PQL	mg/Kg	J (all detects)
SL-194-SA5A-SS-0.0-0.3	MERCURY	J	0.0167	0.114	PQL	mg/Kg	J (all detects)
SL-195-SA5A-SS-0.0-0.2	MERCURY	J	0.0106	0.132	PQL	mg/Kg	J (all detects)
SL-244-SA5A-SB-4.0-5.0	MERCURY	J	0.0055	0.114	PQL	mg/Kg	J (all detects)
SL-256-SA5A-SS-0.0-0.5	MERCURY	J	0.0133	0.111	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE094 **Laboratory: LL**

EDD Filename: DE094_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8081A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-06-SA5A-QC-030111	MIREX	J	0.11	0.38	PQL	ug/Kg	J (all detects)
SL-072-SA5A-SS-0.0-0.5	ENDRIN KETONE	J	0.23	0.38	PQL	ug/Kg	J (all detects)
SL-076-SA5A-SS-0.0-0.5	ENDOSULFAN II gamma-BHC (Lindane)	J J	0.10 0.069	0.37 0.18	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-077-SA5A-SS-0.0-0.5	ENDOSULFAN SULFATE ENDRIN KETONE METHOXYCHLOR	J J J	0.10 0.15 0.66	0.40 0.40 1.9	PQL PQL PQL	ug/Kg ug/Kg ug/Kg	J (all detects)
SL-195-SA5A-SS-0.0-0.2	4,4'-DDE	J	0.31	0.48	PQL	ug/Kg	J (all detects)
SL-256-SA5A-SS-0.0-0.5	MIREX	J	0.34	0.38	PQL	ug/Kg	J (all detects)
SL-257-SA5A-SS-0.0-0.5	ENDOSULFAN II ENDRIN ALDEHYDE HEPTACHLOR EPOXIDE	J J J	0.11 0.35 0.16	0.38 0.38 0.19	PQL PQL PQL	ug/Kg ug/Kg ug/Kg	J (all detects)

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-06-SA5A-QC-030111	AROCLOR 1260	J	5.1	9.6	PQL	ug/Kg	J (all detects)
SL-066-SA5A-SS-0.0-0.5	AROCLOR 1254 Aroclor 5460	J J	12 18	19 37	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-103-SA5A-SS-0.0-0.5	AROCLOR 1248 AROCLOR 1254 AROCLOR 1260	J J J	0.71 1.8 2.1	2.2 2.2 2.2	PQL PQL PQL	ug/Kg ug/Kg ug/Kg	J (all detects)
SL-195-SA5A-SS-0.0-0.2	AROCLOR 1248	J	0.94	2.4	PQL	ug/Kg	J (all detects)

Method: 8151A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-06-SA5A-QC-030111	2,4-DB	J	1.5	1.9	PQL	ug/Kg	J (all detects)
SL-066-SA5A-SS-0.0-0.5	DICAMBA	J	0.46	1.4	PQL	ug/Kg	J (all detects)
SL-072-SA5A-SS-0.0-0.5	MCPA	J	130	280	PQL	ug/Kg	J (all detects)
SL-076-SA5A-SS-0.0-0.5	MCPA	J	130	270	PQL	ug/Kg	J (all detects)
SL-103-SA5A-SS-0.0-0.5	MCPA MCPP	J J	200 200	320 320	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-104-SA5A-SS-0.0-0.5	DICAMBA	J	0.60	1.4	PQL	ug/Kg	J (all detects)
SL-194-SA5A-SS-0.0-0.3	MCPP	J	180	300	PQL	ug/Kg	J (all detects)
SL-195-SA5A-SS-0.0-0.2	DICAMBA	J	0.60	1.7	PQL	ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE094 **Laboratory: LL**

EDD Filename: DE094_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-244-SA5A-SB-4.0-5.0	ETHYLBENZENE	J	0.15	3.9	PQL	ug/Kg	J (all detects)
	m,p-Xylene	J	0.51	3.9	PQL	ug/Kg	
	METHYLENE CHLORIDE	J	0.72	3.9	PQL	ug/Kg	

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-066-SA5A-SS-0.0-0.5	ANTHRACENE	J	25	190	PQL	ug/Kg	J (all detects)
	BENZO(A)ANTHRACENE	J	91	190	PQL	ug/Kg	
	BENZO(A)PYRENE	J	74	190	PQL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	89	190	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	47	190	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	49	190	PQL	ug/Kg	
	CARBAZOLE	J	22	190	PQL	ug/Kg	
	CHRYSENE	J	120	190	PQL	ug/Kg	
	Di-n-butylphthalate	J	40	190	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	40	190	PQL	ug/Kg	
	PHENANTHRENE	J	170	190	PQL	ug/Kg	
SL-103-SA5A-SS-0.0-0.5	CHRYSENE	J	30	210	PQL	ug/Kg	J (all detects)
	FLUORANTHENE	J	47	210	PQL	ug/Kg	
	PHENANTHRENE	J	30	210	PQL	ug/Kg	
	PYRENE	J	39	210	PQL	ug/Kg	
SL-104-SA5A-SS-0.0-0.5	CHRYSENE	J	20	200	PQL	ug/Kg	J (all detects)
	FLUORANTHENE	J	34	200	PQL	ug/Kg	
	PYRENE	J	28	200	PQL	ug/Kg	
SL-191-SA5A-SS-0.0-0.5	Butylbenzylphthalate	J	63	210	PQL	ug/Kg	J (all detects)
	Di-n-butylphthalate	J	110	210	PQL	ug/Kg	
SL-194-SA5A-SS-0.0-0.3	CARBAZOLE	J	31	200	PQL	ug/Kg	J (all detects)
	DIBENZOFURAN	J	110	200	PQL	ug/Kg	
SL-195-SA5A-SS-0.0-0.2	DIBENZOFURAN	J	31	230	PQL	ug/Kg	J (all detects)
	FLUORANTHENE	J	38	230	PQL	ug/Kg	
	PHENANTHRENE	J	100	230	PQL	ug/Kg	

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-06-SA5A-QC-030111	BENZO(A)PYRENE	J	3.8	9.4	PQL	ug/Kg	J (all detects)
	BENZO(G,H,I)PERYLENE	J	3.9	9.4	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	38	100	PQL	ug/Kg	
	CHRYSENE	J	7.5	9.4	PQL	ug/Kg	
	FLUORANTHENE	J	3.9	9.4	PQL	ug/Kg	
	PYRENE	J	5.3	9.4	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE094 **Laboratory: LL**

EDD Filename: DE094_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8270C SIM**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-076-SA5A-SS-0.0-0.5	BENZO(B)FLUORANTHENE	J	7.3	8.9	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	5.1	8.9	PQL	ug/Kg	
	FLUORANTHENE	J	5.6	8.9	PQL	ug/Kg	
	PYRENE	J	5.6	8.9	PQL	ug/Kg	
SL-077-SA5A-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	8.0	21	PQL	ug/Kg	J (all detects)
	Di-n-octylphthalate	J	11	21	PQL	ug/Kg	
SL-078-SA5A-SS-0.0-0.5	Di-n-octylphthalate	J	11	20	PQL	ug/Kg	J (all detects)
SL-103-SA5A-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	4.8	10	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	5.8	10	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	4.9	10	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	48	110	PQL	ug/Kg	
SL-104-SA5A-SS-0.0-0.5	BENZO(B)FLUORANTHENE	J	5.3	9.9	PQL	ug/Kg	J (all detects)
	PHENANTHRENE	J	5.9	9.9	PQL	ug/Kg	
SL-191-SA5A-SS-0.0-0.5	1-METHYLNAPHTHALENE	J	9.1	10	PQL	ug/Kg	J (all detects)
	ACENAPHTHYLENE	J	4.5	10	PQL	ug/Kg	
	NAPHTHALENE	J	7.5	10	PQL	ug/Kg	
SL-194-SA5A-SS-0.0-0.3	ACENAPHTHENE	J	6.7	9.9	PQL	ug/Kg	J (all detects)
	ACENAPHTHYLENE	J	9.1	9.9	PQL	ug/Kg	
	FLUORENE	J	8.3	9.9	PQL	ug/Kg	
SL-195-SA5A-SS-0.0-0.2	ANTHRACENE	J	9.6	23	PQL	ug/Kg	J (all detects)
	BENZO(K)FLUORANTHENE	J	14	23	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	100	250	PQL	ug/Kg	
SL-256-SA5A-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	1.2	1.9	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	1.6	1.9	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.1	1.9	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	0.75	1.9	PQL	ug/Kg	
	CHRYSENE	J	1.3	1.9	PQL	ug/Kg	
	FLUORANTHENE	J	0.80	1.9	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	0.89	1.9	PQL	ug/Kg	
	PYRENE	J	0.86	1.9	PQL	ug/Kg	

LDC #: 25911I4

VALIDATION COMPLETENESS WORKSHEET

Date: 8-3-11

SDG #: DE094

ADR

Laboratory: Lancaster Laboratories

Reviewer: CR

2nd Reviewer: [illegible]

METHOD: Metals (EPA SW 846 Method 6010B/6020A/7000)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	N	Sampling dates:
II.	ICP/MS Tune	—	
III.	Calibration	—	
IV.	Blanks	SW	
V.	ICP Interference Check Sample (ICS) Analysis	N	
VI.	Matrix Spike Analysis	N	MS/D (Al, Ba, Ca, Fe, Mg, Mn, Ti, Zn >4X)
VII.	Duplicate Sample Analysis	N	Dup (Sb, Be, Cd, Ag, Zr <5x)
VIII.	Laboratory Control Samples (LCS)	A	LCS/D
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	SW	J/UJ
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	—	
XV	Field Blanks	SW	EB=14

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:

1	DUP-06-SA5A-QC-030111 ?	11	SL-195-SA5A-S-0.0-0.2	21		31	
2	SL-066-SA5A-S-0.0-0.5	12	SL-256-SA5A-S-0.0-0.5 ?	22		32	
3	SL-072-SA5A-S-0.0-0.5	13	SL-257-SA5A-S-0.0-0.5	23		33	
4	SL-076-SA5A-S-0.0-0.5	14	EB04-SA5A-030111	24		34	
5	SL-177-SA5A-S-0.0-0.5	15	SL-244-SA5A-SB-4.0-5.0	25		35	
6	SL-078-SA5A-S-0.0-0.5	16	SL-244-SA5A-SB-9.0-10.0	26		36	
7	SL-103-SA5A-S-0.0-0.5	17	SL-256-SA5A-S-0.0-0.5MS	27		37	
8	SL-104-SA5A-S-0.0-0.5	18	SL-256-SA5A-S-0.0-0.5MSD	28		38	
9	SL-191-SA5A-S-0.0-0.5	19	SL-256-SA5A-S-0.0-0.5DUP	29		39	
10	SL-194-SA5A-S-0.0-0.3	20		30		40	

Notes:

LDC #: 25911I4

VALIDATION FINDINGS WORKSHEET
PB/ICB/CCB QUALIFIED SAMPLES

Reviewer:
2nd Reviewer:

METHOD: Trace metals (EPA SW 864 Method 6010B/6020/7000)
Sample Concentration units, unless otherwise noted: ug/L

Soil preparation factor applied: 100x x MS: 2xdil
Associated Samples: All Water

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit	14											
Li			8.6	43	6.6											

Samples with analyte concentrations within five times the associated ICB, CCB or PB concentration are listed above with the identifications from the Validation Completeness Worksheet. These sample results were qualified as not detected, "U".

Note : a - The listed analyte concentration is the highest ICB, CCB, or PB detected in the analysis of each element.

LDC #: 25911I4

VALIDATION FINDINGS WORKSHEET
Field Blanks

Page: 1 of 1
Reviewer: QR
2nd Reviewer: A

METHOD: Trace Metals (EPA SW846 6010B/7000)
Y N N/A Were field blanks identified in this SDG?
Y N N/A Were target analytes detected in the field blanks?
Blank units: ug/L **Associated sample units:** mg/Kg
Sampling date: 3/1/11 Soil factor applied 100x
Field blank type: (circle one) Field Blank / Rinsate / Other: Associated Samples: All Soil

Analyte	Blank ID	Sample Identification										
	13	Action Level	No Qualifiers									
Li	6.6	3.3										

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
Samples with analyte concentrations within five times the associated field blank concentration are listed above, these sample results were qualified as not detected, "U".

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 9
SERIAL DILUTIONS
SDG No.: DE094
Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: 6218905BKG Serial Dilution Lab Sample ID: 6218905L
Batch ID(s): P06908D, P06926B
Concentration Units: UG/L

Analyte	Mass	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Diff.	Q	M
Aluminum		109452.9500		104637.0000		4		P
Antimony	121	0.7206	B	1.5000	U	100		MS
Arsenic	75	25.4500		19.1650		25		MS
Barium	137	374.7000		304.1000		19	E	MS
Beryllium	9	2.7090		2.2840	B	16		MS
Boron		39.8300	B	54.7000	B	37		P
Cadmium	111	1.7330		2.2405	B	29		MS
Calcium		39213.1800		41134.6500		5		P
Chromium	52	95.3100		81.1500		15	E	MS
Cobalt	59	27.2700		24.2400		11	E	MS
Copper	63	30.9500		27.9400		10		MS
Iron		149206.7700		154040.2500		3		P
Lead	208	24.2400		20.8350		14	E	MS
Lithium		165.0100		161.7500		2		P
Magnesium		35663.2200		36396.2000		2		P
Manganese		2195.4500		2283.5500		4		P
Molybdenum	98	1.6640		1.9325	B	16		MS
Nickel	60	50.3900		40.6950		19	E	MS
Phosphorus		3149.0700		3105.2000		1		P
Potassium		18208.6000		18494.5000		2		P
Selenium	78	0.6425	B	1.0000	U	100		MS
Silver	107	0.1081	B	0.3000	U	100		MS
Sodium		785.3900	B	1865.0000	U	100		P
Strontium		158.1800		158.6500		0		P
Thallium	203	1.0380		0.9880	B	5		MS
Tin		23.4000	B	50.0000	U	100		P
Titanium		9686.8400		10311.3000		6		P
Vanadium	51	188.3000		161.4000		14	E	MS
Zinc	66	703.7000		541.5000		23	E	MS
Zirconium		12.2700	B	42.0000	U	100		P

NOTE: An E in column Q indicates the presence of a chemical or physical interference in the matrix when the % difference is greater than 10%. This applies only when (I) is greater than or equal to 50x MDL for ICP, 100x MDL for ICP-MS (6020), 50x MDL for ICP-MS (200.8), or 25x MDL for GFAA.

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry

CONCENTRATION QUALIFIERS:
U= Below MDL
B= Below LOQ
FLAGS:
E = Matrix Effects exist as proven by Serial Dilution or Spiked Dilution

SAMPLE DELIVERY GROUP

DE095

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
02-Mar-2011	SL-048-SA5A-SS-0.0-0.5	6220791	N	3050B	6010B	IV
02-Mar-2011	SL-048-SA5A-SS-0.0-0.5	6220791	N	3050B	6020	IV
02-Mar-2011	SL-048-SA5A-SS-0.0-0.5	6220791	N	3060A	7199	IV
02-Mar-2011	SL-048-SA5A-SS-0.0-0.5	6220791	N	3550B	8081A	IV
02-Mar-2011	SL-048-SA5A-SS-0.0-0.5	6220791	N	3550B	8082	IV
02-Mar-2011	SL-048-SA5A-SS-0.0-0.5	6220791	N	3550B	8151A	IV
02-Mar-2011	SL-048-SA5A-SS-0.0-0.5	6220791	N	3550B	8270C	IV
02-Mar-2011	SL-048-SA5A-SS-0.0-0.5	6220791	N	3550B	8270C SIM	IV
02-Mar-2011	SL-048-SA5A-SS-0.0-0.5	6220791	N	Gen Prep	9045M	IV
02-Mar-2011	SL-048-SA5A-SS-0.0-0.5	6220791	N	METHOD	300.0	IV
02-Mar-2011	SL-048-SA5A-SS-0.0-0.5	6220791	N	METHOD	314.0	IV
02-Mar-2011	SL-048-SA5A-SS-0.0-0.5	6220791	N	METHOD	7471A	IV
02-Mar-2011	SL-048-SA5A-SS-0.0-0.5MS	6220792	MS	3050B	6010B	IV
02-Mar-2011	SL-048-SA5A-SS-0.0-0.5MS	6220792	MS	3050B	6020	IV
02-Mar-2011	SL-048-SA5A-SS-0.0-0.5MS	6220792	MS	3060A	7199	IV
02-Mar-2011	SL-048-SA5A-SS-0.0-0.5MS	6220792	MS	3550B	8081A	IV
02-Mar-2011	SL-048-SA5A-SS-0.0-0.5MS	6220792	MS	3550B	8082	IV
02-Mar-2011	SL-048-SA5A-SS-0.0-0.5MS	6220792	MS	3550B	8151A	IV
02-Mar-2011	SL-048-SA5A-SS-0.0-0.5MS	6220792	MS	3550B	8270C	IV
02-Mar-2011	SL-048-SA5A-SS-0.0-0.5MS	6220792	MS	3550B	8270C SIM	IV
02-Mar-2011	SL-048-SA5A-SS-0.0-0.5MS	6220792	MS	METHOD	300.0	IV
02-Mar-2011	SL-048-SA5A-SS-0.0-0.5MS	6220792	MS	METHOD	314.0	IV
02-Mar-2011	SL-048-SA5A-SS-0.0-0.5MS	6220792	MS	METHOD	7471A	IV
02-Mar-2011	SL-048-SA5A-SS-0.0-0.5MSD	6220793	MSD	3050B	6010B	IV
02-Mar-2011	SL-048-SA5A-SS-0.0-0.5MSD	6220793	MSD	3050B	6020	IV
02-Mar-2011	SL-048-SA5A-SS-0.0-0.5MSD	6220793	MSD	3550B	8081A	IV

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
02-Mar-2011	SL-048-SA5A-SS-0.0-0.5MSD	6220793	MSD	3550B	8082	IV
02-Mar-2011	SL-048-SA5A-SS-0.0-0.5MSD	6220793	MSD	3550B	8151A	IV
02-Mar-2011	SL-048-SA5A-SS-0.0-0.5MSD	6220793	MSD	3550B	8270C	IV
02-Mar-2011	SL-048-SA5A-SS-0.0-0.5MSD	6220793	MSD	3550B	8270C SIM	IV
02-Mar-2011	SL-048-SA5A-SS-0.0-0.5MSD	6220793	MSD	METHOD	7471A	IV
02-Mar-2011	SL-048-SA5A-SS-0.0-0.5DUP	6220794	DUP	3050B	6010B	IV
02-Mar-2011	SL-048-SA5A-SS-0.0-0.5DUP	6220794	DUP	3050B	6020	IV
02-Mar-2011	SL-048-SA5A-SS-0.0-0.5DUP	6220794	DUP	3060A	7199	IV
02-Mar-2011	SL-048-SA5A-SS-0.0-0.5DUP	6220794	DUP	Gen Prep	9045M	IV
02-Mar-2011	SL-048-SA5A-SS-0.0-0.5DUP	6220794	DUP	METHOD	300.0	IV
02-Mar-2011	SL-048-SA5A-SS-0.0-0.5DUP	6220794	DUP	METHOD	314.0	IV
02-Mar-2011	SL-048-SA5A-SS-0.0-0.5DUP	6220794	DUP	METHOD	7471A	IV
02-Mar-2011	DUP-07-SA5A-QC-030211	6220787	FD	3050B	6010B	IV
02-Mar-2011	DUP-07-SA5A-QC-030211	6220787	FD	3050B	6020	IV
02-Mar-2011	DUP-07-SA5A-QC-030211	6220787	FD	3060A	7199	IV
02-Mar-2011	DUP-07-SA5A-QC-030211	6220787	FD	3550B	8081A	IV
02-Mar-2011	DUP-07-SA5A-QC-030211	6220787	FD	3550B	8082	IV
02-Mar-2011	DUP-07-SA5A-QC-030211	6220787	FD	3550B	8151A	IV
02-Mar-2011	DUP-07-SA5A-QC-030211	6220787	FD	3550B	8270C	IV
02-Mar-2011	DUP-07-SA5A-QC-030211	6220787	FD	3550B	8270C SIM	IV
02-Mar-2011	DUP-07-SA5A-QC-030211	6220787	FD	Gen Prep	9045M	IV
02-Mar-2011	DUP-07-SA5A-QC-030211	6220787	FD	METHOD	300.0	IV
02-Mar-2011	DUP-07-SA5A-QC-030211	6220787	FD	METHOD	314.0	IV
02-Mar-2011	DUP-07-SA5A-QC-030211	6220787	FD	METHOD	7471A	IV
02-Mar-2011	SL-045-SA5A-SS-0.0-0.5	6220790	N	3050B	6010B	IV
02-Mar-2011	SL-045-SA5A-SS-0.0-0.5	6220790	N	3050B	6020	IV

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IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
02-Mar-2011	SL-045-SA5A-SS-0.0-0.5	6220790	N	3060A	7199	IV
02-Mar-2011	SL-045-SA5A-SS-0.0-0.5	6220790	N	3550B	8081A	IV
02-Mar-2011	SL-045-SA5A-SS-0.0-0.5	6220790	N	3550B	8082	IV
02-Mar-2011	SL-045-SA5A-SS-0.0-0.5	6220790	N	3550B	8151A	IV
02-Mar-2011	SL-045-SA5A-SS-0.0-0.5	6220790	N	3550B	8270C	IV
02-Mar-2011	SL-045-SA5A-SS-0.0-0.5	6220790	N	3550B	8270C SIM	IV
02-Mar-2011	SL-045-SA5A-SS-0.0-0.5	6220790	N	Gen Prep	9045M	IV
02-Mar-2011	SL-045-SA5A-SS-0.0-0.5	6220790	N	METHOD	300.0	IV
02-Mar-2011	SL-045-SA5A-SS-0.0-0.5	6220790	N	METHOD	314.0	IV
02-Mar-2011	SL-045-SA5A-SS-0.0-0.5	6220790	N	METHOD	6850	IV
02-Mar-2011	SL-045-SA5A-SS-0.0-0.5	6220790	N	METHOD	7471A	IV
02-Mar-2011	SL-044-SA5A-SS-0.0-0.5	6220789	N	3050B	6010B	IV
02-Mar-2011	SL-044-SA5A-SS-0.0-0.5	6220789	N	3050B	6020	IV
02-Mar-2011	SL-044-SA5A-SS-0.0-0.5	6220789	N	3060A	7199	IV
02-Mar-2011	SL-044-SA5A-SS-0.0-0.5	6220789	N	3550B	8081A	IV
02-Mar-2011	SL-044-SA5A-SS-0.0-0.5	6220789	N	3550B	8082	IV
02-Mar-2011	SL-044-SA5A-SS-0.0-0.5	6220789	N	3550B	8151A	IV
02-Mar-2011	SL-044-SA5A-SS-0.0-0.5	6220789	N	3550B	8270C	IV
02-Mar-2011	SL-044-SA5A-SS-0.0-0.5	6220789	N	3550B	8270C SIM	IV
02-Mar-2011	SL-044-SA5A-SS-0.0-0.5	6220789	N	Gen Prep	9045M	IV
02-Mar-2011	SL-044-SA5A-SS-0.0-0.5	6220789	N	METHOD	300.0	IV
02-Mar-2011	SL-044-SA5A-SS-0.0-0.5	6220789	N	METHOD	314.0	IV
02-Mar-2011	SL-044-SA5A-SS-0.0-0.5	6220789	N	METHOD	7471A	IV
02-Mar-2011	SL-042-SA5A-SS-0.0-0.5	6220788	N	3050B	6010B	IV
02-Mar-2011	SL-042-SA5A-SS-0.0-0.5	6220788	N	3050B	6020	IV
02-Mar-2011	SL-042-SA5A-SS-0.0-0.5	6220788	N	3060A	7199	IV

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IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
02-Mar-2011	SL-042-SA5A-SS-0.0-0.5	6220788	N	3550B	8081A	IV
02-Mar-2011	SL-042-SA5A-SS-0.0-0.5	6220788	N	3550B	8082	IV
02-Mar-2011	SL-042-SA5A-SS-0.0-0.5	6220788	N	3550B	8151A	IV
02-Mar-2011	SL-042-SA5A-SS-0.0-0.5	6220788	N	3550B	8270C	IV
02-Mar-2011	SL-042-SA5A-SS-0.0-0.5	6220788	N	3550B	8270C SIM	IV
02-Mar-2011	SL-042-SA5A-SS-0.0-0.5	6220788	N	Gen Prep	9045M	IV
02-Mar-2011	SL-042-SA5A-SS-0.0-0.5	6220788	N	METHOD	300.0	IV
02-Mar-2011	SL-042-SA5A-SS-0.0-0.5	6220788	N	METHOD	314.0	IV
02-Mar-2011	SL-042-SA5A-SS-0.0-0.5	6220788	N	METHOD	7471A	IV
02-Mar-2011	SL-179-SA5A-SS-0.0-0.3	6220797	N	3050B	6010B	IV
02-Mar-2011	SL-179-SA5A-SS-0.0-0.3	6220797	N	3050B	6020	IV
02-Mar-2011	SL-179-SA5A-SS-0.0-0.3	6220797	N	3060A	7199	IV
02-Mar-2011	SL-179-SA5A-SS-0.0-0.3	6220797	N	3550B	8081A	IV
02-Mar-2011	SL-179-SA5A-SS-0.0-0.3	6220797	N	3550B	8082	IV
02-Mar-2011	SL-179-SA5A-SS-0.0-0.3	6220797	N	3550B	8151A	IV
02-Mar-2011	SL-179-SA5A-SS-0.0-0.3	6220797	N	3550B	8270C	IV
02-Mar-2011	SL-179-SA5A-SS-0.0-0.3	6220797	N	3550B	8270C SIM	IV
02-Mar-2011	SL-179-SA5A-SS-0.0-0.3	6220797	N	Gen Prep	9045M	IV
02-Mar-2011	SL-179-SA5A-SS-0.0-0.3	6220797	N	METHOD	300.0	IV
02-Mar-2011	SL-179-SA5A-SS-0.0-0.3	6220797	N	METHOD	314.0	IV
02-Mar-2011	SL-179-SA5A-SS-0.0-0.3	6220797	N	METHOD	7471A	IV
02-Mar-2011	SL-178-SA5A-SS-0.0-0.4	6220796	N	3050B	6010B	IV
02-Mar-2011	SL-178-SA5A-SS-0.0-0.4	6220796	N	3050B	6020	IV
02-Mar-2011	SL-178-SA5A-SS-0.0-0.4	6220796	N	3060A	7199	IV
02-Mar-2011	SL-178-SA5A-SS-0.0-0.4	6220796	N	3550B	8081A	IV
02-Mar-2011	SL-178-SA5A-SS-0.0-0.4	6220796	N	3550B	8082	IV

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IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
02-Mar-2011	SL-178-SA5A-SS-0.0-0.4	6220796	N	3550B	8151A	IV
02-Mar-2011	SL-178-SA5A-SS-0.0-0.4	6220796	N	3550B	8270C	IV
02-Mar-2011	SL-178-SA5A-SS-0.0-0.4	6220796	N	3550B	8270C SIM	IV
02-Mar-2011	SL-178-SA5A-SS-0.0-0.4	6220796	N	Gen Prep	9045M	IV
02-Mar-2011	SL-178-SA5A-SS-0.0-0.4	6220796	N	METHOD	300.0	IV
02-Mar-2011	SL-178-SA5A-SS-0.0-0.4	6220796	N	METHOD	314.0	IV
02-Mar-2011	SL-178-SA5A-SS-0.0-0.4	6220796	N	METHOD	7471A	IV
02-Mar-2011	SL-176-SA5A-SS-0.0-0.3	6220795	N	3050B	6010B	IV
02-Mar-2011	SL-176-SA5A-SS-0.0-0.3	6220795	N	3050B	6020	IV
02-Mar-2011	SL-176-SA5A-SS-0.0-0.3	6220795	N	3060A	7199	IV
02-Mar-2011	SL-176-SA5A-SS-0.0-0.3	6220795	N	3550B	8081A	IV
02-Mar-2011	SL-176-SA5A-SS-0.0-0.3	6220795	N	3550B	8082	IV
02-Mar-2011	SL-176-SA5A-SS-0.0-0.3	6220795	N	3550B	8151A	IV
02-Mar-2011	SL-176-SA5A-SS-0.0-0.3	6220795	N	3550B	8270C	IV
02-Mar-2011	SL-176-SA5A-SS-0.0-0.3	6220795	N	3550B	8270C SIM	IV
02-Mar-2011	SL-176-SA5A-SS-0.0-0.3	6220795	N	Gen Prep	9045M	IV
02-Mar-2011	SL-176-SA5A-SS-0.0-0.3	6220795	N	METHOD	300.0	IV
02-Mar-2011	SL-176-SA5A-SS-0.0-0.3	6220795	N	METHOD	314.0	IV
02-Mar-2011	SL-176-SA5A-SS-0.0-0.3	6220795	N	METHOD	6850	IV
02-Mar-2011	SL-176-SA5A-SS-0.0-0.3	6220795	N	METHOD	7471A	IV
02-Mar-2011	EB05-SA5A-030211	6220802	EB	3005A	6010B	IV
02-Mar-2011	EB05-SA5A-030211	6220802	EB	3020A	6020	IV
02-Mar-2011	EB05-SA5A-030211	6220802	EB	3510C	8081A	IV
02-Mar-2011	EB05-SA5A-030211	6220802	EB	3510C	8082	IV
02-Mar-2011	EB05-SA5A-030211	6220802	EB	3510C	8270C	IV
02-Mar-2011	EB05-SA5A-030211	6220802	EB	3510C	8270C SIM	IV

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Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
02-Mar-2011	EB05-SA5A-030211	6220802	EB	Gen Prep	300.0	IV
02-Mar-2011	EB05-SA5A-030211	6220802	EB	Gen Prep	314.0	IV
02-Mar-2011	EB05-SA5A-030211	6220802	EB	Gen Prep	7199	IV
02-Mar-2011	EB05-SA5A-030211	6220802	EB	METHOD	7470A	IV
02-Mar-2011	EB05-SA5A-030211	6220802	EB	METHOD	8151A	IV
02-Mar-2011	SL-186-SA5A-SS-0.0-0.5	6220799	N	3050B	6010B	IV
02-Mar-2011	SL-186-SA5A-SS-0.0-0.5	6220799	N	3050B	6020	IV
02-Mar-2011	SL-186-SA5A-SS-0.0-0.5	6220799	N	3060A	7199	IV
02-Mar-2011	SL-186-SA5A-SS-0.0-0.5	6220799	N	3550B	8081A	IV
02-Mar-2011	SL-186-SA5A-SS-0.0-0.5	6220799	N	3550B	8082	IV
02-Mar-2011	SL-186-SA5A-SS-0.0-0.5	6220799	N	3550B	8151A	IV
02-Mar-2011	SL-186-SA5A-SS-0.0-0.5	6220799	N	3550B	8270C	IV
02-Mar-2011	SL-186-SA5A-SS-0.0-0.5	6220799	N	3550B	8270C SIM	IV
02-Mar-2011	SL-186-SA5A-SS-0.0-0.5	6220799	N	Gen Prep	9045M	IV
02-Mar-2011	SL-186-SA5A-SS-0.0-0.5	6220799	N	METHOD	300.0	IV
02-Mar-2011	SL-186-SA5A-SS-0.0-0.5	6220799	N	METHOD	314.0	IV
02-Mar-2011	SL-186-SA5A-SS-0.0-0.5	6220799	N	METHOD	7471A	IV
02-Mar-2011	SL-188-SA5A-SS-0.0-0.5	6220800	N	3050B	6010B	IV
02-Mar-2011	SL-188-SA5A-SS-0.0-0.5	6220800	N	3050B	6020	IV
02-Mar-2011	SL-188-SA5A-SS-0.0-0.5	6220800	N	3060A	7199	IV
02-Mar-2011	SL-188-SA5A-SS-0.0-0.5	6220800	N	3550B	8081A	IV
02-Mar-2011	SL-188-SA5A-SS-0.0-0.5	6220800	N	3550B	8082	IV
02-Mar-2011	SL-188-SA5A-SS-0.0-0.5	6220800	N	3550B	8151A	IV
02-Mar-2011	SL-188-SA5A-SS-0.0-0.5	6220800	N	3550B	8270C	IV
02-Mar-2011	SL-188-SA5A-SS-0.0-0.5	6220800	N	3550B	8270C SIM	IV
02-Mar-2011	SL-188-SA5A-SS-0.0-0.5	6220800	N	Gen Prep	9045M	IV

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Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
02-Mar-2011	SL-188-SA5A-SS-0.0-0.5	6220800	N	METHOD	300.0	IV
02-Mar-2011	SL-188-SA5A-SS-0.0-0.5	6220800	N	METHOD	314.0	IV
02-Mar-2011	SL-188-SA5A-SS-0.0-0.5	6220800	N	METHOD	7471A	IV
02-Mar-2011	SL-189-SA5A-SS-0.0-0.5	6220801	N	3050B	6010B	IV
02-Mar-2011	SL-189-SA5A-SS-0.0-0.5	6220801	N	3050B	6020	IV
02-Mar-2011	SL-189-SA5A-SS-0.0-0.5	6220801	N	3060A	7199	IV
02-Mar-2011	SL-189-SA5A-SS-0.0-0.5	6220801	N	3550B	8081A	IV
02-Mar-2011	SL-189-SA5A-SS-0.0-0.5	6220801	N	3550B	8082	IV
02-Mar-2011	SL-189-SA5A-SS-0.0-0.5	6220801	N	3550B	8151A	IV
02-Mar-2011	SL-189-SA5A-SS-0.0-0.5	6220801	N	3550B	8270C	IV
02-Mar-2011	SL-189-SA5A-SS-0.0-0.5	6220801	N	3550B	8270C SIM	IV
02-Mar-2011	SL-189-SA5A-SS-0.0-0.5	6220801	N	Gen Prep	9045M	IV
02-Mar-2011	SL-189-SA5A-SS-0.0-0.5	6220801	N	METHOD	300.0	IV
02-Mar-2011	SL-189-SA5A-SS-0.0-0.5	6220801	N	METHOD	314.0	IV
02-Mar-2011	SL-189-SA5A-SS-0.0-0.5	6220801	N	METHOD	7471A	IV
02-Mar-2011	SL-189-SA5A-SS-0.0-0.5DUP	P220801D271905B	DUP	METHOD	300.0	IV
02-Mar-2011	SL-189-SA5A-SS-0.0-0.5DUP	P220801D272025B	DUP	METHOD	314.0	IV
02-Mar-2011	SL-189-SA5A-SS-0.0-0.5MS	P220801R271920B	MS	METHOD	300.0	IV
02-Mar-2011	SL-189-SA5A-SS-0.0-0.5MS	P220801R272049B	MS	METHOD	314.0	IV

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Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE095 **Laboratory: LL**

EDD Filename: DE095_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: DUP-07-SA5A-QC-030211 *Collected:* 3/2/2011 8:58:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.6		0.92	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-042-SA5A-SS-0.0-0.5 *Collected:* 3/2/2011 10:11:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	3.4		0.99	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-044-SA5A-SS-0.0-0.5 *Collected:* 3/2/2011 9:58:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.6		0.90	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-045-SA5A-SS-0.0-0.5 *Collected:* 3/2/2011 9:30:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.7		0.96	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-048-SA5A-SS-0.0-0.5 *Collected:* 3/2/2011 8:55:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.5		0.91	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-176-SA5A-SS-0.0-0.3 *Collected:* 3/2/2011 11:49:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.7		0.90	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-178-SA5A-SS-0.0-0.4 *Collected:* 3/2/2011 11:17:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.6		0.85	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-179-SA5A-SS-0.0-0.3 *Collected:* 3/2/2011 11:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	0.85	U	0.85	MDL	1.1	PQL	mg/Kg	UJ	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE095 **Laboratory: LL**

EDD Filename: DE095_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: GENCHEM

Method: 300.0 **Matrix: SO**

Sample ID: SL-186-SA5A-SS-0.0-0.5 *Collected:* 3/2/2011 1:25:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.9		0.95	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-188-SA5A-SS-0.0-0.5 *Collected:* 3/2/2011 2:01:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	3.4		0.90	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-189-SA5A-SS-0.0-0.5 *Collected:* 3/2/2011 2:15:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.1		0.95	MDL	1.2	PQL	mg/Kg	J	Q

Method Category: METALS

Method: 6010B **Matrix: AQ**

Sample ID: EB05-SA5A-030211 *Collected:* 3/2/2011 12:15:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LITHIUM	0.0045	J	0.0024	MDL	0.0200	PQL	mg/L	U	B

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: DUP-07-SA5A-QC-030211 *Collected:* 3/2/2011 8:58:00 AM *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.16	J	1.01	MDL	5.66	PQL	mg/Kg	J	Z
SODIUM	81.6	J	42.3	MDL	113	PQL	mg/Kg	J	Z
TIN	3.03	J	1.13	MDL	11.3	PQL	mg/Kg	U	B
Zirconium	1.55	J	0.952	MDL	5.66	PQL	mg/Kg	U	B

Sample ID: SL-042-SA5A-SS-0.0-0.5 *Collected:* 3/2/2011 10:11:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	5.72	J	1.07	MDL	6.04	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE095 **Laboratory: LL**

EDD Filename: DE095_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6010B** ***Matrix:*** **SO**

Sample ID: **SL-042-SA5A-SS-0.0-0.5** ***Collected:*** **3/2/2011 10:11:00** ***Analysis Type:*** **REA** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	4.02	J	1.21	MDL	12.1	PQL	mg/Kg	U	B
Zirconium	2.40	J	1.01	MDL	6.04	PQL	mg/Kg	U	B

Sample ID: **SL-044-SA5A-SS-0.0-0.5** ***Collected:*** **3/2/2011 9:58:00 AM** ***Analysis Type:*** **REA** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.99	J	1.00	MDL	5.64	PQL	mg/Kg	J	Z
SODIUM	87.8	J	42.1	MDL	113	PQL	mg/Kg	J	Z
TIN	3.06	J	1.13	MDL	11.3	PQL	mg/Kg	U	B
Zirconium	1.78	J	0.948	MDL	5.64	PQL	mg/Kg	U	B

Sample ID: **SL-045-SA5A-SS-0.0-0.5** ***Collected:*** **3/2/2011 9:30:00 AM** ***Analysis Type:*** **REA** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	4.55	J	1.04	MDL	5.86	PQL	mg/Kg	J	Z
SODIUM	84.9	J	43.7	MDL	117	PQL	mg/Kg	J	Z
TIN	3.19	J	1.17	MDL	11.7	PQL	mg/Kg	U	B
Zirconium	1.83	J	0.984	MDL	5.86	PQL	mg/Kg	U	B

Sample ID: **SL-048-SA5A-SS-0.0-0.5** ***Collected:*** **3/2/2011 8:55:00 AM** ***Analysis Type:*** **REA** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.38	J	0.988	MDL	5.55	PQL	mg/Kg	J	Z
SODIUM	81.4	J	41.4	MDL	111	PQL	mg/Kg	J	Z
TIN	2.84	J	1.11	MDL	11.1	PQL	mg/Kg	U	B
Zirconium	1.94	J	0.932	MDL	5.55	PQL	mg/Kg	U	B

Sample ID: **SL-176-SA5A-SS-0.0-0.3** ***Collected:*** **3/2/2011 11:49:00** ***Analysis Type:*** **REA** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	5.57	J	1.09	MDL	10.9	PQL	mg/Kg	U	B
Zirconium	1.64	J	0.914	MDL	5.44	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE095 **Laboratory: LL**

EDD Filename: DE095_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B ***Matrix:*** SO

Sample ID: SL-178-SA5A-SS-0.0-0.4 ***Collected:*** 3/2/2011 11:17:00 ***Analysis Type:*** REA ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	4.10	J	0.923	MDL	5.19	PQL	mg/Kg	J	Z
TIN	3.17	J	1.04	MDL	10.4	PQL	mg/Kg	U	B
Zirconium	0.925	J	0.871	MDL	5.19	PQL	mg/Kg	U	B

Sample ID: SL-179-SA5A-SS-0.0-0.3 ***Collected:*** 3/2/2011 11:00:00 ***Analysis Type:*** REA ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	4.52	J	0.939	MDL	5.28	PQL	mg/Kg	J	Z
TIN	3.01	J	1.06	MDL	10.6	PQL	mg/Kg	U	B
Zirconium	1.48	J	0.887	MDL	5.28	PQL	mg/Kg	U	B

Sample ID: SL-186-SA5A-SS-0.0-0.5 ***Collected:*** 3/2/2011 1:25:00 PM ***Analysis Type:*** REA ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.79	J	1.18	MDL	11.8	PQL	mg/Kg	U	B
Zirconium	1.86	J	0.990	MDL	5.89	PQL	mg/Kg	U	B

Sample ID: SL-188-SA5A-SS-0.0-0.5 ***Collected:*** 3/2/2011 2:01:00 PM ***Analysis Type:*** REA ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.96	J	1.10	MDL	11.0	PQL	mg/Kg	U	B
Zirconium	1.61	J	0.925	MDL	5.51	PQL	mg/Kg	U	B

Sample ID: SL-189-SA5A-SS-0.0-0.5 ***Collected:*** 3/2/2011 2:15:00 PM ***Analysis Type:*** REA ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.85	J	1.04	MDL	5.87	PQL	mg/Kg	J	Z
TIN	2.63	J	1.17	MDL	11.7	PQL	mg/Kg	U	B
Zirconium	4.72	J	0.985	MDL	5.87	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE095 **Laboratory: LL**

EDD Filename: DE095_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 ***Matrix:*** SO

Sample ID: DUP-07-SA5A-QC-030211 ***Collected:*** 3/2/2011 8:58:00 AM ***Analysis Type:*** REA10 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	11.5		0.0719	MDL	0.436	PQL	mg/Kg	J	E, A

Sample ID: DUP-07-SA5A-QC-030211 ***Collected:*** 3/2/2011 8:58:00 AM ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.162	J	0.0453	MDL	0.453	PQL	mg/Kg	J	Z, FD

Sample ID: DUP-07-SA5A-QC-030211 ***Collected:*** 3/2/2011 8:58:00 AM ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.717		0.0566	MDL	0.113	PQL	mg/Kg	J	Q, E

Sample ID: DUP-07-SA5A-QC-030211 ***Collected:*** 3/2/2011 8:58:00 AM ***Analysis Type:*** REA5 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	140		0.122	MDL	0.453	PQL	mg/Kg	J	E, A

Sample ID: DUP-07-SA5A-QC-030211 ***Collected:*** 3/2/2011 8:58:00 AM ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.141	J	0.0680	MDL	0.227	PQL	mg/Kg	J	Z, Q
ARSENIC	5.35		0.0906	MDL	0.453	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.632		0.0181	MDL	0.113	PQL	mg/Kg	J	E
CADMIUM	0.258		0.0453	MDL	0.113	PQL	mg/Kg	J	Q
CHROMIUM	23.3		0.136	MDL	0.453	PQL	mg/Kg	J	E, A
COBALT	6.86		0.0227	MDL	0.113	PQL	mg/Kg	J	E
LEAD	11.3		0.0118	MDL	0.227	PQL	mg/Kg	J	E, A
NICKEL	16.2		0.113	MDL	0.453	PQL	mg/Kg	J	E
SILVER	0.114		0.0136	MDL	0.113	PQL	mg/Kg	J	Q
VANADIUM	43.1		0.0249	MDL	0.113	PQL	mg/Kg	J	E, A
ZINC	80.9		0.634	MDL	3.40	PQL	mg/Kg	J	E, A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE095 **Laboratory: LL**

EDD Filename: DE095_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 ***Matrix:*** SO

Sample ID: SL-042-SA5A-SS-0.0-0.5 ***Collected:*** 3/2/2011 10:11:00 ***Analysis Type:*** REA10 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	49.5		0.0789	MDL	0.478	PQL	mg/Kg	J	E, A

Sample ID: SL-042-SA5A-SS-0.0-0.5 ***Collected:*** 3/2/2011 10:11:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.457	J	0.0483	MDL	0.483	PQL	mg/Kg	J	Z

Sample ID: SL-042-SA5A-SS-0.0-0.5 ***Collected:*** 3/2/2011 10:11:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	2.04		0.0604	MDL	0.121	PQL	mg/Kg	J	Q, E

Sample ID: SL-042-SA5A-SS-0.0-0.5 ***Collected:*** 3/2/2011 10:11:00 ***Analysis Type:*** REA5 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	191		0.130	MDL	0.483	PQL	mg/Kg	J	E, A

Sample ID: SL-042-SA5A-SS-0.0-0.5 ***Collected:*** 3/2/2011 10:11:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.328		0.0724	MDL	0.241	PQL	mg/Kg	J	Q
ARSENIC	12.0		0.0966	MDL	0.483	PQL	mg/Kg	J	Q, E
BERYLLIUM	1.19		0.0193	MDL	0.121	PQL	mg/Kg	J	E
CADMIUM	2.63		0.0483	MDL	0.121	PQL	mg/Kg	J	Q
CHROMIUM	57.8		0.145	MDL	0.483	PQL	mg/Kg	J	E, A
COBALT	10.5		0.0241	MDL	0.121	PQL	mg/Kg	J	E
LEAD	29.5		0.0126	MDL	0.241	PQL	mg/Kg	J	E, A
NICKEL	28.9		0.121	MDL	0.483	PQL	mg/Kg	J	E
SILVER	59.2		0.0145	MDL	0.121	PQL	mg/Kg	J	Q
VANADIUM	65.6		0.0266	MDL	0.121	PQL	mg/Kg	J	E, A
ZINC	171		0.676	MDL	3.62	PQL	mg/Kg	J	E, A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE095 **Laboratory: LL**

EDD Filename: DE095_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 ***Matrix:*** SO

Sample ID: SL-044-SA5A-SS-0.0-0.5 ***Collected:*** 3/2/2011 9:58:00 AM ***Analysis Type:*** REA10 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	15.1		0.0709	MDL	0.430	PQL	mg/Kg	J	E, A

Sample ID: SL-044-SA5A-SS-0.0-0.5 ***Collected:*** 3/2/2011 9:58:00 AM ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.205	J	0.0443	MDL	0.443	PQL	mg/Kg	J	Z

Sample ID: SL-044-SA5A-SS-0.0-0.5 ***Collected:*** 3/2/2011 9:58:00 AM ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.929		0.0553	MDL	0.111	PQL	mg/Kg	J	Q, E

Sample ID: SL-044-SA5A-SS-0.0-0.5 ***Collected:*** 3/2/2011 9:58:00 AM ***Analysis Type:*** REA5 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	125		0.120	MDL	0.443	PQL	mg/Kg	J	E, A

Sample ID: SL-044-SA5A-SS-0.0-0.5 ***Collected:*** 3/2/2011 9:58:00 AM ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.177	J	0.0664	MDL	0.221	PQL	mg/Kg	J	Z, Q
ARSENIC	7.24		0.0885	MDL	0.443	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.786		0.0177	MDL	0.111	PQL	mg/Kg	J	E
CADMIUM	0.702		0.0443	MDL	0.111	PQL	mg/Kg	J	Q
CHROMIUM	30.8		0.133	MDL	0.443	PQL	mg/Kg	J	E, A
COBALT	7.40		0.0221	MDL	0.111	PQL	mg/Kg	J	E
LEAD	16.9		0.0115	MDL	0.221	PQL	mg/Kg	J	E, A
NICKEL	19.1		0.111	MDL	0.443	PQL	mg/Kg	J	E
SILVER	13.9		0.0133	MDL	0.111	PQL	mg/Kg	J	Q
VANADIUM	42.2		0.0243	MDL	0.111	PQL	mg/Kg	J	E, A
ZINC	98.0		0.620	MDL	3.32	PQL	mg/Kg	J	E, A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE095 **Laboratory: LL**

EDD Filename: DE095_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 ***Matrix:*** SO

Sample ID: SL-045-SA5A-SS-0.0-0.5 ***Collected:*** 3/2/2011 9:30:00 AM ***Analysis Type:*** REA10 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	14.8		0.0773	MDL	0.469	PQL	mg/Kg	J	E, A

Sample ID: SL-045-SA5A-SS-0.0-0.5 ***Collected:*** 3/2/2011 9:30:00 AM ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.273	J	0.0464	MDL	0.464	PQL	mg/Kg	J	Z

Sample ID: SL-045-SA5A-SS-0.0-0.5 ***Collected:*** 3/2/2011 9:30:00 AM ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.02		0.0580	MDL	0.116	PQL	mg/Kg	J	Q, E

Sample ID: SL-045-SA5A-SS-0.0-0.5 ***Collected:*** 3/2/2011 9:30:00 AM ***Analysis Type:*** REA5 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	182		0.125	MDL	0.464	PQL	mg/Kg	J	E, A

Sample ID: SL-045-SA5A-SS-0.0-0.5 ***Collected:*** 3/2/2011 9:30:00 AM ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.153	J	0.0696	MDL	0.232	PQL	mg/Kg	J	Z, Q
ARSENIC	9.44		0.0928	MDL	0.464	PQL	mg/Kg	J	Q, E
BERYLLIUM	1.06		0.0186	MDL	0.116	PQL	mg/Kg	J	E
CADMIUM	0.437		0.0464	MDL	0.116	PQL	mg/Kg	J	Q
CHROMIUM	34.7		0.139	MDL	0.464	PQL	mg/Kg	J	E, A
COBALT	9.49		0.0232	MDL	0.116	PQL	mg/Kg	J	E
LEAD	16.1		0.0121	MDL	0.232	PQL	mg/Kg	J	E, A
NICKEL	22.5		0.116	MDL	0.464	PQL	mg/Kg	J	E
SILVER	0.0846	J	0.0139	MDL	0.116	PQL	mg/Kg	J	Z, Q
VANADIUM	56.5		0.0255	MDL	0.116	PQL	mg/Kg	J	E, A
ZINC	112		0.650	MDL	3.48	PQL	mg/Kg	J	E, A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE095 **Laboratory: LL**

EDD Filename: DE095_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 ***Matrix:*** SO

Sample ID: SL-048-SA5A-SS-0.0-0.5 ***Collected:*** 3/2/2011 8:55:00 AM ***Analysis Type:*** REA10 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	11.3		0.0718	MDL	0.435	PQL	mg/Kg	J	E, A

Sample ID: SL-048-SA5A-SS-0.0-0.5 ***Collected:*** 3/2/2011 8:55:00 AM ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.554		0.0453	MDL	0.453	PQL	mg/Kg	J	FD

Sample ID: SL-048-SA5A-SS-0.0-0.5 ***Collected:*** 3/2/2011 8:55:00 AM ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.04		0.0566	MDL	0.113	PQL	mg/Kg	J	Q, E

Sample ID: SL-048-SA5A-SS-0.0-0.5 ***Collected:*** 3/2/2011 8:55:00 AM ***Analysis Type:*** REA5 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	165		0.122	MDL	0.453	PQL	mg/Kg	J	E, A

Sample ID: SL-048-SA5A-SS-0.0-0.5 ***Collected:*** 3/2/2011 8:55:00 AM ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.167	J	0.0679	MDL	0.226	PQL	mg/Kg	J	Z, Q
ARSENIC	7.30		0.0905	MDL	0.453	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.853		0.0181	MDL	0.113	PQL	mg/Kg	J	E
CADMIUM	0.259		0.0453	MDL	0.113	PQL	mg/Kg	J	Q
CHROMIUM	29.1		0.136	MDL	0.453	PQL	mg/Kg	J	E, A
COBALT	7.73		0.0226	MDL	0.113	PQL	mg/Kg	J	E
LEAD	14.9		0.0118	MDL	0.226	PQL	mg/Kg	J	E, A
NICKEL	18.8		0.113	MDL	0.453	PQL	mg/Kg	J	E
SILVER	0.180		0.0136	MDL	0.113	PQL	mg/Kg	J	Q
VANADIUM	52.1		0.0249	MDL	0.113	PQL	mg/Kg	J	E, A
ZINC	92.2		0.634	MDL	3.39	PQL	mg/Kg	J	E, A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE095 **Laboratory: LL**

EDD Filename: DE095_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6020** ***Matrix:*** **SO**

Sample ID: **SL-176-SA5A-SS-0.0-0.3** ***Collected:*** **3/2/2011 11:49:00** ***Analysis Type:*** **REA** ***Dilution:*** **5**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ZINC	381		1.55	MDL	8.32	PQL	mg/Kg	J	E, A

Sample ID: **SL-176-SA5A-SS-0.0-0.3** ***Collected:*** **3/2/2011 11:49:00** ***Analysis Type:*** **REA10** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	26.0		0.0711	MDL	0.431	PQL	mg/Kg	J	E, A

Sample ID: **SL-176-SA5A-SS-0.0-0.3** ***Collected:*** **3/2/2011 11:49:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.167	J	0.0444	MDL	0.444	PQL	mg/Kg	J	Z

Sample ID: **SL-176-SA5A-SS-0.0-0.3** ***Collected:*** **3/2/2011 11:49:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	2.17		0.0555	MDL	0.111	PQL	mg/Kg	J	Q, E

Sample ID: **SL-176-SA5A-SS-0.0-0.3** ***Collected:*** **3/2/2011 11:49:00** ***Analysis Type:*** **REA5** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	130		0.120	MDL	0.444	PQL	mg/Kg	J	E, A

Sample ID: **SL-176-SA5A-SS-0.0-0.3** ***Collected:*** **3/2/2011 11:49:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.400		0.0666	MDL	0.222	PQL	mg/Kg	J	Q
ARSENIC	5.25		0.0888	MDL	0.444	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.404		0.0178	MDL	0.111	PQL	mg/Kg	J	E
CADMIUM	1.79		0.0444	MDL	0.111	PQL	mg/Kg	J	Q
CHROMIUM	33.7		0.133	MDL	0.444	PQL	mg/Kg	J	E, A
COBALT	7.24		0.0222	MDL	0.111	PQL	mg/Kg	J	E
LEAD	55.6		0.0115	MDL	0.222	PQL	mg/Kg	J	E, A
NICKEL	24.7		0.111	MDL	0.444	PQL	mg/Kg	J	E
SILVER	1.65		0.0133	MDL	0.111	PQL	mg/Kg	J	Q
VANADIUM	38.3		0.0244	MDL	0.111	PQL	mg/Kg	J	E, A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE095 **Laboratory: LL**

EDD Filename: DE095_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6020** ***Matrix:*** **SO**

Sample ID: **SL-178-SA5A-SS-0.0-0.4** ***Collected:*** **3/2/2011 11:17:00** ***Analysis Type:*** **REA10** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	117		0.0691	MDL	0.419	PQL	mg/Kg	J	E, A

Sample ID: **SL-178-SA5A-SS-0.0-0.4** ***Collected:*** **3/2/2011 11:17:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.162	J	0.0419	MDL	0.419	PQL	mg/Kg	J	Z

Sample ID: **SL-178-SA5A-SS-0.0-0.4** ***Collected:*** **3/2/2011 11:17:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	2.94		0.0524	MDL	0.105	PQL	mg/Kg	J	Q, E

Sample ID: **SL-178-SA5A-SS-0.0-0.4** ***Collected:*** **3/2/2011 11:17:00** ***Analysis Type:*** **REA5** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	131		0.113	MDL	0.419	PQL	mg/Kg	J	E, A

Sample ID: **SL-178-SA5A-SS-0.0-0.4** ***Collected:*** **3/2/2011 11:17:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.390		0.0629	MDL	0.210	PQL	mg/Kg	J	Q
ARSENIC	6.39		0.0838	MDL	0.419	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.541		0.0168	MDL	0.105	PQL	mg/Kg	J	E
CADMIUM	1.20		0.0419	MDL	0.105	PQL	mg/Kg	J	Q
CHROMIUM	56.3		0.126	MDL	0.419	PQL	mg/Kg	J	E, A
COBALT	8.89		0.0210	MDL	0.105	PQL	mg/Kg	J	E
LEAD	46.5		0.0109	MDL	0.210	PQL	mg/Kg	J	E, A
NICKEL	30.9		0.105	MDL	0.419	PQL	mg/Kg	J	E
SILVER	0.162		0.0126	MDL	0.105	PQL	mg/Kg	J	Q
VANADIUM	52.0		0.0230	MDL	0.105	PQL	mg/Kg	J	E, A
ZINC	172		0.587	MDL	3.14	PQL	mg/Kg	J	E, A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE095 **Laboratory: LL**

EDD Filename: DE095_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 ***Matrix:*** SO

Sample ID: SL-179-SA5A-SS-0.0-0.3 ***Collected:*** 3/2/2011 11:00:00 ***Analysis Type:*** REA ***Dilution:*** 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	110		0.0267	MDL	0.513	PQL	mg/Kg	J	E, A

Sample ID: SL-179-SA5A-SS-0.0-0.3 ***Collected:*** 3/2/2011 11:00:00 ***Analysis Type:*** REA10 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	20.7		0.0683	MDL	0.414	PQL	mg/Kg	J	E, A

Sample ID: SL-179-SA5A-SS-0.0-0.3 ***Collected:*** 3/2/2011 11:00:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.165	J	0.0410	MDL	0.410	PQL	mg/Kg	J	Z

Sample ID: SL-179-SA5A-SS-0.0-0.3 ***Collected:*** 3/2/2011 11:00:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	2.69		0.0513	MDL	0.103	PQL	mg/Kg	J	Q, E

Sample ID: SL-179-SA5A-SS-0.0-0.3 ***Collected:*** 3/2/2011 11:00:00 ***Analysis Type:*** REA5 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	132		0.111	MDL	0.410	PQL	mg/Kg	J	E, A

Sample ID: SL-179-SA5A-SS-0.0-0.3 ***Collected:*** 3/2/2011 11:00:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.405		0.0615	MDL	0.205	PQL	mg/Kg	J	Q
ARSENIC	7.45		0.0820	MDL	0.410	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.504		0.0164	MDL	0.103	PQL	mg/Kg	J	E
CADMIUM	7.18		0.0410	MDL	0.103	PQL	mg/Kg	J	Q
CHROMIUM	33.4		0.123	MDL	0.410	PQL	mg/Kg	J	E, A
COBALT	8.97		0.0205	MDL	0.103	PQL	mg/Kg	J	E
NICKEL	21.7		0.103	MDL	0.410	PQL	mg/Kg	J	E
SILVER	0.247		0.0123	MDL	0.103	PQL	mg/Kg	J	Q
VANADIUM	51.3		0.0226	MDL	0.103	PQL	mg/Kg	J	E, A
ZINC	137		0.574	MDL	3.08	PQL	mg/Kg	J	E, A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE095 **Laboratory: LL**

EDD Filename: DE095_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6020** ***Matrix:*** **SO**

Sample ID: **SL-186-SA5A-SS-0.0-0.5** ***Collected:*** **3/2/2011 1:25:00 PM** ***Analysis Type:*** **REA** ***Dilution:*** **5**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ZINC	161		1.62	MDL	8.67	PQL	mg/Kg	J	E, A

Sample ID: **SL-186-SA5A-SS-0.0-0.5** ***Collected:*** **3/2/2011 1:25:00 PM** ***Analysis Type:*** **REA10** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	11.3		0.0755	MDL	0.458	PQL	mg/Kg	J	E, A

Sample ID: **SL-186-SA5A-SS-0.0-0.5** ***Collected:*** **3/2/2011 1:25:00 PM** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.255	J	0.0462	MDL	0.462	PQL	mg/Kg	J	Z

Sample ID: **SL-186-SA5A-SS-0.0-0.5** ***Collected:*** **3/2/2011 1:25:00 PM** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.785		0.0578	MDL	0.116	PQL	mg/Kg	J	Q, E

Sample ID: **SL-186-SA5A-SS-0.0-0.5** ***Collected:*** **3/2/2011 1:25:00 PM** ***Analysis Type:*** **REA5** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	147		0.125	MDL	0.462	PQL	mg/Kg	J	E, A

Sample ID: **SL-186-SA5A-SS-0.0-0.5** ***Collected:*** **3/2/2011 1:25:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.623		0.0693	MDL	0.231	PQL	mg/Kg	J	Q
ARSENIC	3.80		0.0925	MDL	0.462	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.456		0.0185	MDL	0.116	PQL	mg/Kg	J	E
CADMIUM	0.627		0.0462	MDL	0.116	PQL	mg/Kg	J	Q
CHROMIUM	20.0		0.139	MDL	0.462	PQL	mg/Kg	J	E, A
COBALT	7.27		0.0231	MDL	0.116	PQL	mg/Kg	J	E
LEAD	15.8		0.0120	MDL	0.231	PQL	mg/Kg	J	E, A
NICKEL	24.5		0.116	MDL	0.462	PQL	mg/Kg	J	E
SILVER	6.58		0.0139	MDL	0.116	PQL	mg/Kg	J	Q
VANADIUM	49.5		0.0254	MDL	0.116	PQL	mg/Kg	J	E, A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE095 **Laboratory: LL**

EDD Filename: DE095_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 ***Matrix:*** SO

Sample ID: SL-188-SA5A-SS-0.0-0.5 ***Collected:*** 3/2/2011 2:01:00 PM ***Analysis Type:*** REA10 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	11.7		0.0713	MDL	0.432	PQL	mg/Kg	J	E, A

Sample ID: SL-188-SA5A-SS-0.0-0.5 ***Collected:*** 3/2/2011 2:01:00 PM ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.168	J	0.0441	MDL	0.441	PQL	mg/Kg	J	Z

Sample ID: SL-188-SA5A-SS-0.0-0.5 ***Collected:*** 3/2/2011 2:01:00 PM ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.799		0.0551	MDL	0.110	PQL	mg/Kg	J	Q, E

Sample ID: SL-188-SA5A-SS-0.0-0.5 ***Collected:*** 3/2/2011 2:01:00 PM ***Analysis Type:*** REA5 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	138		0.119	MDL	0.441	PQL	mg/Kg	J	E, A

Sample ID: SL-188-SA5A-SS-0.0-0.5 ***Collected:*** 3/2/2011 2:01:00 PM ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.140	J	0.0661	MDL	0.220	PQL	mg/Kg	J	Z, Q
ARSENIC	5.42		0.0881	MDL	0.441	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.686		0.0176	MDL	0.110	PQL	mg/Kg	J	E
CADMIUM	0.336		0.0441	MDL	0.110	PQL	mg/Kg	J	Q
CHROMIUM	22.9		0.132	MDL	0.441	PQL	mg/Kg	J	E, A
COBALT	7.58		0.0220	MDL	0.110	PQL	mg/Kg	J	E
LEAD	8.25		0.0115	MDL	0.220	PQL	mg/Kg	J	E, A
NICKEL	15.6		0.110	MDL	0.441	PQL	mg/Kg	J	E
SILVER	1.25		0.0132	MDL	0.110	PQL	mg/Kg	J	Q
VANADIUM	42.8		0.0242	MDL	0.110	PQL	mg/Kg	J	E, A
ZINC	104		0.617	MDL	3.30	PQL	mg/Kg	J	E, A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE095 **Laboratory: LL**

EDD Filename: DE095_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 ***Matrix:*** SO

Sample ID: SL-189-SA5A-SS-0.0-0.5 ***Collected:*** 3/2/2011 2:15:00 PM ***Analysis Type:*** REA10 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	11.0		0.0782	MDL	0.474	PQL	mg/Kg	J	E, A

Sample ID: SL-189-SA5A-SS-0.0-0.5 ***Collected:*** 3/2/2011 2:15:00 PM ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0872	J	0.0469	MDL	0.469	PQL	mg/Kg	J	Z

Sample ID: SL-189-SA5A-SS-0.0-0.5 ***Collected:*** 3/2/2011 2:15:00 PM ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.745		0.0587	MDL	0.117	PQL	mg/Kg	J	Q, E

Sample ID: SL-189-SA5A-SS-0.0-0.5 ***Collected:*** 3/2/2011 2:15:00 PM ***Analysis Type:*** REA5 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	164		0.127	MDL	0.469	PQL	mg/Kg	J	E, A

Sample ID: SL-189-SA5A-SS-0.0-0.5 ***Collected:*** 3/2/2011 2:15:00 PM ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.140	J	0.0704	MDL	0.235	PQL	mg/Kg	J	Z, Q
ARSENIC	4.28		0.0938	MDL	0.469	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.471		0.0188	MDL	0.117	PQL	mg/Kg	J	E
CADMIUM	0.184		0.0469	MDL	0.117	PQL	mg/Kg	J	Q
CHROMIUM	19.0		0.141	MDL	0.469	PQL	mg/Kg	J	E, A
COBALT	7.25		0.0235	MDL	0.117	PQL	mg/Kg	J	E
LEAD	8.00		0.0122	MDL	0.235	PQL	mg/Kg	J	E, A
NICKEL	11.6		0.117	MDL	0.469	PQL	mg/Kg	J	E
SILVER	0.405		0.0141	MDL	0.117	PQL	mg/Kg	J	Q
VANADIUM	48.4		0.0258	MDL	0.117	PQL	mg/Kg	J	E, A
ZINC	81.0		0.657	MDL	3.52	PQL	mg/Kg	J	E, A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE095 **Laboratory: LL**

EDD Filename: DE095_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 7199 **Matrix:** AQ

Sample ID: EB05-SA5A-030211 *Collected:* 3/2/2011 12:15:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	5.0	U	5.0	MDL	10.0	PQL	ug/L	UJ	H

Method Category: METALS

Method: 7199 **Matrix:** SO

Sample ID: DUP-07-SA5A-QC-030211 *Collected:* 3/2/2011 8:58:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.47	J	0.23	MDL	1.1	PQL	mg/Kg	U	B

Sample ID: SL-044-SA5A-SS-0.0-0.5 *Collected:* 3/2/2011 9:58:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.85	J	0.23	MDL	1.1	PQL	mg/Kg	U	B

Sample ID: SL-045-SA5A-SS-0.0-0.5 *Collected:* 3/2/2011 9:30:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	1.6		0.24	MDL	1.2	PQL	mg/Kg	U	B

Sample ID: SL-048-SA5A-SS-0.0-0.5 *Collected:* 3/2/2011 8:55:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.41	J	0.23	MDL	1.1	PQL	mg/Kg	U	B

Sample ID: SL-176-SA5A-SS-0.0-0.3 *Collected:* 3/2/2011 11:49:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	1.3		0.22	MDL	1.1	PQL	mg/Kg	U	B

Sample ID: SL-178-SA5A-SS-0.0-0.4 *Collected:* 3/2/2011 11:17:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.53	J	0.21	MDL	1.1	PQL	mg/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE095 **Laboratory: LL**

EDD Filename: DE095_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 7199 **Matrix:** SO

Sample ID: SL-179-SA5A-SS-0.0-0.3 *Collected:* 3/2/2011 11:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.65	J	0.21	MDL	1.1	PQL	mg/Kg	U	B

Sample ID: SL-186-SA5A-SS-0.0-0.5 *Collected:* 3/2/2011 1:25:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.32	J	0.24	MDL	1.2	PQL	mg/Kg	U	B

Sample ID: SL-188-SA5A-SS-0.0-0.5 *Collected:* 3/2/2011 2:01:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.37	J	0.22	MDL	1.1	PQL	mg/Kg	U	B

Sample ID: SL-189-SA5A-SS-0.0-0.5 *Collected:* 3/2/2011 2:15:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.29	J	0.24	MDL	1.2	PQL	mg/Kg	U	B

Method Category: METALS

Method: 7471A **Matrix:** SO

Sample ID: DUP-07-SA5A-QC-030211 *Collected:* 3/2/2011 8:58:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0448	J	0.0032	MDL	0.111	PQL	mg/Kg	J	Z, FD

Sample ID: SL-042-SA5A-SS-0.0-0.5 *Collected:* 3/2/2011 10:11:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.100	J	0.0034	MDL	0.117	PQL	mg/Kg	J	Z

Sample ID: SL-044-SA5A-SS-0.0-0.5 *Collected:* 3/2/2011 9:58:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0314	J	0.0031	MDL	0.108	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE095 **Laboratory: LL**

EDD Filename: DE095_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 7471A **Matrix: SO**

Sample ID: SL-045-SA5A-SS-0.0-0.5 *Collected:* 3/2/2011 9:30:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0044	J	0.0033	MDL	0.114	PQL	mg/Kg	J	Z

Sample ID: SL-048-SA5A-SS-0.0-0.5 *Collected:* 3/2/2011 8:55:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0040	J	0.0032	MDL	0.110	PQL	mg/Kg	J	Z, FD

Sample ID: SL-186-SA5A-SS-0.0-0.5 *Collected:* 3/2/2011 1:25:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.109	J	0.0032	MDL	0.111	PQL	mg/Kg	J	Z

Sample ID: SL-188-SA5A-SS-0.0-0.5 *Collected:* 3/2/2011 2:01:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0687	J	0.0030	MDL	0.105	PQL	mg/Kg	J	Z

Sample ID: SL-189-SA5A-SS-0.0-0.5 *Collected:* 3/2/2011 2:15:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0979	J	0.0033	MDL	0.115	PQL	mg/Kg	J	Z

Method Category: SVOA

Method: 8081A **Matrix: AQ**

Sample ID: EB05-SA5A-030211 *Collected:* 3/2/2011 12:15:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DIELDRIN	0.0054	U	0.0054	MDL	0.020	PQL	ug/L	UJ	C, C, C

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE095 **Laboratory: LL**

EDD Filename: DE095_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **8081A** ***Matrix:*** **SO**

Sample ID: **SL-042-SA5A-SS-0.0-0.5** ***Collected:*** **3/2/2011 10:11:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DELTA-BHC	0.13	J	0.044	MDL	0.20	PQL	ug/Kg	J	Z

Sample ID: **SL-044-SA5A-SS-0.0-0.5** ***Collected:*** **3/2/2011 9:58:00 AM** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DELTA-BHC	0.062	J	0.041	MDL	0.19	PQL	ug/Kg	J	Z, S

Sample ID: **SL-179-SA5A-SS-0.0-0.3** ***Collected:*** **3/2/2011 11:00:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **5**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	0.35	U	0.35	MDL	1.8	PQL	ug/Kg	UJ	C
4,4'-DDE	4.5		0.35	MDL	1.8	PQL	ug/Kg	J	C
4,4'-DDT	5.6		0.35	MDL	1.8	PQL	ug/Kg	J	C
ALDRIN	0.35	U	0.35	MDL	0.88	PQL	ug/Kg	UJ	C
ALPHA-BHC	0.18	U	0.18	MDL	0.88	PQL	ug/Kg	UJ	C
BETA-BHC	0.32	U	0.32	MDL	0.88	PQL	ug/Kg	UJ	C
Chlordane	4.3	U	4.3	MDL	18	PQL	ug/Kg	UJ	C
DELTA-BHC	0.19	U	0.19	MDL	0.88	PQL	ug/Kg	UJ	C
DIELDRIN	0.54	U	0.54	MDL	1.8	PQL	ug/Kg	UJ	C
ENDOSULFAN I	0.23	U	0.23	MDL	0.88	PQL	ug/Kg	UJ	C
ENDOSULFAN II	0.35	U	0.35	MDL	1.8	PQL	ug/Kg	UJ	C
ENDOSULFAN SULFATE	0.35	U	0.35	MDL	1.8	PQL	ug/Kg	UJ	C
ENDRIN	0.35	U	0.35	MDL	1.8	PQL	ug/Kg	UJ	C
ENDRIN ALDEHYDE	0.71	U	0.71	MDL	1.8	PQL	ug/Kg	UJ	C
ENDRIN KETONE	0.35	U	0.35	MDL	1.8	PQL	ug/Kg	UJ	C
gamma-BHC (Lindane)	0.18	U	0.18	MDL	0.88	PQL	ug/Kg	UJ	C
HEPTACHLOR	0.32	U	0.32	MDL	0.88	PQL	ug/Kg	UJ	C
HEPTACHLOR EPOXIDE	0.22	U	0.22	MDL	0.88	PQL	ug/Kg	UJ	C
METHOXYCHLOR	1.8	U	1.8	MDL	8.8	PQL	ug/Kg	UJ	C
MIREX	0.85	U	0.85	MDL	1.8	PQL	ug/Kg	UJ	C
TOXAPHENE	12	U	12	MDL	35	PQL	ug/Kg	UJ	C

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE095 **Laboratory: LL**

EDD Filename: DE095_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **8081A** ***Matrix:*** **SO**

Sample ID: SL-186-SA5A-SS-0.0-0.5 ***Collected:*** 3/2/2011 1:25:00 PM ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	0.78	U	0.78	MDL	4.0	PQL	ug/Kg	UJ	C
4,4'-DDE	0.78	U	0.78	MDL	4.0	PQL	ug/Kg	UJ	C
4,4'-DDT	3.2	U	3.2	MDL	4.0	PQL	ug/Kg	UJ	C
ALDRIN	0.78	U	0.78	MDL	2.0	PQL	ug/Kg	UJ	C
ALPHA-BHC	0.40	U	0.40	MDL	2.0	PQL	ug/Kg	UJ	C
BETA-BHC	0.71	U	0.71	MDL	2.0	PQL	ug/Kg	UJ	C
Chlordane	20	U	20	MDL	40	PQL	ug/Kg	UJ	C
DELTA-BHC	0.43	U	0.43	MDL	2.0	PQL	ug/Kg	UJ	C
DIELDRIN	0.78	U	0.78	MDL	4.0	PQL	ug/Kg	UJ	C
ENDOSULFAN I	0.52	U	0.52	MDL	2.0	PQL	ug/Kg	UJ	C
ENDOSULFAN II	0.78	U	0.78	MDL	4.0	PQL	ug/Kg	UJ	C
ENDOSULFAN SULFATE	0.78	U	0.78	MDL	4.0	PQL	ug/Kg	UJ	C
ENDRIN	0.78	U	0.78	MDL	4.0	PQL	ug/Kg	UJ	C
ENDRIN ALDEHYDE	0.78	U	0.78	MDL	4.0	PQL	ug/Kg	UJ	C
ENDRIN KETONE	2.7	U	2.7	MDL	4.0	PQL	ug/Kg	UJ	C
gamma-BHC (Lindane)	0.40	U	0.40	MDL	2.0	PQL	ug/Kg	UJ	C
HEPTACHLOR	0.71	U	0.71	MDL	2.0	PQL	ug/Kg	UJ	C
HEPTACHLOR EPOXIDE	0.41	U	0.41	MDL	2.0	PQL	ug/Kg	UJ	C
METHOXYCHLOR	4.0	U	4.0	MDL	20	PQL	ug/Kg	UJ	C
MIREX	3.5	U	3.5	MDL	4.0	PQL	ug/Kg	UJ	C
TOXAPHENE	26	U	26	MDL	78	PQL	ug/Kg	UJ	C

Sample ID: SL-188-SA5A-SS-0.0-0.5 ***Collected:*** 3/2/2011 2:01:00 PM ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	0.52	U	0.52	MDL	0.52	PQL	ug/Kg	UJ	C
4,4'-DDE	0.44	U	0.44	MDL	0.44	PQL	ug/Kg	UJ	C
4,4'-DDT	2.6	U	2.6	MDL	2.6	PQL	ug/Kg	UJ	C
ALDRIN	0.074	U	0.074	MDL	0.19	PQL	ug/Kg	UJ	C
ALPHA-BHC	0.038	U	0.038	MDL	0.19	PQL	ug/Kg	UJ	C
BETA-BHC	0.067	U	0.067	MDL	0.19	PQL	ug/Kg	UJ	C
Chlordane	3.0	U	3.0	MDL	3.8	PQL	ug/Kg	UJ	C
DELTA-BHC	0.040	U	0.040	MDL	0.19	PQL	ug/Kg	UJ	C
DIELDRIN	0.074	U	0.074	MDL	0.38	PQL	ug/Kg	UJ	C

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE095 **Laboratory: LL**

EDD Filename: DE095_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **8081A** ***Matrix:*** **SO**

Sample ID: **SL-188-SA5A-SS-0.0-0.5** ***Collected:*** **3/2/2011 2:01:00 PM** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ENDOSULFAN I	0.049	U	0.049	MDL	0.19	PQL	ug/Kg	UJ	C
ENDOSULFAN II	0.30	U	0.30	MDL	0.38	PQL	ug/Kg	UJ	C
ENDOSULFAN SULFATE	0.074	U	0.074	MDL	0.38	PQL	ug/Kg	UJ	C
ENDRIN	0.074	U	0.074	MDL	0.38	PQL	ug/Kg	UJ	C
ENDRIN ALDEHYDE	0.50	U	0.50	MDL	0.50	PQL	ug/Kg	UJ	C
ENDRIN KETONE	1.3	U	1.3	MDL	1.3	PQL	ug/Kg	UJ	C
gamma-BHC (Lindane)	0.038	U	0.038	MDL	0.19	PQL	ug/Kg	UJ	C
HEPTACHLOR	0.067	U	0.067	MDL	0.19	PQL	ug/Kg	UJ	C
HEPTACHLOR EPOXIDE	0.14	U	0.14	MDL	0.19	PQL	ug/Kg	UJ	C
METHOXYCHLOR	0.38	U	0.38	MDL	1.9	PQL	ug/Kg	UJ	C
MIREX	1.5	U	1.5	MDL	1.5	PQL	ug/Kg	UJ	C
TOXAPHENE	2.5	U	2.5	MDL	7.4	PQL	ug/Kg	UJ	C

Sample ID: **SL-189-SA5A-SS-0.0-0.5** ***Collected:*** **3/2/2011 2:15:00 PM** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	0.11	U	0.11	MDL	0.40	PQL	ug/Kg	UJ	C
4,4'-DDE	0.18	U	0.18	MDL	0.40	PQL	ug/Kg	UJ	C
4,4'-DDT	0.86	U	0.86	MDL	0.86	PQL	ug/Kg	UJ	C
ALDRIN	0.078	U	0.078	MDL	0.20	PQL	ug/Kg	UJ	C
ALPHA-BHC	0.040	U	0.040	MDL	0.20	PQL	ug/Kg	UJ	C
BETA-BHC	0.071	U	0.071	MDL	0.20	PQL	ug/Kg	UJ	C
Chlordane	1.5	U	1.5	MDL	4.0	PQL	ug/Kg	UJ	C
DELTA-BHC	0.043	U	0.043	MDL	0.20	PQL	ug/Kg	UJ	C
DIELDRIN	0.078	U	0.078	MDL	0.40	PQL	ug/Kg	UJ	C
ENDOSULFAN I	0.052	U	0.052	MDL	0.20	PQL	ug/Kg	UJ	C
ENDOSULFAN II	0.078	U	0.078	MDL	0.40	PQL	ug/Kg	UJ	C
ENDOSULFAN SULFATE	0.078	U	0.078	MDL	0.40	PQL	ug/Kg	UJ	C
ENDRIN	0.078	U	0.078	MDL	0.40	PQL	ug/Kg	UJ	C
ENDRIN ALDEHYDE	0.078	U	0.078	MDL	0.40	PQL	ug/Kg	UJ	C
ENDRIN KETONE	0.078	U	0.078	MDL	0.40	PQL	ug/Kg	UJ	C
gamma-BHC (Lindane)	0.040	U	0.040	MDL	0.20	PQL	ug/Kg	UJ	C
HEPTACHLOR	0.071	U	0.071	MDL	0.20	PQL	ug/Kg	UJ	C
HEPTACHLOR EPOXIDE	0.040	U	0.040	MDL	0.20	PQL	ug/Kg	UJ	C

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE095 **Laboratory: LL**

EDD Filename: DE095_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8081A **Matrix:** SO

Sample ID: SL-189-SA5A-SS-0.0-0.5 *Collected:* 3/2/2011 2:15:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHOXYCHLOR	0.40	U	0.40	MDL	2.0	PQL	ug/Kg	UJ	C
MIREX	0.72	U	0.72	MDL	0.72	PQL	ug/Kg	UJ	C
TOXAPHENE	2.6	U	2.6	MDL	7.8	PQL	ug/Kg	UJ	C

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: DUP-07-SA5A-QC-030211 *Collected:* 3/2/2011 8:58:00 AM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	0.98	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z, FD
AROCLOR 1260	0.65	J	0.45	MDL	1.9	PQL	ug/Kg	J	Z
Aroclor 5460	2.1	J	1.1	MDL	3.8	PQL	ug/Kg	J	Z

Sample ID: SL-042-SA5A-SS-0.0-0.5 *Collected:* 3/2/2011 10:11:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	75		2.0	MDL	10	PQL	ug/Kg	J	*XIII

Sample ID: SL-044-SA5A-SS-0.0-0.5 *Collected:* 3/2/2011 9:58:00 AM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	8.8		0.37	MDL	1.9	PQL	ug/Kg	J	*XIII

Sample ID: SL-045-SA5A-SS-0.0-0.5 *Collected:* 3/2/2011 9:30:00 AM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	1.2	J	0.47	MDL	2.0	PQL	ug/Kg	J	Z
Aroclor 5460	2.0	J	1.2	MDL	3.9	PQL	ug/Kg	J	Z

Sample ID: SL-048-SA5A-SS-0.0-0.5 *Collected:* 3/2/2011 8:55:00 AM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	0.38	U	0.38	MDL	1.9	PQL	ug/Kg	UJ	FD
AROCLOR 1260	0.88	J	0.45	MDL	1.9	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE095 **Laboratory: LL**

EDD Filename: DE095_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: SL-048-SA5A-SS-0.0-0.5 *Collected:* 3/2/2011 8:55:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5460	1.3	J	1.1	MDL	3.8	PQL	ug/Kg	J	Z

Sample ID: SL-188-SA5A-SS-0.0-0.5 *Collected:* 3/2/2011 2:01:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1242	0.37	U	0.37	MDL	1.9	PQL	ug/Kg	UJ	C
AROCLOR 1248	0.37	U	0.37	MDL	1.9	PQL	ug/Kg	UJ	C
AROCLOR 1254	14		0.37	MDL	1.9	PQL	ug/Kg	J	C
AROCLOR 1260	3.5		0.44	MDL	1.9	PQL	ug/Kg	J	C

Sample ID: SL-189-SA5A-SS-0.0-0.5 *Collected:* 3/2/2011 2:15:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1242	0.39	U	0.39	MDL	2.0	PQL	ug/Kg	UJ	C
AROCLOR 1248	0.39	U	0.39	MDL	2.0	PQL	ug/Kg	UJ	C
AROCLOR 1254	11		0.39	MDL	2.0	PQL	ug/Kg	J	C
AROCLOR 1260	2.9		0.46	MDL	2.0	PQL	ug/Kg	J	C

Method Category: SVOA

Method: 8151A **Matrix:** SO

Sample ID: SL-042-SA5A-SS-0.0-0.5 *Collected:* 3/2/2011 10:11:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-D	1.5	J	1.5	MDL	4.4	PQL	ug/Kg	J	Z, *IX

Sample ID: SL-044-SA5A-SS-0.0-0.5 *Collected:* 3/2/2011 9:58:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4,5-TP (Silvex)	0.16	J	0.085	MDL	0.19	PQL	ug/Kg	J	Z, * IX

Sample ID: SL-176-SA5A-SS-0.0-0.3 *Collected:* 3/2/2011 11:49:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MCPA	170	J	85	MDL	280	PQL	ug/Kg	J	Z, * IX

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE095 **Laboratory: LL**

EDD Filename: DE095_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8151A **Matrix:** SO

Sample ID: SL-176-SA5A-SS-0.0-0.3 *Collected:* 3/2/2011 11:49:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MCPP	390		84	MDL	280	PQL	ug/Kg	J	* IX

Sample ID: SL-179-SA5A-SS-0.0-0.3 *Collected:* 3/2/2011 11:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MCPP	250	J	79	MDL	260	PQL	ug/Kg	J	Z, * IX

Sample ID: SL-186-SA5A-SS-0.0-0.5 *Collected:* 3/2/2011 1:25:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DB	8.5		0.74	MDL	2.0	PQL	ug/Kg	J	* IX
MCPA	460		90	MDL	300	PQL	ug/Kg	J	* IX

Sample ID: SL-188-SA5A-SS-0.0-0.5 *Collected:* 3/2/2011 2:01:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4,5-TP (Silvex)	0.14	J	0.084	MDL	0.19	PQL	ug/Kg	J	Z, * IX
MCPA	190	J	85	MDL	280	PQL	ug/Kg	J	Z

Sample ID: SL-189-SA5A-SS-0.0-0.5 *Collected:* 3/2/2011 2:15:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DB	1.1	J	0.73	MDL	2.0	PQL	ug/Kg	J	Z, * IX

Method Category: SVOA

Method: 8270C **Matrix:** AQ

Sample ID: EB05-SA5A-030211 *Collected:* 3/2/2011 12:15:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4-CHLOROANILINE	1	U	1	MDL	5	PQL	ug/L	UJ	C
BENZIDINE	21	U	21	MDL	64	PQL	ug/L	UJ	C

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE095 **Laboratory: LL**

EDD Filename: DE095_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **8270C** ***Matrix:*** **SO**

Sample ID: **DUP-07-SA5A-QC-030211** ***Collected:*** **3/2/2011 8:58:00 AM** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4-CHLOROANILINE	76	U	76	MDL	190	PQL	ug/Kg	UJ	C
ANILINE	190	U	190	MDL	570	PQL	ug/Kg	UJ	C
BENZIDINE	1300	U	1300	MDL	3800	PQL	ug/Kg	UJ	C

Sample ID: **SL-042-SA5A-SS-0.0-0.5** ***Collected:*** **3/2/2011 10:11:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4-CHLOROANILINE	82	U	82	MDL	200	PQL	ug/Kg	UJ	C
ANILINE	200	U	200	MDL	610	PQL	ug/Kg	UJ	C
BENZIDINE	1400	U	1400	MDL	4100	PQL	ug/Kg	UJ	C
BENZO(G,H,I)PERYLENE	22	J	20	MDL	200	PQL	ug/Kg	J	Z

Sample ID: **SL-044-SA5A-SS-0.0-0.5** ***Collected:*** **3/2/2011 9:58:00 AM** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4-CHLOROANILINE	75	U	75	MDL	190	PQL	ug/Kg	UJ	C
ANILINE	190	U	190	MDL	560	PQL	ug/Kg	UJ	C
BENZIDINE	1300	U	1300	MDL	3800	PQL	ug/Kg	UJ	C

Sample ID: **SL-045-SA5A-SS-0.0-0.5** ***Collected:*** **3/2/2011 9:30:00 AM** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4-CHLOROANILINE	80	U	80	MDL	200	PQL	ug/Kg	UJ	C
ANILINE	200	U	200	MDL	600	PQL	ug/Kg	UJ	C
BENZIDINE	1400	U	1400	MDL	4000	PQL	ug/Kg	UJ	C

Sample ID: **SL-048-SA5A-SS-0.0-0.5** ***Collected:*** **3/2/2011 8:55:00 AM** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4-CHLOROANILINE	76	U	76	MDL	190	PQL	ug/Kg	UJ	C
ANILINE	190	U	190	MDL	570	PQL	ug/Kg	UJ	C
BENZIDINE	1300	U	1300	MDL	3800	PQL	ug/Kg	UJ	Q, C

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE095 **Laboratory: LL**

EDD Filename: DE095_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **8270C** ***Matrix:*** **SO**

Sample ID: **SL-176-SA5A-SS-0.0-0.3** ***Collected:*** **3/2/2011 11:49:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	25	J	19	MDL	190	PQL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	21	J	19	MDL	190	PQL	ug/Kg	J	Z
4-CHLOROANILINE	74	U	74	MDL	190	PQL	ug/Kg	UJ	C
ACENAPHTHENE	74	J	19	MDL	190	PQL	ug/Kg	J	Z
ANILINE	190	U	190	MDL	560	PQL	ug/Kg	UJ	C
BENZIDINE	1300	U	1300	MDL	3700	PQL	ug/Kg	UJ	C
Butylbenzylphthalate	21	J	19	MDL	190	PQL	ug/Kg	J	Z
CARBAZOLE	98	J	19	MDL	190	PQL	ug/Kg	J	Z
DIBENZOFURAN	35	J	19	MDL	190	PQL	ug/Kg	J	Z
FLUORENE	62	J	19	MDL	190	PQL	ug/Kg	J	Z

Sample ID: **SL-178-SA5A-SS-0.0-0.4** ***Collected:*** **3/2/2011 11:17:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4-CHLOROANILINE	71	U	71	MDL	180	PQL	ug/Kg	UJ	C
ACENAPHTHENE	67	J	18	MDL	180	PQL	ug/Kg	J	Z
ANILINE	180	U	180	MDL	530	PQL	ug/Kg	UJ	C
ANTHRACENE	99	J	18	MDL	180	PQL	ug/Kg	J	Z
BENZIDINE	1200	U	1200	MDL	3500	PQL	ug/Kg	UJ	C
CARBAZOLE	58	J	18	MDL	180	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	73	J	18	MDL	180	PQL	ug/Kg	J	Z
DIBENZOFURAN	21	J	18	MDL	180	PQL	ug/Kg	J	Z
FLUORENE	37	J	18	MDL	180	PQL	ug/Kg	J	Z

Sample ID: **SL-179-SA5A-SS-0.0-0.3** ***Collected:*** **3/2/2011 11:00:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4-CHLOROANILINE	71	U	71	MDL	180	PQL	ug/Kg	UJ	C
ANILINE	180	U	180	MDL	530	PQL	ug/Kg	UJ	C
BENZIDINE	1200	U	1200	MDL	3500	PQL	ug/Kg	UJ	C
BENZO(G,H,I)PERYLENE	21	J	18	MDL	180	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE095 **Laboratory: LL**

EDD Filename: DE095_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SL-186-SA5A-SS-0.0-0.5 *Collected:* 3/2/2011 1:25:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4-CHLOROANILINE	78	U	78	MDL	200	PQL	ug/Kg	UJ	C
ANILINE	200	U	200	MDL	590	PQL	ug/Kg	UJ	C
BENZIDINE	1400	U	1400	MDL	3900	PQL	ug/Kg	UJ	C

Sample ID: SL-188-SA5A-SS-0.0-0.5 *Collected:* 3/2/2011 2:01:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4-CHLOROANILINE	75	U	75	MDL	190	PQL	ug/Kg	UJ	C
ANILINE	190	U	190	MDL	560	PQL	ug/Kg	UJ	C
BENZIDINE	1300	U	1300	MDL	3700	PQL	ug/Kg	UJ	C

Sample ID: SL-189-SA5A-SS-0.0-0.5 *Collected:* 3/2/2011 2:15:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4-CHLOROANILINE	78	U	78	MDL	200	PQL	ug/Kg	UJ	C
ANILINE	200	U	200	MDL	590	PQL	ug/Kg	UJ	C
BENZIDINE	1400	U	1400	MDL	3900	PQL	ug/Kg	UJ	C

Method Category: SVOA

Method: 8270C SIM **Matrix:** AQ

Sample ID: EB05-SA5A-030211 *Collected:* 3/2/2011 12:15:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	0.12	J	0.053	MDL	1.1	PQL	ug/L	U	B
Diethylphthalate	0.072	J	0.053	MDL	1.1	PQL	ug/L	U	B
Di-n-butylphthalate	0.34	J	0.053	MDL	1.1	PQL	ug/L	U	B

Method Category: SVOA

Method: 8270C SIM **Matrix:** SO

Sample ID: DUP-07-SA5A-QC-030211 *Collected:* 3/2/2011 8:58:00 AM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)PYRENE	0.94	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z, FD

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE095 **Laboratory: LL**

EDD Filename: DE095_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **8270C SIM** ***Matrix:*** **SO**

Sample ID: **DUP-07-SA5A-QC-030211** ***Collected:*** **3/2/2011 8:58:00 AM** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	5.3		0.76	MDL	1.9	PQL	ug/Kg	J	FD
BIS(2-ETHYLHEXYL)PHTHALATE	7.6	J	6.9	MDL	21	PQL	ug/Kg	J	Z, FD
CHRYSENE	1.6	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z, FD
Di-n-butylphthalate	13	J	6.9	MDL	21	PQL	ug/Kg	J	Z
Di-n-octylphthalate	12	J	6.9	MDL	21	PQL	ug/Kg	J	Z
FLUORANTHENE	2.5		0.76	MDL	1.9	PQL	ug/Kg	J	FD
PHENANTHRENE	1.1	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z, FD
PYRENE	1.9		0.76	MDL	1.9	PQL	ug/Kg	J	FD

Sample ID: **SL-042-SA5A-SS-0.0-0.5** ***Collected:*** **3/2/2011 10:11:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-METHYLNAPHTHALENE	1.3	J	0.82	MDL	2.0	PQL	ug/Kg	J	Z
ACENAPHTHYLENE	0.72	J	0.41	MDL	2.0	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	9.7	J	7.3	MDL	22	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	1.1	J	0.82	MDL	2.0	PQL	ug/Kg	J	Z
Di-n-butylphthalate	14	J	7.3	MDL	22	PQL	ug/Kg	J	Z
Di-n-octylphthalate	13	J	7.3	MDL	22	PQL	ug/Kg	J	Z
NAPHTHALENE	1.3	J	0.82	MDL	2.0	PQL	ug/Kg	J	Z

Sample ID: **SL-044-SA5A-SS-0.0-0.5** ***Collected:*** **3/2/2011 9:58:00 AM** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	1.3	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.7	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	8.2	J	6.7	MDL	20	PQL	ug/Kg	J	Z
Di-n-butylphthalate	13	J	6.7	MDL	20	PQL	ug/Kg	J	Z
Di-n-octylphthalate	12	J	6.7	MDL	20	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	1.6	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
PHENANTHRENE	1.3	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: **SL-045-SA5A-SS-0.0-0.5** ***Collected:*** **3/2/2011 9:30:00 AM** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHRYSENE	1.1	J	0.40	MDL	2.0	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE095 **Laboratory: LL**

EDD Filename: DE095_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **8270C SIM** ***Matrix:*** **SO**

Sample ID: **SL-045-SA5A-SS-0.0-0.5** ***Collected:*** **3/2/2011 9:30:00 AM** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Di-n-butylphthalate	14	J	7.1	MDL	21	PQL	ug/Kg	J	Z
Di-n-octylphthalate	12	J	7.1	MDL	21	PQL	ug/Kg	J	Z
FLUORANTHENE	1.3	J	0.79	MDL	2.0	PQL	ug/Kg	J	Z
PHENANTHRENE	0.84	J	0.79	MDL	2.0	PQL	ug/Kg	J	Z
PYRENE	1.1	J	0.79	MDL	2.0	PQL	ug/Kg	J	Z

Sample ID: **SL-048-SA5A-SS-0.0-0.5** ***Collected:*** **3/2/2011 8:55:00 AM** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)PYRENE	0.76	U	0.76	MDL	1.9	PQL	ug/Kg	UJ	FD
BENZO(B)FLUORANTHENE	2.9		0.76	MDL	1.9	PQL	ug/Kg	J	FD
BIS(2-ETHYLHEXYL)PHTHALATE	6.9	U	6.9	MDL	21	PQL	ug/Kg	UJ	FD
CHRYSENE	0.90	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z, FD
Di-n-butylphthalate	12	J	6.9	MDL	21	PQL	ug/Kg	J	Z
Di-n-octylphthalate	12	J	6.9	MDL	21	PQL	ug/Kg	J	Z
FLUORANTHENE	0.94	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z, FD
PHENANTHRENE	0.76	U	0.76	MDL	1.9	PQL	ug/Kg	UJ	FD
PYRENE	0.76	U	0.76	MDL	1.9	PQL	ug/Kg	UJ	FD

Sample ID: **SL-176-SA5A-SS-0.0-0.3** ***Collected:*** **3/2/2011 11:49:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **5**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACENAPHTHYLENE	4.9	J	1.9	MDL	9.3	PQL	ug/Kg	J	Z
Di-n-octylphthalate	68	J	34	MDL	100	PQL	ug/Kg	J	Z

Sample ID: **SL-179-SA5A-SS-0.0-0.3** ***Collected:*** **3/2/2011 11:00:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **5**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Di-n-butylphthalate	58	J	32	MDL	96	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	4.6	J	3.5	MDL	8.9	PQL	ug/Kg	J	Z

Sample ID: **SL-186-SA5A-SS-0.0-0.5** ***Collected:*** **3/2/2011 1:25:00 PM** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **5**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACENAPHTHYLENE	3.6	J	2.0	MDL	9.9	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE095 **Laboratory: LL**

EDD Filename: DE095_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **8270C SIM** ***Matrix:*** **SO**

Sample ID: **SL-186-SA5A-SS-0.0-0.5** ***Collected:*** **3/2/2011 1:25:00 PM** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **5**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Butylbenzylphthalate	48	J	36	MDL	110	PQL	ug/Kg	J	Z
Di-n-octylphthalate	72	J	36	MDL	110	PQL	ug/Kg	J	Z
FLUORENE	4.7	J	4.0	MDL	9.9	PQL	ug/Kg	J	Z

Sample ID: **SL-188-SA5A-SS-0.0-0.5** ***Collected:*** **3/2/2011 2:01:00 PM** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **5**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACENAPHTHYLENE	7.4	J	1.9	MDL	9.3	PQL	ug/Kg	J	Z
Di-n-butylphthalate	61	J	33	MDL	100	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE095 **Laboratory: LL**

EDD Filename: DE095_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
*XIII and * IX	Compound Quantitation and CRQL
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Verification Correlation Coefficient
C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE095 **Laboratory: LL**

EDD Filename: DE095_v1 **eQAPP Name: CDM_SSFL_110509**

F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation
L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery Lower Estimation

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE095 **Laboratory: LL**

EDD Filename: DE095_v1 **eQAPP Name: CDM_SSFL_110509**

R	Continuing Calibration Verification Percent Recovery Lower Rejection
R	Continuing Calibration Verification Percent Recovery Upper Estimation
R	Continuing Calibration Verification Percent Recovery Upper Rejection
R	Continuing Calibration Verification Relative Response Factor
R	Initial Calibration Relative Response Factor
R	Initial Calibration Verification Percent Recovery Lower Estimation
R	Initial Calibration Verification Percent Recovery Lower Rejection
R	Initial Calibration Verification Percent Recovery Upper Estimation
R	Initial Calibration Verification Percent Recovery Upper Rejection
R	Initial Calibration Verification Relative Response Factor
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control Outlier Reports

DE095

QC Outlier Report: HoldingTimes

Lab Reporting Batch ID: DE095 **Laboratory: LL**
EDD Filename: DE095_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7199 **Preparation Method: Gen Prep**
Matrix: AQ

Sample ID	Type	Actual	Criteria	Units	Flag
EB05-SA5A-030211 (RES)	Sampling To Analysis	25.00	24.00	HOURS	J (all detects) UJ (all non-detects)

Method Blank Outlier Report

Lab Reporting Batch ID: DE095 | Laboratory: LL

EDD Filename: DE095_v1 | eQAPP Name: CDM_SSFL_110509

Method: 6010B
Matrix: AQ

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P06848CB221929	3/10/2011 7:29:00 PM	LITHIUM	0.0049 mg/L	EB05-SA5A-030211

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
EB05-SA5A-030211(RES)	LITHIUM	0.0045 mg/L	0.0045U mg/L

Method: 6010B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P06808BB221730	3/11/2011 5:30:00 PM	PHOSPHORUS TIN	1.22 mg/Kg 1.61 mg/Kg	DUP-07-SA5A-QC-030211 SL-042-SA5A-SS-0.0-0.5 SL-044-SA5A-SS-0.0-0.5 SL-045-SA5A-SS-0.0-0.5 SL-048-SA5A-SS-0.0-0.5 SL-176-SA5A-SS-0.0-0.3 SL-178-SA5A-SS-0.0-0.4 SL-179-SA5A-SS-0.0-0.3 SL-186-SA5A-SS-0.0-0.5 SL-188-SA5A-SS-0.0-0.5 SL-189-SA5A-SS-0.0-0.5

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
DUP-07-SA5A-QC-030211(REA)	TIN	3.03 mg/Kg	3.03U mg/Kg
SL-042-SA5A-SS-0.0-0.5(REA)	TIN	4.02 mg/Kg	4.02U mg/Kg
SL-044-SA5A-SS-0.0-0.5(REA)	TIN	3.06 mg/Kg	3.06U mg/Kg
SL-045-SA5A-SS-0.0-0.5(REA)	TIN	3.19 mg/Kg	3.19U mg/Kg
SL-048-SA5A-SS-0.0-0.5(REA)	TIN	2.84 mg/Kg	2.84U mg/Kg
SL-176-SA5A-SS-0.0-0.3(REA)	TIN	5.57 mg/Kg	5.57U mg/Kg
SL-178-SA5A-SS-0.0-0.4(REA)	TIN	3.17 mg/Kg	3.17U mg/Kg
SL-179-SA5A-SS-0.0-0.3(REA)	TIN	3.01 mg/Kg	3.01U mg/Kg
SL-186-SA5A-SS-0.0-0.5(REA)	TIN	2.79 mg/Kg	2.79U mg/Kg
SL-188-SA5A-SS-0.0-0.5(REA)	TIN	2.96 mg/Kg	2.96U mg/Kg
SL-189-SA5A-SS-0.0-0.5(REA)	TIN	2.63 mg/Kg	2.63U mg/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE095 **Laboratory: LL**

EDD Filename: DE095_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **6020**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P06826BB221548C	3/12/2011 3:48:00 PM	MOLYBDENUM	0.0669 mg/Kg	DUP-07-SA5A-QC-030211 SL-042-SA5A-SS-0.0-0.5 SL-044-SA5A-SS-0.0-0.5 SL-045-SA5A-SS-0.0-0.5 SL-048-SA5A-SS-0.0-0.5 SL-176-SA5A-SS-0.0-0.3 SL-178-SA5A-SS-0.0-0.4 SL-179-SA5A-SS-0.0-0.3 SL-186-SA5A-SS-0.0-0.5 SL-188-SA5A-SS-0.0-0.5 SL-189-SA5A-SS-0.0-0.5
P06826BB221548D	3/12/2011 3:48:00 PM	BARIUM	0.203 mg/Kg	DUP-07-SA5A-QC-030211 SL-042-SA5A-SS-0.0-0.5 SL-044-SA5A-SS-0.0-0.5 SL-045-SA5A-SS-0.0-0.5 SL-048-SA5A-SS-0.0-0.5 SL-176-SA5A-SS-0.0-0.3 SL-178-SA5A-SS-0.0-0.4 SL-179-SA5A-SS-0.0-0.3 SL-186-SA5A-SS-0.0-0.5 SL-188-SA5A-SS-0.0-0.5 SL-189-SA5A-SS-0.0-0.5
P07426BB220847A	3/16/2011 8:47:00 AM	COPPER	0.0727 mg/Kg	DUP-07-SA5A-QC-030211 SL-042-SA5A-SS-0.0-0.5 SL-044-SA5A-SS-0.0-0.5 SL-045-SA5A-SS-0.0-0.5 SL-048-SA5A-SS-0.0-0.5 SL-176-SA5A-SS-0.0-0.3 SL-178-SA5A-SS-0.0-0.4 SL-179-SA5A-SS-0.0-0.3 SL-186-SA5A-SS-0.0-0.5 SL-188-SA5A-SS-0.0-0.5 SL-189-SA5A-SS-0.0-0.5

Method: **7199**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
11066BB271726A	3/8/2011 5:26:00 PM	HEXAVALENT CHROMIUM	0.49 mg/Kg	DUP-07-SA5A-QC-030211 SL-042-SA5A-SS-0.0-0.5 SL-044-SA5A-SS-0.0-0.5 SL-045-SA5A-SS-0.0-0.5 SL-048-SA5A-SS-0.0-0.5 SL-176-SA5A-SS-0.0-0.3 SL-178-SA5A-SS-0.0-0.4 SL-179-SA5A-SS-0.0-0.3 SL-186-SA5A-SS-0.0-0.5 SL-188-SA5A-SS-0.0-0.5 SL-189-SA5A-SS-0.0-0.5

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
DUP-07-SA5A-QC-030211(RES)	HEXAVALENT CHROMIUM	0.47 mg/Kg	0.47U mg/Kg
SL-044-SA5A-SS-0.0-0.5(RES)	HEXAVALENT CHROMIUM	0.85 mg/Kg	0.85U mg/Kg
SL-045-SA5A-SS-0.0-0.5(RES)	HEXAVALENT CHROMIUM	1.6 mg/Kg	1.6U mg/Kg
SL-048-SA5A-SS-0.0-0.5(RES)	HEXAVALENT CHROMIUM	0.41 mg/Kg	0.41U mg/Kg

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Method Blank Outlier Report

Lab Reporting Batch ID: DE095 **Laboratory: LL**

EDD Filename: DE095_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **7199**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-176-SA5A-SS-0.0-0.3(RES)	HEXAVALENT CHROMIUM	1.3 mg/Kg	1.3U mg/Kg
SL-178-SA5A-SS-0.0-0.4(RES)	HEXAVALENT CHROMIUM	0.53 mg/Kg	0.53U mg/Kg
SL-179-SA5A-SS-0.0-0.3(RES)	HEXAVALENT CHROMIUM	0.65 mg/Kg	0.65U mg/Kg
SL-186-SA5A-SS-0.0-0.5(RES)	HEXAVALENT CHROMIUM	0.32 mg/Kg	0.32U mg/Kg
SL-188-SA5A-SS-0.0-0.5(RES)	HEXAVALENT CHROMIUM	0.37 mg/Kg	0.37U mg/Kg
SL-189-SA5A-SS-0.0-0.5(RES)	HEXAVALENT CHROMIUM	0.29 mg/Kg	0.29U mg/Kg

Method: **8270C**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKLA06B261221	3/11/2011 12:21:00 PM	BIS(2-ETHYLHEXYL)PHTHALATE	26 ug/Kg	DUP-07-SA5A-QC-030211 SL-042-SA5A-SS-0.0-0.5 SL-044-SA5A-SS-0.0-0.5 SL-045-SA5A-SS-0.0-0.5 SL-048-SA5A-SS-0.0-0.5 SL-176-SA5A-SS-0.0-0.3 SL-178-SA5A-SS-0.0-0.4 SL-179-SA5A-SS-0.0-0.3 SL-186-SA5A-SS-0.0-0.5 SL-188-SA5A-SS-0.0-0.5 SL-189-SA5A-SS-0.0-0.5

Method: **8270C SIM**
Matrix: **AQ**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKWC06B260128	3/16/2011 1:28:00 AM	BIS(2-ETHYLHEXYL)PHTHALATE Diethylphthalate Di-n-butylphthalate	0.13 ug/L 0.053 ug/L 0.066 ug/L	EB05-SA5A-030211

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
EB05-SA5A-030211(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	0.12 ug/L	1.1U ug/L
EB05-SA5A-030211(RES)	Diethylphthalate	0.072 ug/L	1.1U ug/L
EB05-SA5A-030211(RES)	Di-n-butylphthalate	0.34 ug/L	1.1U ug/L

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE095 **Laboratory: LL**

EDD Filename: DE095_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-048-SA5A-SS-0.0-0.5MSD (SL-048-SA5A-SS-0.0-0.5)	ANILINE	-	100	35.00-95.00	-	ANILINE	J (all detects)
SL-048-SA5A-SS-0.0-0.5MS SL-048-SA5A-SS-0.0-0.5MSD (SL-048-SA5A-SS-0.0-0.5)	BENZIDINE	19	18	35.00-141.00	-	BENZIDINE	J(all detects) UJ(all non-detects)

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-048-SA5A-SS-0.0-0.5MS (DUP-07-SA5A-QC-030211 SL-042-SA5A-SS-0.0-0.5 SL-044-SA5A-SS-0.0-0.5 SL-045-SA5A-SS-0.0-0.5 SL-048-SA5A-SS-0.0-0.5 SL-176-SA5A-SS-0.0-0.3 SL-178-SA5A-SS-0.0-0.4 SL-179-SA5A-SS-0.0-0.3 SL-186-SA5A-SS-0.0-0.5 SL-188-SA5A-SS-0.0-0.5 SL-189-SA5A-SS-0.0-0.5)	CADMIUM SILVER	135 131	- -	75.00-125.00 75.00-125.00	- -	CADMIUM SILVER	J(all detects)
SL-048-SA5A-SS-0.0-0.5MS SL-048-SA5A-SS-0.0-0.5MSD (DUP-07-SA5A-QC-030211 SL-042-SA5A-SS-0.0-0.5 SL-044-SA5A-SS-0.0-0.5 SL-045-SA5A-SS-0.0-0.5 SL-048-SA5A-SS-0.0-0.5 SL-176-SA5A-SS-0.0-0.3 SL-178-SA5A-SS-0.0-0.4 SL-179-SA5A-SS-0.0-0.3 SL-186-SA5A-SS-0.0-0.5 SL-188-SA5A-SS-0.0-0.5 SL-189-SA5A-SS-0.0-0.5)	ANTIMONY ARSENIC LEAD VANADIUM ZINC	54 - 68 - -	54 73 49 70 60	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	- - - - -	ANTIMONY ARSENIC LEAD VANADIUM ZINC	J(all detects) UJ(all non-detects) Pb, V, Zn No Qual, >4x
SL-048-SA5A-SS-0.0-0.5MS SL-048-SA5A-SS-0.0-0.5MSD (DUP-07-SA5A-QC-030211 SL-042-SA5A-SS-0.0-0.5 SL-044-SA5A-SS-0.0-0.5 SL-045-SA5A-SS-0.0-0.5 SL-048-SA5A-SS-0.0-0.5 SL-176-SA5A-SS-0.0-0.3 SL-178-SA5A-SS-0.0-0.4 SL-179-SA5A-SS-0.0-0.3 SL-186-SA5A-SS-0.0-0.5 SL-188-SA5A-SS-0.0-0.5 SL-189-SA5A-SS-0.0-0.5)	MOLYBDENUM	138	129	75.00-125.00	-	MOLYBDENUM	J(all detects)
SL-048-SA5A-SS-0.0-0.5MSD (DUP-07-SA5A-QC-030211 SL-042-SA5A-SS-0.0-0.5 SL-044-SA5A-SS-0.0-0.5 SL-045-SA5A-SS-0.0-0.5 SL-048-SA5A-SS-0.0-0.5 SL-176-SA5A-SS-0.0-0.3 SL-178-SA5A-SS-0.0-0.4 SL-179-SA5A-SS-0.0-0.3 SL-186-SA5A-SS-0.0-0.5 SL-188-SA5A-SS-0.0-0.5 SL-189-SA5A-SS-0.0-0.5)	BARIUM	-	8	75.00-125.00	-	BARIUM	No Qual, >4x

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE095 **Laboratory: LL**

EDD Filename: DE095_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-048-SA5A-SS-0.0-0.5MS SL-048-SA5A-SS-0.0-0.5MSD (DUP-07-SA5A-QC-030211 SL -042-SA5A-SS-0.0-0.5 SL -044-SA5A-SS-0.0-0.5 SL -045-SA5A-SS-0.0-0.5 SL -048-SA5A-SS-0.0-0.5 SL -176-SA5A-SS-0.0-0.3 SL -178-SA5A-SS-0.0-0.4 SL -179-SA5A-SS-0.0-0.3 SL -186-SA5A-SS-0.0-0.5 SL -188-SA5A-SS-0.0-0.5 SL -189-SA5A-SS-0.0-0.5)	ALUMINUM CALCIUM TITANIUM	634 130 227	934 149 289	75.00-125.00 75.00-125.00 75.00-125.00	- - -	ALUMINUM CALCIUM TITANIUM	No Qual, >4x
SL-048-SA5A-SS-0.0-0.5MS SL-048-SA5A-SS-0.0-0.5MSD (DUP-07-SA5A-QC-030211 SL -042-SA5A-SS-0.0-0.5 SL -044-SA5A-SS-0.0-0.5 SL -045-SA5A-SS-0.0-0.5 SL -048-SA5A-SS-0.0-0.5 SL -176-SA5A-SS-0.0-0.3 SL -178-SA5A-SS-0.0-0.4 SL -179-SA5A-SS-0.0-0.3 SL -186-SA5A-SS-0.0-0.5 SL -188-SA5A-SS-0.0-0.5 SL -189-SA5A-SS-0.0-0.5)	IRON MAGNESIUM	-1326 -60	-286 136	75.00-125.00 75.00-125.00	- -	IRON MAGNESIUM	No Qual, >4x
SL-048-SA5A-SS-0.0-0.5MS (DUP-07-SA5A-QC-030211 SL -042-SA5A-SS-0.0-0.5 SL -044-SA5A-SS-0.0-0.5 SL -045-SA5A-SS-0.0-0.5 SL -048-SA5A-SS-0.0-0.5 SL -176-SA5A-SS-0.0-0.3 SL -178-SA5A-SS-0.0-0.4 SL -179-SA5A-SS-0.0-0.3 SL -186-SA5A-SS-0.0-0.5 SL -188-SA5A-SS-0.0-0.5 SL -189-SA5A-SS-0.0-0.5)	MANGANESE PHOSPHORUS	67 56	- -	75.00-125.00 75.00-125.00	- -	MANGANESE PHOSPHORUS	No Qual, >4x

Method: 8270C SIM
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-048-SA5A-SS-0.0-0.5MS (SL-048-SA5A-SS-0.0-0.5)	BIS(2-ETHYLHEXYL)PHTHALAT	168	-	39.00-167.00	-	BIS(2-ETHYLHEXYL)PHTHALA	J(all detects)

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE095 **Laboratory: LL**

EDD Filename: DE095_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 300.0
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-048-SA5A-SS-0.0-0.5MS (DUP-07-SA5A-QC-030211 SL-042-SA5A-SS-0.0-0.5 SL-044-SA5A-SS-0.0-0.5 SL-045-SA5A-SS-0.0-0.5 SL-048-SA5A-SS-0.0-0.5 SL-176-SA5A-SS-0.0-0.3 SL-178-SA5A-SS-0.0-0.4 SL-179-SA5A-SS-0.0-0.3 SL-186-SA5A-SS-0.0-0.5 SL-188-SA5A-SS-0.0-0.5)	FLUORIDE	49	-	80.00-120.00	-	FLUORIDE	J(all detects) UJ(all non-detects)
SL-189-SA5A-SS-0.0-0.5MS (SL-189-SA5A-SS-0.0-0.5)	FLUORIDE	79	-	80.00-120.00	-	FLUORIDE	J(all detects) UJ(all non-detects)

Method: 8151A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-048-SA5A-SS-0.0-0.5MSD (SL-048-SA5A-SS-0.0-0.5)	DINOSEB MCPP	- -	- -	10.00-46.00 10.00-184.00	46 (35.00) 69 (50.00)	DINOSEB MCPP	J(all detects)

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE095 | Laboratory: LL

EDD Filename: DE095_v1 | eQAPP Name: CDM_SSFL_110509

Method: 6020
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-048-SA5A-SS-0.0-0.5DUP	ANTIMONY	30	20.00	
(DUP-07-SA5A-QC-030211	ARSENIC	40	20.00	
SL -042-SA5A-SS-0.0-0.5	BARIUM	38	20.00	
SL -044-SA5A-SS-0.0-0.5	BERYLLIUM	0.3475	0.226 mg/Kg	
SL -045-SA5A-SS-0.0-0.5	CHROMIUM	40	20.00	J (all detects)
SL -048-SA5A-SS-0.0-0.5	COBALT	38	20.00	UJ (all non-detects)
SL -176-SA5A-SS-0.0-0.3	COPPER	25	20.00	
SL -178-SA5A-SS-0.0-0.4	LEAD	42	20.00	Sb, Se, Ag, Tl
SL -179-SA5A-SS-0.0-0.3	MOLYBDENUM	51	20.00	No Qual
SL -186-SA5A-SS-0.0-0.5	NICKEL	36	20.00	OK by difference
SL -188-SA5A-SS-0.0-0.5	SELENIUM	124	20.00	
SL -189-SA5A-SS-0.0-0.5)	SILVER	49	20.00	
	THALLIUM	47	20.00	
	VANADIUM	43	20.00	
	ZINC	31	20.00	

Method: 7199
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-048-SA5A-SS-0.0-0.5DUP	HEXAVALENT CHROMIUM	32	20.00	
(DUP-07-SA5A-QC-030211				
SL -042-SA5A-SS-0.0-0.5				
SL -044-SA5A-SS-0.0-0.5				
SL -045-SA5A-SS-0.0-0.5				
SL -048-SA5A-SS-0.0-0.5				No Qual
SL -176-SA5A-SS-0.0-0.3				OK by difference
SL -178-SA5A-SS-0.0-0.4				
SL -179-SA5A-SS-0.0-0.3				
SL -186-SA5A-SS-0.0-0.5				
SL -188-SA5A-SS-0.0-0.5				
SL -189-SA5A-SS-0.0-0.5)				

Method: 7471A
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-048-SA5A-SS-0.0-0.5DUP	MERCURY	200	20.00	
(DUP-07-SA5A-QC-030211				
SL -042-SA5A-SS-0.0-0.5				
SL -044-SA5A-SS-0.0-0.5				
SL -045-SA5A-SS-0.0-0.5				
SL -048-SA5A-SS-0.0-0.5				No Qual
SL -176-SA5A-SS-0.0-0.3				OK by difference
SL -178-SA5A-SS-0.0-0.4				
SL -179-SA5A-SS-0.0-0.3				
SL -186-SA5A-SS-0.0-0.5				
SL -188-SA5A-SS-0.0-0.5				
SL -189-SA5A-SS-0.0-0.5)				

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE095 **Laboratory: LL**

EDD Filename: DE095_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P2WALCSQ262324 (EB05-SA5A-030211)	ANILINE	106	-	49.00-101.00	-	ANILINE	J (all detects)

Method: 8270C SIM
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P3WCLCSQ260159 (EB05-SA5A-030211)	ACENAPHTHENE	110	-	74.00-109.00	-	ACENAPHTHENE	J(all detects)

Surrogate Outlier Report

Lab Reporting Batch ID: DE095 **Laboratory: LL**

EDD Filename: DE095_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8081A
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-042-SA5A-SS-0.0-0.5	DECACHLOROBIPHENYL	487	20.00-120.00	All Target Analytes	No Qual, Diluted Out
SL-044-SA5A-SS-0.0-0.5	DECACHLOROBIPHENYL	169	20.00-120.00	All Target Analytes	J(all detects)
SL-179-SA5A-SS-0.0-0.3	DECACHLOROBIPHENYL	289	20.00-120.00	All Target Analytes	No Qual, Diluted Out
SL-188-SA5A-SS-0.0-0.5	DECACHLOROBIPHENYL	165	20.00-120.00	All Target Analytes	J(all detects)
SL-189-SA5A-SS-0.0-0.5	DECACHLOROBIPHENYL	286	20.00-120.00	All Target Analytes	J(all detects)

Method: 8082
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-176-SA5A-SS-0.0-0.3	TETRACHLORO-M-XYLENE	49	53.00-139.00	All Target Analytes	No Qual Diluted Out

Field Duplicate RPD Report

Lab Reporting Batch ID: DE095 **Laboratory: LL**

EDD Filename: DE095_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 160.3M
Matrix: SO

Analyte	Concentration (%) SL-048-SA5A-SS-0.0-0.5	Concentration (%) DUP-07-SA5A-QC-030211	Sample RPD	eQAPP RPD	Flag
MOISTURE	12.5	12.6	1		No Qualifiers Applied

Method: 300.0
Matrix: SO

Analyte	Concentration (mg/Kg) SL-048-SA5A-SS-0.0-0.5	Concentration (mg/Kg) DUP-07-SA5A-QC-030211	Sample RPD	eQAPP RPD	Flag
FLUORIDE	1.5	1.6	6	50.00	No Qualifiers Applied

Method: 6010B
Matrix: SO

Analyte	Concentration (mg/Kg) SL-048-SA5A-SS-0.0-0.5	Concentration (mg/Kg) DUP-07-SA5A-QC-030211	Sample RPD	eQAPP RPD	Flag
ALUMINUM	17600	17100	3	50.00	No Qualifiers Applied
BORON	3.38	3.16	7	50.00	
CALCIUM	3150	3000	5	50.00	
IRON	23600	23500	0	50.00	
LITHIUM	27.6	27.1	2	50.00	
MAGNESIUM	5550	5460	2	50.00	
MANGANESE	370	367	1	50.00	
PHOSPHORUS	696	664	5	50.00	
POTASSIUM	4460	4420	1	50.00	
SODIUM	81.4	81.6	0	50.00	
STRONTIUM	20.3	19.7	3	50.00	
TIN	2.84	3.03	6	50.00	
TITANIUM	1290	1270	2	50.00	
Zirconium	1.94	1.55	22	50.00	

Method: 6020
Matrix: SO

Analyte	Concentration (mg/Kg) SL-048-SA5A-SS-0.0-0.5	Concentration (mg/Kg) DUP-07-SA5A-QC-030211	Sample RPD	eQAPP RPD	Flag
ANTIMONY	0.167	0.141	17	50.00	No Qualifiers Applied
ARSENIC	7.30	5.35	31	50.00	
BARIUM	165	140	16	50.00	
BERYLLIUM	0.853	0.632	30	50.00	
CADMIUM	0.259	0.258	0	50.00	
CHROMIUM	29.1	23.3	22	50.00	
COBALT	7.73	6.86	12	50.00	
COPPER	11.3	11.5	2	50.00	
LEAD	14.9	11.3	27	50.00	
MOLYBDENUM	1.04	0.717	37	50.00	
NICKEL	18.8	16.2	15	50.00	
SILVER	0.180	0.114	45	50.00	
THALLIUM	0.379	0.304	22	50.00	
VANADIUM	52.1	43.1	19	50.00	
ZINC	92.2	80.9	13	50.00	
SELENIUM	0.554	0.162	109	50.00	J(all detects)

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Field Duplicate RPD Report

Lab Reporting Batch ID: DE095 **Laboratory: LL**

EDD Filename: DE095_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7199
Matrix: SO

Analyte	Concentration (mg/Kg) SL-048-SA5A-SS-0.0-0.5	Concentration (mg/Kg) DUP-07-SA5A-QC-030211	Sample RPD	eQAPP RPD	Flag
HEXAVALENT CHROMIUM	0.41	0.47	14	50.00	No Qualifiers Applied

Method: 7471A
Matrix: SO

Analyte	Concentration (mg/Kg) SL-048-SA5A-SS-0.0-0.5	Concentration (mg/Kg) DUP-07-SA5A-QC-030211	Sample RPD	eQAPP RPD	Flag
MERCURY	0.0040	0.0448	167	50.00	J(all detects)

Method: 8082
Matrix: SO

Analyte	Concentration (ug/Kg) SL-048-SA5A-SS-0.0-0.5	Concentration (ug/Kg) DUP-07-SA5A-QC-030211	Sample RPD	eQAPP RPD	Flag
AROCLOR 1260	0.88	0.65	30	50.00	No Qualifiers Applied
Aroclor 5460	1.3	2.1	47	50.00	
AROCLOR 1254	1.9 U	0.98	200	50.00	J(all detects) UJ(all non-detects)

Method: 8270C SIM
Matrix: SO

Analyte	Concentration (ug/Kg) SL-048-SA5A-SS-0.0-0.5	Concentration (ug/Kg) DUP-07-SA5A-QC-030211	Sample RPD	eQAPP RPD	Flag
Di-n-butylphthalate	12	13	8	50.00	No Qualifiers Applied
Di-n-octylphthalate	12	12	0	50.00	
BENZO(A)PYRENE	1.9 U	0.94	200	50.00	J(all detects) UJ(all non-detects)
BENZO(B)FLUORANTHENE	2.9	5.3	59	50.00	
BIS(2-ETHYLHEXYL)PHTHALATE	21 U	7.6	200	50.00	
CHRYSENE	0.90	1.6	56	50.00	
FLUORANTHENE	0.94	2.5	91	50.00	
PHENANTHRENE	1.9 U	1.1	200	50.00	
PYRENE	1.9 U	1.9	200	50.00	

Method: 9045M
Matrix: SO

Analyte	Concentration (pH unit) SL-048-SA5A-SS-0.0-0.5	Concentration (pH unit) DUP-07-SA5A-QC-030211	Sample RPD	eQAPP RPD	Flag
PH	6.33	6.20	2	50.00	No Qualifiers Applied

Method: ASTM D1498
Matrix: SO

Analyte	Concentration (mV) SL-048-SA5A-SS-0.0-0.5	Concentration (mV) DUP-07-SA5A-QC-030211	Sample RPD	eQAPP RPD	Flag
Oxidation Reduction Potential	388	356	9		No Qualifiers Applied

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Reporting Limit Outliers

Lab Reporting Batch ID: DE095 **Laboratory: LL**

EDD Filename: DE095_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB05-SA5A-030211	LITHIUM	J	0.0045	0.0200	PQL	mg/L	J (all detects)

Method: 8270C SIM

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB05-SA5A-030211	BIS(2-ETHYLHEXYL)PHTHALATE	J	0.12	1.1	PQL	ug/L	J (all detects)
	Diethylphthalate	J	0.072	1.1	PQL	ug/L	
	Di-n-butylphthalate	J	0.34	1.1	PQL	ug/L	

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-07-SA5A-QC-030211	BORON	J	3.16	5.66	PQL	mg/Kg	J (all detects)
	SODIUM	J	81.6	113	PQL	mg/Kg	
	TIN	J	3.03	11.3	PQL	mg/Kg	
	Zirconium	J	1.55	5.66	PQL	mg/Kg	
SL-042-SA5A-SS-0.0-0.5	BORON	J	5.72	6.04	PQL	mg/Kg	J (all detects)
	TIN	J	4.02	12.1	PQL	mg/Kg	
	Zirconium	J	2.40	6.04	PQL	mg/Kg	
SL-044-SA5A-SS-0.0-0.5	BORON	J	3.99	5.64	PQL	mg/Kg	J (all detects)
	SODIUM	J	87.8	113	PQL	mg/Kg	
	TIN	J	3.06	11.3	PQL	mg/Kg	
	Zirconium	J	1.78	5.64	PQL	mg/Kg	
SL-045-SA5A-SS-0.0-0.5	BORON	J	4.55	5.86	PQL	mg/Kg	J (all detects)
	SODIUM	J	84.9	117	PQL	mg/Kg	
	TIN	J	3.19	11.7	PQL	mg/Kg	
	Zirconium	J	1.83	5.86	PQL	mg/Kg	
SL-048-SA5A-SS-0.0-0.5	BORON	J	3.38	5.55	PQL	mg/Kg	J (all detects)
	SODIUM	J	81.4	111	PQL	mg/Kg	
	TIN	J	2.84	11.1	PQL	mg/Kg	
	Zirconium	J	1.94	5.55	PQL	mg/Kg	
SL-176-SA5A-SS-0.0-0.3	TIN	J	5.57	10.9	PQL	mg/Kg	J (all detects)
	Zirconium	J	1.64	5.44	PQL	mg/Kg	
SL-178-SA5A-SS-0.0-0.4	BORON	J	4.10	5.19	PQL	mg/Kg	J (all detects)
	TIN	J	3.17	10.4	PQL	mg/Kg	
	Zirconium	J	0.925	5.19	PQL	mg/Kg	
SL-179-SA5A-SS-0.0-0.3	BORON	J	4.52	5.28	PQL	mg/Kg	J (all detects)
	TIN	J	3.01	10.6	PQL	mg/Kg	
	Zirconium	J	1.48	5.28	PQL	mg/Kg	
SL-186-SA5A-SS-0.0-0.5	TIN	J	2.79	11.8	PQL	mg/Kg	J (all detects)
	Zirconium	J	1.86	5.89	PQL	mg/Kg	
SL-188-SA5A-SS-0.0-0.5	TIN	J	2.96	11.0	PQL	mg/Kg	J (all detects)
	Zirconium	J	1.61	5.51	PQL	mg/Kg	

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Reporting Limit Outliers

Lab Reporting Batch ID: DE095 **Laboratory: LL**

EDD Filename: DE095_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-189-SA5A-SS-0.0-0.5	BORON	J	3.85	5.87	PQL	mg/Kg	J (all detects)
	TIN	J	2.63	11.7	PQL	mg/Kg	
	Zirconium	J	4.72	5.87	PQL	mg/Kg	

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-07-SA5A-QC-030211	ANTIMONY	J	0.141	0.227	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.162	0.453	PQL	mg/Kg	
SL-042-SA5A-SS-0.0-0.5	SELENIUM	J	0.457	0.483	PQL	mg/Kg	J (all detects)
SL-044-SA5A-SS-0.0-0.5	ANTIMONY	J	0.177	0.221	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.205	0.443	PQL	mg/Kg	
SL-045-SA5A-SS-0.0-0.5	ANTIMONY	J	0.153	0.232	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.273	0.464	PQL	mg/Kg	
	SILVER	J	0.0846	0.116	PQL	mg/Kg	
SL-048-SA5A-SS-0.0-0.5	ANTIMONY	J	0.167	0.226	PQL	mg/Kg	J (all detects)
SL-176-SA5A-SS-0.0-0.3	SELENIUM	J	0.167	0.444	PQL	mg/Kg	J (all detects)
SL-178-SA5A-SS-0.0-0.4	SELENIUM	J	0.162	0.419	PQL	mg/Kg	J (all detects)
SL-179-SA5A-SS-0.0-0.3	SELENIUM	J	0.165	0.410	PQL	mg/Kg	J (all detects)
SL-186-SA5A-SS-0.0-0.5	SELENIUM	J	0.255	0.462	PQL	mg/Kg	J (all detects)
SL-188-SA5A-SS-0.0-0.5	ANTIMONY	J	0.140	0.220	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.168	0.441	PQL	mg/Kg	
SL-189-SA5A-SS-0.0-0.5	ANTIMONY	J	0.140	0.235	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0872	0.469	PQL	mg/Kg	

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-07-SA5A-QC-030211	HEXAVALENT CHROMIUM	J	0.47	1.1	PQL	mg/Kg	J (all detects)
SL-044-SA5A-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.85	1.1	PQL	mg/Kg	J (all detects)
SL-048-SA5A-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.41	1.1	PQL	mg/Kg	J (all detects)
SL-178-SA5A-SS-0.0-0.4	HEXAVALENT CHROMIUM	J	0.53	1.1	PQL	mg/Kg	J (all detects)
SL-179-SA5A-SS-0.0-0.3	HEXAVALENT CHROMIUM	J	0.65	1.1	PQL	mg/Kg	J (all detects)
SL-186-SA5A-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.32	1.2	PQL	mg/Kg	J (all detects)
SL-188-SA5A-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.37	1.1	PQL	mg/Kg	J (all detects)
SL-189-SA5A-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.29	1.2	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE095 **Laboratory: LL**

EDD Filename: DE095_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-07-SA5A-QC-030211	MERCURY	J	0.0448	0.111	PQL	mg/Kg	J (all detects)
SL-042-SA5A-SS-0.0-0.5	MERCURY	J	0.100	0.117	PQL	mg/Kg	J (all detects)
SL-044-SA5A-SS-0.0-0.5	MERCURY	J	0.0314	0.108	PQL	mg/Kg	J (all detects)
SL-045-SA5A-SS-0.0-0.5	MERCURY	J	0.0044	0.114	PQL	mg/Kg	J (all detects)
SL-048-SA5A-SS-0.0-0.5	MERCURY	J	0.0040	0.110	PQL	mg/Kg	J (all detects)
SL-186-SA5A-SS-0.0-0.5	MERCURY	J	0.109	0.111	PQL	mg/Kg	J (all detects)
SL-188-SA5A-SS-0.0-0.5	MERCURY	J	0.0687	0.105	PQL	mg/Kg	J (all detects)
SL-189-SA5A-SS-0.0-0.5	MERCURY	J	0.0979	0.115	PQL	mg/Kg	J (all detects)

Method: 8081A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-042-SA5A-SS-0.0-0.5	DELTA-BHC	J	0.13	0.20	PQL	ug/Kg	J (all detects)
SL-044-SA5A-SS-0.0-0.5	DELTA-BHC	J	0.062	0.19	PQL	ug/Kg	J (all detects)

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-07-SA5A-QC-030211	AROCLOR 1254 AROCLOR 1260 Aroclor 5460	J J J	0.98 0.65 2.1	1.9 1.9 3.8	PQL PQL PQL	ug/Kg ug/Kg ug/Kg	J (all detects)
SL-045-SA5A-SS-0.0-0.5	AROCLOR 1260 Aroclor 5460	J J	1.2 2.0	2.0 3.9	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-048-SA5A-SS-0.0-0.5	AROCLOR 1260 Aroclor 5460	J J	0.88 1.3	1.9 3.8	PQL PQL	ug/Kg ug/Kg	J (all detects)

Method: 8151A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-042-SA5A-SS-0.0-0.5	2,4-D	J	1.5	4.4	PQL	ug/Kg	J (all detects)
SL-044-SA5A-SS-0.0-0.5	2,4,5-TP (Silvex)	J	0.16	0.19	PQL	ug/Kg	J (all detects)
SL-176-SA5A-SS-0.0-0.3	MCPA	J	170	280	PQL	ug/Kg	J (all detects)
SL-179-SA5A-SS-0.0-0.3	MCPP	J	250	260	PQL	ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE095 **Laboratory: LL**

EDD Filename: DE095_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8151A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-188-SA5A-SS-0.0-0.5	2,4,5-TP (Silvex)	J	0.14	0.19	PQL	ug/Kg	J (all detects)
	MCPA	J	190	280	PQL	ug/Kg	
SL-189-SA5A-SS-0.0-0.5	2,4-DB	J	1.1	2.0	PQL	ug/Kg	J (all detects)

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-042-SA5A-SS-0.0-0.5	BENZO(G,H,I)PERYLENE	J	22	200	PQL	ug/Kg	J (all detects)
SL-176-SA5A-SS-0.0-0.3	1-METHYLNAPHTHALENE	J	25	190	PQL	ug/Kg	J (all detects)
	2-METHYLNAPHTHALENE	J	21	190	PQL	ug/Kg	
	ACENAPHTHENE	J	74	190	PQL	ug/Kg	
	Butylbenzylphthalate	J	21	190	PQL	ug/Kg	
	CARBAZOLE	J	98	190	PQL	ug/Kg	
	DIBENZOFURAN	J	35	190	PQL	ug/Kg	
	FLUORENE	J	62	190	PQL	ug/Kg	
SL-178-SA5A-SS-0.0-0.4	ACENAPHTHENE	J	67	180	PQL	ug/Kg	J (all detects)
	ANTHRACENE	J	99	180	PQL	ug/Kg	
	CARBAZOLE	J	58	180	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	73	180	PQL	ug/Kg	
	DIBENZOFURAN	J	21	180	PQL	ug/Kg	
	FLUORENE	J	37	180	PQL	ug/Kg	
SL-179-SA5A-SS-0.0-0.3	BENZO(G,H,I)PERYLENE	J	21	180	PQL	ug/Kg	J (all detects)

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-07-SA5A-QC-030211	BENZO(A)PYRENE	J	0.94	1.9	PQL	ug/Kg	J (all detects)
	BIS(2-ETHYLHEXYL)PHTHALATE	J	7.6	21	PQL	ug/Kg	
	CHRYSENE	J	1.6	1.9	PQL	ug/Kg	
	Di-n-butylphthalate	J	13	21	PQL	ug/Kg	
	Di-n-octylphthalate	J	12	21	PQL	ug/Kg	
	PHENANTHRENE	J	1.1	1.9	PQL	ug/Kg	
SL-042-SA5A-SS-0.0-0.5	2-METHYLNAPHTHALENE	J	1.3	2.0	PQL	ug/Kg	J (all detects)
	ACENAPHTHYLENE	J	0.72	2.0	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	9.7	22	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	1.1	2.0	PQL	ug/Kg	
	Di-n-butylphthalate	J	14	22	PQL	ug/Kg	
	Di-n-octylphthalate	J	13	22	PQL	ug/Kg	
	NAPHTHALENE	J	1.3	2.0	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE095 **Laboratory: LL**

EDD Filename: DE095_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8270C SIM**

Matrix: **SO**

SampleID	*Analyte*	*Lab Qual*	*Result*	*Reporting Limit*	*RL Type*	*Units*	*Flag*
SL-044-SA5A-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	1.3	1.9	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	1.7	1.9	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	8.2	20	PQL	ug/Kg	
	Di-n-butylphthalate	J	13	20	PQL	ug/Kg	
	Di-n-octylphthalate	J	12	20	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.6	1.9	PQL	ug/Kg	
	PHENANTHRENE	J	1.3	1.9	PQL	ug/Kg	
SL-045-SA5A-SS-0.0-0.5	CHRYSENE	J	1.1	2.0	PQL	ug/Kg	J (all detects)
	Di-n-butylphthalate	J	14	21	PQL	ug/Kg	
	Di-n-octylphthalate	J	12	21	PQL	ug/Kg	
	FLUORANTHENE	J	1.3	2.0	PQL	ug/Kg	
	PHENANTHRENE	J	0.84	2.0	PQL	ug/Kg	
	PYRENE	J	1.1	2.0	PQL	ug/Kg	
SL-048-SA5A-SS-0.0-0.5	CHRYSENE	J	0.90	1.9	PQL	ug/Kg	J (all detects)
	Di-n-butylphthalate	J	12	21	PQL	ug/Kg	
	Di-n-octylphthalate	J	12	21	PQL	ug/Kg	
	FLUORANTHENE	J	0.94	1.9	PQL	ug/Kg	
SL-176-SA5A-SS-0.0-0.3	ACENAPHTHYLENE	J	4.9	9.3	PQL	ug/Kg	J (all detects)
	Di-n-octylphthalate	J	68	100	PQL	ug/Kg	
SL-179-SA5A-SS-0.0-0.3	Di-n-butylphthalate	J	58	96	PQL	ug/Kg	J (all detects)
	INDENO(1,2,3-CD)PYRENE	J	4.6	8.9	PQL	ug/Kg	
SL-186-SA5A-SS-0.0-0.5	ACENAPHTHYLENE	J	3.6	9.9	PQL	ug/Kg	J (all detects)
	Butylbenzylphthalate	J	48	110	PQL	ug/Kg	
	Di-n-octylphthalate	J	72	110	PQL	ug/Kg	
	FLUORENE	J	4.7	9.9	PQL	ug/Kg	
SL-188-SA5A-SS-0.0-0.5	ACENAPHTHYLENE	J	7.4	9.3	PQL	ug/Kg	J (all detects)
	Di-n-butylphthalate	J	61	100	PQL	ug/Kg	

Enclosure II

EPA Level IV Validation Reports

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	March 2, 2011
LDC Report Date:	August 11, 2011
Matrix:	Soil/Water
Parameters:	Semivolatiles
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE095

Sample Identification

DUP-07-SA5A-QC-030211
SL-042-SA5A-SS-0.0-0.5
SL-044-SA5A-SS-0.0-0.5
SL-045-SA5A-SS-0.0-0.5
SL-048-SA5A-SS-0.0-0.5
SL-176-SA5A-SS-0.0-0.3
SL-178-SA5A-SS-0.0-0.4
SL-179-SA5A-SS-0.0-0.3
SL-186-SA5A-SS-0.0-0.5
SL-188-SA5A-SS-0.0-0.5
SL-189-SA5A-SS-0.0-0.5
EB05-SA5A-030211
SL-048-SA5A-SS-0.0-0.5MS
SL-048-SA5A-SS-0.0-0.5MSD

Introduction

This data review covers 13 soil samples and one water sample listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8270C for Semivolatiles.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 30.0% for all compounds.

In the case where the laboratory used a calibration curve to evaluate the compounds, all coefficients of determination (r^2) were greater than or equal to 0.990 .

Average relative response factors (RRF) for all compounds were within method and validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs) and 25.0% for all other compounds with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
3/9/11	4-Chloroaniline	29	All water samples in SDG DE095	J (all detects) UJ (all non-detects)	A
3/11/11 (11:17)	Aniline 4-Chloroaniline	42 32	DUP-07-SA5A-QC-030211 SL-042-SA5A-SS-0.0-0.5 SL-044-SA5A-SS-0.0-0.5 SL-045-SA5A-SS-0.0-0.5 SL-048-SA5A-SS-0.0-0.5 SL-176-SA5A-SS-0.0-0.3 SL-178-SA5A-SS-0.0-0.4 SL-048-SA5A-SS-0.0-0.5MS SL-048-SA5A-SS-0.0-0.5MSD SBLKLA067	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A

Date	Compound	%D	Associated Samples	Flag	A or P
3/11/11 (23:57)	Aniline 4-Chloroaniline	35 31	SL-179-SA5A-SS-0.0-0.3 SL-186-SA5A-SS-0.0-0.5 SL-188-SA5A-SS-0.0-0.5 SL-189-SA5A-SS-0.0-0.5	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A

The percent differences (%D) of the second source calibration standard were less than or equal to 25.0% for all compounds with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
3/3/11	Benzidine	26	All samples in SDG DE095	J (all detects) UJ (all non-detects)	A

All of the continuing calibration relative response factors (RRF) were within method and validation criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No semivolatile contaminants were found in the method blanks.

Sample EB05-SA5A-030211 was identified as an equipment blank. No semivolatile contaminants were found with the following exceptions:

Equipment Blank ID	Sampling Date	Compound	Concentration	Associated Samples
EB05-SA5A-030211	3/2/11	Di-n-butylphthalate	0.34 ug/L	All soil samples in SDG DE095

Sample concentrations were compared to concentrations detected in the field blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated field blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
SL-048-SA5A-SS-0.0-0.5MS/MSD (SL-048-SA5A-SS-0.0-0.5)	Aniline	-	100 (35-95)	-	J (all detects)	A
SL-048-SA5A-SS-0.0-0.5MS/MSD (SL-048-SA5A-SS-0.0-0.5)	Benzidine	19 (35-141)	18 (35-141)	-	J (all detects) UJ (all non-detects)	A

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

LCS ID (Associated Samples)	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Flag	A or P
062WALCS/D (All water samples in SDG DE095)	Aniline	106 (49-101)	-	-	J (all detects)	P

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE095	All compounds reported below the RL.	J (all detects)	A

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was acceptable.

XV. Overall Assessment

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

Samples DUP-07-SA5A-QC-030211 and SL-048-SA5A-SS-0.0-0.5 were identified as field duplicates. No semivolatiles were detected in any of the samples.

Santa Susana Field Laboratory
Semivolatiles - Data Qualification Summary - SDG DE095

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE095	EB05-SA5A-030211	4-Chloroaniline	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D) (C)
	DUP-07-SA5A-QC-030211 SL-042-SA5A-SS-0.0-0.5 SL-044-SA5A-SS-0.0-0.5 SL-045-SA5A-SS-0.0-0.5 SL-048-SA5A-SS-0.0-0.5 SL-176-SA5A-SS-0.0-0.3 SL-178-SA5A-SS-0.0-0.4 SL-179-SA5A-SS-0.0-0.3 SL-186-SA5A-SS-0.0-0.5 SL-188-SA5A-SS-0.0-0.5 SL-189-SA5A-SS-0.0-0.5	Aniline 4-Chloroaniline	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A	Continuing calibration (%D) (C)
DE095	DUP-07-SA5A-QC-030211 SL-042-SA5A-SS-0.0-0.5 SL-044-SA5A-SS-0.0-0.5 SL-045-SA5A-SS-0.0-0.5 SL-048-SA5A-SS-0.0-0.5 SL-176-SA5A-SS-0.0-0.3 SL-178-SA5A-SS-0.0-0.4 SL-179-SA5A-SS-0.0-0.3 SL-186-SA5A-SS-0.0-0.5 SL-188-SA5A-SS-0.0-0.5 SL-189-SA5A-SS-0.0-0.5 EB05-SA5A-030211	Benzidine	J (all detects) UJ (all non-detects)	A	Continuing calibration (ICV %D) (C)
DE095	SL-048-SA5A-SS-0.0-0.5	Aniline	J (all detects)	A	Matrix spike/Matrix spike duplicate (%R) (Q)
DE095	SL-048-SA5A-SS-0.0-0.5	Benzidine	J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicate (%R) (Q)
DE095	EB05-SA5A-030211	Aniline	J (all detects)	P	Laboratory control samples (%R) (L)
DE095	DUP-07-SA5A-QC-030211 SL-042-SA5A-SS-0.0-0.5 SL-044-SA5A-SS-0.0-0.5 SL-045-SA5A-SS-0.0-0.5 SL-048-SA5A-SS-0.0-0.5 SL-176-SA5A-SS-0.0-0.3 SL-178-SA5A-SS-0.0-0.4 SL-179-SA5A-SS-0.0-0.3 SL-186-SA5A-SS-0.0-0.5 SL-188-SA5A-SS-0.0-0.5 SL-189-SA5A-SS-0.0-0.5 EB05-SA5A-030211	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
Semivolatiles - Laboratory Blank Data Qualification Summary - SDG DE095

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Semivolatiles - Field Blank Data Qualification Summary - SDG DE095

No Sample Data Qualified in this SDG

LDC #: 25911J2a **VALIDATION COMPLETENESS WORKSHEET** Date: 8/10/11
SDG #: DE095 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC/MS Semivolatiles (EPA SW 846 Method 8270C)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 3/2/11
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	A	% RSD ≤30, r2
IV.	Continuing calibration/ICV	SW	ICV/CCV ≤ 25
V.	Blanks A	~~SW~~	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	SW	
VIII.	Laboratory control samples	SW	LCS/D
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A	
XI.	Target compound identification	A	
XII.	Compound quantitation/CRQLs	A	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	A	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	ND	D = 1,5
XVII.	Field blanks	SW	EB = 2

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:
soil + water

1 1	DUP-07-SA5A-QC-030211 D	11	SL-189-SA5A-SS-0.0-0.5	21 1	SBLKLA067	31	
2	SL-042-SA5A-SS-0.0-0.5	12 2	EB05-SA5A-030211 W	22 2	SBLKWA062	32	
3	SL-044-SA5A-SS-0.0-0.5	13	SL-048-SA5A-SS-0.0-0.5MS	23		33	
4	SL-045-SA5A-SS-0.0-0.5	14	SL-048-SA5A-SS-0.0-0.5MSD	24		34	
5	SL-048-SA5A-SS-0.0-0.5 D	15		25		35	
6	SL-176-SA5A-SS-0.0-0.3	16		26		36	
7	SL-178-SA5A-SS-0.0-0.4	17		27		37	
8	SL-179-SA5A-SS-0.0-0.3	18		28		38	
9	SL-186-SA5A-SS-0.0-0.5	19		29		39	
10	SL-188-SA5A-SS-0.0-0.5	20		30		40	

LDC #: 25911J2a

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer: [illegible]

Method: Semivolatiles (EPA SW 846 Method 8270C)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. GC/MS Instrument performance check				
Were the DFTPP performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
III. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Was a curve fit used for evaluation?	✓			
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?	✓			
Were all percent relative standard deviations (%RSD) ≤ 30% and relative response factors (RRF) > 0.05?	✓			
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓			
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Were all percent differences (%D) ≤ 25% and relative response factors (RRF) ≥ 0.05?		✓		
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate recoveries				
Were all surrogate %R within QC limits?	✓			
If 2 or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R?			✓	
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?			✓	
VII. Matrix Spike/Matrix Spike Duplicate				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?		✓		
VIII. Laboratory control sample				
Was an LCS analyzed for this SDG?	✓			

LDC #: 25911J2a

VALIDATION FINDINGS CHECKLIST

Page: 2 of 2
Reviewer: FT
2nd Reviewer: [illegible]

Validation Area	Yes	No	NA	Findings/Comments
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?		✓		
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
X. Internal standards				
Were internal standard area counts within -50% or +100% of the associated calibration standard?	✓			
Were retention times within ± 30 seconds from the associated calibration standard?	✓			
XI. Target compound identification				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?	✓			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	✓			
Were chromatogram peaks verified and accounted for?	✓			
XII. Compound quantitation				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	✓			
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XIII. Tentatively identified compounds				
Were the major ions (> 10 percent relative intensity) in the reference spectrum evaluated in sample spectrum?			✓	
Were relative intensities of the major ions within ± 20% between the sample and the reference spectra?			✓	
Did the raw data indicate that the laboratory performed a library search for all required peaks in the chromatograms (samples and blanks)?			✓	
XIV. System performance				
System performance was found to be acceptable.	✓			
XV. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XVI. Field duplicates				
Field duplicate pairs were identified in this SDG.	✓			
Target compounds were detected in the field duplicates.		✓		
XVII. Field blanks				
Field blanks were identified in this SDG.	✓			
Target compounds were detected in the field blanks.	✓			

VALIDATION FINDINGS WORKSHEET

METHOD: GC/MS BNA (EPA Method 8270)

A. Phenol	P. Bis(2-chloroethoxy)methane	EE. 2,6-Dinitrotoluene	TT. Pentachlorophenol	III. Benzo(a)pyrene
B. Bis (2-chloroethyl) ether	Q. 2,4-Dichlorophenol	FF. 3-Nitroaniline	UU. Phenanthrene	JJJ. Indeno(1,2,3-cd)pyrene
C. 2-Chlorophenol	R. 1,2,4-Trichlorobenzene	GG. Acenaphthene	VV. Anthracene	KKK. Dibenz(a,h)anthracene
D. 1,3-Dichlorobenzene	S. Naphthalene	HH. 2,4-Dinitrophenol	WW. Carbazole	LLL. Benzo(g,h,i)perylene
E. 1,4-Dichlorobenzene	T. 4-Chloroaniline	II. 4-Nitrophenol	XX. Di-n-butylphthalate	MMM. Bis(2-Chloroisopropyl)ether
F. 1,2-Dichlorobenzene	U. Hexachlorobutadiene	JJ. Dibenzofuran	YY. Fluoranthene	NNN. Aniline
G. 2-Methylphenol	V. 4-Chloro-3-methylphenol	KK. 2,4-Dinitrotoluene	ZZ. Pyrene	OOO. N-Nitrosodimethylamine
H. 2,2'-Oxybis(1-chloropropane)	W. 2-Methylnaphthalene	LL. Diethylphthalate	AAA. Butylbenzylphthalate	PPP. Benzoic Acid
I. 4-Methylphenol	X. Hexachlorocyclopentadiene	MM. 4-Chlorophenyl-phenyl ether	BBB. 3,3'-Dichlorobenzidine	QQQ. Benzyl alcohol
J. N-Nitroso-di-n-propylamine	Y. 2,4,6-Trichlorophenol	NN. Fluorene	CCC. Benzo(a)anthracene	RRR. Pyridine
K. Hexachloroethane	Z. 2,4,5-Trichlorophenol	OO. 4-Nitroaniline	DDD. Chrysene	SSS. Benzidine
L. Nitrobenzene	AA. 2-Chloronaphthalene	PP. 4,6-Dinitro-2-methylphenol	EEE. Bis(2-ethylhexyl)phthalate	TTT. 1-Methylnaphthalene
M. Isophorone	BB. 2-Nitroaniline	QQ. N-Nitrosodiphenylamine (1)	FFF. Di-n-octylphthalate	UUU.
N. 2-Nitrophenol	CC. Dimethylphthalate	RR. 4-Bromophenyl-phenylether	GGG. Benzo(b)fluoranthene	VVV.
O. 2,4-Dimethylphenol	DD. Acenaphthylene	SS. Hexachlorobenzene	HHH. Benzo(k)fluoranthene	WWW.

LDC #: 259/1J2C

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Page: 1 of 1
Reviewer: FT
2nd Reviewer: C

METHOD: GC/MS BNA (EPA SW 846 Method 8270)
Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a continuing calibration standard analyzed at least once every 12 hours of sample analysis for each instrument?
Y N N/A Were percent differences (%D) and relative response factors (RRF) within method criteria for all CCC's and SPCC's ?
Y N N/A Were all %D and RRFs within the validation criteria of ≤25 %D and ≥0.05 RRF ?

#	Date	Standard ID	Compound	Finding %D (Limit: ≤25.0%)	Finding RRF (Limit: ≥0.05)	Associated Samples	Qualifications
	3/3/11	ICV	SSS	26		all ~~water~~	J/UJ/A (C)
	3/9/11	CCV	T	29		all water	↓
	21:33						
	3/11/11	CCV	NNN	42		SBLKLA067,	↓
	11:17		T	32		1→7, 13, 14	
	3/11/11	CCV	NNN	35		8 → 11	↓
	23:57		T	31		↓	

CONCAL.2S

LDC #: 25911J2a

VALIDATION FINDINGS WORKSHEET
Field Blanks

Page: 6 of 1
Reviewer: FT
2nd Reviewer: A

METHOD: GC/MS BNA (EPA SW 846 Method 8270)
Y N N/A Were field blanks identified in this SDG?
Y N N/A Were target compounds detected in the field blanks?
Blank units: ug/L **Associated sample units:** ug/kg
Sampling date: 3/2/11
Field blank type: (circle one) Field Blank / Rinsate / Other: EB Associated Samples: all soil 5211 (ND + >10x)

Compound	Blank ID	Sample Identification								
	12									
Di-n-butylphthalate	0.34									
CRQL										

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
Common contaminants such as the phthalates and TICs noted above that were detected in samples within ten times the associated field blank concentration were qualified as not detected, "U". Other contaminants within five times the field blank concentration were also qualified as not detected, "U".

LDC #: 25911J2a

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Page: 1 of 1
Reviewer: FT
2nd Reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.

Y N N/A Was a MS/MSD analyzed every 20 samples of each matrix?

Y N N/A Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?

#	Date	MS/MSD ID	Compound	MS %R (Limits)	MSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
		13+14	NNN	( )	100 (35-95)	( )	5	J/A all (Q)
			SSS	19 (35-141)	18 (35-141)	( )	↓	J/W/A (Q)
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
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LDC #: 25911J2c

VALIDATION FINDINGS WORKSHEET
Laboratory Control Samples (LCS)

Page: 1 of 1
Reviewer: FT
2nd Reviewer: C

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a LCS required?

Y N N/A Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?

#	Date	LCS/LCSD ID	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
		062WAles/P	NNN	106 (49-101)	( )	( )	All water	J/Pdet (L)
				( )	( )	( )		
				( )	( )	( )		
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LDC #: 25911J29

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: FT
2nd Reviewer: C

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

$RRF = (A_x)(C_{is})/(A_{is})(C_x)$
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

A_x = Area of compound,
C_x = Concentration of compound,
S = Standard deviation of the RRFs,

A_{is} = Area of associated internal standard
C_{is} = Concentration of internal standard
X = Mean of the RRFs

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Reported RRF (50 std)	Recalculated RRF (50 std)	Reported Average RRF (initial)	Recalculated Average RRF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	3/3/11	Phenol (1st internal standard)	2.934	2.934	2.976	2.976	7	7
			~~Naphthalene~~ Nitrobenzene (2nd internal standard)	0.533	0.533	0.521	0.521	7	7
			~~Fluorene~~ 2,4-Dinitrophenol (3rd internal standard)	0.116	0.116	0.108	0.108	16	16
			Pentachlorophenol (4th internal standard)	0.096	0.096	0.091	0.091	13	13
			Bis(2-ethylhexyl)phthalate (5th internal standard)	1.013	1.013	0.946	0.946	12	12
			~~Benzo(a)pyrene~~ Di-n-octylphthalate (6th internal standard)	2.014	2.014	1.870	1.870	16	16
2			Phenol (1st internal standard)						
			Naphthalene (2nd internal standard)						
			Fluorene (3rd internal standard)						
			Pentachlorophenol (4th internal standard)						
			Bis(2-ethylhexyl)phthalate (5th internal standard)						
			Benzo(a)pyrene (6th internal standard)						
3			Phenol (1st internal standard)						
			Naphthalene (2nd internal standard)						
			Fluorene (3rd internal standard)						
			Pentachlorophenol (4th internal standard)						
			Bis(2-ethylhexyl)phthalate (5th internal standard)						
			Benzo(a)pyrene (6th internal standard)						

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25911J29

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: FT
2nd Reviewer: [illegible]

METHOD: GC/MS BNA (EPA SW 846 Method 8270C)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
RRF = $(A_x)(C_{is})/(A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Average RRF (initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
1	CCV	3/9/11	Phenol (1st internal standard)	2.976	2.612	2.612	12	12
	21:33		~~Naphthalene~~ Nitrobenzene (2nd internal standard)	0.521	0.488	0.488	6	6
			~~Fluorene~~ 2,4-Dinitrophenol (3rd internal standard)	0.108	0.132	0.132	7	7
			Pentachlorophenol (4th internal standard)	0.091	0.101	0.101	11	11
			Bis(2-ethylhexyl)phthalate (5th internal standard)	0.946	1.051	1.051	11	11
			~~Benzo(a)pyrene~~ Di-n-octyl phthalate (6th internal standard)	1.870	2.002	2.002	5	5
2	CCV	3/11/11	~~Phenol (1st internal standard)~~		2.823	2.823	5	5
	11:17		Naphthalene (2nd internal standard)		0.502	0.502	4	4
			Fluorene (3rd internal standard)		0.127	0.127	14	14
			Pentachlorophenol (4th internal standard)		0.098	0.098	8	8
			Bis(2-ethylhexyl)phthalate (5th internal standard)		0.990	0.990	5	5
			~~Benzo(a)pyrene (6th internal standard)~~		2.038	2.038	4	4
3			Phenol (1st internal standard)					
			Naphthalene (2nd internal standard)					
			Fluorene (3rd internal standard)					
			Pentachlorophenol (4th internal standard)					
			Bis(2-ethylhexyl)phthalate (5th internal standard)					
			Benzo(a)pyrene (6th internal standard)					

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25911129

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT
2nd reviewer: [illegible]

METHOD: GC/MS Semivolatiles (EPA SW 846 Method 8270)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5	100	82.589	83	83	0
2-Fluorobiphenyl	↓	91.227	91	91	↓
Terphenyl-d14	↓	80.583	81	81	↓
Phenol-d5	200	167.126	84	84	↓
2-Fluorophenol	↓	174.660	87	87	↓
2,4,6-Tribromophenol	↓	174.730	87	87	↓
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5					
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5					
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

LDC #: 25911J2a

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Reviewer: FT
2nd Reviewer: [illegible]

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SSC - SC)/SA Where: SSC = Spiked sample concentration; SA = Spike added; SC = Sample concentation

RPD = I MSC - MSC I * 2/(MSC + MSDC) MSC = Matrix spike concentration MSDC = Matrix spike duplicate concentration

MS/MSD samples: 13 + 14

Compound	Spike Added (ug/kg)		Sample Concentration (ug/kg)	Spiked Sample Concentration (ug/kg)		Matrix Spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	------	MS	MSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
Phenol	1666.67	1666.67	ND	1443.33	1490.93	87	87	89	89	3	3
N-Nitroso-di-n-propylamine				1380.13	1440.72	83	83	86	86	4	4
4-Chloro-3-methylphenol				1460.75	1499.28	88	88	90	90	3	3
Acenaphthene				1552.64	1548.49	93	93	93	93	0	0
Pentachlorophenol				1461.67	1461.44	88	88	88	88	0	0
Pyrene				1585.69	1670.77	95	95	100	100	5	5

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25911J29

VALIDATION FINDINGS WORKSHEET

Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: FT

2nd Reviewer: [illegible]

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SC/SA

Where: SSC = Spike concentration
SA = Spike added

RPD = I LCSC - LCSDC I * 2/(LCSC + LCSDC)

LCSC = Laboraotry control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCS/LCSD samples: LCS/D water

Compound	Spike Added (ug/L)		Spike Concentration (ug/L)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalculated
Phenol	50.0	50.0	16.71	15.68	33	33	31	31	6	6
N-Nitroso-di-n-propylamine	50.0	50.0	43.32	41.81	87	87	84	84	4	4
4-Chloro-3-methylphenol	↓	↓	44.36	43.58	89	89	87	87	2	2
Acenaphthene	NA									
Pentachlorophenol	50	50	42.57	44.37	85	85	89	89	4	4
Pyrene	NA									

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25911J2a

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: FT
2nd reviewer: C

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(V_t)(DF)(2.0)}{(A_{is})(RRF)(V_o)(V_i)(\%S)}$

A_x	=	Area of the characteristic ion (EICP) for the compound to be measured
A_{is}	=	Area of the characteristic ion (EICP) for the specific internal standard
I_s	=	Amount of internal standard added in nanograms (ng)
V_o	=	Volume or weight of sample extract in milliliters (ml) or grams (g).
V_i	=	Volume of extract injected in microliters (ul)
V_t	=	Volume of the concentrated extract in microliters (ul)
Df	=	Dilution Factor.
%S	=	Percent solids, applicable to soil and solid matrices only.
2.0	=	Factor of 2 to account for GPC cleanup

Example:

Sample I.D. #1, EEE

Conc. = (12109)(40)(1000)( )( )
(716180)(0.946)(30)(0.87)( )

=

27 ug/kg

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	March 2, 2011
LDC Report Date:	August 11, 2011
Matrix:	Soil/Water
Parameters:	Semivolatiles
Validation Level:	Level IV
Laboratory:	Lancaster laboratories
Sample Delivery Group (SDG):	DE095

Sample Identification

DUP-07-SA5A-QC-030211
SL-042-SA5A-SS-0.0-0.5
SL-044-SA5A-SS-0.0-0.5
SL-045-SA5A-SS-0.0-0.5
SL-048-SA5A-SS-0.0-0.5
SL-176-SA5A-SS-0.0-0.3
SL-178-SA5A-SS-0.0-0.4
SL-179-SA5A-SS-0.0-0.3
SL-186-SA5A-SS-0.0-0.5
SL-188-SA5A-SS-0.0-0.5
SL-189-SA5A-SS-0.0-0.5
EB05-SA5A-030211
SL-048-SA5A-SS-0.0-0.5MS
SL-048-SA5A-SS-0.0-0.5MSD

Introduction

This data review covers 13 soil samples and one water sample listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Semivolatiles.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 30.0% for all compounds.

In the case where the laboratory used a calibration curve to evaluate the compounds, all coefficients of determination (r^2) were greater than or equal to 0.990 .

Average relative response factors (RRF) for all compounds were within method and validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs) and 25.0% for all other compounds.

The percent differences (%D) of the second source calibration standard were less than or equal to 25.0% for all compounds.

All of the continuing calibration relative response factors (RRF) were within method and validation criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No semivolatile contaminants were found in the method blanks with the following exceptions:

Method Blank ID	Extraction Date	Compound TIC (RT in minutes)	Concentration	Associated Samples
SBLKWC063	3/4/11	Diethylphthalate Di-n-butylphthalate Bis(2-ethylhexyl)phthalate	0.05 ug/L 0.07 ug/L 0.13 ug/L	All water samples in SDG DE095

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated method blanks with the following exceptions:

Sample	Compound TIC (RT in minutes)	Reported Concentration	Modified Final Concentration
EB05-SA5A-030211	Diethylphthalate Di-n-butylphthalate Bis(2-ethylhexyl)phthalate	0.072 ug/L 0.34 ug/L 0.12 ug/L	1.1U ug/L 1.1U ug/L 1.1U ug/L

Sample EB05-SA5A-030211 was identified as an equipment blank. No semivolatile contaminants were found with the following exceptions:

Equipment Blank ID	Sampling Date	Compound	Concentration	Associated Samples
EB05-SA5A-030211	3/2/11	Di-n-butylphthalate Diethylphthalate Bis(2-ethylhexyl)phthalate	0.34 ug/L 0.072 ug/L 0.12 ug/L	All soil samples in SDG DE095

Sample concentrations were compared to concentrations detected in the field blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated field blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
SL-048-SA5A-SS-0.0-0.5MS/MSD (SL-048-SA5A-SS-0.0-0.5)	Bis(2-ethylhexyl)phthalate	168 (39-167)	-	-	J (all detects)	A

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

LCS ID (Associated Samples)	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Flag	A or P
063WLCS/D (All water samples in SDG DE095)	Acenaphthene	110 (74-109)	-	-	J (all detects)	P

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE095	All compounds reported below the RL.	J (all detects)	A

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was acceptable.

XV. Overall Assessment

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

Samples SL-048-SA5A-SS-0.0-0.5 and DUP-07-SA5A-QC-030211 were identified as field duplicates. No semivolatiles were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/Kg)		RPD (Limits)	Flags	A or P
	SL-048-SA5A-SS-0.0-0.5	DUP-07-SA5A-QC-030211			
Benzo(a)pyrene	1.9U	0.94	200 (≤50)	J (all detects) UJ (all non-detects)	A
Benzo(b)fluoranthene	2.9	5.3	59 (≤50)	J (all detects)	A
Di-n-butylphthalate	12	13	8 (≤50)	-	-
Chrysene	0.90	1.6	56 (≤50)	J (all detects)	A
Bis(2-ethylhexyl)phthalate	21U	7.6	200 (≤50)	J (all detects) UJ (all non-detects)	A
Fluoranthene	0.94	2.5	91 (≤50)	J (all detects)	A
Di-n-octylphthalate	12	12	0 (≤50)	-	-
Phenanthrene	1.9U	1.1	200 (≤50)	J (all detects) UJ (all non-detects)	A
Pyrene	1.9U	1.9	200 (≤50)	J (all detects) UJ (all non-detects)	A

Santa Susana Field Laboratory
Semivolatiles- Data Qualification Summary - SDG DE095

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE095	SL-048-SA5A-SS-0.0-0.5	Bis(2-ethylhexyl)phthalate	J (all detects)	A	Matrix spike/Matrix spike duplicate (%R) (Q)
DE095	EB05-SA5A-030211	Acenaphthene	J (all detects)	P	Laboratory control samples (%R) (L)
DE095	DUP-07-SA5A-QC-030211 SL-042-SA5A-SS-0.0-0.5 SL-044-SA5A-SS-0.0-0.5 SL-045-SA5A-SS-0.0-0.5 SL-048-SA5A-SS-0.0-0.5 SL-176-SA5A-SS-0.0-0.3 SL-178-SA5A-SS-0.0-0.4 SL-179-SA5A-SS-0.0-0.3 SL-186-SA5A-SS-0.0-0.5 SL-188-SA5A-SS-0.0-0.5 SL-189-SA5A-SS-0.0-0.5 EB05-SA5A-030211	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and RLs (Z)
DE095	SL-048-SA5A-SS-0.0-0.5 DUP-07-SA5A-QC-030211	Benzo(a)pyrene Bis(2-ethylhexyl)phthalate Phenanthrene Pyrene	J (all detects) UJ (all non-detects)	A	Field duplicates (RPD) (FD)
DE095	SL-048-SA5A-SS-0.0-0.5 DUP-07-SA5A-QC-030211	Benzo(b)fluoranthene Chrysene Fluoranthene	J (all detects) J (all detects) J (all detects)	A	Field duplicates (RPD) (FD)

Santa Susana Field Laboratory
Semivolatiles- Laboratory Blank Data Qualification Summary - SDG DE095

SDG	Sample	Compound TIC (RT in minutes)	Modified Final Concentration	A or P	Code
DE095	EB05-SA5A-030211	Diethylphthalate Di-n-butylphthalate Bis(2-ethylhexyl)phthalate	1.1U ug/L 1.1U ug/L 1.1U ug/L	A	B

Santa Susana Field Laboratory
Semivolatiles- Field Blank Data Qualification Summary - SDG DE095

No Sample Data Qualified in this SDG

LDC #: 25911J2b **VALIDATION COMPLETENESS WORKSHEET** Date: 8/10/11

SDG #: DE095 Level IV Page: 1 of 1

Laboratory: Lancaster Laboratories Reviewer:

2nd Reviewer:

METHOD: GC/MS P~~olynuclear Aromatic Hydrocarbons~~ SVOA (EPA SW 846 Method 8270C-SIM)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 3/2/11
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	A	% RSD ≤ 30, r²
IV.	Continuing calibration/ICV	A	ICV/CCV ≤ 25
V.	Blanks	SW	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	SW	
VIII.	Laboratory control samples	SW	LCS/D
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A	
XI.	Target compound identification	A	
XII.	Compound quantitation/CRQLs (RL)	A	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	A	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	SW	D = 1, 5
XVII.	Field blanks	SW	EB = 12

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: Soil + water

1	DUP-07-SA5A-QC-030211 D	11	SL-189-SA5A-SS-0.0-0.5	21	SBLKWC063	31	
2	SL-042-SA5A-SS-0.0-0.5	12	EB05-SA5A-030211 W	22	SBLKLD069	32	
3	SL-044-SA5A-SS-0.0-0.5	13	SL-048-SA5A-SS-0.0-0.5MS	23		33	
4	SL-045-SA5A-SS-0.0-0.5	14	SL-048-SA5A-SS-0.0-0.5MSD	24		34	
5	SL-048-SA5A-SS-0.0-0.5 D	15		25		35	
6	SL-176-SA5A-SS-0.0-0.3	16		26		36	
7	SL-178-SA5A-SS-0.0-0.4	17		27		37	
8	SL-179-SA5A-SS-0.0-0.3	18		28		38	
9	SL-186-SA5A-SS-0.0-0.5	19		29		39	
10	SL-188-SA5A-SS-0.0-0.5	20		30		40	

LDC #: 25911J2b

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer: A

Method: Semivolatiles (EPA SW 846 Method 8270C)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. GC/MS Instrument performance check				
Were the DFTPP performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
III. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Was a curve fit used for evaluation?	✓			
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?	✓			
Were all percent relative standard deviations (%RSD) ≤ 30% and relative response factors (RRF) > 0.05?	✓			
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓			
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Were all percent differences (%D) ≤ 25% and relative response factors (RRF) ≥ 0.05?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.	✓			
VI. Surrogate recoveries				
Were all surrogate %R within QC limits?	✓			
If 2 or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R?			✓	
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?			✓	
VII. Matrix spike/matrix spike duplicate				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?		✓		
VIII. Laboratory control sample				
Was an LCS analyzed for this SDG?	✓			

LDC #: 25911J2b

VALIDATION FINDINGS CHECKLIST

Reviewer: FT

2nd Reviewer: [illegible]

Validation Area	Yes	No	NA	Findings/Comments
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?		✓		
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
X. Internal Standards				
Were internal standard area counts within -50% or +100% of the associated calibration standard?	✓			
Were retention times within ± 30 seconds from the associated calibration standard?	✓			
XI. Target Compound Identification				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?	✓			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	✓			
Were chromatogram peaks verified and accounted for?	✓			
XII. Compound Quantitation				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	✓			
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XIII. Tentatively Identified Compounds				
Were the major ions (> 10 percent relative intensity) in the reference spectrum evaluated in sample spectrum?			✓	
Were relative intensities of the major ions within ± 20% between the sample and the reference spectra?			✓	
Did the raw data indicate that the laboratory performed a library search for all required peaks in the chromatograms (samples and blanks)?			✓	
XIV. System Performance				
System performance was found to be acceptable.	✓			
XV. Overall Assessment of Data				
Overall assessment of data was found to be acceptable.	✓			
XVI. Field Duplicates				
Field duplicate pairs were identified in this SDG.	✓			
Target compounds were detected in the field duplicates.	✓			
XVII. Field Blanks				
Field blanks were identified in this SDG.	✓			
Target compounds were detected in the field blanks.	✓			

VALIDATION FINDINGS WORKSHEET

METHOD: GC/MS BNA (EPA Method 8270)

A. Phenol	P. Bis(2-chloroethoxy)methane	EE. 2,6-Dinitrotoluene	TT. Pentachlorophenol	III. Benzo(a)pyrene
B. Bis (2-chloroethyl) ether	Q. 2,4-Dichlorophenol	FF. 3-Nitroaniline	UU. Phenanthrene	JJJ. Indeno(1,2,3-cd)pyrene
C. 2-Chlorophenol	R. 1,2,4-Trichlorobenzene	GG. Acenaphthene	VV. Anthracene	KKK. Dibenz(a,h)anthracene
D. 1,3-Dichlorobenzene	S. Naphthalene	HH. 2,4-Dinitrophenol	WW. Carbazole	LLL. Benzo(g,h,i)perylene
E. 1,4-Dichlorobenzene	T. 4-Chloroaniline	II. 4-Nitrophenol	XX. Di-n-butylphthalate	MMM. Bis(2-Chloroisopropyl)ether
F. 1,2-Dichlorobenzene	U. Hexachlorobutadiene	JJ. Dibenzofuran	YY. Fluoranthene	NNN. Aniline
G. 2-Methylphenol	V. 4-Chloro-3-methylphenol	KK. 2,4-Dinitrotoluene	ZZ. Pyrene	OOO. N-Nitrosodimethylamine
H. 2,2'-Oxybis(1-chloropropane)	W. 2-Methylnaphthalene	LL. Diethylphthalate	AAA. Butylbenzylphthalate	PPP. Benzoic Acid
I. 4-Methylphenol	X. Hexachlorocyclopentadiene	MM. 4-Chlorophenyl-phenyl ether	BBB. 3,3'-Dichlorobenzidine	QQQ. Benzyl alcohol
J. N-Nitroso-di-n-propylamine	Y. 2,4,6-Trichlorophenol	NN. Fluorene	CCC. Benzo(a)anthracene	RRR. Pyridine
K. Hexachloroethane	Z. 2,4,5-Trichlorophenol	OO. 4-Nitroaniline	DDD. Chrysene	SSS. Benzidine
L. Nitrobenzene	AA. 2-Chloronaphthalene	PP. 4,6-Dinitro-2-methylphenol	EEE. Bis(2-ethylhexyl)phthalate	TTT. 1-Methylnaphthalene
M. Isophorone	BB. 2-Nitroaniline	QQ. N-Nitrosodiphenylamine (1)	FFF. Di-n-octylphthalate	UUU.
N. 2-Nitrophenol	CC. Dimethylphthalate	RR. 4-Bromophenyl-phenylether	GGG. Benzo(b)fluoranthene	VVV.
O. 2,4-Dimethylphenol	DD. Acenaphthylene	SS. Hexachlorobenzene	HHH. Benzo(k)fluoranthene	WWW.

LDC #: 25911V2b

VALIDATION FINDINGS WORKSHEET
Blanks

Reviewer: FT
2nd Reviewer: C

METHOD: GC/MS BNA (EPA SW 846 Method 8270)
Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a method blank analyzed for each matrix?
Y N N/A Was a method blank analyzed for each concentration preparation level?
Y N N/A Was a method blank associated with every sample?
Y N N/A Was the blank contaminated? If yes, please see qualification below.

Blank extraction date: 3/4/11 **Blank analysis date:** 3/16/11
Conc. units: ug/L Associated Samples: All water

Compound	Blank ID	Sample Identification							
[redacted]	SBLKWC063	12							
LL	0.05	0.072/1.1U							
XX	0.07	0.34/1.1U							
EEE	0.13	0.12/1.1/U							

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
Common contaminants such as the phthalates and TICs noted above that were detected in samples within ten times the associated method blank concentration were qualified as not detected, "U". Other contaminants within five times the method blank concentration were also qualified as not detected, "U".

LDC #: 25911J2b

VALIDATION FINDINGS WORKSHEET
Field Blanks

Reviewer: FT
2nd Reviewer: [illegible]

METHOD: GC/MS BNA (EPA SW 846 Method 8270)
Y N N/A Were field blanks identified in this SDG?
Y N N/A Were target compounds detected in the field blanks?
Blank units: ug/L **Associated sample units:** ug/kg
Sampling date: 3/2/11
Field blank type: (circle one) Field Blank / Rinsate / Other: EB Associated Samples: All soils (ND + 10X)

Compound	Blank ID	Sample Identification								
	12	10X								
XX	0.34	3.4								
LL	0.072	0.72								
EEE	0.12	1.2								
CRQL										

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
Common contaminants such as the phthalates and TICs noted above that were detected in samples within ten times the associated field blank concentration were qualified as not detected, "U". Other contaminants within five times the field blank concentration were also qualified as not detected, "U".

LDC #: 25911J2b

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Reviewer: FT
2nd Reviewer: C

METHOD: GC/MS BNA (EPA SW 846 Method 8270)
Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.

Y N N/A Was a MS/MSD analyzed every 20 samples of each matrix?

Y N N/A Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?

#	Date	MS/MSD ID	Compound	MS %R (Limits)	MSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
		13 & 14	EEE	168 (39-167)	( )	( )	5	J/A all (Q)
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
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				( )	( )	( )		
				( )	( )	( )		

LDC #: 259/N26

VALIDATION FINDINGS WORKSHEET
Laboratory Control Samples (LCS)

Reviewer: FT
2nd Reviewer: [illegible]

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a LCS required?

Y N N/A Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?

#	Date	LCS/LCSD ID	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
		~~LCS/D water~~		( )	( )	( )		
		063W LCS/D	GG	110 (74-109)	( )	( )	All water	J/Pdet
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
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				( )	( )	( )		
				( )	( )	( )		

LDC#: 25911J2b **VALIDATION FINDINGS WORKSHEET**
Field Duplicates

Page: 1 of 1
Reviewer: FZ
2nd Reviewer: C

METHOD: SVOA (EPA Method 8270C-SIM)
Y N NA Were field duplicate pairs identified in this SDG?
Y N NA Were target analytes detected in the field duplicate pairs?

Compound	Concentration (ug/kg) 1	Concentration (ug/kg) 5	(≤50) RPD		
III	0.94	1.9U	200	J/UJ/A	(FD)
GGG	5.3	2.9	59	J det/A	
XX	13	12	8		
DDD	1.6	0.90	56		
EEE	7.6	21U	200	J/UJ/A	
YY	2.5	0.94	91	J det/A	
FFF	12	12	0		
UU	1.1	1.9U	200	J/UJ/A	
ZZ	1.9	1.9U	200		

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LDC #: 259/1126

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: FT
2nd Reviewer: [illegible]

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

RRF = $(A_x)(C_{is})/(A_{is})(C_x)$
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

A_x = Area of compound,
C_x = Concentration of compound,
S = Standard deviation of the RRFs,

A_{is} = Area of associated internal standard
C_{is} = Concentration of internal standard
X = Mean of the RRFs

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Reported RRF (1 std)	Recalculated RRF (1 std)	Reported Average RRF (initial)	Recalculated Average RRF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	3/15/11	~~Phenol (1st internal standard)~~						
	cc		Naphthalene (2nd internal standard)	0.932	0.932	0.942	0.942	8	8
			Fluorene (3rd internal standard)	1.313	1.313	1.282	1.282	3	3
			Anthracene ~~Pentachlorophenol~~ (4th internal standard)	1.119	1.119	1.061	1.061	6	6
			Chrysene ~~Bis(2-ethylhexyl)phthalate~~ (5th internal standard)	1.207	1.207	1.214	1.214	3	3
			Benzo(a)pyrene (6th internal standard)	1.591	1.591	1.586	1.586	2	2
2	ICAL	3/18/11	~~Phenol (1st internal standard)~~						
	ic		Naphthalene (2nd internal standard)	1.013	1.013	1.036	1.036	6	6
			Fluorene (3rd internal standard)	1.221	1.221	1.232	1.232	10	10
			Anthracene ~~Pentachlorophenol~~ (4th internal standard)	1.059	1.059	1.069	1.069	14	14
			Chrysene ~~Bis(2-ethylhexyl)phthalate~~ (5th internal standard)	1.143	1.143	1.166	1.166	6	6
			Benzo(a)pyrene (6th internal standard)	1.342	1.342	1.349	1.349	11	11
3			Phenol (1st internal standard)						
			Naphthalene (2nd internal standard)						
			Fluorene (3rd internal standard)						
			Pentachlorophenol (4th internal standard)						
			Bis(2-ethylhexyl)phthalate (5th internal standard)						
			Benzo(a)pyrene (6th internal standard)						

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25911026

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Page: 1 of 1
Reviewer: FT
2nd Reviewer: CN

METHOD: GC/MS BNA (EPA SW 846 Method 8270C)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
RRF = $(A_x)(C_{is})/(A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Average RRF (initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
1	CCV	3/18/11	~~Phenol (1st internal standard)~~					
	14:29		Naphthalene (2nd internal standard)	1.036	1.007	1.007	3	3
			Fluorene (3rd internal standard)	1.232	1.208	1.208	2	2
			~~Pentachlorophenol~~ Anthracene (4th internal standard)	1.069	1.044	1.044	2	2
			~~Bis(2-ethylhexyl)phthalate~~ Chrysene (5th internal standard)	1.166	1.145	1.145	2	2
			Benzo(a)pyrene (6th internal standard)	1.349	1.356	1.356	0	0
2	CCV	3/19/11	~~Phenol (1st internal standard)~~					
	5:50		Naphthalene (2nd internal standard)		0.995	0.995	4	4
			~~Fluorene~~ Fluorene (3rd internal standard)		1.260	1.260	2	2
			~~Pentachlorophenol~~ Anthracene (4th internal standard)		1.127	1.127	5	5
			~~Bis(2-ethylhexyl)phthalate~~ Chrysene (5th internal standard)		1.146	1.146	2	2
			Benzo(a)pyrene (6th internal standard)		1.394	1.394	3	3
3			Phenol (1st internal standard)					
			Naphthalene (2nd internal standard)					
			Fluorene (3rd internal standard)					
			Pentachlorophenol (4th internal standard)					
			Bis(2-ethylhexyl)phthalate (5th internal standard)					
			Benzo(a)pyrene (6th internal standard)					

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25911J2b

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT
2nd reviewer: A

METHOD: GC/MS Semivolatiles (EPA SW 846 Method 8270)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5	1.0	0.963	96	96	0
2-Fluorobiphenyl	↓	0.875	88	88	↓
Terphenyl-d14	↓	0.923	92	92	↓
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5					
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5					
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

LDC #: 25 9 / N 8 P

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Reviewer: FT
2nd Reviewer: [illegible]

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SSC - SC)/SA Where: SSC = Spiked sample concentration; SA = Spike added; SC = Sample concentation

RPD = I MSC - MSC I * 2/(MSC + MSDC) MSC = Matrix spike concentration MSDC = Matrix spike duplicate concentration

MS/MSD samples: 13 + 14

Compound	Spike Added (ug/Kg)		Sample Concentration (ug/Kg)	Spiked Sample Concentration (ug/Kg)		Matrix Spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	-----	MS	MSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
Phenol											
N-Nitroso-di-n-propylamine											
4-Chloro-3-methylphenol											
Acenaphthene	33.33	33.33	ND	32.41	31.5	97	97	94	94	3	3
Pentachlorophenol											
Pyrene	↓	↓	ND	33.09	31.95	99	99	96	96	4	4

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25911J2b

VALIDATION FINDINGS WORKSHEET

Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: FT

2nd Reviewer: [illegible]

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SC/SA

Where: SSC = Spike concentration
SA = Spike added

RPD = I LCSC - LCSDC I * 2/(LCSC + LCSDC)

LCSC = Laboraotry control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCS/LCSD samples: 069LCS

Compound	Spike Added (ug/kg)		Spike Concentration (ug/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalculated
Phenol										
N-Nitroso-di-n-propylamine										
4-Chloro-3-methylphenol										
Acenaphthene	33.33	NA	30.31	NA	91	91				
Pentachlorophenol										
Pyrene	↓	↓	31.92	↓	96	96	NA			

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25911J26

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: FT
2nd reviewer: A

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(V_t)(DF)(2.0)}{(A_{is})(RRF)(V_o)(V_i)(\%S)}$

A_x	=	Area of the characteristic ion (EICP) for the compound to be measured
A_{is}	=	Area of the characteristic ion (EICP) for the specific internal standard
I_s	=	Amount of internal standard added in nanograms (ng)
V_o	=	Volume or weight of sample extract in milliliters (ml) or grams (g).
V_i	=	Volume of extract injected in microliters (ul)
V_t	=	Volume of the concentrated extract in microliters (ul)
Df	=	Dilution Factor.
%S	=	Percent solids, applicable to soil and solid matrices only.
2.0	=	Factor of 2 to account for GPC cleanup

Example:

Sample I.D. #1, YY:

Conc. = $\frac{(29304)(1.0)(1000)(\quad)(\quad)}{(38127)(1.19)(30)(0.87)(\quad)}$

= 2.47 ug/kg

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: March 2, 2011

LDC Report Date: August 11, 2011

Matrix: Soil/Water

Parameters: Chlorinated Pesticides

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE095

Sample Identification

DUP-07-SA5A-QC-030211
SL-042-SA5A-SS-0.0-0.5
SL-044-SA5A-SS-0.0-0.5
SL-045-SA5A-SS-0.0-0.5
SL-048-SA5A-SS-0.0-0.5
SL-176-SA5A-SS-0.0-0.3
SL-178-SA5A-SS-0.0-0.4
SL-179-SA5A-SS-0.0-0.3
SL-186-SA5A-SS-0.0-0.5
SL-188-SA5A-SS-0.0-0.5
SL-189-SA5A-SS-0.0-0.5
EB05-SA5A-030211
SL-048-SA5A-SS-0.0-0.5MS
SL-048-SA5A-SS-0.0-0.5MSD

Introduction

This data review covers 13 soil samples and one water sample listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8081A for Chlorinated Pesticides.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/ECD Instrument Performance Check

Instrument performance was acceptable unless noted otherwise under initial calibration and continuing calibration sections.

III. Initial Calibration

Initial calibration of single compounds was performed for the primary (quantitation) column and confirmation column as required by this method.

The percent relative standard deviations (%RSD) were less than or equal to 20.0% for all compounds with the following exceptions:

Date	Column	Compound	%RSD	Associated Samples	Flag	A or P
2/24/11	RTX-CLPII	Dieldrin	23.8	All water samples in SDG DE095	J (all detects) UJ (all non-detects)	A

Retention time windows were evaluated and considered technically acceptable.

IV. Continuing Calibration

Continuing calibration was performed at required frequencies.

The percent differences (%D) of calibration factors in continuing standard mixtures were within the 20.0% QC limits with the following exceptions:

Date	Standard	Column	Compound	%D	Associated Samples	Flag	A or P
3/4/11	CCV	RTX-CLPII	Dieldrin	31.9	All water samples in SDG DE095	J (all detects) UJ (all non-detects)	A
3/23/11 (6:56)	CCV	RTX-CLP1	Mirex	35.6	SL-179-SA5A-SS-0.0-0.3 SL-186-SA5A-SS-0.0-0.5 SL-188-SA5A-SS-0.0-0.5 SL-189-SA5A-SS-0.0-0.5	J (all detects) UJ (all non-detects)	P
3/23/11 (6:56)	CCV	RTX-CLP2	Mirex	29.8	SL-179-SA5A-SS-0.0-0.3 SL-186-SA5A-SS-0.0-0.5 SL-188-SA5A-SS-0.0-0.5 SL-189-SA5A-SS-0.0-0.5	J (all detects) UJ (all non-detects)	P

Date	Standard	Column	Compound	%D	Associated Samples	Flag	A or P
3/23/11 (7:10)	CCV	RTX-CLP1	Toxaphene	42.8	SL-179-SA5A-SS-0.0-0.3 SL-186-SA5A-SS-0.0-0.5 SL-188-SA5A-SS-0.0-0.5 SL-189-SA5A-SS-0.0-0.5	J (all detects) UJ (all non-detects)	P
3/23/11 (7:10)	CCV	RTX-CLP2	Toxaphene	33.7	SL-179-SA5A-SS-0.0-0.3 SL-186-SA5A-SS-0.0-0.5 SL-188-SA5A-SS-0.0-0.5 SL-189-SA5A-SS-0.0-0.5	J (all detects) UJ (all non-detects)	P
3/23/11 (7:24)	CCV	RTX-CLP1	Chlordane	23.8	SL-179-SA5A-SS-0.0-0.3 SL-186-SA5A-SS-0.0-0.5 SL-188-SA5A-SS-0.0-0.5 SL-189-SA5A-SS-0.0-0.5	J (all detects) UJ (all non-detects)	P
3/23/11 (6:43)	CCV	RTX-CLP1	alpha-BHC gamma-BHC beta-BHC delta-BHC Heptachlor Aldrin Heptachlor epoxide 4,4'-DDE Endosulfan I Dieldrin Endrin 4,4'-DDD Endosulfan II 4,4'-DDT Endrin aldehyde Methoxychlor Endosulfan sulfate Endrin ketone	22.7 26.9 31.9 27.1 34.8 35.8 36.2 37.0 41.6 38.9 42.9 31.6 21.9 50.9 36.9 42.5 37.1 29.4	SL-179-SA5A-SS-0.0-0.3 SL-186-SA5A-SS-0.0-0.5 SL-188-SA5A-SS-0.0-0.5 SL-189-SA5A-SS-0.0-0.5	J (all detects) UJ (all non-detects)	P
3/23/11 (6:43)	CCV	RTX-CLP2	Heptachlor epoxide Endosulfan I 4,4'-DDE Dieldrin Endrin 4,4'-DDD Endosulfan II 4,4'-DDT Endrin aldehyde Endosulfan sulfate Methoxychlor Endrin ketone	24.1 31.6 28.7 31.1 36.5 24.0 31.5 47.7 40.9 32.5 44.4 31.7	SL-179-SA5A-SS-0.0-0.3 SL-186-SA5A-SS-0.0-0.5 SL-188-SA5A-SS-0.0-0.5 SL-189-SA5A-SS-0.0-0.5	J (all detects) UJ (all non-detects)	P

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds with the following exceptions:

Date	Standard	Column	Compound	%D	Associated Samples	Flag	A or P
2/24/11	ICV	RTX-CLPII	Dieldrin	34.3	All water samples in SDG DE095	J (all detects) UJ (all non-detects)	A

Retention times (RT) of all compounds in the calibration standards were within QC limits.

The individual 4,4'-DDT and Endrin breakdowns (%BD) were less than or equal to 15.0% .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No chlorinated pesticide contaminants were found in the method blanks.

No field blanks were identified in this SDG.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits with the following exceptions:

Sample	Column	Surrogate	%R (Limits)	Compound	Flag	A or P
SL-044-SA5A-SS-0.0-0.5	Not specified	Decachlorobiphenyl	169 (20-120)	All TCL compounds except 4,4'-DDT	J (all detects)	A
SL-188-SA5A-SS-0.0-0.5	Not specified	Decachlorobiphenyl	165 (20-120)	All TCL compounds	J (all detects)	A
SL-189-SA5A-SS-0.0-0.5	Not specified	Decachlorobiphenyl	286 (20-120)	All TCL compounds	J (all detects)	A

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limit.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Florisil Cartridge Check

Florisil cleanup was not required and therefore not performed in this SDG.

XI. GPC Calibration

GPC cleanup was not required and therefore not performed in this SDG.

XII. Target Compound Identification

All target compound identifications were within validation criteria.

XIII. Compound Quantitation and Reported CRQLs

All compound quantitation and CRQLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE095	All compounds reported below the RL.	J (all detects)	A

XIV. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XV. Field Duplicates

Samples DUP-07-SA5A-QC-030211 and SL-048-SA5A-SS-0.0-0.5 were identified as field duplicates. No chlorinated pesticides were detected in any of the samples.

Santa Susana Field Laboratory
Chlorinated Pesticides - Data Qualification Summary - SDG DE095

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE095	EB05-SA5A-030211	Dieldrin	J (all detects) UJ (all non-detects)	A	Initial calibration (%RSD) (C)
DE095	EB05-SA5A-030211	Dieldrin	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D) (C)
DE095	SL-179-SA5A-SS-0.0-0.3 SL-186-SA5A-SS-0.0-0.5 SL-188-SA5A-SS-0.0-0.5 SL-189-SA5A-SS-0.0-0.5	Mirex Toxaphene Chlordane alpha-BHC gamma-BHC beta-BHC delta-BHC Heptachlor Aldrin Heptachlor epoxide 4,4'-DDE Endosulfan I Dieldrin Endrin 4,4'-DDD Endosulfan II 4,4'-DDT Endrin aldehyde Methoxychlor Endosulfan sulfate Endrin ketone	J (all detects) UJ (all non-detects)	P	Continuing calibration (%D) (C)
DE095	EB05-SA5A-030211	Dieldrin	J (all detects) UJ (all non-detects)	A	Continuing calibration (ICV %D) (C)
DE095	SL-044-SA5A-SS-0.0-0.5	All TCL compounds except 4,4'-DDT	J (all detects)	A	Surrogate spikes (%R) (S)
DE095	SL-188-SA5A-SS-0.0-0.5 SL-189-SA5A-SS-0.0-0.5	All TCL compounds	J (all detects)	A	Surrogate spikes (%R) (S)
DE095	DUP-07-SA5A-QC-030211 SL-042-SA5A-SS-0.0-0.5 SL-044-SA5A-SS-0.0-0.5 SL-045-SA5A-SS-0.0-0.5 SL-048-SA5A-SS-0.0-0.5 SL-176-SA5A-SS-0.0-0.3 SL-178-SA5A-SS-0.0-0.4 SL-179-SA5A-SS-0.0-0.3 SL-186-SA5A-SS-0.0-0.5 SL-188-SA5A-SS-0.0-0.5 SL-189-SA5A-SS-0.0-0.5 EB05-SA5A-030211	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
Chlorinated Pesticides - Laboratory Blank Data Qualification Summary - SDG DE095

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Chlorinated Pesticides - Field Blank Data Qualification Summary - SDG DE095

No Sample Data Qualified in this SDG

LDC #: 25911J3a

SDG #: DE095

Laboratory: Lancaster Laboratories

VALIDATION COMPLETENESS WORKSHEET

Level IV

Date: 8/11/11

Page: 1 of 1

Reviewer:

2nd Reviewer:

METHOD: GC Chlorinated Pesticides (EPA SW846 Method 8081A)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 3/2/11
II.	GC/ECD Instrument Performance Check	A	
III.	Initial calibration	SW	% RSD ≤ 20
IV.	Continuing calibration/ICV	SW	ICV/CCV ≤ 20
V.	Blanks	A	
VI.	Surrogate spikes	SW	
VII.	Matrix spike/Matrix spike duplicates	A	
VIII.	Laboratory control samples	A	LCS ID
IX.	Regional quality assurance and quality control	N	
X.	Florisil cartridge check	N	
XI.	GPC Calibration	N	
XII.	Target compound identification	A	
XIII.	Compound quantitation and reported CRQLs	A	
XIV.	Overall assessment of data	A	
XV.	Field duplicates	ND	D = 1,5
XVI.	Field blanks	ND	EB = 12

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: SOIL + water

1	DUP-07-SA5A-QC-030211	11	SL-189-SA5A-SS-0.0-0.5	21	PBLK 28069	31	787
2	SL-042-SA5A-SS-0.0-0.5	12	EB05-SA5A-030211 W	22	PBLK 22062	32	788
3	SL-044-SA5A-SS-0.0-0.5	13	SL-048-SA5A-SS-0.0-0.5MS	23		33	789
4	SL-045-SA5A-SS-0.0-0.5	14	SL-048-SA5A-SS-0.0-0.5MSD	24		34	
5	SL-048-SA5A-SS-0.0-0.5	15		25		35	
6	SL-176-SA5A-SS-0.0-0.3	16		26		36	
7	SL-178-SA5A-SS-0.0-0.4	17		27		37	
8	SL-179-SA5A-SS-0.0-0.3	18		28		38	
9	SL-186-SA5A-SS-0.0-0.5	19		29		39	
10	SL-188-SA5A-SS-0.0-0.5	20		30		40	800

Notes:

LDC #: 25911J3a
SDG #: see cover

VALIDATION FINDINGS CHECKLIST

Page: 1 of 2
Reviewer: [illegible]
2nd Reviewer: [illegible]

Method: Pesticides/PCBs (EPA SW 846 Method 8081/8082)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. GC/ECD Instrument performance check				
Was the instrument performance found to be acceptable?	✓			
III. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Was a linear fit used for evaluation? If yes, were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation? If Yes, what was the acceptance criteria used?		✓		
Did the initial calibration meet the curve fit acceptance criteria?			✓	
Were the RT windows properly established?	✓			
Were the required standard concentrations analyzed in the initial calibration?	✓			
IV. Continuing calibration				
What type of continuing calibration calculation was performed? ____%D or ____%R	✓			
Were Evaluation mix standards analyzed prior to the initial calibration and sample analysis?	✓			
Were endrin and 4,4'-DDT breakdowns ≤ 15%.0 for individual breakdown in the Evaluation mix standards?	✓			
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ ~~15%.0~~ 20 or percent recovieries ~~85-115%~~ 80-120?		✓		
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Were extract cleanup blanks analyzed with every batch requiring clean-up?			✓	
Was there contamination in the method blanks or clean-up blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?		✓		
If the percent recovery (%R) of one or more surrogates was outside QC limits, was a reanalysis performed to confirm %R?	✓			
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?			✓	

LDC #: 25911J3a
SDG #: all cones

VALIDATION FINDINGS CHECKLIST

Reviewer: M
2nd Reviewer: A

Validation Area	Yes	No	NA	Findings/Comments
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?	✓			
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
X. Target compound identification				
Were the retention times of reported detects within the RT windows?	✓			
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions, dry weight factors, and clean-up activities applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.	✓			
Target compounds were detected in the field duplicates.		✓		
XV. Field blanks				
Field blanks were identified in this SDG.	✓			
Target compounds were detected in the field blanks.		✓		

VALIDATION FINDINGS WORKSHEET

METHOD: Pesticide/PCBs (EPASW 846 Method 8081/8082)

A. alpha-BHC	I. Dieldrin	Q. Endrin ketone	Y. Aroclor-1242	GG.
B. beta-BHC	J. 4,4'-DDE	R. Endrin aldehyde	Z. Aroclor-1248	HH.
C. delta-BHC	K. Endrin	S. alpha-Chlordane	AA. Aroclor-1254	II.
D. gamma-BHC	L. Endosulfan II	T. gamma-Chlordane	BB. Aroclor-1260	JJ.
E. Heptachlor	M. 4,4'-DDD	U. Toxaphene	CC. DB 608	KK.
F. Aldrin	N. Endosulfan sulfate	V. Aroclor-1016	DD. DB 1701	LL.
G. Heptachlor epoxide	O. 4,4'-DDT	W. Aroclor-1221	EE.	MM.
H. Endosulfan I	P. Methoxychlor	X. Aroclor-1232	FF.	NN.

Notes:_____

LDC #: 2591J3a
SDG #: see cover

METHOD: ✓ GC __ HPLC

VALIDATION FINDINGS WORKSHEET
Initial Calibration

Reviewer: FT
2nd Reviewer: [illegible]

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a 5 point calibration curve performed?
Y N N/A Was a linear fit used for evaluation? If yes, the acceptance criteria for each compound is %RSD less than or equal to 20.0%.
Y N N/A Was a curve fit used for evaluation? If yes, what was the acceptance criteria used for evaluation? _____
Y N N/A Did the initial calibration meet the acceptance criteria?
Y N N/A Was initial calibration performed at the required frequency?

Level IV Only

Y N N/A Were the retention time windows properly established for all compounds?
Y N N/A Were compounds run at the required concentrations in the initial calibrations?

#	Date	Standard ID	Column / Detector	Compound	Finding RPD Limit ≤20%	Associated Samples	Qualifications
	2/24/11	ICAL	RTXCLPII	I	23.8	All water	J/UJ/A (C)
	~~2/24/11~~	~~ICV~~	↓	~~I~~	~~34.3~~		

Comments _____

LDC #: 25911J3a

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Page: 1 of 1
Reviewer: FT

METHOD: ✓ GC __ HPLC

2nd Reviewer: A

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".
What type of continuing calibration calculation was performed? __%D or __RPD
Y N N/A Were continuing calibration standards analyzed at the required frequencies?
Y N N/A Did the continuing calibration standards meet the %D / RPD validation criteria of ≤20.0%?
Level IV Only
Y N N/A Were the retention times for all calibrated compounds within their respective acceptance windows?

#	Date	Standard ID	Detector/ Column	Compound	%D (Limit ≤ 20.0)	RT (limit)	Associated Samples	Qualifications
	3/24/11	ICV	RTX CLP II	I	34.3	( )	All water	J/UJ/A (C)
						( )		
						( )		
						( )		
	3/4/11 15:05	CCV	RTX CLP II	I	31.9	( )	↓	↓
						( )		
						( )		
						( )		
						( )		
	3/23/11 6:52	CCV	RTX CLP1	Mirex	35.6	( )	8 → 11	J/UJ/P (C)
			RTX CLP2	↓	29.8	( )	↓	↓
						( )		
						( )		
	3/23/11 7:10	CCV	RTX CLP1	U	42.8	( )	↓	↓ (C)
			RTX CLP2	↓	33.7	( )		
						( )		
						( )		
	3/23/11 7:24	CCV	RTX CLP1	chlordane	23.8	( )	↓	↓ (C)
			~~RTX CLP2~~			( )		
						( )		
						( )		
						( )		
						( )		
						( )		

LDC #: 2591W3a

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Page: 1 of 1
Reviewer: FT
2nd Reviewer: [illegible]

METHOD: ✓ GC __ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".
What type of continuing calibration calculation was performed? __%D or __RPD
Y N N/A Were continuing calibration standards analyzed at the required frequencies?
Y N N/A Did the continuing calibration standards meet the %D / RPD validation criteria of ≤20.0%?
Level IV Only
Y N N/A Were the retention times for all calibrated compounds within their respective acceptance windows?

#	Date	Standard ID	Detector/ Column	Compound	%D (Limit ≤ 20.0)	RT (limit)	Associated Samples	Qualifications
	3/23/11	CCV	RTX CLP1	A	22.7	( )	8 → 11	J/UJ/P (C)
	6:43			D	26.9	( )		
				B	31.9	( )		
				C	27.1	( )		
				E	34.8	( )		
				F	35.8	( )		
				G	36.2	( )		
++				J	37.0	( )		
				H	41.6	( )		
+-				I	38.9	( )		
				K	42.9	( )		
				M	31.6	( )		
				L	21.9	( )		
				O	50.9	( )		
				R	36.9	( )		
				P	42.5	( )		
				N	37.1	( )		
				Q	29.4	( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		

LDC #: 2591N3a

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Page: 1 of 1
Reviewer: FT

METHOD: ✓ GC __ HPLC

2nd Reviewer: C

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".
What type of continuing calibration calculation was performed? __%D or __RPD
Y N N/A Were continuing calibration standards analyzed at the required frequencies?
Y N N/A Did the continuing calibration standards meet the %D / RPD validation criteria of ≤20.0%?
Level IV Only
Y N N/A Were the retention times for all calibrated compounds within their respective acceptance windows?

#	Date	Standard ID	Detector/ Column	Compound	%D (Limit ≤ 20.0)	RT (limit)	Associated Samples	Qualifications
	3/23/11	CCV	RTXCLP2	G	24.1	( )	8 → 11	J/UJ/A (C)
	6:43			H	31.6	( )		
				J	28.7	( )		
				I	31.1	( )		
				K	36.5	( )		
				M	24.0	( )		
				L	31.5	( )		
				O	47.7	( )		
				R	40.9	( )		
				N	32.5	( )		
				P	44.4	( )		
				Q	31.7	( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		

LDC #: 259/W3a

VALIDATION FINDINDS WORKSHEET
Surrogate Recovery

Reviewer: FT
2nd Reviewer: A

METHOD: ✓ GC __ HPLC

Are surrogates required by the method? Yes____ or No____.

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were surrogates spiked into all samples and blanks?

Y N N/A Did all surrogate recoveries (%R) meet the QC limits?

(S)

#	Sample ID	Detector/ Column	Surrogate Compound	%R (Limits)	Qualifications
	2, 6, 7, 8	NS	surrogate outside limit	( )	no qual ≥ 5x PL
				( )	
				( )	
	3	~~X~~ NS	~~169~~ O	169 (20-120)	J/A det all except O
				( )	
				( )	
	10	↓	O	165 (20-120)	J/A det all TCL
				( )	
				( )	
	11	↓	O	286 (20-120)	J/A det all TCL
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	

	Surrogate Compound		Surrogate Compound		Surrogate Compound		Surrogate Compound		
A	Chlorobenzene (CBZ)	G	Octacosane	M	Benzo(e)Pyrene	S	1-Chloro-3-Nitrobenzene	Y	Tetrachloro-m- xylene
B	4-Bromofluorobenzene (BFB)	H	Ortho-Terphenyl	N	Terphenyl-D14	T	3,4-Dinitrotoluene		
C	a,a,a-Trifluorotoluene	I	Fluorobenzene (FBZ)	O	Decachlorobiphenyl (DCB)	U	Tripentyltin		
D	Bromochlorobenene	J	n-Triacontane	P	1-methylnaphthalene	V	Tri-n-propyltin		
E	1,4-Dichlorobutane	K	Hexacosane	Q	Dichlorophenyl Acetic Acid (DCAA)	W	Tributyl Phosphate		
F	1,4-Difluorobenzene (DFB)	L	Bromobenzene	R	4-Nitrophenol	X	Triphenyl Phosphate		

LDC #: 25911U3a
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC ✓ HPLC ____

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

#	Standard ID	Calibration Date	Compound	Reported CF (10/std)	Recalculated CF (10/std)	Reported Average CF (initial)	Recalculated Average CF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL ICSDS	2/24/11	endosulfan I RTX CLP1	2.63×10^3	2.63×10^3	2.71×10^3	2.71×10^3	8.5	8.5
			Methoxychlor	8.19×10^2	8.19×10^2	8.23×10^2	8.23×10^2	8.4	8.4
2			↓ RTX CLP2	6.33×10^3	6.33×10^3	6.07×10^3	6.07×10^3	3.3	3.3
			↓	2.18×10^3	2.18×10^3	2.07×10^3	2.07×10^3	4.7	4.7
3	ICAL IP10080	3/21/11	↓ RTX CLP1	4.35×10^3	4.35×10^3	4.48×10^3	4.48×10^3	8.0	8.0
			↓	1.47×10^3	1.47×10^3	1.51×10^3	1.51×10^3	9.7	9.7
4			↓ RTX CLP2	1.88×10^3	1.88×10^3	2.01×10^3	2.01×10^3	8.2	8.2
			↓	7.24×10^2	7.24×10^2	7.49×10^2	7.49×10^2	9.0	9.0

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25911J3a
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer:
2nd Reviewer:

METHOD: GC ✓ HPLC

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

#	Standard ID	Calibration Date	Compound	Reported CF (10/10 std)	Recalculated CF (10/10 std)	Reported Average CF (initial)	Recalculated Average CF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL IP100X1	3/22/11	endosulfan RTX dup1	4.21×10^3	4.21×10^3	4.52×10^3	4.52×10^3	6.9	6.9
			methoxychlor	1.58×10^3	1.58×10^3	1.67×10^3	1.67×10^3	8.3	8.3
2			↓ RTX CLP2	1.94×10^3	1.94×10^3	2.13×10^3	2.13×10^3	8.5	8.5
				8.02×10^2	8.02×10^2	8.48×10^2	8.48×10^2	9.6	9.6
3									
4									

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

INICI C ISB

LDC #: 25911J3a
SDG #: per cover

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Page: 1 of 1
Reviewer:
2nd Reviewer:

METHOD: GC ✓ HPLC_____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF - CF)/ave. CF
CF = A/C

Where: ave. CF = initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound		Average CF(Ical)/ CCV Conc.	Reported CF/Conc. CCV	Recalculated CF/Conc. CCV	Reported %D	Recalculated %D
1	ccv 15:05	3/4/11	endosulfan I	RTX cvp1	10.0	9.45	9.45	5.5	5.5
			methoxychlor	↓	100	83.77	83.77	16.2	16.2
			↓	RTX cvp2	↓	10.80	10.80	8.0	8.0
2			↓		↓	99.13	99.13	0.9	0.9
	ccv 14:00	3/21/11	↓	RTX cvp1	10.0	10.08	10.08	0.8	0.8
			↓	↓	100.0	95.85	95.85	4.2	4.2
3			↓	RTX cvp2	10.0	9.93	9.93	0.7	0.7
			↓		100	95.15	95.15	4.8	4.8
	cc 6:43	3/23/11	↓	RTX cvp1	10	5.84	5.84	41.6	41.6
4			↓	↓	100	57.48	57.48	42.5	42.6
			↓	RTX cvp2	10	6.84	6.84	31.6	31.6
			↓		100	55.62	55.62	44.4	44.4

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25 7115 39
SDG #: per cover

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Page: 1 of 1
Reviewer: [illegible]
2nd reviewer: [illegible]

METHOD: GC Pesticides/PCBs (EPA SW 846 Method 8081/8082)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
Tetrachloro-m-xylene						
Tetrachloro-m-xylene	RTXcrp2	1.04	0.80926	78	77.9	0
Decachlorobiphenyl	↓	1.04	1.157846	111	111.2	0
Decachlorobiphenyl						

Sample ID:

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
Tetrachloro-m-xylene						
Tetrachloro-m-xylene						
Decachlorobiphenyl						
Decachlorobiphenyl						

Sample ID:

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
Tetrachloro-m-xylene						
Tetrachloro-m-xylene						
Decachlorobiphenyl						
Decachlorobiphenyl						

Sample ID:

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
Tetrachloro-m-xylene						
Tetrachloro-m-xylene						
Decachlorobiphenyl						
Decachlorobiphenyl						

Notes:

LDC #: 2591J3a
SDG #: per cover

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC Pesticides/PCBs (EPA SW 846 Method 8081/8082)

The percent recoveries (%R) and Relative Percent difference (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100* (SSC-SC)/SA

Where: SSC = Spiked sample concentration; SA = Spike added; SC = Concentration

RPD = I MS - MSD I * 2/(MS + MSD)

MS = Matrix spike percent recovery; MSD = Matrix spike duplicate percent recovery

MS/MSD samples: 13+14

Compound	Spike Added (ug/kg)		Sample Concentration (ug/kg)	Spiked Sample Concentration (ug/kg)		Matrix Spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	-	MS	MSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalculated
gamma-BHC	0.33	0.33	ND	0.35	0.35	106	106	106	106	0	0
4,4'-DDT	0.65	0.65	ND	0.93	0.94	143	143	145	145	1	1

Comments: Refer ot Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25911N3a
SDG #: per cover

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC Pesticides/PCBs (EPA SW 846 Method 8081/8082)

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100* (SSC-SC)/SA

Where: SSC = Spiked sample concentration; SA = Spike added; SC = Concentration

RPD = I LCS - LCSD I * 2/(LCS + LCSD)

LCS = Laboratory control sample percent recovery; LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: LCS SOIL

Compound	Spike Added (ug/kg)		Spiked Sample Concentration (ug/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
gamma-BHC	0.33	NA	0.38	NA	115	115				
4,4'-DDT	0.65	↓	0.84	↓	129	129	NA			

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 259/N3C
SDG #: per cover

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: P
2nd reviewer: A

METHOD: GC Pesticides/PCBs (EPA SW 846 Method 8081/8082)

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Example:

Sample I.D. #2 Delta BHC

$$\text{Conc.} = \frac{(8055)(10000)(0.4)}{(5.10 \times 10^{3})(60.2)(0.812)(1000)}$$

=

0.13 ug/kg

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification

Note:

C:\WPDOCS\WRK\PEST\RECALC.3S

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	March 2, 2011
LDC Report Date:	August 10, 2011
Matrix:	Soil/Water
Parameters:	Polychlorinated Biphenyls
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE095

Sample Identification

DUP-07-SA5A-QC-030211
SL-042-SA5A-SS-0.0-0.5
SL-044-SA5A-SS-0.0-0.5
SL-045-SA5A-SS-0.0-0.5
SL-048-SA5A-SS-0.0-0.5
SL-176-SA5A-SS-0.0-0.3
SL-178-SA5A-SS-0.0-0.4
SL-179-SA5A-SS-0.0-0.3
SL-186-SA5A-SS-0.0-0.5
SL-188-SA5A-SS-0.0-0.5
SL-189-SA5A-SS-0.0-0.5
EB05-SA5A-030211
SL-048-SA5A-SS-0.0-0.5MS
SL-048-SA5A-SS-0.0-0.5MSD

Introduction

This data review covers 13 soil samples and one water sample listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8082 for Polychlorinated Biphenyls.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/ECD Instrument Performance Check

Instrument performance was acceptable unless noted otherwise under initial calibration and continuing calibration sections.

III. Initial Calibration

Initial calibration of multicomponent compounds was performed for the primary (quantitation) column as required by the method.

The percent relative standard deviations (%RSD) were less than or equal to 20.0% for all compounds.

Retention time windows were evaluated and considered technically acceptable.

IV. Continuing Calibration

Continuing calibration was performed at required frequencies.

The percent differences (%D) of calibration factors in continuing standard mixtures were within the 20.0% QC limits with the following exceptions:

Date	Standard	Column	Compound	%D	Associated Samples	Affected Compound	Flag	A or P
3/16/11	CCV.58	RTX-CLP1	Aroclor-1260	22.9	SL-188-SA5A-SS-0.0-0.5 SL-189-SA5A-SS-0.0-0.5	Aroclor-1242 Aroclor-1248 Aroclor-1254 Aroclor-1260	J (all detects) UJ (all non-detects)	A
3/16/11	CCV.58	RTX-CLP2	Aroclor-1260	38.5	SL-188-SA5A-SS-0.0-0.5 SL-189-SA5A-SS-0.0-0.5	Aroclor-1242 Aroclor-1248 Aroclor-1254 Aroclor-1260	J (all detects) UJ (all non-detects)	A

The percent difference (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

Retention times (RT) of all compounds in the calibration standards were within QC limits.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polychlorinated biphenyl contaminants were found in the method blanks.

No field blanks were identified in this SDG.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. Surrogate recoveries (%R) were not within QC limits for samples SL-176-SA5A-SS-0.0-0.3 and SL-178-SA5A-SS-0.0-0.4. Since the samples were diluted out, no data were qualified.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Florisil Cartridge Check

Florisil cleanup was not required and therefore not performed in this SDG.

XI. GPC Calibration

GPC cleanup was not required and therefore not performed in this SDG.

XII. Target Compound Identification

All target compound identifications were within validation criteria.

XIII. Compound Quantitation and Reported CRQLs

All compound quantitation and CRQLs were within validation criteria.

The sample results for detected compounds from the two columns were within 40% relative percent difference (RPD) with the following exceptions:

Sample	Compound	RPD	Flag	A or P
SL-042-SA5A-SS-0.0-0.5	Aroclor-1254	62	J (all detects)	A
SL-044-SA5A-SS-0.0-0.5	Aroclor-1254	66	J (all detects)	A

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE095	All compounds reported below the RL.	J (all detects)	A

XIV. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XV. Field Duplicates

Samples DUP-07-SA5A-QC-030211 and SL-048-SA5A-SS-0.0-0.5 were identified as field duplicates. No polychlorinated biphenyls were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/Kg)		RPD (Limits)	Flags	A or P
	DUP-07-SA5A-QC-030211	SL-048-SA5A-SS-0.0-0.5			
Aroclor-5460	2.1	1.3	47 (≤50)	-	-
Aroclor-1254	0.98	1.9U	200 (≤50)	J (all detects) UJ (all non-detects)	A
Aroclor-1260	0.65	0.88	30 (≤50)	-	-

Santa Susana Field Laboratory
Polychlorinated Biphenyls - Data Qualification Summary - SDG DE095

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE095	SL-188-SA5A-SS-0.0-0.5 SL-189-SA5A-SS-0.0-0.5	Aroclor-1242 Aroclor-1248 Aroclor-1254 Aroclor-1260	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D) (C)
DE095	SL-042-SA5A-SS-0.0-0.5 SL-044-SA5A-SS-0.0-0.5	Aroclor-1254	J (all detects)	A	Compound quantitation and CRQLs (RPD) (*XIII)
DE095	DUP-07-SA5A-QC-030211 SL-042-SA5A-SS-0.0-0.5 SL-044-SA5A-SS-0.0-0.5 SL-045-SA5A-SS-0.0-0.5 SL-048-SA5A-SS-0.0-0.5 SL-176-SA5A-SS-0.0-0.3 SL-178-SA5A-SS-0.0-0.4 SL-179-SA5A-SS-0.0-0.3 SL-186-SA5A-SS-0.0-0.5 SL-188-SA5A-SS-0.0-0.5 SL-189-SA5A-SS-0.0-0.5 EB05-SA5A-030211	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)
DE095	DUP-07-SA5A-QC-030211 SL-048-SA5A-SS-0.0-0.5	Aroclor-1254	J (all detects) UJ (all non-detects)	A	Field duplicates (RPD) (FD)

Santa Susana Field Laboratory
Polychlorinated Biphenyls - Laboratory Blank Data Qualification Summary - SDG DE095

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Polychlorinated Biphenyls - Field Blank Data Qualification Summary - SDG DE095

No Sample Data Qualified in this SDG

LDC #: 25911J3b

SDG #: DE095

Laboratory: Lancaster Laboratories

VALIDATION COMPLETENESS WORKSHEET

Level IV

Date: 8/10/11

Page: 1 of 1

Reviewer: FT

2nd Reviewer: [illegible]

METHOD: GC Polychlorinated Biphenyls (EPA SW 846 Method 8082)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 3/2/11
II.	GC/ECD Instrument Performance Check	NA	
III.	Initial calibration	A	% RSD ≤ 20
IV.	Continuing calibration/ICV	SW	10% / CCV ≤ 20
V.	Blanks	A	
VI.	Surrogate spikes	SW	
VII.	Matrix spike/Matrix spike duplicates	A	
VIII.	Laboratory control samples	A	LCS ID
IX.	Regional quality assurance and quality control	N	
X.	Florisil cartridge check	N	
XI.	GPC Calibration	N	
XII.	Target compound identification	A	
XIII.	Compound quantitation and reported CRQLs	SW	
XIV.	Overall assessment of data	A	
XV.	Field duplicates	SW	D = 1, 5
XVI.	Field blanks	ND	EB = 12

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:

soil + water

1	DUP-07-SA5A-QC-030211 D	11	SL-189-SA5A-SS-0.0-0.5	21 1	PBLK07069	31	
2	SL-042-SA5A-SS-0.0-0.5	12	EB05-SA5A-030211 W	22 2	PBLK21062	32	
3	SL-044-SA5A-SS-0.0-0.5	13	SL-048-SA5A-SS-0.0-0.5MS	23		33	
4	SL-045-SA5A-SS-0.0-0.5	14	SL-048-SA5A-SS-0.0-0.5MSD	24		34	
5	SL-048-SA5A-SS-0.0-0.5 D	15		25		35	
6	SL-176-SA5A-SS-0.0-0.3	16		26		36	
7	SL-178-SA5A-SS-0.0-0.4	17		27		37	
8	SL-179-SA5A-SS-0.0-0.3	18		28		38	
9	SL-186-SA5A-SS-0.0-0.5	19		29		39	
10	SL-188-SA5A-SS-0.0-0.5	20		30		40	

Notes:

LDC #: 25911J3b
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Page: 1 of 2
Reviewer: [illegible]
2nd Reviewer: [illegible]

Method: ✓ GC ____ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation?		✓		
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?			✓	
Were the RT windows properly established?	✓			
IV. Continuing calibration				
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20%.0 or percent recoveries 80-120%?	✓			
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?		✓		
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?		✓		
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?	✓			
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	

LDC #: 25911J3b
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Reviewer: FJ
2nd Reviewer: A

Validation Area	Yes	No	NA	Findings/Comments
X. Target compound identification				
Were the retention times of reported detects within the RT windows?	✓			
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.	✓			
Target compounds were detected in the field duplicates.	✓			
XV. Field blanks				
Field blanks were identified in this SDG.	✓			
Target compounds were detected in the field blanks.		✓		

VALIDATION FINDINGS WORKSHEET

METHOD: Pesticide/PCBs (EPASW 846 Method 8081/8082)

A. alpha-BHC	I. Dieldrin	Q. Endrin ketone	Y. Aroclor-1242	GG.
B. beta-BHC	J. 4,4'-DDE	R. Endrin aldehyde	Z. Aroclor-1248	HH.
C. delta-BHC	K. Endrin	S. alpha-Chlordane	AA. Aroclor-1254	II.
D. gamma-BHC	L. Endosulfan II	T. gamma-Chlordane	BB. Aroclor-1260	JJ.
E. Heptachlor	M. 4,4'-DDD	U. Toxaphene	CC. DB 608	KK.
F. Aldrin	N. Endosulfan sulfate	V. Aroclor-1016	DD. DB 1701	LL.
G. Heptachlor epoxide	O. 4,4'-DDT	W. Aroclor-1221	EE.	MM.
H. Endosulfan I	P. Methoxychlor	X. Aroclor-1232	FF.	NN.

Notes:_____

LDC #: 29113b

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Page: 1 of 1
Reviewer: FT
2nd Reviewer: C

METHOD: ✓ GC __ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".
What type of continuing calibration calculation was performed? __%D or __RPD
Y N N/A Were continuing calibration standards analyzed at the required frequencies?
Y N N/A Did the continuing calibration standards meet the %D / RPD validation criteria of ≤20.0%?
Level IV Only
Y N N/A Were the retention times for all calibrated compounds within their respective acceptance windows?

#	Date	Standard ID	Detector/ Column	Compound	%D (Limit ≤ 20.0)	RT (limit)	Associated Samples	Qualifications
	3/16/11	CCV. 58	RTXCLP1	BB	22.9	( )	10, 11	J/UJ/A (C)
	7:09		RTXCLP2	↓	38.5	( )	↓	↓
						( )		qual Y, Z, AA,
						( )		+ BB only
						( )		
						( )		
						( )		
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						( )		

LDC #: 25911N36

VALIDATION FINDINDS WORKSHEET
Surrogate Recovery

Page: 1 of 1
Reviewer: FT
2nd Reviewer: C

METHOD: __ GC __ HPLC

Are surrogates required by the method? Yes____ or No____.

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y (N) N/A Were surrogates spiked into all samples and blanks?

Y (N) N/A Did all surrogate recoveries (%R) meet the QC limits?

#	Sample ID	Detector/ Column	Surrogate Compound	%R (Limits)	Qualifications
	6	NS	Y	49 (53-139)	J/UJ/P (S)
				( )	
				( )	
	7	↓	O	129 (45-120)	J/Pdet (S)
				( )	
				( )	No qual 75X PL
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	

	Surrogate Compound		Surrogate Compound		Surrogate Compound		Surrogate Compound		
A	Chlorobenzene (CBZ)	G	Octacosane	M	Benzo(e)Pyrene	S	1-Chloro-3-Nitrobenzene	Y	Tetrachloro-m- xylene
B	4-Bromofluorobenzene (BFB)	H	Ortho-Terphenyl	N	Terphenyl-D14	T	3,4-Dinitrotoluene		
C	a,a,a-Trifluorotoluene	I	Fluorobenzene (FBZ)	O	Decachlorobiphenyl (DCB)	U	Tripentyltin		
D	Bromochlorobenene	J	n-Triacontane	P	1-methylnaphthalene	V	Tri-n-propyltin		
E	1,4-Dichlorobutane	K	Hexacosane	Q	Dichlorophenyl Acetic Acid (DCAA)	W	Tributyl Phosphate		
F	1,4-Difluorobenzene (DFB)	L	Bromobenzene	R	4-Nitrophenol	X	Triphenyl Phosphate		

LDC #: 25914 3b
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Compound Quantitation and Reported CRQLs

Reviewer: F7
2nd Reviewer: [illegible]

METHOD: ___ GC ___ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".
Level IV/D Only
Y N N/A Were CRQLs adjusted for sample dilutions, dry weight factors, etc.?
Y N N/A Did the reported results for detected target compounds agree within 10.0% of the recalculated results?

#	Compound Name	% RPD Bet 2 col Finding ≤40	Associated Samples	Qualifications
	AA	62	2	J/A det * XIII
	↓	66	3	↓ ↓

Comments: See sample calculation verification worksheet for recalculations

LDC #: 25911U3b

VALIDATION FINDINGS WORKSHEET
Field Duplicates

Page: 1 of 1
Reviewer: FT
2nd reviewer: C

METHOD: ___ GC ___ HPLC
Y N N/A Were field duplicate pairs identified in this SDG?
Y N N/A Were target compounds detected in the field duplicate pairs?

Compound	Concentration (ug/kg)		%RPD Limit ≤50	Qualification Parent only / All Samples
	1	5		
Aroclor 5460	2.1	1.3	47	
~~PCB~~ - 1254	0.98	1.9 U	200	J/UJ/A (FD/Fd)
~~PCB~~ - 1260	0.65	0.88	30	

Compound	Concentration ( )		%RPD Limit _____	Qualification Parent only / All Samples

LDC #: 25911W 3/

SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1

Reviewer: [illegible]

2nd Reviewer: [illegible]

METHOD: GC ✓ HPLC ____

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

#	Standard ID	Calibration Date	Compound	Reported CF (200 std)	Recalculated CF (200 std)	Reported Average CF (Initial)	Recalculated Average CF (Initial)	Reported %RSD	Recalculated %RSD
1	3 ICAL	3/9/11	1260 - 1 ZB_R1	18	18	17	17	9.8	9.8
			↓ ZB_R2	271	271	253	253	9.7	9.7
2	ICAL	3/10/11	↓ CLP1	119	119	115	115	12.0	12.0
			↓ CLP II	212	212	206	206	9.6	9.6
3	ICAL	3/15/11	↓ CLP1						
			↓ CLP II						
4									

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

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LDC #: 25911J3b
SDG #: pw comm

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: FT
2nd Reviewer: A

METHOD: GC ✓ HPLC_____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF - CF)/ave. CF
CF = A/C

Where: ave. CF = Initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(Ical)/ CCV Conc.	Reported CF/Conc. CCV	Recalculated CF/Conc. CCV	Reported %D	Recalculated %D
1	ccv	3/15/11 21:53	Aroclor 1260 cup 1	200.00	199.03	199.03	0.5	0.5
			cup 2	200.00	195.55	195.55	2.2	2.2
2	ccv	3/16/11 7:09	↓ ↓	200.00	154.12	154.12	22.9	22.9
				200.00	123.05	123.05	38.5	38.5
3								
4								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25 ZIN 09
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT
2nd reviewer: C

METHOD: ✓ GC __ HPLC

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
TCMX	RTx CLP1	1.04	0.9289	89	89	0
DCB	↓	1.04	1.0423	100	100	↓

Sample ID:

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Sample ID:

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

LDC #: 25 7/N 2D
SDG #: pu cover

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Page: 1 of 1
Reviewer: FZ
2nd Reviewer: [illegible]

METHOD: ✓ GC __ HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

%Recovery = 100 * (SSC - SC)/SA Where SSC = Spiked sample concentration SC = Sample concentration
SA = Spike added
RPD =(((SSCMS - SSCMSD) * 2) / (SSCMS + SSCMSD))*100 MS = Matrix spike MSD = Matrix spike duplicate

MS/MSD samples: 13 + 14

Compound	Spike Added ( )		Sample Conc. ( )	Spike Sample Concentration ( )		Matrix spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	—	MS	MSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)											
Diesel (8015)											
Benzene (8021B)											
Methane (RSK-175)											
2,4-D (8151)											
Dinoseb (8151)											
Naphthalene (8310)											
Anthracene (8310)											
HMX (8330)											
2,4,6-Trinitrotoluene (8330)											
PCB-1260	16.67	16.67	0.77	16.67	16.03	95	95	92	92	4	4

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25914B3b
SDG #: pu cover

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: ✓ GC __HPLC

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100* (SSC-SC)/SA
RPD = | LCS - LCSD | * 2/(LCS + LCSD)

Where: SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory control sample percent recovery
SC = Concentration
LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: LCS 8012

Compound	Spike Added (ug/kg)		Spiked Sample Concentration (ug/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)										
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)										
2,4,6-Trinitrotoluene (8330)										
PCB-1260	16.67	NA	14.91	NA	89	89	NA			

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25911J3b
SDG #: pu [illegible]

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: ✓ GC __ HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= (A)(Fv)(Df) / (RF)(Vs or Ws)(%S/100)

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound in the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID. #2 Compound Name Aroclor 1260

Final Concentration = 45.437 / 0.812

= 56 ug/kg

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications
	1260-5 =	56315, 105469 (2000)(5)		126-5 = 33.76	
		278 (60)(1000)		6 = 56.77	
				7 = 45.78	
	=	33.76		45.437	

Comments:

SAMPCALew.wpd

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	March 2, 2011
LDC Report Date:	August 1, 2011
Matrix:	Soil/Water
Parameters:	Metals
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE095

Sample Identification

DUP-07-SA5A-QC-030211
SL-042-SA5A-SS-0.0-0.5
SL-044-SA5A-SS-0.0-0.5
SL-045-SA5A-SS-0.0-0.5
SL-048-SA5A-SS-0.0-0.5
SL-176-SA5A-SS-0.0-0.3
SL-178-SA5A-SS-0.0-0.4
SL-179-SA5A-SS-0.0-0.3
SL-186-SA5A-SS-0.0-0.5
SL-188-SA5A-SS-0.0-0.5
SL-189-SA5A-SS-0.0-0.5
EB05-SA5A-030211
SL-048-SA5A-SS-0.0-0.5MS
SL-048-SA5A-SS-0.0-0.5MSD
SL-048-SA5A-SS-0.0-0.5DUP

Introduction

This data review covers 14 soil samples and one water sample listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Methods 6010B, 6020, and 7000 for Metals. The metals analyzed were Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Phosphorus, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, and Zirconium.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review (January 2010).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. ICPMS Tune

The mass calibration was within 0.1 AMU and the percent relative standard deviation (%RSD) was less than or equal to 5% .

III. Calibration

An initial calibration was performed.

The frequency and analysis criteria of the initial calibration verification (ICV) and continuing calibration verification (CCV) were met.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No metal contaminants were found in the initial, continuing and preparation blanks with the following exceptions:

Method Blank ID	Analyte	Maximum Concentration	Associated Samples
PB (prep blank)	Lithium	4.9 ug/L	EB05-SA5A-030211
ICB/CCB	Calcium Lithium Magnesium	237 ug/L 8.6 ug/L 252 ug/L	EB05-SA5A-030211
PB (prep blank)	Barium Copper Molybdenum Phosphorus Tin	0.203 mg/Kg 0.073 mg/Kg 0.067 mg/Kg 1.219 mg/Kg 1.612 mg/Kg	All soil samples in SDG DE095
ICB/CCB	Titanium Zirconium	0.61 ug/L 5.0 ug/L	SL-042-SA5A-SS-0.0-0.5 SL-044-SA5A-SS-0.0-0.5 SL-045-SA5A-SS-0.0-0.5 SL-176-SA5A-SS-0.0-0.3 SL-178-SA5A-SS-0.0-0.4 SL-179-SA5A-SS-0.0-0.3 SL-186-SA5A-SS-0.0-0.5 SL-188-SA5A-SS-0.0-0.5 SL-189-SA5A-SS-0.0-0.5
ICB/CCB	Titanium Zirconium	0.57 ug/L 5.1 ug/L	DUP-07-SA5A-QC-030211 SL-048-SA5A-SS-0.0-0.5

Data qualification by the initial, continuing and preparation blanks (ICB/CCB/PBs) was based on the maximum contaminant concentration in the ICB/CCB/PBs in the analysis of each analyte. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated method blanks with the following exceptions:

Sample	Analyte	Reported Concentration	Modified Final Concentration
DUP-07-SA5A-QC-030211	Tin Zirconium	3.0 mg/Kg 1.5 mg/Kg	3.0U mg/Kg 1.5U mg/Kg
SL-042-SA5A-SS-0.0-0.5	Tin Zirconium	4.0 mg/Kg 2.4 mg/Kg	4.0U mg/Kg 2.4U mg/Kg
SL-044-SA5A-SS-0.0-0.5	Tin Zirconium	3.1 mg/Kg 1.8 mg/Kg	3.1U mg/Kg 1.8U mg/Kg
SL-045-SA5A-SS-0.0-0.5	Tin Zirconium	3.2 mg/Kg 1.8 mg/Kg	3.2U mg/Kg 1.8U mg/Kg
SL-048-SA5A-SS-0.0-0.5	Tin Zirconium	2.8 mg/Kg 1.9 mg/Kg	2.8U mg/Kg 1.9U mg/Kg
SL-176-SA5A-SS-0.0-0.3	Tin Zirconium	5.6 mg/Kg 1.6 mg/Kg	5.6U mg/Kg 1.6U mg/Kg
SL-178-SA5A-SS-0.0-0.4	Tin Zirconium	3.2 mg/Kg 0.93 mg/Kg	3.2U mg/Kg 0.93U mg/Kg
SL-179-SA5A-SS-0.0-0.3	Tin Zirconium	3.0 mg/Kg 1.5 mg/Kg	3.0U mg/Kg 1.5U mg/Kg
SL-186-SA5A-SS-0.0-0.5	Tin Zirconium	2.8 mg/Kg 1.9 mg/Kg	2.8U mg/Kg 1.9U mg/Kg
SL-188-SA5A-SS-0.0-0.5	Tin Zirconium	3.0 mg/Kg 1.6 mg/Kg	3.0U mg/Kg 1.6U mg/Kg
SL-189-SA5A-SS-0.0-0.5	Tin Zirconium	2.6 mg/Kg 4.7 mg/Kg	2.6U mg/Kg 4.7U mg/Kg
EB05-SA5A-030211	Lithium	4.5 ug/L	4.5U ug/L

Sample EB05-SA5A-030211 was identified as an equipment blank. No metal contaminants were found with the following exceptions:

Equipment Blank ID	Sampling Date	Analyte	Concentration	Associated Samples
EB05-SA5A-030211	3/2/11	Lithium	4.5 ug/L	All soil samples in SDG DE095

Sample concentrations were compared to concentrations detected in the field blanks. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated field blanks.

V. ICP Interference Check Sample (ICS) Analysis

The frequency of analysis was met.

The criteria for analysis were met.

VI. Matrix Spike Analysis

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Analyte	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
SL-048-SA5A-SS-0.0-0.5MS/MSD (All soil samples in SDG DE095)	Antimony	54 (75-125)	54 (75-125)	-	J (all detects) UJ (all non-detects)	A
	Arsenic	-	73 (75-125)	-	J (all detects) UJ (all non-detects)	
SL-048-SA5A-SS-0.0-0.5MS/MSD (All soil samples in SDG DE095)	Cadmium	135 (75-125)	-	-	J (all detects)	A
	Molybdenum	138 (75-125)	129 (75-125)	-	J (all detects)	
	Silver	131 (75-125)	-		J (all detects)	

VII. Duplicate Sample Analysis

Duplicate (DUP) sample analyses were reviewed for each matrix as applicable. Results were within QC limits with the following exceptions:

DUP ID (Associated Samples)	Analyte	RPD (Limits)	Difference (Limits)	Flag	A or P
SL-048-SA5A-SS-0.0-0.5DUP (All soil samples in SDG DE095)	Arsenic	40 (≤20)	-	J (all detects) UJ (all non-detects)	A
	Barium	38 (≤20)	-		
	Beryllium	-	0.3475 (≤0.226)		
	Chromium	40 (≤20)	-		
	Cobalt	38 (≤20)	-		
	Copper	25 (≤20)	-		
	Lead	42 (≤20)	-		
	Molybdenum	51 (≤20)	-		
	Nickel	36 (≤20)	-		
	Vanadium	43 (≤20)	-		
	Zinc	31 (≤20)	-		

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Internal Standards

All internal standard percent recoveries (%R) were within QC limits.

X. Furnace Atomic Absorption QC

Graphite furnace atomic absorption was not utilized in this SDG.

XI. ICP Serial Dilution

ICP serial dilution analysis was performed by the laboratory. The analysis criteria were met with the following exceptions:

Diluted Sample	Analyte	%D (Limits)	Associated Samples	Flag	A or P
SL-048-SA5A-SS-0.0-0.5	Barium	21 (≤10)	All soil samples in SDG DE095	J (all detects) UJ (all non-detects)	A
	Chromium	15 (≤10)			
	Copper	16 (≤10)			
	Lead	19 (≤10)			
	Vanadium	15 (≤10)			
	Zinc	13 (≤10)			

XII. Sample Result Verification

All sample result verifications were acceptable.

All metals reported below the RL and above the MDL were qualified as follows:

Sample	Analyte	Flag	A or P
All samples in SDG DE095	All analytes reported below the RL and above the MDL.	J (all detects)	A

XIII. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XIV. Field Duplicates

Samples DUP-07-SA5A-QC-030211 and SL-048-SA5A-SS-0.0-0.5 were identified as field duplicates. No metals were detected in any of the samples with the following exceptions:

Analyte	Concentration (mg/Kg)		RPD (Limits)	Flags	A or P
	DUP-07-SA5A-QC-030211	SL-048-SA5A-SS-0.0-0.5			
Aluminum	17100	17600	3 (≤50)	-	-
Antimony	0.14	0.17	19 (≤50)	-	-
Arsenic	5.4	7.3	30 (≤50)	-	-
Barium	140	165	16 (≤50)	-	-
Beryllium	0.63	0.85	30 (≤50)	-	-
Boron	3.2	3.4	6 (≤50)	-	-
Cadmium	0.26	0.26	0 (≤50)	-	-
Calcium	3000	3150	5 (≤50)	-	-
Chromium	23.3	29.1	22 (≤50)	-	-
Cobalt	6.9	7.7	11 (≤50)	-	-
Copper	11.5	11.3	2 (≤50)	-	-
Iron	23500	23600	0 (≤50)	-	-
Lead	11.3	14.9	27 (≤50)	-	-
Lithium	27.1	27.6	2 (≤50)	-	-

Analyte	Concentration (mg/Kg)		RPD (Limits)	Flags	A or P
	DUP-07-SA5A-QC-030211	SL-048-SA5A-SS-0.0-0.5			
Magnesium	5460	5550	2 (≤50)	-	-
Manganese	367	370	1 (≤50)	-	-
Mercury	0.045	0.0040	167 (≤50)	J (all detects)	A
Molybdenum	0.72	1.0	33 (≤50)	-	-
Nickel	16.2	18.8	15 (≤50)	-	-
Phosphorus	664	696	5 (≤50)	-	-
Potassium	4420	4460	1 (≤50)	-	-
Selenium	0.16	0.55	110 (≤50)	J (all detects)	A
Silver	0.11	0.18	48 (≤50)	-	-
Sodium	81.6	81.4	0 (≤50)	-	-
Strontium	19.7	20.3	3 (≤50)	-	-
Thallium	0.30	0.38	24 (≤50)	-	-
Tin	3.0	2.8	7 (≤50)	-	-
Titanium	1270	1290	2 (≤50)	-	-
Vanadium	43.1	52.1	19 (≤50)	-	-
Zinc	80.9	92.2	13 (≤50)	-	-
Zirconium	1.5	1.9	24 (≤50)	-	-

Santa Susana Field Laboratory
Metals - Data Qualification Summary - SDG DE095

SDG	Sample	Analyte	Flag	A or P	Reason (Code)
DE095	DUP-07-SA5A-QC-030211 SL-042-SA5A-SS-0.0-0.5 SL-044-SA5A-SS-0.0-0.5 SL-045-SA5A-SS-0.0-0.5 SL-048-SA5A-SS-0.0-0.5 SL-176-SA5A-SS-0.0-0.3 SL-178-SA5A-SS-0.0-0.4 SL-179-SA5A-SS-0.0-0.3 SL-186-SA5A-SS-0.0-0.5 SL-188-SA5A-SS-0.0-0.5 SL-189-SA5A-SS-0.0-0.5	Antimony Arsenic	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicate (%R) (Q)
DE095	DUP-07-SA5A-QC-030211 SL-042-SA5A-SS-0.0-0.5 SL-044-SA5A-SS-0.0-0.5 SL-045-SA5A-SS-0.0-0.5 SL-048-SA5A-SS-0.0-0.5 SL-176-SA5A-SS-0.0-0.3 SL-178-SA5A-SS-0.0-0.4 SL-179-SA5A-SS-0.0-0.3 SL-186-SA5A-SS-0.0-0.5 SL-188-SA5A-SS-0.0-0.5 SL-189-SA5A-SS-0.0-0.5	Cadmium Molybdenum Silver	J (all detects) J (all detects) J (all detects)	A	Matrix spike/Matrix spike duplicate (%R) (Q)
DE095	DUP-07-SA5A-QC-030211 SL-042-SA5A-SS-0.0-0.5 SL-044-SA5A-SS-0.0-0.5 SL-045-SA5A-SS-0.0-0.5 SL-048-SA5A-SS-0.0-0.5 SL-176-SA5A-SS-0.0-0.3 SL-178-SA5A-SS-0.0-0.4 SL-179-SA5A-SS-0.0-0.3 SL-186-SA5A-SS-0.0-0.5 SL-188-SA5A-SS-0.0-0.5 SL-189-SA5A-SS-0.0-0.5	Arsenic Barium Chromium Cobalt Copper Lead Molybdenum Nickel Vanadium Zinc	J (all detects) UJ (all non-detects)	A	Duplicate sample analysis (RPD) (E)
DE095	DUP-07-SA5A-QC-030211 SL-042-SA5A-SS-0.0-0.5 SL-044-SA5A-SS-0.0-0.5 SL-045-SA5A-SS-0.0-0.5 SL-048-SA5A-SS-0.0-0.5 SL-176-SA5A-SS-0.0-0.3 SL-178-SA5A-SS-0.0-0.4 SL-179-SA5A-SS-0.0-0.3 SL-186-SA5A-SS-0.0-0.5 SL-188-SA5A-SS-0.0-0.5 SL-189-SA5A-SS-0.0-0.5	Beryllium	J (all detects) UJ (all non-detects)	A	Duplicate sample analysis (Difference) (E)
DE095	DUP-07-SA5A-QC-030211 SL-042-SA5A-SS-0.0-0.5 SL-044-SA5A-SS-0.0-0.5 SL-045-SA5A-SS-0.0-0.5 SL-048-SA5A-SS-0.0-0.5 SL-176-SA5A-SS-0.0-0.3 SL-178-SA5A-SS-0.0-0.4 SL-179-SA5A-SS-0.0-0.3 SL-186-SA5A-SS-0.0-0.5 SL-188-SA5A-SS-0.0-0.5 SL-189-SA5A-SS-0.0-0.5	Barium Chromium Copper Lead Vanadium Zinc	J (all detects) UJ (all non-detects)	A	ICP serial dilution (%D) (A)

SDG	Sample	Analyte	Flag	A or P	Reason (Code)
DE095	DUP-07-SA5A-QC-030211 SL-042-SA5A-SS-0.0-0.5 SL-044-SA5A-SS-0.0-0.5 SL-045-SA5A-SS-0.0-0.5 SL-048-SA5A-SS-0.0-0.5 SL-176-SA5A-SS-0.0-0.3 SL-178-SA5A-SS-0.0-0.4 SL-179-SA5A-SS-0.0-0.3 SL-186-SA5A-SS-0.0-0.5 SL-188-SA5A-SS-0.0-0.5 SL-189-SA5A-SS-0.0-0.5 EB05-SA5A-030211	All analytes reported below the RL and above the MDL.	J (all detects)	A	Sample result verification (Z)
DE095	DUP-07-SA5A-QC-030211 SL-048-SA5A-SS-0.0-0.5	Mercury Selenium	J (all detects) J (all detects)	A	Field duplicates (RPD) (FD)

Santa Susana Field Laboratory
Metals - Laboratory Blank Data Qualification Summary - SDG DE095

SDG	Sample	Analyte	Modified Final Concentration	A or P	Code
DE095	DUP-07-SA5A-QC-030211	Tin Zirconium	3.0U mg/Kg 1.5U mg/Kg	A	B
DE095	SL-042-SA5A-SS-0.0-0.5	Tin Zirconium	4.0U mg/Kg 2.4U mg/Kg	A	B
DE095	SL-044-SA5A-SS-0.0-0.5	Tin Zirconium	3.1U mg/Kg 1.8U mg/Kg	A	B
DE095	SL-045-SA5A-SS-0.0-0.5	Tin Zirconium	3.2U mg/Kg 1.8U mg/Kg	A	B
DE095	SL-048-SA5A-SS-0.0-0.5	Tin Zirconium	2.8U mg/Kg 1.9U mg/Kg	A	B
DE095	SL-176-SA5A-SS-0.0-0.3	Tin Zirconium	5.6U mg/Kg 1.6U mg/Kg	A	B
DE095	SL-178-SA5A-SS-0.0-0.4	Tin Zirconium	3.2U mg/Kg 0.93U mg/Kg	A	B
DE095	SL-179-SA5A-SS-0.0-0.3	Tin Zirconium	3.0U mg/Kg 1.5U mg/Kg	A	B
DE095	SL-186-SA5A-SS-0.0-0.5	Tin Zirconium	2.8U mg/Kg 1.9U mg/Kg	A	B
DE095	SL-188-SA5A-SS-0.0-0.5	Tin Zirconium	3.0U mg/Kg 1.6U mg/Kg	A	B

SDG	Sample	Analyte	Modified Final Concentration	A or P	Code
DE095	SL-189-SA5A-SS-0.0-0.5	Tin Zirconium	2.6U mg/Kg 4.7U mg/Kg	A	B
DE095	EB05-SA5A-030211	Lithium	4.5U ug/L	A	B

Santa Susana Field Laboratory
Metals - Field Blank Data Qualification Summary - SDG DE095

No Sample Data Qualified in this SDG

LDC #: 25911J4 **VALIDATION COMPLETENESS WORKSHEET** Date: 8-1-11
SDG #: DE095 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: OR
2nd Reviewer: ✓

METHOD: Metals (EPA SW 846 Method 6010B/6020A/7000)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 3/2/11
II.	ICP/MS Tune	A	
III.	Calibration	A	
IV.	Blanks	SW	
V.	ICP Interference Check Sample (ICS) Analysis	SW	
VI.	Matrix Spike Analysis	SW	MS/D
VII.	Duplicate Sample Analysis	SW	DUP
VIII.	Laboratory Control Samples (LCS)	A	LCS/D
IX.	Internal Standard (ICP-MS)	A	
X.	Furnace Atomic Absorption QC	N	Not utilized
XI.	ICP Serial Dilution	SW	
XII.	Sample Result Verification	A	
XIII.	Overall Assessment of Data	A	
XIV.	Field Duplicates	SW	(1, 5)
XV	Field Blanks	SW	EB=12

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: all soil except 12=water

1	DUP-07-SA5A-QC-030211	11	SL-189-SA5A-SS-0.0-0.5	21		31	
2	SL-042-SA5A-SS-0.0-0.5	12	EB05-SA5A-030211	22		32	
3	SL-044-SA5A-SS-0.0-0.5	13	SL-048-SA5A-SS-0.0-0.5MS	23		33	
4	SL-045-SA5A-SS-0.0-0.5	14	SL-048-SA5A-SS-0.0-0.5MSD	24		34	
5	SL-048-SA5A-SS-0.0-0.5	15	SL-048-SA5A-SS-0.0-0.5DUP	25		35	
6	SL-176-SA5A-SS-0.0-0.3	16		26		36	
7	SL-178-SA5A-SS-0.0-0.4	17		27		37	
8	SL-179-SA5A-SS-0.0-0.3	18		28		38	
9	SL-186-SA5A-SS-0.0-0.5	19		29		39	
10	SL-188-SA5A-SS-0.0-0.5	20		30		40	

Notes:

LDC #: 25911J4

VALIDATION FINDINGS CHECKLIST

Reviewer: CR
2nd Reviewer: [illegible]

Method: Metals (EPA SW 846 Method 6010B/7000/6020)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. ICP/MS Tune				
Were all isotopes in the tuning solution mass resolution within 0.1 amu?	✓			
Were %RSD of isotopes in the tuning solution ≤5%?	✓			
III. Calibration				
Were all instruments calibrated daily, each set-up time?	✓			
Were the proper number of standards used?	✓			
Were all initial and continuing calibration verification %Rs within the 90-110% (80-120% for mercury) QC limits?	✓			
Were all initial calibration correlation coefficients > 0.995?	✓			
IV. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.	✓			
V. ICP Interference Check Sample				
Were ICP interference check samples performed daily?	✓			
Were the AB solution percent recoveries (%R) with the 80-120% QC limits?		✓		
VI. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and duplicate (DUP) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD or MS/DUP. Soil / Water.	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the 75-125 QC limits? If the sample concentration exceeded the spike concentration by a factor of 4 or more, no action was taken.		✓		
Were the MS/MSD or duplicate relative percent differences (RPD) ≤ 20% for waters and ≤ 35% for soil samples? A control limit of +/- RL(+/-2X RL for soil) was used for samples that were ≤ 5X the RL, including when only one of the duplicate sample values were ≤ 5X the RL.		✓		
VII. Laboratory control samples				
Was an LCS anaylzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the 80-120% QC limits for water samples and laboratory established QC limits for soils?	✓			

LDC #: 25911J4

VALIDATION FINDINGS CHECKLIST

Reviewer: ae
2nd Reviewer: W

Validation Area	Yes	No	NA	Findings/Comments
VIII. Furnace Atomic Absorption QC				
If MSA was performed, was the correlation coefficients > 0.995?			✓	
Do all applicable analysies have duplicate injections? (Level IV only)			✓	
For sample concentrations > RL, are applicable duplicate injection RSD values < 20%? (Level IV only)			✓	
Were analytical spike recoveries within the 85-115% QC limits?			✓	
IX. ICP Serial Dilution				
Was an ICP serial dilution analyzed if analyte concentrations were > 50X the MDL (ICP)/>100X the MDL(ICP/MS)?	✓			
Were all percent differences (%Ds) < 10%?		✓		
Was there evidence of negative interference? If yes, professional judgement will be used to qualify the data.		✓		
X. Internal Standards (EPA SW 846 Method 6020/EPA 200.8)				
Were all the percent recoveries (%R) within the 30-120% (6020)/60-125% (200.8) of the intensity of the internal standard in the associated initial calibration?	✓			
If the %Rs were outside the criteria, was a reanalysis performed?	✓			
XI. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?		✓		
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
XII. Sample Result Verification				
Were RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.	✓			
Target analytes were detected in the field duplicates.	✓			
XV. Field blanks				
Field blanks were identified in this SDG.	✓	✓		
Target analytes were detected in the field blanks.	✓			

LDC #: 25911J4

VALIDATION FINDINGS WORKSHEET
PB/ICB/CCB QUALIFIED SAMPLES

Page: 1 of 1
Reviewer: JR
2nd Reviewer: [illegible]

METHOD: Trace metals (EPA SW 864 Method 6010B/6020/7000) Soil preparation factor applied: 100 x MS: 2xdil

Sample Concentration units, unless otherwise noted: ug/L Associated Samples: All Water

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit	12									
Ca			237	1185										
Li		4.9	8.6	43	4.5									
Mg			252	1260										

Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: All Soil

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit	1	2	3	4	5	6	7	8	9	10	11
Ba	0.203			1.015											
Cu	0.073			0.365											
Mo	0.067			0.335											
P	1.219			6.095											
Sn	1.612			8.06	3.0	4.0	3.1	3.2	2.8	5.6	3.2	3.0	2.8	3.0	2.6

Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: 2-4, 6-11

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit	2	3	4	6	7	8	9	10	11	
Ti			0.61	0.305										
Zr			5.0	2.5	2.4	1.8	1.8	1.6	0.93	1.5	1.9	1.6	4.7	

Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: 1, 5

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit	1	5								
Ti			0.57	0.285										
Zr			5.1	2.55	1.5	1.9								

Samples with analyte concentrations within five times the associated ICB, CCB or PB concentration are listed above with the identifications from the Validation Completeness Worksheet. These sample results were qualified as not detected, "U".

Note : a - The listed analyte concentration is the highest ICB, CCB, or PB detected in the analysis of each element.

LDC #: 25911J4

VALIDATION FINDINGS WORKSHEET
Field Blanks

Page: 6 of 1
Reviewer: CR
2nd Reviewer: [illegible]

METHOD: Trace Metals (EPA SW846 6010B/7000)
Y N N/A Were field blanks identified in this SDG?
Y N N/A Were target analytes detected in the field blanks?
Blank units: ug/L **Associated sample units:** mg/Kg
Sampling date: 3/2/11 Soil factor applied 100x
Field blank type: (circle one) Field Blank / Rinsate / Other: Associated Samples: All Soil

Analyte	Blank ID	Sample Identification										
	12	Action Level	No Qualifiers									
Li	4.5	2.25										

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
Samples with analyte concentrations within five times the associated field blank concentration are listed above, these sample results were qualified as not detected, "U".

LDC #: 259154

VALIDATION FINDINGS WORKSHEET
ICP Interference Check Sample

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: Trace Metals (EPA SW 846 Method 6010/6020/7000)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were ICP interference check samples performed as required?

Y N N/A Were the AB solution percent recoveries (%R) within the control limits of 80-120% ?

LEVEL IV ONLY:

Y N N/A Were recalculated results acceptable? See Level IV Recalculation Worksheet for recalculations.

#	Date	ICS Identification	Analyte	Finding	Associated Samples	Qualifications
	3/10/11	ICSAB ~~(19:18)~~ (19:17)	K	121.3	All Water	No Qual (<90% ICSA)
	3/10/11	ICSAB (19:58)	K	120.4	↓	↓
				Concentration (Limits)		
	3/11/11	ICSA (17:14)	Mn	5 ug/L (≤0.78)	All Soil	No Qual (<90% ICSA)
	3/11/11	ICSA (19:04)	Mn	4 ug/L ↓	↓	↓

Comments:

ICS.4SW

LDC #: 25915J4

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Page: 1 of 1
Reviewer: CK
2nd Reviewer: ✓

METHOD: Trace metals (EPA SW 846 Method 6010/6020/7000)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a matrix spike analyzed for each matrix in this SDG?

Y N N/A Were matrix spike percent recoveries (%R) within the control limits of 75-125? If the sample concentration exceeded the spike concentration by a factor of 4 or more, no action was taken.

Y N N/A Were all duplicate sample relative percent differences (RPD) ≤ 20% for water samples and ≤35% for soil samples?

LEVEL IV ONLY:

Y N N/A Were recalculated results acceptable? See Level IV Recalculation Worksheet for recalculations.

#	MS/MSD ID	Matrix	Analyte	MS %Recovery	MSD %Recovery	RPD (Limits)	Associated Samples	Qualifications
	B/14	S	Sb	54	54		All Soil	J/UJ/A (Q)
			As		73			
			Cd	135				Jdet/A
			Mo	138	129			
			Ag	131				

Comments:

LDC #: 25911D4

VALIDATION FINDINGS WORKSHEET
Duplicate Analysis

Page: 1 of 1
Reviewer: GR
2nd Reviewer: [illegible]

METHOD: Trace Metals (EPA SW 846 Method 6010/6020/7000)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a duplicate sample analyzed for each matrix in this SDG?

Y N N/A Were all duplicate sample relative percent differences (RPD) ≤ 20% for water samples and ≤ 35% for soil samples? If no, see qualifications below. A control limit of ±R.L. (±2X R.L. for soil) was used for sample values that were <5X the R.L., including the case when only one of the duplicate sample values was <5X R.L.. If field blanks were used for laboratory duplicates, note in the Overall Assessment.

LEVEL IV ONLY:

Y N N/A Were recalculated results acceptable? See Level IV Recalculation Worksheet for recalculations.

#	Date	Duplicate ID	Matrix	Analyte	RPD (Limits)	Difference (Limits)	Associated Samples	Qualifications
		15	S	As	40 (≤20)		All Soil	J/UJ/A (E)
				Ba	38			
				Be		0.3475 (≤0.226)		
				Cr	40			
				Co	38			
				Cu	25			
				Pb	42			
				Mo	51			
				Ni	36			
				V	43			
				Zn	31			

Comments:

DUP.4SW

LDC #: 25911C4

VALIDATION FINDINGS WORKSHEET
ICP Serial Dilution

Page: 1 of 1
Reviewer: CR
2nd Reviewer: [illegible]

METHOD: Trace Metals (EPA SW 846 Method 6010/6020/7000)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A If analyte concentrations were > 50X the MDL (ICP) ,or >100X the MDL (ICP/MS), was a serial dilution analyzed?
Y N N/A Were ICP serial dilution percent differences (%D) ≤10%?
Y N N/A Is there evidence of negative interference? If yes, professional judgement will be used to qualify the data.

LEVEL IV ONLY:

Y N N/A Were recalculated results acceptable? See Level IV Recalculation Worksheet for recalculations.

#	Date	Diluted Sample ID	Matrix	Analyte	%D (Limits)	Associated Samples	Qualifications
		5	S	Ba	21	All Soil	J/UJ/A (A)
				Cr	15		
				Cu	16		
				Pb	19		
				V	15		
				Zn	13		

Comments:

SDILICPMS.wpd

LDC#: 25911J4

VALIDATION FINDINGS WORKSHEET
Field Duplicates

Page: 12 of 18
Reviewer:
2nd Reviewer:

METHOD: Metals (EPA Method 6010B/7000)

Y N NA Were field duplicate pairs identified in this SDG?
Y N NA Were target analytes detected in the field duplicate pairs?

Analyte	Concentration (mg/Kg)		RPD (≤50)	Qualifiers: (Parents Only)
	1	5		
Aluminum	17100	17600	3	
Antimony	0.14	0.17	19	
Arsenic	5.4	7.3	30	
Barium	140	165	16	
Beryllium	0.63	0.85	30	
Boron	3.2	3.4	6	
Cadmium	0.26	0.26	0	
Calcium	3000	3150	5	
Chromium	23.3	29.1	22	
Cobalt	6.9	7.7	11	
Copper	11.5	11.3	2	
Iron	23500	23600	0	
Lead	11.3	14.9	27	
Lithium	27.1	27.6	2	
Magnesium	5460	5550	2	
Manganese	367	370	1	
Mercury	0.045	0.0040	167	Jdet/A (FD)
Molybdenum	0.72	1.0	33	
Nickel	16.2	18.8	15	

LDC#: 25911J4

VALIDATION FINDINGS WORKSHEET
Field Duplicates

Reviewer:
2nd Reviewer:

METHOD: Metals (EPA Method 6010B/7000)

Y N NA Were field duplicate pairs identified in this SDG?
Y N NA Were target analytes detected in the field duplicate pairs?

Analyte	Concentration (mg/Kg)		RPD (≤50)	Qualifiers: (Parents Only)
	1	5		
Phosphorus	664	696	5	
Potassium	4420	4460	1	
Selenium	0.16	0.55	110	Jdet/A (FD)
Silver	0.11	0.18	48	
Sodium	81.6	81.4	0	
Strontium	19.7	20.3	3	
Thallium	0.30	0.38	24	
Tin	3.0	2.8	7	
Titanium	1270	1290	2	
Vanadium	43.1	52.1	19	
Zinc	80.9	92.2	13	
Zirconium	1.5	1.9	24	

V:\FIELD DUPLICATES\FD_inorganic\25911J4.wpd

LDC #: 28911J4

VALIDATION FINDINGS WORKSHEET
Initial and Continuing Calibration Calculation Verification

Page: 1 of 1
Reviewer: CS
2nd Reviewer: Y

METHOD: Trace Metals (EPA SW 846 Method 6010/6020/7000)

An initial and continuing calibration verification percent recovery (%R) was recalculated for each type of analysis using the following formula:

%R = Found / True x 100 Where, Found = concentration (in ug/L) of each analyte measured in the analysis of the ICV or CCV solution
True = concentration (in ug/L) of each analyte in the ICV or CCV source

Standard ID	Type of Analysis	Element	Found (ug/L)	True (ug/L)	Recalculated %R	Reported %R	Acceptable (Y/N)
ICV	ICP (Initial calibration)	Mn	598.71	600	99.8	99.8	Y
ICV	ICP/MS (Initial calibration)	V	496.90	500	99.4	99.4	
ICV	CVAA (Initial calibration)	Hg	2.49	2.5	99.6	99.6	
CCV (18:09)	ICP (Continuing calibration)	Ti	495.14	500	99.0	99.0	
CCV (16:19)	ICP/MS (Continuing calibration)	Mo	23.93	25	95.7	95.7	
CCV	CVAA (Continuing calibration)	Hg	1.03	1	103.0	103.0	
	GFAA (Initial calibration)						
	GFAA (Continuing calibation)						

Comments: Refer to Calibration Verification findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

CALCLC.4SW

LDC #: 2591KJ4

VALIDATION FINDINGS WORKSHEET
Level IV Recalculation Worksheet

Page: 1 of 1
Reviewer: CR
2nd Reviewer: [illegible]

METHOD: Trace Metals (EPA SW 846 Method 6010/6020/7000)

Percent recoveries (%R) for an ICP interference check sample, a laboratory control sample and a matrix spike sample were recalculated using the following formula:

$\%R = \frac{Found}{True} \times 100$

Where, Found = Concentration of each analyte measured in the analysis of the sample. For the matrix spike calculation, Found = SSR (spiked sample result) - SR (sample result).
True = Concentration of each analyte in the source.

A sample and duplicate relative percent difference (RPD) was recalculated using the following formula:

$RPD = \frac{|S-D|}{(S+D)/2} \times 100$

Where, S = Original sample concentration
D = Duplicate sample concentration

An ICP serial dilution percent difference (%D) was recalculated using the following formula:

$\%D = \frac{|I-SDR|}{I} \times 100$

Where, I = Initial Sample Result (mg/L)
SDR = Serial Dilution Result (mg/L) (Instrument Reading x 5)

Sample ID	Type of Analysis	Element	Found / S / I (~~units~~ mg/kg)	True / D / SDR (~~units~~ mg/kg)	Recalculated %R / RPD / %D	Reported %R / RPD / %D	Acceptable (Y/N)
ICSAB	ICP interference check	Ni	20.6 ug/L	20 ug/L	103	103	Y
LCS	Laboratory control sample	P	1056.6	1000	106	106	
13	Matrix spike	Ni	(SSR-SR) 13.1119	11.4286	115	115	
15	Duplicate	15	4491.8691	4491.7443	1	1	
5	ICP serial dilution	Mn	3338.39 ug/L	3482.15 ug/L	4	4	

Comments: Refer to appropriate worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

TOTCLC.4SW

LDC #: 25911J4

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: CR
2nd reviewer: [illegible]

METHOD: Trace Metals (EPA SW 846 Method 6010/6020/7000)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Have results been reported and calculated correctly?
Y N N/A Are results within the calibrated range of the instruments and within the linear range of the ICP?
Y N N/A Are all detection limits below the CRDL?

Detected analyte results for Ca were recalculated and verified using the following equation:

Concentration = (RD)(FV)(Dil) / (In. Vol.)

RD = Raw data concentration
FV = Final volume (ml)
In. Vol. = Initial volume (ml) or weight (G)
Dil = Dilution factor

Recalculation:

$$\frac{(100\,mL)(28.37658\,mg/L)}{0.875\,(\cancel{100\,mL})(1.03\,g)} = 3148.6\,mg/kg$$

#	Sample ID	Analyte	Reported Concentration (mg/kg)	Calculated Concentration (mg/kg)	Acceptable (Y/N)
	S	Al	17600	17600	Y
		Sb	0.17	0.17	
		As	7.3	7.3	
		Ba	165	165	
		Be	0.85	0.85	
		B	3.4	3.4	
		Cd	0.26	0.26	
		Ca	3150	3150	
		Cr	29.1	29.1	
		Co	7.7	7.7	
		Cu	11.3	11.3	
		Fe	23600	23600	
		Pb	14.9	14.9	
		Li	27.6	27.6	
		Mg	5550	5550	
		Mn	370	370	
		Hg	0.0040	0.0040	
		Mo	1.0	1.0	
		Ni	18.8	18.6	
		P	696	696	

Note:

LDC #: 25911 4

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: R
2nd reviewer: ✓

METHOD: Trace Metals (EPA SW 846 Method 6010/6020/7000)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Have results been reported and calculated correctly?
Y N N/A Are results within the calibrated range of the instruments and within the linear range of the ICP?
Y N N/A Are all detection limits below the CRDL?

Detected analyte results for Sb were recalculated and verified using the following equation:

Concentration = $\frac{(RD)(FV)(Dil)}{(In.\ Vol.)}$

RD = Raw data concentration
FV = Final volume (ml)
In. Vol. = Initial volume (ml) or weight (G)
Dil = Dilution factor

Recalculation:

11: $\frac{100mL(2)(0.5987ug/L)}{0.814(1.01g)(1000)} = 0.14 mg/kg$

#	Sample ID	Analyte	Reported Concentration (mg/kg)	Calculated Concentration (mg/kg)	Acceptable (Y/N)
	5	K	4460	4460	Y
		Se	0.55	0.55	
		Ag	0.18	0.18	
		Na	81.4	81.4	
		Sr	20.3	20.3	
		Tl	0.38	0.38	
		Sn	2.8	2.8	
		Ti	1290	1290	
		V	52.1	52.1	
		Zn	92.2	92.2	
		Zr	1.9	1.9	
	11	Al	12000	12000	
		Sb	0.14	0.14	
		As	4.3	4.3	
		Ba	164	164	
		Be	0.47	0.47	
		Bi	3.9	3.9	
		Cd	0.18	0.18	
		Ca	5190	5190	
		Cr	19.0	19.0	
		Co	7.2	7.2	
		Cu	11.0	11.0	✓

LDC #: 25910 4

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: CR
2nd reviewer: [illegible]

METHOD: Trace Metals (EPA SW 846 Method 6010/6020/7000)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Have results been reported and calculated correctly?
Y N N/A Are results within the calibrated range of the instruments and within the linear range of the ICP?
Y N N/A Are all detection limits below the CRDL?

Detected analyte results for _____ were recalculated and verified using the following equation:

Concentration = (RD)(FV)(Dil) / (In. Vol.)

RD = Raw data concentration
FV = Final volume (ml)
In. Vol. = Initial volume (ml) or weight (G)
Dil = Dilution factor

Recalculation:

see previous page

#	Sample ID	Analyte	Reported Concentration (mg/kg)	Calculated Concentration (mg/kg)	Acceptable (Y/N)
	11	Fe	18500	18500	Y
		Pb	8.0	8.0	
		Li	16.7	16.7	
		Mg	3620	3620	
		Mn	214	214	
		Hg	0.098	0.098	
		Mo	0.74	0.74	
		Ni	11.6	11.6	
		P	427	427	
		K	2710	2710	
		Se	0.087	0.087	
		Ag	0.40	0.40	
		Na	273	273	
		Sr	53.9	53.9	
		Tl	0.26	0.26	
		Sn	2.6	2.6	
		Ti	1010	1010	
		V	48.4	48.4	
		Zn	81.0	81.0	
		Zr	4.7	4.7	

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	March 2, 2011
LDC Report Date:	August 11, 2011
Matrix:	Soil/Water
Parameters:	Herbicides
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE095

Sample Identification

DUP-07-SA5A-QC-030211
SL-042-SA5A-SS-0.0-0.5
SL-044-SA5A-SS-0.0-0.5
SL-045-SA5A-SS-0.0-0.5
SL-048-SA5A-SS-0.0-0.5
SL-176-SA5A-SS-0.0-0.3
SL-178-SA5A-SS-0.0-0.4
SL-179-SA5A-SS-0.0-0.3
SL-186-SA5A-SS-0.0-0.5
SL-188-SA5A-SS-0.0-0.5
SL-189-SA5A-SS-0.0-0.5
EB05-SA5A-030211
SL-048-SA5A-SS-0.0-0.5MS
SL-048-SA5A-SS-0.0-0.5MSD

Introduction

This data review covers 13 soil samples and one water sample listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8151A for Herbicides.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration of compounds was performed for the primary (quantitation) column and confirmation column as required by this method.

The percent relative standard deviations (%RSD) were less than or equal to 20.0% for all compounds.

In the case where the laboratory used a calibration curve to evaluate the compounds, all coefficients of determination (r^2) were greater than or equal to 0.990 .

Retention time windows were evaluated and considered technically acceptable.

III. Calibration Verification

Calibration verification was performed at the required frequencies.

The percent differences (%D) of calibration factors in continuing standard mixtures were within the 20.0% QC limits.

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

Retention times (RT) of all compounds in the calibration standards were within QC limits.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No herbicide contaminants were found in the method blanks.

Sample EB05-SA5A-030211 was identified as an equipment blank. No herbicide contaminants were found.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VI. Matrix Spike/(Matrix Spike) Duplicate

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
SL-048-SA5A-SS-0.0-0.5MS/MSD (SL-048-SA5A-SS-0.0-0.5)	MCPP Dinoseb	- -	- -	69 (≤50) 46 (≤35)	J (all detects) J (all detects)	A

VII. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits were within QC limits.

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

The sample results for detected compounds from the two columns were within 40% relative percent difference (RPD) with the following exceptions:

Sample	Compound	RPD	Flag	A or P
SL-042-SA5A-SS-0.0-0.5	2,4-D	87	J (all detects)	A
SL-044-SA5A-SS-0.0-0.5	2,4,5-TP	68	J (all detects)	A
SL-176-SA5A-SS-0.0-0.3	MCPP MCPA	69 61	J (all detects) J (all detects)	A
SL-179-SA5A-SS-0.0-0.3	MCPP	46	J (all detects)	A
SL-186-SA5A-SS-0.0-0.5	MCPA 2,4-DB	72 98	J (all detects) J (all detects)	A
SL-188-SA5A-SS-0.0-0.5	2,4,5-TP	140	J (all detects)	A
SL-189-SA5A-SS-0.0-0.5	2,4-DB	79	J (all detects)	A

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE095	All compounds reported below the RL.	J (all detects)	A

X. System Performance

The system performance was acceptable.

XI. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XII. Field Duplicates

Samples SL-048-SA5A-SS-0.0-0.5 and DUP-07-SA5A-QC-030211 were identified as field duplicates. No herbicides were detected in any of the samples.

Santa Susana Field Laboratory
Herbicides - Data Qualification Summary - SDG DE095

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE095	SL-048-SA5A-SS-0.0-0.5	MCPP Dinoseb	J (all detects) J (all detects)	A	Matrix spike/Matrix spike duplicate (RPD) (Q)
DE095	SL-042-SA5A-SS-0.0-0.5	2,4-D	J (all detects)	A	Compound quantitation and CRQLs (RPD) (*IX)
DE095	SL-044-SA5A-SS-0.0-0.5 SL-188-SA5A-SS-0.0-0.5	2,4,5-TP	J (all detects)	A	Compound quantitation and CRQLs (RPD) (*IX)
DE095	SL-176-SA5A-SS-0.0-0.3	MCPP MCPA	J (all detects) J (all detects)	A	Compound quantitation and CRQLs (RPD) (*IX)
DE095	SL-179-SA5A-SS-0.0-0.3	MCPP	J (all detects)	A	Compound quantitation and CRQLs (RPD) (*IX)
DE095	SL-186-SA5A-SS-0.0-0.5	MCPA 2,4-DB	J (all detects) J (all detects)	A	Compound quantitation and RLs (RPD) (*IX)
DE095	SL-189-SA5A-SS-0.0-0.5	2,4-DB	J (all detects)	A	Compound quantitation and RLs (RPD) (*IX)
DE095	DUP-07-SA5A-QC-030211 SL-042-SA5A-SS-0.0-0.5 SL-044-SA5A-SS-0.0-0.5 SL-045-SA5A-SS-0.0-0.5 SL-048-SA5A-SS-0.0-0.5 SL-176-SA5A-SS-0.0-0.3 SL-178-SA5A-SS-0.0-0.4 SL-179-SA5A-SS-0.0-0.3 SL-186-SA5A-SS-0.0-0.5 SL-188-SA5A-SS-0.0-0.5 SL-189-SA5A-SS-0.0-0.5 EB05-SA5A-030211	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and RLs (Z)

Santa Susana Field Laboratory
Herbicides - Laboratory Blank Data Qualification Summary - SDG DE095

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Herbicides - Field Blank Data Qualification Summary - SDG DE095

No Sample Data Qualified in this SDG

LDC #: 25911J5

SDG #: DE095

Laboratory: Lancaster Laboratories

VALIDATION COMPLETENESS WORKSHEET

Level IV

Date: 8/10/11

Page: 1 of 1

Reviewer:

2nd Reviewer:

METHOD: GC Herbicides (EPA SW 846 Method 8151A)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 3/2/11
II	Initial calibration	A	% RSD ≤ 20, r^2
III.	Calibration verification/ICV	A	ICV/CCV ≤ 20
IV.	Blanks	A	
V	Surrogate recovery	A	
VI.	Matrix spike/Matrix spike duplicates	SW	
VII.	Laboratory control samples	A	LCS
VIII.	Target compound identification	A	
IX.	Compound Quantitation and CRQLs (RL)	SW	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	ND	D = 1, 5
XIII.	Field blanks	ND	EB = 12

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: SOIL + water

1	1	DUP-07-SA5A-QC-030211 D	11	SL-189-SA5A-SS-0.0-0.5	21	1	PBLK20074	31	
2	1	SL-042-SA5A-SS-0.0-0.5	12	2 EB05-SA5A-030211 EB	22	2	PBLK03064	32	
3		SL-044-SA5A-SS-0.0-0.5	13	SL-048-SA5A-SS-0.0-0.5MS	23			33	
4		SL-045-SA5A-SS-0.0-0.5	14	SL-048-SA5A-SS-0.0-0.5MSD	24			34	
5		SL-048-SA5A-SS-0.0-0.5 D	15		25			35	
6		SL-176-SA5A-SS-0.0-0.3	16		26			36	
7		SL-178-SA5A-SS-0.0-0.4	17		27			37	
8		SL-179-SA5A-SS-0.0-0.3	18		28			38	
9		SL-186-SA5A-SS-0.0-0.5	19		29			39	
10		SL-188-SA5A-SS-0.0-0.5	20		30			40	

Notes:

LDC #: 25911J5
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Page: 1 of 2
Reviewer: [illegible]
2nd Reviewer: [illegible]

Method: ✓ GC ____ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation?		✓		
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?			✓	
Were the RT windows properly established?	✓			
IV. Continuing calibration				
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20%.0 or percent recoveries 80-120%?	✓			
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?		✓		
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	

LDC #: 25911J5
SDG #: see cover

VALIDATION FINDINGS CHECKLIST

Reviewer: FJ
2nd Reviewer: A

Validation Area	Yes	No	NA	Findings/Comments
X. Target compound identification				
Were the retention times of reported detects within the RT windows?	✓			
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.	✓			
Target compounds were detected in the field duplicates.		✓		
XV. Field blanks				
Field blanks were identified in this SDG.	✓			
Target compounds were detected in the field blanks.		✓		

LDC #: 25911J5

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Page: 1 of 1
Reviewer: FT
2nd Reviewer:

METHOD: ✓ GC ___ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG?
Y N N/A Was an MS/MSD analyzed every 20 samples for each matrix or whenever a sample extraction was performed?
Y N N/A Were the MS/MSD percent recoveries (%R) and relative percent differences (RPD) within QC limits?

#	MS/MSD ID	Compound	MS %R (Limits)	MSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
	13+14	I	( )	( )	69 (50)	5 (Q)	J/A det
		E	( )	( )	46 (35)	↓ ↓	↓
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
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			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		

VALIDATION FINDINGS WORKSHEET

METHOD: ✓ GC ____ HPLC

8310	8330	8151	8141	8141(Con't)	8021B
A. Acenaphthene	A. HMX	A. 2,4-D	A. Dichlorvos	V. Fensulfothion	V. Benzene
B. Acenaphthylene	B. RDX	B. 2,4-DB	B. Mevinphos	W. Bolstar	CC. Toluene
C. Anthracene	C. 1,3,5-Trinitrobenzene	C. 2,4,5-T	C. Demeton-O	X. EPN	EE. Ethyl Benzene
D. Benzo(a)anthracene	D. 1,3-Dinitrobenzene	D. 2,4,5-TP	D. Demeton-S	Y. Azinphos-methyl	SSS. O-Xylene
E. Benzo(a)pyrene	E. Tetryl	E. Dinoseb	E. Ethoprop	Z. Coumaphos	RRR. MP-Xylene
F. Benzo(b)fluoranthene	F. Nitrobenzene	F. Dichlorprop	F. Naled	AA. Parathion	GG. Total Xylene
G. Benzo(g,h,i)perylene	G. 2,4,6-Trinitrotoluene	G. Dicamba	G. Sulfotep	BB. Trichloronate	
H. Benzo(k)fluoranthene	H. 4-Amino-2,6-dinitrotoluene	H. Dalapon	H. Phorate	CC. Trichlorinate	
I. Chrysene	I. 2-Amino-4,6-dinitrotoluene	I. MCPP	I. Dimethoate	DD. Trifluralin	
J. Dibenz(a,h)anthracene	J. 2,4-Dinitrotoluene	J. MCPA	J. Diazinon	EE. Def	
K. Fluoranthene	K. 2,6-Dinitrotoluene	K. Pentachlorophenol	K. Disulfoton	FF. Prowl	
L. Fluorene	L. 2-Nitrotoluene	L. 2,4,5-TP (silvex)	L. Parathion-methyl	GG. Ethion	
M. Indeno(1,2,3-cd)pyrene	M. 3-Nitrotoluene	M. Silvex	M. Ronnel	HH. Tetrachlorvinphos	
N. Naphthalene	N. 4-Nitrotoluene		N. Malathion	II. Sulprofos	
O. Phenanthrene	O.		O. Chlorpyrifos		
P. Pyrene	P.		P. Fenthion		
Q.	Q		Q. Parathion-ethyl		
R.			R. Trichloronate		
S.			S. Merphos		
			T. Stirofos		
			U. Tokuthion		

Notes:

cmpd_list.wpd

LDC #: 25911J5
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Compound Quantitation and Reported CRQLs

Page: 1 of 1
Reviewer: F7
2nd Reviewer: [illegible]

METHOD: ✓ GC ___ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".
Level IV/D Only
Y N N/A Were CRQLs adjusted for sample dilutions, dry weight factors, etc.?
Y N N/A Did the reported results for detected target compounds agree within 10.0% of the recalculated results?

#	Compound Name	% RPD Bet. 2 col. ±40 Finding	Associated Samples	Qualifications
	J	200%	1	J/A dot ~~*~~
				* XIII
	A ✓	87%	2	J/A dot
	D ✓	68	3	
	I ✓	69	6	
	J ✓	61	↓	
	I	46	8	
	J	72	9	
	B	98		
	D	140	10	✓

Comments: See sample calculation verification worksheet for recalculations

COMQUANew.wpd

LDC #: 259IN5
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Compound Quantitation and Reported CRQLs

Page: 1 of 1
Reviewer: F7
2nd Reviewer: C

METHOD: ✓ GC ___ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".
Level IV/D Only
Y N N/A Were CRQLs adjusted for sample dilutions, dry weight factors, etc.?
Y N N/A Did the reported results for detected target compounds agree within 10.0% of the recalculated results?

#	Compound Name	Finding (% RPD Bet 2 col ≤ 40)	Associated Samples	Qualifications
	B	79	11	J/A dnt *XIII

Comments: See sample calculation verification worksheet for recalculations

COMQUANew.wpd

LDC #: 25911J5
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC ✓ HPLC ____

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

#	Standard ID	Calibration Date	Compound	Reported CF (410.4/2002 std)	Recalculated CF (410.4/2002 std)	Reported Average CF (initial)	Recalculated Average CF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL RTXCLP1	3/5/11	Dalapon RTXCLP1	1.93 ~~3.05~~ $\times 10^{-1}$	1.9×10^{-1}	1.96×10^{-1}	1.96×10^{-1}	8.29	8.29
			Dicamba	5.25×10^{-1}	5.25×10^{-1}	5.34×10^{-1}	5.27×10^{-1}	13.46	13.46
			~~RTXCLP2~~						
2		3							
3	ICAL RTXCLP1	3/5/11	Dalapon RTXCLP2	1.75×10^{-1}	1.75×10^{-1}	1.721×10^{-1}	1.721×10^{-1}	12.91	12.91
			Dicamba	5.10×10^{-1}	5.10×10^{-1}	4.953×10^{-1}	4.953×10^{-1}	3.52	3.52
4									

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25 91N5
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer:
2nd Reviewer:

METHOD: GC ✓ HPLC

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

#	Standard ID	Calibration Date	Compound	Reported 410 / 20.020 CF (std)	Recalculated → CF (std)	Reported Average CF (initial)	Recalculated Average CF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	3/11/11	Dalapon RTX CLP1	0.193	0.193	0.1899	0.1899	12.81	12.81
			Dicamba	0.567	0.567	0.5660	0.5660	8.36	8.36
2			RTX CLP2	0.173	0.173	0.1722	0.1722	11.92	11.92
			↓	0.545	0.545	0.5387	0.5387	5.40	5.40
3									
4									

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

INICI C ISB

LDC #: 25 91N5
SDG #: w conv

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: EJ
2nd Reviewer: A

METHOD: GC ✓ HPLC_____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF - CF)/ave. CF
CF = A/C

Where: ave. CF = Initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(Ical)/ CCV Conc.	Reported CF/Conc. CCV	Recalculated CF/Conc. CCV	Reported %D	Recalculated %D
1	ccv 3:34	3/8/11	Dalapon ELP1	410.40	385.71	385.71	6.0	6.0
			Dicamba	20.02	21.15	21.15	5.6	5.6
			↓ CLP2		425.68	425.68	3.7	3.7
2	ccv 9:04	3/8/11	↓	↓	20.36	20.36	1.7	1.7
			↓ CLP1	410.40	381.37	381.37	7.1	7.1
			↓	20.02	20.86	20.86	4.2	4.2
3			↓ CLPII	410.40	422.92	422.92	3.1	3.1
			↓	20.02	20.69	20.69	3.4	3.4
	ccv 16:32	3/18/11	↓ CLP1	410.40	429.55	429.55	4.7	4.7
4			↓	20.02	19.35	19.35	3.3	3.3
			↓ CLP2	410.40	438.86	438.86	6.9	6.9
			↓	20.02	19.15	19.15	4.3	4.3

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 75911U5
SDG #: pu cover

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Page: 1 of 7
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC ✓ HPLC_____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF - CF)/ave. CF
CF = A/C

Where: ave. CF = initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(Ical)/ CCV Conc.	Reported CF/Conc. CCV	Recalculated CF/Conc. CCV	Reported %D	Recalculated %D
1	CCV 22.01	3/18/11	Dalapon	410.40	437.30	437.30	6.6	6.6
			Dicamba	20.02	19.42	19.42	3.0	3.0
2	CCV 22.01	3/18/11	↓	410.40	457.14	457.14	11.4	11.4
			↓	20.02	19.93	19.93	3.5	3.5
3								
4								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

CONCLC.1S

LDC #:_____
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Page: 1 of 1
Reviewer: FT
2nd reviewer: [illegible]

METHOD: ___ GC ___ HPLC

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: # 1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
2,4-DCPAA	RTX CLP2	6.7	5.985713	90	90	0

Sample ID:_____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Sample ID:_____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

LDC #: 25 7103
SDG #: per cover

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Reviewer: FT
2nd Reviewer: [illegible]

METHOD: ✓ GC __HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

%Recovery = 100 * (SSC - SC)/SA Where SSC = Spiked sample concentration SC = Sample concentration
SA = Spike added
RPD =(((SSCMS - SSCMSD) * 2) / (SSCMS + SSCMSD))*100 MS = Matrix spike MSD = Matrix spike duplicate

MS/MSD samples: 13 + 14

Compound	Spike Added (ug/kg)		Sample Conc. (ug/kg)	Spike Sample Concentration (ug/kg)		Matrix spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	—	MS	MSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)											
Diesel (8015)											
Benzene (8021B)											
Methane (RSK-175)											
2,4-D (8151)											
Dinoseb (8151)											
Naphthalene (8310)											
Anthracene (8310)											
HMX (8330)											
2,4,6-Trinitrotoluene (8330)											
Dalapon	20.88	20.88	ND	13.36	9.92	64	64	48	48	30	30
Dicamba	0.83	0.83	ND	0.78	0.62	94	94	75	75	23	23

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25911J5
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: ✓ GC __HPLC

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100* (SSC-SC)/SA
RPD = I LCS - LCSD I * 2/(LCS + LCSD)

Where: SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory control sample percent recovery
SC = Concentration
LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: LCS

Compound	Spike Added (ug/L)		Spiked Sample Concentration (ug/L)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)										
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)										
2,4,6-Trinitrotoluene (8330)										
Dalapon	6.3	NA	4.3	NA	68	68				
Picloram	0.25	↓	0.24	↓	96	96	NA			

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25911J5
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: ✓ GC __ HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= (A)(Fv)(Df) / (RF)(Vs or Ws)(%S/100)

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound in the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID. #1 Compound Name MCPA

Concentration = 1285 (100) (2) / 69603 (0.0007) (60.1) (0.874)

= 100 ug/kg

2,4-D

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications
	#2 =	7537 (100) (2000) / 149.3337 (1.38x10^-1)	(60) (0.812)	(1000)	
		= 1.5 ug/kg			

Comments:

SAMPCALew.wpd

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	March 2, 2011
LDC Report Date:	August 1, 2011
Matrix:	Soil/Water
Parameters:	Wet Chemistry
Validation Level:	Level IV
Laboratory, Area IV:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE095

Sample Identification

DUP-07-SA5A-QC-030211
SL-042-SA5A-SS-0.0-0.5
SL-044-SA5A-SS-0.0-0.5
SL-045-SA5A-SS-0.0-0.5
SL-048-SA5A-SS-0.0-0.5
SL-176-SA5A-SS-0.0-0.3
SL-178-SA5A-SS-0.0-0.4
SL-179-SA5A-SS-0.0-0.3
SL-186-SA5A-SS-0.0-0.5
SL-188-SA5A-SS-0.0-0.5
SL-189-SA5A-SS-0.0-0.5
EB05-SA5A-030211
SL-048-SA5A-SS-0.0-0.5MS
SL-048-SA5A-SS-0.0-0.5DUP
SL-189-SA5A-SS-0.0-0.5MS
SL-189-SA5A-SS-0.0-0.5DUP

Introduction

This data review covers 15 soil samples and one water sample listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA Method 300.0 for Fluoride, EPA SW 846 Method 7199 for Hexavalent Chromium, EPA SW 846 Method 9045C for pH, and EPA Method 314.0 for Perchlorate.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review (January 2010).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met with the following exceptions:

Sample	Analyte	Total Time From Sample Collection Until Analysis	Required Holding Time From Sample Collection Until Analysis	Flag	A or P
EB05-SA5A-030211	Hexavalent chromium	25.25 hours	24 hours	J (all detects) UJ (all non-detects)	P

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

All criteria for the initial calibration of each method were met.

III. Calibration Verification

Calibration verification frequency and analysis criteria were met for each method when applicable.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No contaminant concentrations were found in the initial, continuing and preparation blanks with the following exceptions:

Method Blank ID	Analyte	Concentration	Associated Samples
PB (prep blank)	Hexavalent chromium	0.49 mg/Kg	All soil samples in SDG DE095

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated method blanks with the following exceptions:

Sample	Analyte	Reported Concentration	Modified Final Concentration
DUP-07-SA5A-QC-030211	Hexavalent chromium	0.47 mg/Kg	0.47U mg/Kg
SL-044-SA5A-SS-0.0-0.5	Hexavalent chromium	0.85 mg/Kg	0.85U mg/Kg
SL-045-SA5A-SS-0.0-0.5	Hexavalent chromium	1.6 mg/Kg	1.6U mg/Kg

Sample	Analyte	Reported Concentration	Modified Final Concentration
SL-048-SA5A-SS-0.0-0.5	Hexavalent chromium	0.41 mg/Kg	0.41U mg/Kg
SL-176-SA5A-SS-0.0-0.3	Hexavalent chromium	1.3 mg/Kg	1.3U mg/Kg
SL-178-SA5A-SS-0.0-0.4	Hexavalent chromium	0.53 mg/Kg	0.53U mg/Kg
SL-179-SA5A-SS-0.0-0.3	Hexavalent chromium	0.65 mg/Kg	0.65U mg/Kg
SL-186-SA5A-SS-0.0-0.5	Hexavalent chromium	0.32 mg/Kg	0.32U mg/Kg
SL-188-SA5A-SS-0.0-0.5	Hexavalent chromium	0.37 mg/Kg	0.37U mg/Kg
SL-189-SA5A-SS-0.0-0.5	Hexavalent chromium	0.29 mg/Kg	0.29U mg/Kg

Sample EB05-SA5A-030211 was identified as an equipment blank. No contaminant concentrations were found.

V. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) analyses were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Analyte	%R (Limits)	Flag	A or P
SL-048-SA5A-SS-0.0-0.5MS (DUP-07-SA5A-QC-030211 SL-042-SA5A-SS-0.0-0.5 SL-044-SA5A-SS-0.0-0.5 SL-045-SA5A-SS-0.0-0.5 SL-048-SA5A-SS-0.0-0.5 SL-176-SA5A-SS-0.0-0.3 SL-178-SA5A-SS-0.0-0.4 SL-179-SA5A-SS-0.0-0.3 SL-186-SA5A-SS-0.0-0.5 SL-188-SA5A-SS-0.0-0.5)	Fluoride	49 (80-120)	J (all detects) UJ (all non-detects)	A
SL-189-SA5A-SS-0.0-0.5MS (SL-189-SA5A-SS-0.0-0.5)	Fluoride	79 (80-1200	J (all detects) UJ (all non-detects)	A

VI. Duplicates

Duplicate (DUP) sample analyses were reviewed for each matrix as applicable. Results were within QC limits.

VII. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Sample Result Verification

All sample result verifications were acceptable

All analytes reported below the RL were qualified as follows:

Sample	Analyte	Flag	A or P
All samples in SDG DE095	All analytes reported below the RL and above the MDL.	J (all detects)	A

IX. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

X. Field Duplicates

Samples DUP-07-SA5A-QC-030211 and SL-048-SA5A-SS-0.0-0.5 were identified as field duplicates. No contaminant concentrations were detected in any of the samples with the following exceptions:

Analyte	Concentration		RPD (Limits)	Flags	A or P
	DUP-07-SA5A-QC-030211	SL-048-SA5A-SS-0.0-0.5			
Fluoride	1.6 mg/Kg	1.5 mg/Kg	6 (≤50)	-	-
Hexavalent chromium	0.47 mg/Kg	0.41 mg/Kg	14 (≤50)	-	-
pH	6.20 units	6.33 units	2 (≤50)	-	-

Santa Susana Field Laboratory
Wet Chemistry - Data Qualification Summary - SDG DE095

SDG	Sample	Analyte	Flag	A or P	Reason (Code)
DE029	EB05-SA5A-030211	Hexavalent chromium	J (all detects) UJ (all non-detects)	P	Technical holding times (H)
DE029	DUP-07-SA5A-QC-030211 SL-042-SA5A-SS-0.0-0.5 SL-044-SA5A-SS-0.0-0.5 SL-045-SA5A-SS-0.0-0.5 SL-048-SA5A-SS-0.0-0.5 SL-176-SA5A-SS-0.0-0.3 SL-178-SA5A-SS-0.0-0.4 SL-179-SA5A-SS-0.0-0.3 SL-186-SA5A-SS-0.0-0.5 SL-188-SA5A-SS-0.0-0.5 SL-189-SA5A-SS-0.0-0.5	Fluoride	J (all detects) UJ (all non-detects)	A	Matrix spike analysis (Q)
DE029	DUP-07-SA5A-QC-030211 SL-042-SA5A-SS-0.0-0.5 SL-044-SA5A-SS-0.0-0.5 SL-045-SA5A-SS-0.0-0.5 SL-048-SA5A-SS-0.0-0.5 SL-176-SA5A-SS-0.0-0.3 SL-178-SA5A-SS-0.0-0.4 SL-179-SA5A-SS-0.0-0.3 SL-186-SA5A-SS-0.0-0.5 SL-188-SA5A-SS-0.0-0.5 SL-189-SA5A-SS-0.0-0.5 EB05-SA5A-030211	All analytes reported below the RL and above the MDL.	J (all detects)	A	Sample result verification (Z)

Santa Susana Field Laboratory
Wet Chemistry – Laboratory Blank Data Qualification Summary - SDG DE095

SDG	Sample	Analyte	Modified Final Concentration	A or P	Code
DE095	DUP-07-SA5A-QC-030211	Hexavalent chromium	0.47U mg/Kg	A	B
DE095	SL-044-SA5A-SS-0.0-0.5	Hexavalent chromium	0.85U mg/Kg	A	B
DE095	SL-045-SA5A-SS-0.0-0.5	Hexavalent chromium	1.6U mg/Kg	A	B
DE095	SL-048-SA5A-SS-0.0-0.5	Hexavalent chromium	0.41U mg/Kg	A	B
DE095	SL-176-SA5A-SS-0.0-0.3	Hexavalent chromium	1.3U mg/Kg	A	B
DE095	SL-178-SA5A-SS-0.0-0.4	Hexavalent chromium	0.53U mg/Kg	A	B
DE095	SL-179-SA5A-SS-0.0-0.3	Hexavalent chromium	0.65U mg/Kg	A	B
DE095	SL-186-SA5A-SS-0.0-0.5	Hexavalent chromium	0.32U mg/Kg	A	B

SDG	Sample	Analyte	Modified Final Concentration	A or P	Code
DE095	SL-188-SA5A-SS-0.0-0.5	Hexavalent chromium	0.37U mg/Kg	A	B
DE095	SL-189-SA5A-SS-0.0-0.5	Hexavalent chromium	0.29U mg/Kg	A	B

Santa Susana Field Laboratory
Wet Chemistry - Field Blank Data Qualification Summary - SDG DE095

No Sample Data Qualified in this SDG

LDC #: 25911J6

SDG #: DE095

Laboratory: Lancaster Laboratories

VALIDATION COMPLETENESS WORKSHEET

Level IV

Date: 8-1-11

Page: 1 of 1

Reviewer: [illegible]

2nd Reviewer: [illegible]

METHOD: (Analyte) Fluoride (EPA Method 300.0), Hexavalent Chromium (EPA SW846 Method 7199), pH (~~EPA Method 150.1~~/EPA SW846 Method 9045C), Perchlorate (EPA Method 314.0)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	SW	Sampling dates: 3/2/11
IIa.	Initial calibration	A	
IIb.	Calibration verification	A	
III.	Blanks	SW	
IV	Matrix Spike/Matrix Spike Duplicates	SW	MS
V	Duplicates	A	DUP
VI.	Laboratory control samples	A	LCS/D
VII.	Sample result verification	A	
VIII.	Overall assessment of data	A	
IX.	Field duplicates	SW	(1,5)
X	Field blanks	ND	EB=12

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: all soil except 12=water

1	DUP-07-SA5A-QC-030211	11	SL-189-SA5A-SS-0.0-0.5	21		31	
2	SL-042-SA5A-SS-0.0-0.5	12	EB05-SA5A-030211	22		32	
3	SL-044-SA5A-SS-0.0-0.5	13	SL-048-SA5A-SS-0.0-0.5MS	23		33	
4	SL-045-SA5A-SS-0.0-0.5	14	SL-048-SA5A-SS-0.0-0.5DUP	24		34	
5	SL-048-SA5A-SS-0.0-0.5	15	(~~X~~1J) MS	25		35	
6	SL-176-SA5A-SS-0.0-0.3	16	↓ DUP	26		36	
7	SL-178-SA5A-SS-0.0-0.4	17		27		37	
8	SL-179-SA5A-SS-0.0-0.3	18		28		38	
9	SL-186-SA5A-SS-0.0-0.5	19		29		39	
10	SL-188-SA5A-SS-0.0-0.5	20		30		40	

Notes:

LDC #: 259176

VALIDATION FINDINGS CHECKLIST

Reviewer: CR
2nd Reviewer: [illegible]

Method: Inorganics (EPA Method See cover)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.		✓		
Cooler temperature criteria was met.	✓			
II. Calibration				
Were all instruments calibrated daily, each set-up time?	✓			
Were the proper number of standards used?	✓			
Were all initial calibration correlation coefficients > 0.995?	✓			
Were all initial and continuing calibration verification %Rs within the 90-110% QC limits?	✓			
Were titrant checks performed as required? (Level IV only)			✓	
Were balance checks performed as required? (Level IV only)			✓	
III. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.	✓			
IV. Matrix spike/Matrix spike duplicates and Duplicates				
Were a matrix spike (MS) and duplicate (DUP) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD or MS/DUP. Soil / Water.	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the 75-125 QC limits? If the sample concentration exceeded the spike concentration by a factor of 4 or more, no action was taken.		✓		
Were the MS/MSD or duplicate relative percent differences (RPD) ≤ 20% for waters and ≤ 35% for soil samples? A control limit of ≤ CRDL(≤ 2X CRDL for soil) was used for samples that were ≤ 5X the CRDL, including when only one of the duplicate sample values were < 5X the CRDL.	✓			
V. Laboratory control samples				
Was an LCS anaylzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the 80-120% (85-115% for Method 300.0) QC limits?	✓			
VI. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?		✓		
Were the performance evaluation (PE) samples within the acceptance limits?			✓	

LDC #: 259156

VALIDATION FINDINGS CHECKLIST

Reviewer: 02
2nd Reviewer: [illegible]

Validation Area	Yes	No	NA	Findings/Comments
VII. Sample Result Verification				
Were RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
Were detection limits < RL?	✓			
VIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
IX. Field duplicates				
Field duplicate pairs were identified in this SDG.	✓			
Target analytes were detected in the field duplicates.	✓			
X. Field blanks				
Field blanks were identified in this SDG.	✓			
Target analytes were detected in the field blanks.		✓		

LDC #: 25911J6

VALIDATION FINDINGS WORKSHEET
Sample Specific Analysis Reference

Reviewer: CR
2nd reviewer: [illegible]

All circled methods are applicable to each sample.

Sample ID	Matrix	Parameter
1-11		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
12		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
QC 13		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
14		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
15		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
16		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4

Comments:

LDC #: 25916J6

VALIDATION FINDINGS WORKSHEET
Technical Holding Times

Page: 1 of 1
Reviewer: CR
2nd reviewer: [illegible]

All circled dates have exceeded the technical holding time.
Y N N/A Were all samples preserved as applicable to each method ?
Y N N/A Were all cooler temperatures within validation criteria?

Method:	7199					
Parameters:	Cr6+					
Technical holding time:	24hrs					

Sample ID	Sampling date	Analysis date	Analysis date	Analysis date	Analysis date	Analysis date	Qualifier
12	3/2/11 12:15	3/3/11 8:30	(25.25hrs)				J/UJ/P (H)

LDC #: 25911J6

VALIDATION FINDINGS WORKSHEET
Blanks

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: Inorganics, Method See Cover

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".
Y N N/A Were blank analyses performed as required? If no, please see qualifications below.
Y N N/A Were any activities in the blanks greater than the minimum detectable activity? If yes, please see qualifications below.

Conc. units: mg/Kg **Associated Samples:** All Soil

Analyte	Blank ID	Blank ID	Blank Action Limit												
	PB	ICB/CCB (mg/L)		1	2	3	4	5	6	7	8	9	10	11
Cr6+	0.49		2.45	0.47		0.85	1.6	0.41	1.3	0.53	0.65	0.32	0.37	0.29

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
All contaminants within five times the method blank concentration were qualified as not detected, "U".

LDC #: 25911J6

VALIDATION FINDINGS WORKSHEET
Matrix Spike Analysis

Page: 1 of 2
Reviewer:
2nd Reviewer:

METHOD: Inorganics, Method see cover

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a matrix spike analyzed for each matrix in this SDG?

Y N N/A Were matrix spike percent recoveries (%R) within the control limits of ~~75-125~~ 80-120 (85-115% for Method 300.0)? If the sample concentration exceeded the spike concentration by a factor of 4 or more, no action was taken.

LEVEL IV ONLY:

Y N N/A Were recalculated results acceptable? See Level IV Recalculation Worksheet for recalculations.

#	Date	Matrix Spike ID	Matrix	Analyte	%R	Associated Samples	Qualifications
		13	S	F	49	1-10	J/UJ/A (Q)
		15	S	F	79	11	

Comments:

MS.6

LDC# 25911J6

VALIDATION FINDINGS WORKSHEET
Field Duplicates

Page: 1 of 1
Reviewer:
2nd Reviewer:

Inorganics, Method See Cover

Y N NA Were field duplicate pairs identified in this SDG?
Y N NA Were target analytes detected in the field duplicate pairs?

Analyte	Concentration (mg/Kg)		RPD (≤50)	
	1	5		
Fluoride	1.6	1.5	6	
Hexavalent Chromium	0.47	0.41	14	
pH (units)	6.20	6.33	2	

V:\FIELD DUPLICATES\FD_inorganic\25911J6.wpd

LDC #: 25911J6

Validation Findings Worksheet
Initial and Continuing Calibration Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

Method: Inorganics, Method See Cover

The correlation coefficient (r) for the calibration of ClO4 was recalculated.Calibration date: 3/9/11

An initial or continuing calibration verification percent recovery (%R) was recalculated for each type of analysis using the following formula:

%R = Found X 100 / True

Where, Found = concentration of each analyte measured in the analysis of the ICV or CCV solution
True = concentration of each analyte in the ICV or CCV source

Type of analysis	Analyte	Standard	Conc. (ug/L)	Response	Recalculated r or r^2	Reported r or r^2	Acceptable (Y/N)
Initial calibration	ClO4	s1	2	0.005	1.000	1.000	Y
		s2	4.00	0.01			
		s3	10.00	0.026			
		s4	25.00	0.067			
		s5	100.00	0.272			
Calibration verification	F	CCV	1.5	1.3884	93	93	
Calibration verification	Cr6+	↓	200	206.5510	103	103	
Calibration verification	ClO4	↓	100	113.4187	113	113	↓

Comments: Refer to Calibration Verification findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25416J6

VALIDATION FINDINGS WORKSHEET
Level IV Recalculation Worksheet

Page: 1 of 1
Reviewer: QR
2nd Reviewer: [illegible]

METHOD: Inorganics, Method See cover

Percent recoveries (%R) for a laboratory control sample and a matrix spike sample were recalculated using the following formula:

$$\%R = \frac{Found}{True} \times 100$$

Where, Found = concentration of each analyte measured in the analysis of the sample. For the matrix spike calculation, Found = SSR (spiked sample result) - SR (sample result).
True = concentration of each analyte in the source.

A sample and duplicate relative percent difference (RPD) was recalculated using the following formula:

$$RPD = \frac{|S-D|}{(S+D)/2} \times 100$$

Where, S = Original sample concentration
D = Duplicate sample concentration

Sample ID	Type of Analysis	Element	Found / S (~~units~~) mg/kg	True / D (~~units~~) mg/kg	Recalculated %R / RPD	Reported %R / RPD	Acceptable (Y/N)
LCS	Laboratory control sample	Cr6+	99.7	100	99.7	—	Y
13	Matrix spike sample	Cl04	(SSR-SR) 554 ug/kg	500 ug/kg	111	111	
14	Duplicate sample	F	1.3	1.4	4	4	

Comments: Refer to appropriate worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

TOTCLC.6

LDC #: 25915B6

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: CR
2nd reviewer: [illegible]

METHOD: Inorganics, Method See cover

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Have results been reported and calculated correctly?
Y N N/A Are results within the calibrated range of the instruments?
Y N N/A Are all detection limits below the CRQL?

Compound (analyte) results for F / Cr^{6+} reported with a positive detect were recalculated and verified using the following equation:

Concentration =

F: $y = 0.1827x - 0.0131$

Cr^{6+}: $y = 0.0124x - 0.0052$

Recalculation:

5: F: $\frac{\frac{6.010 + 0.0131}{0.1827} \times 50mL}{4.139g\,(0.875)} = 1.47 mg/kg$

9: Cr^{6+} = $(0.0903(80.64) - 0.418) / 24.9g(0.84) = 0.328 mg/kg$

#	Sample ID	Analyte	Reported Concentration (mg/kg)	Calculated Concentration (mg/kg)	Acceptable (Y/N)
0.875	5	F	1.5	1.5	Y
		Cr^{6+}	0.41	0.42	
		pH	6.33	6.33	
0.84	9	F	1.9	1.9	
		Cr^{6+}	0.32	0.33	
		pH	8.40	8.40	✓

Note:

RECALC.6

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	March 2, 2011
LDC Report Date:	August 11, 2011
Matrix:	Soil
Parameters:	Perchlorate
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE095

Sample Identification

SL-045-SA5A-SS-0.0-0.5
SL-176-SA5A-SS-0.0-0.3

Introduction

This data review covers 2 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 6850 for Perchlorate.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

A curve fit, based on the initial calibration, was established for quantitation. The coefficient of determination (r^2) was greater than or equal to 0.990 .

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

All of the continuing calibration percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were less than or equal to 15.0% for unlabeled compounds and less than or equal to 50.0% for labeled compounds.

The percent differences (%D) of the second source calibration standard were less than or equal to 15.0% for unlabeled compounds and less than or equal to 50.0% for labeled compounds.

The percent differences (%D) of the limit of detection verification (LODV) calibration standard were less than or equal to 50.0% for perchlorate.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No perchlorate was found in the method blanks.

No field blanks were identified in this SDG.

VI. Surrogate Spikes

Surrogate spikes were not required by the method.

VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE095	All compounds reported below the RL.	J (all detects)	A

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was acceptable.

XV. Overall Assessment

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Perchlorate - Data Qualification Summary - SDG DE095

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE095	SL-045-SA5A-SS-0.0-0.5 SL-176-SA5A-SS-0.0-0.3	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and RLs (Z)

Santa Susana Field Laboratory
Perchlorate - Laboratory Blank Data Qualification Summary - SDG DE095

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Perchlorate - Field Blank Data Qualification Summary - SDG DE095

No Sample Data Qualified in this SDG

LDC #: 25911J87 **VALIDATION COMPLETENESS WORKSHEET** Date: 8/10/11
SDG #: DE095 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer:
2nd Reviewer:

METHOD: LC/MS Perchlorate (EPA SW846 Method 6850)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 3/2/11
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	A	r2
IV.	Continuing calibration/ICV	A	ICV/CCV ≤ 15/50 LODV ≤ 50
V.	Blanks	A	
VI.	Surrogate spikes	N	
VII.	Matrix spike/Matrix spike duplicates	N	client specified
VIII.	Laboratory control samples	A	LCS
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A	
XI.	Target compound identification	A	
XII.	Compound quantitation/CRQLs (RL)	A	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	A	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	N	
XVII.	Field blanks	N	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: SOIL

1	SL-045-SA5A-SS-0.0-0.5	11	PBLK12071	21		31	
2	SL-176-SA5A-SS-0.0-0.3	12		22		32	
3		13		23		33	
4		14		24		34	
5		15		25		35	
6		16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

LDC #: 25911J87

VALIDATION FINDINGS CHECKLIST

Page: 1 of 2
Reviewer: FT
2nd Reviewer: [illegible]

Method: Semivolatiles (EPA SW 846 Method 8270C)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. GC/MS instrument performance check				
Were the DFTPP performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
III. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?			✓	
Was a curve fit used for evaluation?	✓			
Did the initial calibration meet the curve fit acceptance criteria of > 0.990?	✓			
Were all percent relative standard deviations (%RSD) ≤ 30% and relative response factors (RRF) > 0.05?			✓	
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓			
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓		✓	
Were all percent differences (%D) ≤ ~~25%~~ 15/50 and relative response factors (RRF) ≥ 0.05?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.				
VI. Surrogate recoveries				
Were all surrogate %R within QC limits?			✓	
If 2 or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R?			✓	
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?			✓	
VII. Matrix spike/matrix spike duplicate				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.			✓	
Was a MS/MSD analyzed every 20 samples of each matrix?			✓	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
VIII. Laboratory control sample				
Was an LCS analyzed for this SDG?	✓			

LDC #: 259 11J87

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer: A

Validation Area	Yes	No	NA	Findings/Comments
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
X. Internal standards				
Were internal standard area counts within -50% or +100% of the associated calibration standard?	✓			
Were retention times within ± 30 seconds from the associated calibration standard?	✓			
XI. Target compound identification				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?			✓	
Did compound spectra meet specified EPA "Functional Guidelines" criteria?			✓	
Were chromatogram peaks verified and accounted for?	✓			
XII. Compound quantitation				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?			✓	
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XIII. Tentatively identified compounds				
Were the major ions (> 10 percent relative intensity) in the reference spectrum evaluated in sample spectrum?			✓	
Were relative intensities of the major ions within ± 20% between the sample and the reference spectra?			✓	
Did the raw data indicate that the laboratory performed a library search for all required peaks in the chromatograms (samples and blanks)?			✓	
XIV. System performance				
System performance was found to be acceptable.	✓			
XV. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XVI. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XVII. Field blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

LDC # 25911387
SDG# pre cover

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: FT
2nd Reviewer: C

METHOD: Method 6850

Parameter: perchlorate

Date	Column	Compound	y	x	
03/22/2011	LCMS	perchlorate	0.0222	0.020	
			0.0409	0.040	
			0.1014	0.100	
			0.2052	0.200	
			0.4124	0.400	
			1.0325	1.000	
			2.5899	2.500	

Regression Output:		Regression Output:	Reported	
Constant		-0.00130		-1.3000E-003
Std Err of Y Est		0.00182		
R Squared		1.00000		0.99999
No. of Observations		7.00000		
Degrees of Freedom		5.00000		
X Coefficient(s)	1.036E+000		0.10360	
Std Err of Coef.	0.000827	0.04		

LDC #: 25911J87

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: FT
2nd Reviewer: C

METHOD: GC/MS BNA (EPA SW 846 Method 8270C)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
RRF = $(A_x)(C_{is})/(A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Average RRF (initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
1	CCV_11032	3/15/11	Phenol (1st internal standard)	4	4.08	4.08	2	2
			Naphthalene (2nd internal standard)					
			Fluorene (3rd internal standard)					
			Pentachlorophenol (4th internal standard)					
			Bis(2-ethylhexyl)phthalate (5th internal standard)					
			Benzo(a)pyrene (6th internal standard)					
2	CCV_11043	3/15/11	Phenol (1st internal standard)	0.4	0.429	0.429	7	7
			Naphthalene (2nd internal standard)					
			Fluorene (3rd internal standard)					
			Pentachlorophenol (4th internal standard)					
			Bis(2-ethylhexyl)phthalate (5th internal standard)					
			Benzo(a)pyrene (6th internal standard)					
3			Phenol (1st internal standard)					
			Naphthalene (2nd internal standard)					
			Fluorene (3rd internal standard)					
			Pentachlorophenol (4th internal standard)					
			Bis(2-ethylhexyl)phthalate (5th internal standard)					
			Benzo(a)pyrene (6th internal standard)					

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25911J87

VALIDATION FINDINGS WORKSHEET

Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: FT

2nd Reviewer: [illegible]

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SC/SA

Where: SSC = Spike concentration
SA = Spike added

RPD = | LCSC - LCSDC | * 2/(LCSC + LCSDC)

LCSC = Laboraotry control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCS/LCSD samples: yes

Compound	Spike Added (ug/kg)		Spike Concentration (ug/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
Phenol										
N-Nitroso-di-n-propylamine										
4-Chloro-3-methylphenol										
Acenaphthene										
Pentachlorophenol										
Pyrene										
Perchlorate	100	NA	103	NA	103	103	NA			

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25911187

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: FT
2nd reviewer: C

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(V_t)(DF)(2.0)}{(A_{is})(RRF)(V_o)(V_i)(\%S)}$

A_x	=	Area of the characteristic ion (EICP) for the compound to be measured
A_{is}	=	Area of the characteristic ion (EICP) for the specific internal standard
I_s	=	Amount of internal standard added in nanograms (ng)
V_o	=	Volume or weight of sample extract in milliliters (ml) or grams (g).
V_i	=	Volume of extract injected in microliters (ul)
V_t	=	Volume of the concentrated extract in microliters (ul)
Df	=	Dilution Factor.
%S	=	Percent solids, applicable to soil and solid matrices only.
2.0	=	Factor of 2 to account for GPC cleanup

Example:

Sample I.D. _____, _____:

Conc. = (_____)(_____)(_____)(_____)(_____) / (_____)(_____)(_____)(_____)(_____)

= ND

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification

SAMPLE DELIVERY GROUP

DE096

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
02-Mar-2011	SL-245-SA5A-SB-4.0-5.0	6220827	N	3050B	6010B	III
02-Mar-2011	SL-245-SA5A-SB-4.0-5.0	6220827	N	3050B	6020	III
02-Mar-2011	SL-245-SA5A-SB-4.0-5.0	6220827	N	3060A	7199	III
02-Mar-2011	SL-245-SA5A-SB-4.0-5.0	6220827	N	3550B	8082	III
02-Mar-2011	SL-245-SA5A-SB-4.0-5.0	6220827	N	3550B	8270C	III
02-Mar-2011	SL-245-SA5A-SB-4.0-5.0	6220827	N	3550B	8270C SIM	III
02-Mar-2011	SL-245-SA5A-SB-4.0-5.0	6220827	N	5035	8260B	III
02-Mar-2011	SL-245-SA5A-SB-4.0-5.0	6220827	N	5035	8260B SIM	III
02-Mar-2011	SL-245-SA5A-SB-4.0-5.0	6220827	N	Gen Prep	9045M	III
02-Mar-2011	SL-245-SA5A-SB-4.0-5.0	6220827	N	METHOD	300.0	III
02-Mar-2011	SL-245-SA5A-SB-4.0-5.0	6220827	N	METHOD	314.0	III
02-Mar-2011	SL-245-SA5A-SB-4.0-5.0	6220827	N	METHOD	7471A	III
02-Mar-2011	SL-245-SA5A-SB-4.0-5.0MS	6220828	MS	3050B	6010B	III
02-Mar-2011	SL-245-SA5A-SB-4.0-5.0MS	6220828	MS	3050B	6020	III
02-Mar-2011	SL-245-SA5A-SB-4.0-5.0MS	6220828	MS	3060A	7199	III
02-Mar-2011	SL-245-SA5A-SB-4.0-5.0MS	6220828	MS	3550B	8082	III
02-Mar-2011	SL-245-SA5A-SB-4.0-5.0MS	6220828	MS	3550B	8270C	III
02-Mar-2011	SL-245-SA5A-SB-4.0-5.0MS	6220828	MS	3550B	8270C SIM	III
02-Mar-2011	SL-245-SA5A-SB-4.0-5.0MS	6220828	MS	5035	8260B	III
02-Mar-2011	SL-245-SA5A-SB-4.0-5.0MS	6220828	MS	5035	8260B SIM	III
02-Mar-2011	SL-245-SA5A-SB-4.0-5.0MS	6220828	MS	METHOD	300.0	III
02-Mar-2011	SL-245-SA5A-SB-4.0-5.0MS	6220828	MS	METHOD	314.0	III
02-Mar-2011	SL-245-SA5A-SB-4.0-5.0MS	6220828	MS	METHOD	7471A	III
02-Mar-2011	SL-245-SA5A-SB-4.0-5.0MSD	6220829	MSD	3050B	6010B	III
02-Mar-2011	SL-245-SA5A-SB-4.0-5.0MSD	6220829	MSD	3050B	6020	III
02-Mar-2011	SL-245-SA5A-SB-4.0-5.0MSD	6220829	MSD	3550B	8082	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
02-Mar-2011	SL-245-SA5A-SB-4.0-5.0MSD	6220829	MSD	3550B	8270C	III
02-Mar-2011	SL-245-SA5A-SB-4.0-5.0MSD	6220829	MSD	3550B	8270C SIM	III
02-Mar-2011	SL-245-SA5A-SB-4.0-5.0MSD	6220829	MSD	5035	8260B	III
02-Mar-2011	SL-245-SA5A-SB-4.0-5.0MSD	6220829	MSD	5035	8260B SIM	III
02-Mar-2011	SL-245-SA5A-SB-4.0-5.0MSD	6220829	MSD	METHOD	7471A	III
02-Mar-2011	SL-245-SA5A-SB-4.0-5.0DUP	6220830	DUP	3050B	6010B	III
02-Mar-2011	SL-245-SA5A-SB-4.0-5.0DUP	6220830	DUP	3050B	6020	III
02-Mar-2011	SL-245-SA5A-SB-4.0-5.0DUP	6220830	DUP	3060A	7199	III
02-Mar-2011	SL-245-SA5A-SB-4.0-5.0DUP	6220830	DUP	Gen Prep	9045M	III
02-Mar-2011	SL-245-SA5A-SB-4.0-5.0DUP	6220830	DUP	METHOD	300.0	III
02-Mar-2011	SL-245-SA5A-SB-4.0-5.0DUP	6220830	DUP	METHOD	314.0	III
02-Mar-2011	SL-245-SA5A-SB-4.0-5.0DUP	6220830	DUP	METHOD	7471A	III
02-Mar-2011	DUP08-SA5A-QC-030211	6220826	FD	3050B	6010B	III
02-Mar-2011	DUP08-SA5A-QC-030211	6220826	FD	3050B	6020	III
02-Mar-2011	DUP08-SA5A-QC-030211	6220826	FD	3060A	7199	III
02-Mar-2011	DUP08-SA5A-QC-030211	6220826	FD	3550B	8082	III
02-Mar-2011	DUP08-SA5A-QC-030211	6220826	FD	3550B	8270C	III
02-Mar-2011	DUP08-SA5A-QC-030211	6220826	FD	3550B	8270C SIM	III
02-Mar-2011	DUP08-SA5A-QC-030211	6220826	FD	5035	8260B	III
02-Mar-2011	DUP08-SA5A-QC-030211	6220826	FD	5035	8260B SIM	III
02-Mar-2011	DUP08-SA5A-QC-030211	6220826	FD	Gen Prep	9045M	III
02-Mar-2011	DUP08-SA5A-QC-030211	6220826	FD	METHOD	300.0	III
02-Mar-2011	DUP08-SA5A-QC-030211	6220826	FD	METHOD	314.0	III
02-Mar-2011	DUP08-SA5A-QC-030211	6220826	FD	METHOD	7471A	III
02-Mar-2011	SL-245-SA5A-SB-9.0-10.0	6220831	N	3050B	6010B	III
02-Mar-2011	SL-245-SA5A-SB-9.0-10.0	6220831	N	3050B	6020	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
02-Mar-2011	SL-245-SA5A-SB-9.0-10.0	6220831	N	3060A	7199	III
02-Mar-2011	SL-245-SA5A-SB-9.0-10.0	6220831	N	3550B	8082	III
02-Mar-2011	SL-245-SA5A-SB-9.0-10.0	6220831	N	3550B	8270C	III
02-Mar-2011	SL-245-SA5A-SB-9.0-10.0	6220831	N	3550B	8270C SIM	III
02-Mar-2011	SL-245-SA5A-SB-9.0-10.0	6220831	N	Gen Prep	9045M	III
02-Mar-2011	SL-245-SA5A-SB-9.0-10.0	6220831	N	METHOD	300.0	III
02-Mar-2011	SL-245-SA5A-SB-9.0-10.0	6220831	N	METHOD	314.0	III
02-Mar-2011	SL-245-SA5A-SB-9.0-10.0	6220831	N	METHOD	7471A	III
02-Mar-2011	SL-245-SA5A-SB-29.0-30.0	6220832	N	3050B	6010B	III
02-Mar-2011	SL-245-SA5A-SB-29.0-30.0	6220832	N	3050B	6020	III
02-Mar-2011	SL-245-SA5A-SB-29.0-30.0	6220832	N	3060A	7199	III
02-Mar-2011	SL-245-SA5A-SB-29.0-30.0	6220832	N	3550B	8082	III
02-Mar-2011	SL-245-SA5A-SB-29.0-30.0	6220832	N	3550B	8270C	III
02-Mar-2011	SL-245-SA5A-SB-29.0-30.0	6220832	N	3550B	8270C SIM	III
02-Mar-2011	SL-245-SA5A-SB-29.0-30.0	6220832	N	Gen Prep	9045M	III
02-Mar-2011	SL-245-SA5A-SB-29.0-30.0	6220832	N	METHOD	300.0	III
02-Mar-2011	SL-245-SA5A-SB-29.0-30.0	6220832	N	METHOD	314.0	III
02-Mar-2011	SL-245-SA5A-SB-29.0-30.0	6220832	N	METHOD	6850	III
02-Mar-2011	SL-245-SA5A-SB-29.0-30.0	6220832	N	METHOD	7471A	III
02-Mar-2011	SL-246-SA5A-SB-4.0-5.0	6220833	N	3050B	6010B	III
02-Mar-2011	SL-246-SA5A-SB-4.0-5.0	6220833	N	3050B	6020	III
02-Mar-2011	SL-246-SA5A-SB-4.0-5.0	6220833	N	3060A	7199	III
02-Mar-2011	SL-246-SA5A-SB-4.0-5.0	6220833	N	3550B	8082	III
02-Mar-2011	SL-246-SA5A-SB-4.0-5.0	6220833	N	3550B	8270C	III
02-Mar-2011	SL-246-SA5A-SB-4.0-5.0	6220833	N	3550B	8270C SIM	III
02-Mar-2011	SL-246-SA5A-SB-4.0-5.0	6220833	N	5035	8260B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
02-Mar-2011	SL-246-SA5A-SB-4.0-5.0	6220833	N	5035	8260B SIM	III
02-Mar-2011	SL-246-SA5A-SB-4.0-5.0	6220833	N	Gen Prep	9045M	III
02-Mar-2011	SL-246-SA5A-SB-4.0-5.0	6220833	N	METHOD	300.0	III
02-Mar-2011	SL-246-SA5A-SB-4.0-5.0	6220833	N	METHOD	314.0	III
02-Mar-2011	SL-246-SA5A-SB-4.0-5.0	6220833	N	METHOD	7471A	III
02-Mar-2011	SL-246-SA5A-SB-9.0-10.0	6220834	N	3050B	6010B	III
02-Mar-2011	SL-246-SA5A-SB-9.0-10.0	6220834	N	3050B	6020	III
02-Mar-2011	SL-246-SA5A-SB-9.0-10.0	6220834	N	3060A	7199	III
02-Mar-2011	SL-246-SA5A-SB-9.0-10.0	6220834	N	3550B	8082	III
02-Mar-2011	SL-246-SA5A-SB-9.0-10.0	6220834	N	3550B	8270C	III
02-Mar-2011	SL-246-SA5A-SB-9.0-10.0	6220834	N	3550B	8270C SIM	III
02-Mar-2011	SL-246-SA5A-SB-9.0-10.0	6220834	N	Gen Prep	9045M	III
02-Mar-2011	SL-246-SA5A-SB-9.0-10.0	6220834	N	METHOD	300.0	III
02-Mar-2011	SL-246-SA5A-SB-9.0-10.0	6220834	N	METHOD	314.0	III
02-Mar-2011	SL-246-SA5A-SB-9.0-10.0	6220834	N	METHOD	7471A	III
02-Mar-2011	SL-247-SA5A-SB-4.0-5.0	6220835	N	3050B	6010B	III
02-Mar-2011	SL-247-SA5A-SB-4.0-5.0	6220835	N	3050B	6020	III
02-Mar-2011	SL-247-SA5A-SB-4.0-5.0	6220835	N	3060A	7199	III
02-Mar-2011	SL-247-SA5A-SB-4.0-5.0	6220835	N	3550B	8082	III
02-Mar-2011	SL-247-SA5A-SB-4.0-5.0	6220835	N	3550B	8270C	III
02-Mar-2011	SL-247-SA5A-SB-4.0-5.0	6220835	N	3550B	8270C SIM	III
02-Mar-2011	SL-247-SA5A-SB-4.0-5.0	6220835	N	5035	8260B	III
02-Mar-2011	SL-247-SA5A-SB-4.0-5.0	6220835	N	5035	8260B SIM	III
02-Mar-2011	SL-247-SA5A-SB-4.0-5.0	6220835	N	Gen Prep	9045M	III
02-Mar-2011	SL-247-SA5A-SB-4.0-5.0	6220835	N	METHOD	300.0	III
02-Mar-2011	SL-247-SA5A-SB-4.0-5.0	6220835	N	METHOD	314.0	III

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IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
02-Mar-2011	SL-247-SA5A-SB-4.0-5.0	6220835	N	METHOD	7471A	III
02-Mar-2011	SL-247-SA5A-SB-9.0-10.0	6220836	N	3050B	6010B	III
02-Mar-2011	SL-247-SA5A-SB-9.0-10.0	6220836	N	3050B	6020	III
02-Mar-2011	SL-247-SA5A-SB-9.0-10.0	6220836	N	3060A	7199	III
02-Mar-2011	SL-247-SA5A-SB-9.0-10.0	6220836	N	3550B	8082	III
02-Mar-2011	SL-247-SA5A-SB-9.0-10.0	6220836	N	3550B	8270C	III
02-Mar-2011	SL-247-SA5A-SB-9.0-10.0	6220836	N	3550B	8270C SIM	III
02-Mar-2011	SL-247-SA5A-SB-9.0-10.0	6220836	N	Gen Prep	9045M	III
02-Mar-2011	SL-247-SA5A-SB-9.0-10.0	6220836	N	METHOD	300.0	III
02-Mar-2011	SL-247-SA5A-SB-9.0-10.0	6220836	N	METHOD	314.0	III
02-Mar-2011	SL-247-SA5A-SB-9.0-10.0	6220836	N	METHOD	7471A	III
02-Mar-2011	TB-030211	6220837	TB	5030B	8260B	III
02-Mar-2011	TB-030211	6220837	TB	5030B	8260B SIM	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE096 **Laboratory: LL**

EDD Filename: DE096_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B ***Matrix:*** SO

Sample ID: DUP08-SA5A-QC-030211 ***Collected:*** 3/2/2011 9:08:00 AM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.24	J	0.944	MDL	5.30	PQL	mg/Kg	J	Z
CALCIUM	1900		6.50	MDL	21.2	PQL	mg/Kg	J	E
PHOSPHORUS	221		0.594	MDL	10.6	PQL	mg/Kg	J	Q
POTASSIUM	2490		19.1	MDL	53.0	PQL	mg/Kg	J	Q
SODIUM	99.5	J	39.5	MDL	106	PQL	mg/Kg	J	Z
TIN	2.49	J	1.06	MDL	10.6	PQL	mg/Kg	U	B

Sample ID: SL-245-SA5A-SB-29.0-30.0 ***Collected:*** 3/2/2011 9:22:00 AM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.77	J	1.00	MDL	5.62	PQL	mg/Kg	J	Z
CALCIUM	2810		6.89	MDL	22.5	PQL	mg/Kg	J	E
PHOSPHORUS	335		0.629	MDL	11.2	PQL	mg/Kg	J	Q
POTASSIUM	2870		20.2	MDL	56.2	PQL	mg/Kg	J	Q
TIN	2.77	J	1.12	MDL	11.2	PQL	mg/Kg	U	B

Sample ID: SL-245-SA5A-SB-4.0-5.0 ***Collected:*** 3/2/2011 8:52:00 AM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.21	J	0.950	MDL	5.34	PQL	mg/Kg	J	Z
CALCIUM	2160		6.55	MDL	21.4	PQL	mg/Kg	J	E
PHOSPHORUS	315		0.598	MDL	10.7	PQL	mg/Kg	J	Q
POTASSIUM	2550		19.2	MDL	53.4	PQL	mg/Kg	J	Q
SODIUM	99.8	J	39.8	MDL	107	PQL	mg/Kg	J	Z
TIN	2.74	J	1.07	MDL	10.7	PQL	mg/Kg	U	B

Sample ID: SL-245-SA5A-SB-9.0-10.0 ***Collected:*** 3/2/2011 9:12:00 AM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.42	J	0.983	MDL	5.52	PQL	mg/Kg	J	Z
CALCIUM	4620		6.77	MDL	22.1	PQL	mg/Kg	J	E
PHOSPHORUS	411		0.619	MDL	11.0	PQL	mg/Kg	J	Q
POTASSIUM	3100		19.9	MDL	55.2	PQL	mg/Kg	J	Q
TIN	2.80	J	1.10	MDL	11.0	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE096 **Laboratory: LL**

EDD Filename: DE096_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6010B** ***Matrix:*** **SO**

Sample ID: **SL-246-SA5A-SB-4.0-5.0** ***Collected:*** **3/2/2011 11:45:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.84	J	0.965	MDL	5.42	PQL	mg/Kg	J	Z
CALCIUM	4460		6.65	MDL	21.7	PQL	mg/Kg	J	E
PHOSPHORUS	309		0.607	MDL	10.8	PQL	mg/Kg	J	Q
POTASSIUM	2990		19.5	MDL	54.2	PQL	mg/Kg	J	Q
SODIUM	92.4	J	40.5	MDL	108	PQL	mg/Kg	J	Z
TIN	2.80	J	1.08	MDL	10.8	PQL	mg/Kg	U	B

Sample ID: **SL-246-SA5A-SB-9.0-10.0** ***Collected:*** **3/2/2011 12:20:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.79	J	0.958	MDL	5.38	PQL	mg/Kg	J	Z
CALCIUM	2340		6.60	MDL	21.5	PQL	mg/Kg	J	E
PHOSPHORUS	364		0.603	MDL	10.8	PQL	mg/Kg	J	Q
POTASSIUM	3010		19.4	MDL	53.8	PQL	mg/Kg	J	Q
TIN	2.44	J	1.08	MDL	10.8	PQL	mg/Kg	U	B
Zirconium	1.86	J	0.904	MDL	5.38	PQL	mg/Kg	J	Z

Sample ID: **SL-247-SA5A-SB-4.0-5.0** ***Collected:*** **3/2/2011 3:45:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	4.10	J	1.00	MDL	5.64	PQL	mg/Kg	J	Z
CALCIUM	2440		6.91	MDL	22.5	PQL	mg/Kg	J	E
PHOSPHORUS	347		0.631	MDL	11.3	PQL	mg/Kg	J	Q
POTASSIUM	2570		20.3	MDL	56.4	PQL	mg/Kg	J	Q
SODIUM	99.8	J	42.1	MDL	113	PQL	mg/Kg	J	Z
TIN	2.65	J	1.13	MDL	11.3	PQL	mg/Kg	U	B
Zirconium	1.81	J	0.947	MDL	5.64	PQL	mg/Kg	J	Z

Sample ID: **SL-247-SA5A-SB-9.0-10.0** ***Collected:*** **3/2/2011 3:50:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.85	J	0.954	MDL	5.36	PQL	mg/Kg	J	Z
CALCIUM	2180		6.57	MDL	21.4	PQL	mg/Kg	J	E
PHOSPHORUS	396		0.600	MDL	10.7	PQL	mg/Kg	J	Q
POTASSIUM	3310		19.3	MDL	53.6	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE096 **Laboratory: LL**

EDD Filename: DE096_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-247-SA5A-SB-9.0-10.0 *Collected:* 3/2/2011 3:50:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.38	J	1.07	MDL	10.7	PQL	mg/Kg	U	B
Zirconium	1.95	J	0.900	MDL	5.36	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: DUP08-SA5A-QC-030211 *Collected:* 3/2/2011 9:08:00 AM *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0972	J	0.0428	MDL	0.428	PQL	mg/Kg	J	Z

Sample ID: DUP08-SA5A-QC-030211 *Collected:* 3/2/2011 9:08:00 AM *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0642	U	0.0642	MDL	0.214	PQL	mg/Kg	UJ	Q, FD
CADMIUM	0.0700	J	0.0428	MDL	0.107	PQL	mg/Kg	J	Z
COBALT	3.65		0.0214	MDL	0.107	PQL	mg/Kg	J	A
SILVER	0.0183	J	0.0128	MDL	0.107	PQL	mg/Kg	J	Z
VANADIUM	23.0		0.0235	MDL	0.107	PQL	mg/Kg	J	Q

Sample ID: SL-245-SA5A-SB-29.0-30.0 *Collected:* 3/2/2011 9:22:00 AM *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.106	J	0.0437	MDL	0.437	PQL	mg/Kg	J	Z

Sample ID: SL-245-SA5A-SB-29.0-30.0 *Collected:* 3/2/2011 9:22:00 AM *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0655	U	0.0655	MDL	0.218	PQL	mg/Kg	UJ	Q
CADMIUM	0.0839	J	0.0437	MDL	0.109	PQL	mg/Kg	J	Z
COBALT	4.12		0.0218	MDL	0.109	PQL	mg/Kg	J	A
VANADIUM	28.6		0.0240	MDL	0.109	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE096 **Laboratory: LL**

EDD Filename: DE096_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6020** ***Matrix:*** **SO**

Sample ID: SL-245-SA5A-SB-4.0-5.0 ***Collected:*** 3/2/2011 8:52:00 AM ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.114	J	0.0423	MDL	0.423	PQL	mg/Kg	J	Z

Sample ID: SL-245-SA5A-SB-4.0-5.0 ***Collected:*** 3/2/2011 8:52:00 AM ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0800	J	0.0635	MDL	0.212	PQL	mg/Kg	J	Z, Q, FD
CADMIUM	0.0508	J	0.0423	MDL	0.106	PQL	mg/Kg	J	Z
COBALT	3.96		0.0212	MDL	0.106	PQL	mg/Kg	J	A
SILVER	0.0143	J	0.0127	MDL	0.106	PQL	mg/Kg	J	Z
VANADIUM	25.0		0.0233	MDL	0.106	PQL	mg/Kg	J	Q

Sample ID: SL-245-SA5A-SB-9.0-10.0 ***Collected:*** 3/2/2011 9:12:00 AM ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.140	J	0.0438	MDL	0.438	PQL	mg/Kg	J	Z

Sample ID: SL-245-SA5A-SB-9.0-10.0 ***Collected:*** 3/2/2011 9:12:00 AM ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0656	U	0.0656	MDL	0.219	PQL	mg/Kg	UJ	Q
CADMIUM	0.0879	J	0.0438	MDL	0.109	PQL	mg/Kg	J	Z
COBALT	4.88		0.0219	MDL	0.109	PQL	mg/Kg	J	A
SILVER	0.0303	J	0.0131	MDL	0.109	PQL	mg/Kg	J	Z
VANADIUM	31.7		0.0241	MDL	0.109	PQL	mg/Kg	J	Q

Sample ID: SL-246-SA5A-SB-4.0-5.0 ***Collected:*** 3/2/2011 11:45:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0448	J	0.0421	MDL	0.421	PQL	mg/Kg	J	Z

Sample ID: SL-246-SA5A-SB-4.0-5.0 ***Collected:*** 3/2/2011 11:45:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0632	U	0.0632	MDL	0.211	PQL	mg/Kg	UJ	Q
CADMIUM	0.0885	J	0.0421	MDL	0.105	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE096 **Laboratory: LL**

EDD Filename: DE096_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 ***Matrix:*** SO

Sample ID: SL-246-SA5A-SB-4.0-5.0 ***Collected:*** 3/2/2011 11:45:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COBALT	4.22		0.0211	MDL	0.105	PQL	mg/Kg	J	A
VANADIUM	26.0		0.0232	MDL	0.105	PQL	mg/Kg	J	Q

Sample ID: SL-246-SA5A-SB-9.0-10.0 ***Collected:*** 3/2/2011 12:20:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.132	J	0.0431	MDL	0.431	PQL	mg/Kg	J	Z

Sample ID: SL-246-SA5A-SB-9.0-10.0 ***Collected:*** 3/2/2011 12:20:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.105	J	0.0646	MDL	0.215	PQL	mg/Kg	J	Z, Q
COBALT	6.48		0.0215	MDL	0.108	PQL	mg/Kg	J	A
SILVER	0.0400	J	0.0129	MDL	0.108	PQL	mg/Kg	J	Z
VANADIUM	36.4		0.0237	MDL	0.108	PQL	mg/Kg	J	Q

Sample ID: SL-247-SA5A-SB-4.0-5.0 ***Collected:*** 3/2/2011 3:45:00 PM ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0749	J	0.0446	MDL	0.446	PQL	mg/Kg	J	Z

Sample ID: SL-247-SA5A-SB-4.0-5.0 ***Collected:*** 3/2/2011 3:45:00 PM ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0670	U	0.0670	MDL	0.223	PQL	mg/Kg	UJ	Q
COBALT	6.25		0.0223	MDL	0.112	PQL	mg/Kg	J	A
SILVER	0.0515	J	0.0134	MDL	0.112	PQL	mg/Kg	J	Z
VANADIUM	35.7		0.0246	MDL	0.112	PQL	mg/Kg	J	Q

Sample ID: SL-247-SA5A-SB-9.0-10.0 ***Collected:*** 3/2/2011 3:50:00 PM ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.120	J	0.0446	MDL	0.446	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE096 **Laboratory: LL**

EDD Filename: DE096_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-247-SA5A-SB-9.0-10.0 *Collected:* 3/2/2011 3:50:00 PM *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0669	U	0.0669	MDL	0.223	PQL	mg/Kg	UJ	Q
COBALT	6.53		0.0223	MDL	0.111	PQL	mg/Kg	J	A
SILVER	0.0445	J	0.0134	MDL	0.111	PQL	mg/Kg	J	Z
VANADIUM	38.6		0.0245	MDL	0.111	PQL	mg/Kg	J	Q

Method Category: METALS

Method: 7199 **Matrix:** SO

Sample ID: DUP08-SA5A-QC-030211 *Collected:* 3/2/2011 9:08:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.44	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z, FD

Sample ID: SL-245-SA5A-SB-4.0-5.0 *Collected:* 3/2/2011 8:52:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.22	U	0.22	MDL	1.1	PQL	mg/Kg	UJ	FD

Sample ID: SL-245-SA5A-SB-9.0-10.0 *Collected:* 3/2/2011 9:12:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.36	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-246-SA5A-SB-9.0-10.0 *Collected:* 3/2/2011 12:20:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.51	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-247-SA5A-SB-9.0-10.0 *Collected:* 3/2/2011 3:50:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.45	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE096 **Laboratory: LL**

EDD Filename: DE096_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **8082** ***Matrix:*** **SO**

Sample ID: **DUP08-SA5A-QC-030211** ***Collected:*** **3/2/2011 9:08:00 AM** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1016	0.36	U	0.36	MDL	1.9	PQL	ug/Kg	UJ	L
AROCLOR 1221	0.36	U	0.36	MDL	1.9	PQL	ug/Kg	UJ	L
AROCLOR 1232	0.36	U	0.36	MDL	1.9	PQL	ug/Kg	UJ	L
AROCLOR 1242	0.36	U	0.36	MDL	1.9	PQL	ug/Kg	UJ	L
AROCLOR 1248	0.36	U	0.36	MDL	1.9	PQL	ug/Kg	UJ	L
AROCLOR 1254	0.36	U	0.36	MDL	1.9	PQL	ug/Kg	UJ	L
AROCLOR 1260	0.43	U	0.43	MDL	1.9	PQL	ug/Kg	UJ	L
Aroclor 1262	0.36	U	0.36	MDL	1.9	PQL	ug/Kg	UJ	L
Aroclor 1268	0.36	U	0.36	MDL	1.9	PQL	ug/Kg	UJ	L
Aroclor 5432	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	E
Aroclor 5442	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	E
Aroclor 5460	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	E

Sample ID: **SL-245-SA5A-SB-29.0-30.0** ***Collected:*** **3/2/2011 9:22:00 AM** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1016	0.37	U	0.37	MDL	1.9	PQL	ug/Kg	UJ	L
AROCLOR 1221	0.37	U	0.37	MDL	1.9	PQL	ug/Kg	UJ	L
AROCLOR 1232	0.37	U	0.37	MDL	1.9	PQL	ug/Kg	UJ	L
AROCLOR 1242	0.37	U	0.37	MDL	1.9	PQL	ug/Kg	UJ	L
AROCLOR 1248	0.37	U	0.37	MDL	1.9	PQL	ug/Kg	UJ	L
AROCLOR 1254	0.37	U	0.37	MDL	1.9	PQL	ug/Kg	UJ	L
AROCLOR 1260	0.44	U	0.44	MDL	1.9	PQL	ug/Kg	UJ	L
Aroclor 1262	0.37	U	0.37	MDL	1.9	PQL	ug/Kg	UJ	L
Aroclor 1268	0.37	U	0.37	MDL	1.9	PQL	ug/Kg	UJ	L
Aroclor 5432	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	E
Aroclor 5442	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	E
Aroclor 5460	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	E

Sample ID: **SL-245-SA5A-SB-4.0-5.0** ***Collected:*** **3/2/2011 8:52:00 AM** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1016	0.36	U	0.36	MDL	1.8	PQL	ug/Kg	UJ	L
AROCLOR 1221	0.36	U	0.36	MDL	1.8	PQL	ug/Kg	UJ	L
AROCLOR 1232	0.36	U	0.36	MDL	1.8	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE096 **Laboratory: LL**

EDD Filename: DE096_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **8082** ***Matrix:*** **SO**

Sample ID: **SL-245-SA5A-SB-4.0-5.0** ***Collected:*** **3/2/2011 8:52:00 AM** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1242	0.36	U	0.36	MDL	1.8	PQL	ug/Kg	UJ	L
AROCLOR 1248	0.36	U	0.36	MDL	1.8	PQL	ug/Kg	UJ	L
AROCLOR 1254	0.36	U	0.36	MDL	1.8	PQL	ug/Kg	UJ	L
AROCLOR 1260	0.42	U	0.42	MDL	1.8	PQL	ug/Kg	UJ	L
Aroclor 1262	0.36	U	0.36	MDL	1.8	PQL	ug/Kg	UJ	L
Aroclor 1268	0.36	U	0.36	MDL	1.8	PQL	ug/Kg	UJ	L
Aroclor 5432	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	E
Aroclor 5442	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	E
Aroclor 5460	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	E

Sample ID: **SL-245-SA5A-SB-9.0-10.0** ***Collected:*** **3/2/2011 9:12:00 AM** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1016	0.36	U	0.36	MDL	1.9	PQL	ug/Kg	UJ	L
AROCLOR 1221	0.36	U	0.36	MDL	1.9	PQL	ug/Kg	UJ	L
AROCLOR 1232	0.36	U	0.36	MDL	1.9	PQL	ug/Kg	UJ	L
AROCLOR 1242	0.36	U	0.36	MDL	1.9	PQL	ug/Kg	UJ	L
AROCLOR 1248	0.36	U	0.36	MDL	1.9	PQL	ug/Kg	UJ	L
AROCLOR 1254	0.68	J	0.36	MDL	1.9	PQL	ug/Kg	J	Z, L
AROCLOR 1260	0.43	U	0.43	MDL	1.9	PQL	ug/Kg	UJ	L
Aroclor 1262	0.36	U	0.36	MDL	1.9	PQL	ug/Kg	UJ	L
Aroclor 1268	0.36	U	0.36	MDL	1.9	PQL	ug/Kg	UJ	L
Aroclor 5432	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	E
Aroclor 5442	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	E
Aroclor 5460	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	E

Sample ID: **SL-246-SA5A-SB-4.0-5.0** ***Collected:*** **3/2/2011 11:45:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1016	0.36	U	0.36	MDL	1.8	PQL	ug/Kg	UJ	L
AROCLOR 1221	0.36	U	0.36	MDL	1.8	PQL	ug/Kg	UJ	L
AROCLOR 1232	0.36	U	0.36	MDL	1.8	PQL	ug/Kg	UJ	L
AROCLOR 1242	0.36	U	0.36	MDL	1.8	PQL	ug/Kg	UJ	L
AROCLOR 1248	0.36	U	0.36	MDL	1.8	PQL	ug/Kg	UJ	L
AROCLOR 1254	0.36	U	0.36	MDL	1.8	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE096 **Laboratory: LL**

EDD Filename: DE096_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **8082** ***Matrix:*** **SO**

Sample ID: **SL-246-SA5A-SB-4.0-5.0** ***Collected:*** **3/2/2011 11:45:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	0.42	U	0.42	MDL	1.8	PQL	ug/Kg	UJ	L
Aroclor 1262	0.36	U	0.36	MDL	1.8	PQL	ug/Kg	UJ	L
Aroclor 1268	0.36	U	0.36	MDL	1.8	PQL	ug/Kg	UJ	L
Aroclor 5432	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	E
Aroclor 5442	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	E
Aroclor 5460	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	E

Sample ID: **SL-246-SA5A-SB-9.0-10.0** ***Collected:*** **3/2/2011 12:20:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1016	0.37	U	0.37	MDL	1.9	PQL	ug/Kg	UJ	L
AROCLOR 1221	0.37	U	0.37	MDL	1.9	PQL	ug/Kg	UJ	L
AROCLOR 1232	0.37	U	0.37	MDL	1.9	PQL	ug/Kg	UJ	L
AROCLOR 1242	0.37	U	0.37	MDL	1.9	PQL	ug/Kg	UJ	L
AROCLOR 1248	0.37	U	0.37	MDL	1.9	PQL	ug/Kg	UJ	L
AROCLOR 1254	0.37	U	0.37	MDL	1.9	PQL	ug/Kg	UJ	L
AROCLOR 1260	0.43	U	0.43	MDL	1.9	PQL	ug/Kg	UJ	L
Aroclor 1262	0.37	U	0.37	MDL	1.9	PQL	ug/Kg	UJ	L
Aroclor 1268	0.37	U	0.37	MDL	1.9	PQL	ug/Kg	UJ	L
Aroclor 5432	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	E
Aroclor 5442	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	E
Aroclor 5460	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	E

Sample ID: **SL-247-SA5A-SB-4.0-5.0** ***Collected:*** **3/2/2011 3:45:00 PM** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1016	0.37	U	0.37	MDL	1.9	PQL	ug/Kg	UJ	L
AROCLOR 1221	0.37	U	0.37	MDL	1.9	PQL	ug/Kg	UJ	L
AROCLOR 1232	0.37	U	0.37	MDL	1.9	PQL	ug/Kg	UJ	L
AROCLOR 1242	0.37	U	0.37	MDL	1.9	PQL	ug/Kg	UJ	L
AROCLOR 1248	0.37	U	0.37	MDL	1.9	PQL	ug/Kg	UJ	L
AROCLOR 1254	0.37	U	0.37	MDL	1.9	PQL	ug/Kg	UJ	L
AROCLOR 1260	0.44	U	0.44	MDL	1.9	PQL	ug/Kg	UJ	L
Aroclor 1262	0.37	U	0.37	MDL	1.9	PQL	ug/Kg	UJ	L
Aroclor 1268	0.37	U	0.37	MDL	1.9	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE096 **Laboratory: LL**

EDD Filename: DE096_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: SL-247-SA5A-SB-4.0-5.0 *Collected:* 3/2/2011 3:45:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	E
Aroclor 5442	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	E
Aroclor 5460	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	E

Sample ID: SL-247-SA5A-SB-9.0-10.0 *Collected:* 3/2/2011 3:50:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1016	0.37	U	0.37	MDL	1.9	PQL	ug/Kg	UJ	L
AROCLOR 1221	0.37	U	0.37	MDL	1.9	PQL	ug/Kg	UJ	L
AROCLOR 1232	0.37	U	0.37	MDL	1.9	PQL	ug/Kg	UJ	L
AROCLOR 1242	0.37	U	0.37	MDL	1.9	PQL	ug/Kg	UJ	L
AROCLOR 1248	0.37	U	0.37	MDL	1.9	PQL	ug/Kg	UJ	L
AROCLOR 1254	0.37	U	0.37	MDL	1.9	PQL	ug/Kg	UJ	L
AROCLOR 1260	0.43	U	0.43	MDL	1.9	PQL	ug/Kg	UJ	L
Aroclor 1262	0.37	U	0.37	MDL	1.9	PQL	ug/Kg	UJ	L
Aroclor 1268	0.37	U	0.37	MDL	1.9	PQL	ug/Kg	UJ	L
Aroclor 5432	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	E
Aroclor 5442	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	E
Aroclor 5460	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	E

Method Category: SVOA

Method: 8270C **Matrix: SO**

Sample ID: SL-245-SA5A-SB-4.0-5.0 *Collected:* 3/2/2011 8:52:00 AM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,4-TRICHLOROBENZENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	Q
1,4-DICHLOROBENZENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	Q
2,4,5-TRICHLOROPHENOL	36	U	36	MDL	180	PQL	ug/Kg	UJ	Q
2,4,6-TRICHLOROPHENOL	36	U	36	MDL	180	PQL	ug/Kg	UJ	Q
2,4-DICHLOROPHENOL	18	U	18	MDL	180	PQL	ug/Kg	UJ	Q
2,4-DIMETHYLPHENOL	36	U	36	MDL	180	PQL	ug/Kg	UJ	Q
2,4-DINITROTOLUENE	36	U	36	MDL	180	PQL	ug/Kg	UJ	Q
2-CHLOROPHENOL	18	U	18	MDL	180	PQL	ug/Kg	UJ	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE096 **Laboratory: LL**

EDD Filename: DE096_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C **Matrix: SO**

Sample ID: SL-245-SA5A-SB-4.0-5.0 *Collected:* 3/2/2011 8:52:00 AM *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-METHYLPHENOL	36	U	36	MDL	180	PQL	ug/Kg	UJ	Q
2-NITROPHENOL	18	U	18	MDL	180	PQL	ug/Kg	UJ	Q
4-CHLORO-3-METHYLPHENOL	36	U	36	MDL	180	PQL	ug/Kg	UJ	Q
4-CHLOROPHENYL-PHENYLETHER	36	U	36	MDL	180	PQL	ug/Kg	UJ	Q
BENZIDINE	1300	U	1300	MDL	3600	PQL	ug/Kg	UJ	Q
BIS(2-CHLOROETHOXY)METHANE	18	U	18	MDL	180	PQL	ug/Kg	UJ	Q
BIS(2-ETHYLHEXYL)PHTHALATE	20	J	18	MDL	360	PQL	ug/Kg	J	Z
HEXACHLOROBENZENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	Q
ISOPHORONE	18	U	18	MDL	180	PQL	ug/Kg	UJ	Q
NITROBENZENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	Q
N-NITROSODIPHENYLAMINE	18	U	18	MDL	180	PQL	ug/Kg	UJ	Q

Sample ID: SL-247-SA5A-SB-9.0-10.0 *Collected:* 3/2/2011 3:50:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	18	J	18	MDL	370	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8270C SIM **Matrix: SO**

Sample ID: DUP08-SA5A-QC-030211 *Collected:* 3/2/2011 9:08:00 AM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Di-n-octylphthalate	6.6	U	6.6	MDL	20	PQL	ug/Kg	UJ	FD

Sample ID: SL-245-SA5A-SB-29.0-30.0 *Collected:* 3/2/2011 9:22:00 AM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Di-n-octylphthalate	11	J	6.8	MDL	20	PQL	ug/Kg	J	Z
NAPHTHALENE	1.0	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-245-SA5A-SB-4.0-5.0 *Collected:* 3/2/2011 8:52:00 AM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Di-n-octylphthalate	10	J	6.5	MDL	20	PQL	ug/Kg	J	Z, FD

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE096 | Laboratory: LL

EDD Filename: DE096_v1 | eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8270C SIM **Matrix:** SO

Sample ID: SL-245-SA5A-SB-9.0-10.0 *Collected:* 3/2/2011 9:12:00 AM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHRYSENE	1.0	J	0.37	MDL	1.8	PQL	ug/Kg	J	Z
FLUORANTHENE	1.0	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
NAPHTHALENE	0.98	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
PHENANTHRENE	0.75	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
PYRENE	0.99	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-247-SA5A-SB-9.0-10.0 *Collected:* 3/2/2011 3:50:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHRYSENE	1.1	J	0.37	MDL	1.8	PQL	ug/Kg	J	Z

Method Category: VOA

Method: 8260B **Matrix:** AQ

Sample ID: TB-030211 *Collected:* 3/2/2011 4:30:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZENE	0.6	J	0.5	MDL	5	PQL	ug/L	J	Z

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: DUP08-SA5A-QC-030211 *Collected:* 3/2/2011 9:08:00 AM *Analysis Type:* RES *Dilution:* 0.96

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ETHYLBENZENE	0.15	J	0.06	MDL	4.2	PQL	ug/Kg	J	Z, FD
m,p-Xylene	0.51	J	0.18	MDL	4.2	PQL	ug/Kg	J	Z, FD
METHYLENE CHLORIDE	0.78	J	0.25	MDL	4.2	PQL	ug/Kg	U	B

Sample ID: SL-245-SA5A-SB-4.0-5.0 *Collected:* 3/2/2011 8:52:00 AM *Analysis Type:* RES *Dilution:* 0.84

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Chlorotrifluoroethylene	0.46	U	0.46	MDL	4.6	PQL	ug/Kg	UJ	Q
ETHYLBENZENE	0.06	U	0.06	MDL	3.7	PQL	ug/Kg	UJ	FD
m,p-Xylene	0.16	U	0.16	MDL	3.7	PQL	ug/Kg	UJ	FD

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE096 **Laboratory: LL**

EDD Filename: DE096_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **VOA**

Method: **8260B** ***Matrix:*** **SO**

Sample ID: **SL-245-SA5A-SB-4.0-5.0** ***Collected:*** **3/2/2011 8:52:00 AM** ***Analysis Type:*** **RES** ***Dilution:*** **0.84**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.62	J	0.22	MDL	3.7	PQL	ug/Kg	U	B

Sample ID: **SL-246-SA5A-SB-4.0-5.0** ***Collected:*** **3/2/2011 11:45:00** ***Analysis Type:*** **RES** ***Dilution:*** **0.92**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ETHYLBENZENE	0.13	J	0.06	MDL	4.0	PQL	ug/Kg	J	Z
m,p-Xylene	0.42	J	0.17	MDL	4.0	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	0.95	J	0.24	MDL	4.0	PQL	ug/Kg	U	B

Sample ID: **SL-247-SA5A-SB-4.0-5.0** ***Collected:*** **3/2/2011 3:45:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ETHYLBENZENE	0.18	J	0.07	MDL	4.5	PQL	ug/Kg	J	Z
m,p-Xylene	0.53	J	0.19	MDL	4.5	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	0.40	J	0.27	MDL	4.5	PQL	ug/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE096 **Laboratory: LL**

EDD Filename: DE096_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
*#	Professional Judgment
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Verification Correlation Coefficient
C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE096 **Laboratory: LL**

EDD Filename: DE096_v1 **eQAPP Name: CDM_SSFL_110509**

F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation
L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery Lower Estimation

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE096 **Laboratory: LL**

EDD Filename: DE096_v1 **eQAPP Name: CDM_SSFL_110509**

R	Continuing Calibration Verification Percent Recovery Lower Rejection
R	Continuing Calibration Verification Percent Recovery Upper Estimation
R	Continuing Calibration Verification Percent Recovery Upper Rejection
R	Continuing Calibration Verification Relative Response Factor
R	Initial Calibration Relative Response Factor
R	Initial Calibration Verification Percent Recovery Lower Estimation
R	Initial Calibration Verification Percent Recovery Lower Rejection
R	Initial Calibration Verification Percent Recovery Upper Estimation
R	Initial Calibration Verification Percent Recovery Upper Rejection
R	Initial Calibration Verification Relative Response Factor
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control Outlier Reports

DE096

Method Blank Outlier Report

Lab Reporting Batch ID: DE096 **Laboratory: LL**

EDD Filename: DE096_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **6010B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P06908BB222001	3/11/2011 8:01:00 PM	ALUMINUM CALCIUM IRON MAGNESIUM PHOSPHORUS TIN	6.34 mg/Kg 10.2 mg/Kg 5.30 mg/Kg 2.85 mg/Kg 1.24 mg/Kg 1.30 mg/Kg	DUP08-SA5A-QC-030211 SL-245-SA5A-SB-29.0-30.0 SL-245-SA5A-SB-4.0-5.0 SL-245-SA5A-SB-9.0-10.0 SL-246-SA5A-SB-4.0-5.0 SL-246-SA5A-SB-9.0-10.0 SL-247-SA5A-SB-4.0-5.0 SL-247-SA5A-SB-9.0-10.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
DUP08-SA5A-QC-030211(RES)	TIN	2.49 mg/Kg	2.49U mg/Kg
SL-245-SA5A-SB-29.0-30.0(RES)	TIN	2.77 mg/Kg	2.77U mg/Kg
SL-245-SA5A-SB-4.0-5.0(RES)	TIN	2.74 mg/Kg	2.74U mg/Kg
SL-245-SA5A-SB-9.0-10.0(RES)	TIN	2.80 mg/Kg	2.80U mg/Kg
SL-246-SA5A-SB-4.0-5.0(RES)	TIN	2.80 mg/Kg	2.80U mg/Kg
SL-246-SA5A-SB-9.0-10.0(RES)	TIN	2.44 mg/Kg	2.44U mg/Kg
SL-247-SA5A-SB-4.0-5.0(RES)	TIN	2.65 mg/Kg	2.65U mg/Kg
SL-247-SA5A-SB-9.0-10.0(RES)	TIN	2.38 mg/Kg	2.38U mg/Kg

Method: **6020**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P06926AB221434A	3/16/2011 2:34:00 PM	COPPER	0.169 mg/Kg	DUP08-SA5A-QC-030211 SL-245-SA5A-SB-29.0-30.0 SL-245-SA5A-SB-4.0-5.0 SL-245-SA5A-SB-9.0-10.0 SL-246-SA5A-SB-4.0-5.0 SL-246-SA5A-SB-9.0-10.0 SL-247-SA5A-SB-4.0-5.0 SL-247-SA5A-SB-9.0-10.0

Method: **8260B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB84B211702A	3/3/2011 5:02:00 PM	METHYLENE CHLORIDE TOLUENE	1.1 ug/Kg 0.12 ug/Kg	DUP08-SA5A-QC-030211 SL-245-SA5A-SB-4.0-5.0 SL-246-SA5A-SB-4.0-5.0 SL-247-SA5A-SB-4.0-5.0

Method Blank Outlier Report

Lab Reporting Batch ID: DE096 **Laboratory: LL**

EDD Filename: DE096_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8260B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
DUP08-SA5A-QC-030211(RES)	METHYLENE CHLORIDE	0.78 ug/Kg	4.2U ug/Kg
SL-245-SA5A-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.62 ug/Kg	3.7U ug/Kg
SL-246-SA5A-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.95 ug/Kg	4.0U ug/Kg
SL-247-SA5A-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.40 ug/Kg	4.5U ug/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE096 **Laboratory: LL**

EDD Filename: DE096_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-245-SA5A-SB-4.0-5.0MS SL-245-SA5A-SB-4.0-5.0MSD (DUP08-SA5A-QC-030211 SL-245-SA5A-SB-29.0-30.0 SL-245-SA5A-SB-4.0-5.0 SL-245-SA5A-SB-9.0-10.0 SL-246-SA5A-SB-4.0-5.0 SL-246-SA5A-SB-9.0-10.0 SL-247-SA5A-SB-4.0-5.0 SL-247-SA5A-SB-9.0-10.0)	ZINC	44	18	75.00-125.00	-	ZINC	No Qual, >4x
SL-245-SA5A-SB-4.0-5.0MS SL-245-SA5A-SB-4.0-5.0MSD (DUP08-SA5A-QC-030211 SL-245-SA5A-SB-29.0-30.0 SL-245-SA5A-SB-4.0-5.0 SL-245-SA5A-SB-9.0-10.0 SL-246-SA5A-SB-4.0-5.0 SL-246-SA5A-SB-9.0-10.0 SL-247-SA5A-SB-4.0-5.0 SL-247-SA5A-SB-9.0-10.0)	ANTIMONY VANADIUM	44 72	42 -	75.00-125.00 75.00-125.00	- -	ANTIMONY VANADIUM	J(all detects) UJ(all non-detects)
SL-245-SA5A-SB-4.0-5.0MS (DUP08-SA5A-QC-030211 SL-245-SA5A-SB-29.0-30.0 SL-245-SA5A-SB-4.0-5.0 SL-245-SA5A-SB-9.0-10.0 SL-246-SA5A-SB-4.0-5.0 SL-246-SA5A-SB-9.0-10.0 SL-247-SA5A-SB-4.0-5.0 SL-247-SA5A-SB-9.0-10.0)	BARIUM	70	-	75.00-125.00	-	BARIUM	No Qual, >4x

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-245-SA5A-SB-4.0-5.0MS SL-245-SA5A-SB-4.0-5.0MSD (DUP08-SA5A-QC-030211 SL-245-SA5A-SB-29.0-30.0 SL-245-SA5A-SB-4.0-5.0 SL-245-SA5A-SB-9.0-10.0 SL-246-SA5A-SB-4.0-5.0 SL-246-SA5A-SB-9.0-10.0 SL-247-SA5A-SB-4.0-5.0 SL-247-SA5A-SB-9.0-10.0)	ALUMINUM MAGNESIUM POTASSIUM TITANIUM	1083 207 130 228	1307 - - 162	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	- - - -	ALUMINUM MAGNESIUM POTASSIUM TITANIUM	J(all detects) Al, Mg, Ti No Qual, >4x
SL-245-SA5A-SB-4.0-5.0MS SL-245-SA5A-SB-4.0-5.0MSD (DUP08-SA5A-QC-030211 SL-245-SA5A-SB-29.0-30.0 SL-245-SA5A-SB-4.0-5.0 SL-245-SA5A-SB-9.0-10.0 SL-246-SA5A-SB-4.0-5.0 SL-246-SA5A-SB-9.0-10.0 SL-247-SA5A-SB-4.0-5.0 SL-247-SA5A-SB-9.0-10.0)	IRON	-300	-82	75.00-125.00	-	IRON	No Qual, >4x

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE096 **Laboratory: LL**

EDD Filename: DE096_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-245-SA5A-SB-4.0-5.0MS SL-245-SA5A-SB-4.0-5.0MSD (DUP08-SA5A-QC-030211 SL-245-SA5A-SB-29.0-30.0 SL-245-SA5A-SB-4.0-5.0 SL-245-SA5A-SB-9.0-10.0 SL-246-SA5A-SB-4.0-5.0 SL-246-SA5A-SB-9.0-10.0 SL-247-SA5A-SB-4.0-5.0 SL-247-SA5A-SB-9.0-10.0)	CALCIUM	752	74	75.00-125.00	72 (20.00)	CALCIUM	J(all detects) UJ(all non-detects) Ca No Qual %R, >4x Mn No Qual, >4x
	MANGANESE	45	41	75.00-125.00	-	MANGANESE	
	PHOSPHORUS	-	41	75.00-125.00	-	PHOSPHORUS	

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-245-SA5A-SB-4.0-5.0MSD (SL-245-SA5A-SB-4.0-5.0)	3,3'-DICHLOROBENZIDINE	-	-	16.00-119.00	42 (30.00)	3,3'-DICHLOROBENZIDINE	J(all detects)
	ANILINE	-	-	35.00-95.00	31 (30.00)	ANILINE	
	Di-n-octylphthalate	-	127	56.00-126.00	-	Di-n-octylphthalate	
SL-245-SA5A-SB-4.0-5.0MS SL-245-SA5A-SB-4.0-5.0MSD (SL-245-SA5A-SB-4.0-5.0)	1,2,4-TRICHLOROBENZENE	69	-	72.00-115.00	-	1,2,4-TRICHLOROBENZENE	J(all detects) UJ(all non-detects)
	1,4-DICHLOROBENZENE	65	-	70.00-100.00	-	1,4-DICHLOROBENZENE	
	1-METHYLNAPHTHALENE	72	-	73.00-112.00	-	1-METHYLNAPHTHALENE	
	2,4,5-TRICHLOROPHENOL	74	-	78.00-109.00	-	2,4,5-TRICHLOROPHENOL	
	2,4,6-TRICHLOROPHENOL	70	-	77.00-115.00	-	2,4,6-TRICHLOROPHENOL	
	2,4-DICHLOROPHENOL	73	-	78.00-117.00	-	2,4-DICHLOROPHENOL	
	2,4-DIMETHYLPHENOL	70	-	78.00-110.00	-	2,4-DIMETHYLPHENOL	
	2,4-DINITROTOLUENE	72	-	73.00-113.00	-	2,4-DINITROTOLUENE	
	2-CHLOROPHENOL	72	-	73.00-121.00	-	2-CHLOROPHENOL	
	2-METHYLNAPHTHALENE	66	-	76.00-114.00	-	2-METHYLNAPHTHALENE	
	2-METHYLPHENOL	72	-	75.00-111.00	-	2-METHYLPHENOL	
	2-NITROPHENOL	66	-	74.00-115.00	-	2-NITROPHENOL	
	4-CHLORO-3-METHYLPHENOL	72	-	76.00-110.00	-	4-CHLORO-3-METHYLPHENOL	
	4-CHLOROPHENYL-PHENYLET	74	-	80.00-109.00	-	4-CHLOROPHENYL-PHENYLE	
	ACENAPHTHENE	71	-	75.00-115.00	-	ACENAPHTHENE	
	ACENAPHTHYLENE	74	-	81.00-110.00	-	ACENAPHTHYLENE	
	ANTHRACENE	73	-	75.00-115.00	-	ANTHRACENE	
	BENZIDINE	18	24	35.00-141.00	-	BENZIDINE	
	BIS(2-CHLOROETHOXY)METHA	74	-	75.00-104.00	-	BIS(2-CHLOROETHOXY)METH	
	FLUORENE	72	-	77.00-111.00	-	FLUORENE	
	HEXACHLOROBENZENE	74	-	77.00-114.00	-	HEXACHLOROBENZENE	
	ISOPHORONE	69	-	73.00-102.00	-	ISOPHORONE	
	NAPHTHALENE	69	-	72.00-116.00	-	NAPHTHALENE	
	NITROBENZENE	68	-	72.00-106.00	-	NITROBENZENE	
	N-NITROSODIPHENYLAMINE	73	-	86.00-145.00	-	N-NITROSODIPHENYLAMINE	

Method: 8260B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-245-SA5A-SB-4.0-5.0MS SL-245-SA5A-SB-4.0-5.0MSD (SL-245-SA5A-SB-4.0-5.0)	Chlorotrifluoroethylene	56	58	70.00-130.00	-	Chlorotrifluoroethylene	J(all detects) UJ(all non-detects)

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE096 **Laboratory: LL**

EDD Filename: DE096_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-245-SA5A-SB-4.0-5.0DUP (DUP08-SA5A-QC-030211 SL-245-SA5A-SB-29.0-30.0 SL-245-SA5A-SB-4.0-5.0 SL-245-SA5A-SB-9.0-10.0 SL-246-SA5A-SB-4.0-5.0 SL-246-SA5A-SB-9.0-10.0 SL-247-SA5A-SB-4.0-5.0 SL-247-SA5A-SB-9.0-10.0)	Zirconium	200	20.00	No Qual OK by difference

Method: 6020
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-245-SA5A-SB-4.0-5.0DUP (DUP08-SA5A-QC-030211 SL-245-SA5A-SB-29.0-30.0 SL-245-SA5A-SB-4.0-5.0 SL-245-SA5A-SB-9.0-10.0 SL-246-SA5A-SB-4.0-5.0 SL-246-SA5A-SB-9.0-10.0 SL-247-SA5A-SB-4.0-5.0 SL-247-SA5A-SB-9.0-10.0)	ANTIMONY CADMIUM SILVER	200 200 43	20.00 20.00 20.00	No Qual OK by difference

Method: 7199
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-245-SA5A-SB-4.0-5.0DUP (DUP08-SA5A-QC-030211 SL-245-SA5A-SB-29.0-30.0 SL-245-SA5A-SB-4.0-5.0 SL-245-SA5A-SB-9.0-10.0 SL-246-SA5A-SB-4.0-5.0 SL-246-SA5A-SB-9.0-10.0 SL-247-SA5A-SB-4.0-5.0 SL-247-SA5A-SB-9.0-10.0)	HEXAVALENT CHROMIUM	200	20.00	No Qual OK by difference

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE096 | Laboratory: LL

EDD Filename: DE096_v1 | eQAPP Name: CDM_SSFL_110509

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P06926AQ221437A (DUP08 -SA5A -QC -030211 SL -245-SA5A -SB-29.0-30.0 SL -245-SA5A -SB-4.0-5.0 SL -245-SA5A -SB-9.0-10.0 SL -246-SA5A -SB-4.0-5.0 SL -246-SA5A -SB-9.0-10.0 SL -247-SA5A -SB-4.0-5.0 SL -247-SA5A -SB-9.0-10.0)	ANTIMONY	65	-	80.00-120.00	-	ANTIMONY	No Qual SRM within QC limits

Method: 8082
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P10717AQ241456A	AROCLOR 1016	51	-	72.00-120.00	-	All TCL Compounds	J(all detects) UJ(all non-detects)
P10717AQ241543A	AROCLOR 1260	60	-	65.00-137.00	-		
P10717AY241520A (DUP08 -SA5A -QC -030211 SL -245-SA5A -SB-29.0-30.0 SL -245-SA5A -SB-4.0-5.0 SL -245-SA5A -SB-9.0-10.0 SL -246-SA5A -SB-4.0-5.0 SL -246-SA5A -SB-9.0-10.0 SL -247-SA5A -SB-4.0-5.0 SL -247-SA5A -SB-9.0-10.0)	Aroclor 5442	134	-	36.00-106.00	37 (30.00)		

Method: 8260B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
LCSB84Q211517A (DUP08 -SA5A -QC -030211 SL -245-SA5A -SB-4.0-5.0 SL -246-SA5A -SB-4.0-5.0 SL -247-SA5A -SB-4.0-5.0)	BROMOCHLOROMETHANE	126	-	79.00-124.00	-	BROMOCHLOROMETHANE	J(all detects)

Field Duplicate RPD Report

Lab Reporting Batch ID: DE096 **Laboratory: LL**

EDD Filename: DE096_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 160.3M
Matrix: SO

Analyte	Concentration (%)		Sample RPD	eQAPP RPD	Flag
	SL-245-SA5A-SB-4.0-5.0	DUP08-SA5A-QC-030211			
MOISTURE	8.2	9.3	13		No Qualifiers Applied

Method: 300.0
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-245-SA5A-SB-4.0-5.0	DUP08-SA5A-QC-030211			
FLUORIDE	2.1	3.2	42	50.00	No Qualifiers Applied

Method: 6010B
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-245-SA5A-SB-4.0-5.0	DUP08-SA5A-QC-030211			
ALUMINUM	11100	11300	2	50.00	No Qualifiers Applied
BORON	2.21	2.24	1	50.00	
CALCIUM	2160	1900	13	50.00	
IRON	16800	15700	7	50.00	
LITHIUM	23.2	20.5	12	50.00	
MAGNESIUM	3410	2980	13	50.00	
MANGANESE	226	204	10	50.00	
PHOSPHORUS	315	221	35	50.00	
POTASSIUM	2550	2490	2	50.00	
SODIUM	99.8	99.5	0	50.00	
STRONTIUM	11.4	9.97	13	50.00	
TIN	2.74	2.49	10	50.00	
TITANIUM	967	930	4	50.00	

Method: 6020
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-245-SA5A-SB-4.0-5.0	DUP08-SA5A-QC-030211			
ARSENIC	3.79	3.43	10	50.00	No Qualifiers Applied
BARIUM	70.9	63.0	12	50.00	
BERYLLIUM	0.458	0.461	1	50.00	
CADMIUM	0.0508	0.0700	32	50.00	
CHROMIUM	11.0	10.1	9	50.00	
COBALT	3.96	3.65	8	50.00	
COPPER	4.24	3.83	10	50.00	
LEAD	3.95	4.04	2	50.00	
MOLYBDENUM	0.344	0.339	1	50.00	
NICKEL	6.15	5.72	7	50.00	
SELENIUM	0.114	0.0972	16	50.00	
SILVER	0.0143	0.0183	25	50.00	
THALLIUM	0.278	0.252	10	50.00	
VANADIUM	25.0	23.0	8	50.00	
ZINC	59.7	52.2	13	50.00	
ANTIMONY	0.0800	0.214 U	200	50.00	J(all detects) UJ(all non-detects)

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Field Duplicate RPD Report

Lab Reporting Batch ID: DE096 **Laboratory: LL**

EDD Filename: DE096_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7199
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-245-SA5A-SB-4.0-5.0	DUP08-SA5A-QC-030211			
HEXAVALENT CHROMIUM	1.1 U	0.44	200	50.00	J(all detects) UJ(all non-detects)

Method: 8260B
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-245-SA5A-SB-4.0-5.0	DUP08-SA5A-QC-030211			
METHYLENE CHLORIDE	0.62	0.78	23	50.00	No Qualifiers Applied
ETHYLBENZENE m,p-Xylene	3.7 U 3.7 U	0.15 0.51	200 200	50.00 50.00	J(all detects) UJ(all non-detects)

Method: 8270C SIM
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-245-SA5A-SB-4.0-5.0	DUP08-SA5A-QC-030211			
Di-n-octylphthalate	10	20 U	200	50.00	J(all detects) UJ(all non-detects)

Method: 9045M
Matrix: SO

Analyte	Concentration (pH unit)		Sample RPD	eQAPP RPD	Flag
	SL-245-SA5A-SB-4.0-5.0	DUP08-SA5A-QC-030211			
PH	7.99	8.22	3	50.00	No Qualifiers Applied

Method: ASTM D1498
Matrix: SO

Analyte	Concentration (mV)		Sample RPD	eQAPP RPD	Flag
	SL-245-SA5A-SB-4.0-5.0	DUP08-SA5A-QC-030211			
Oxidation Reduction Potential	429	352	20		No Qualifiers Applied

Reporting Limit Outliers

Lab Reporting Batch ID: DE096 **Laboratory: LL**

EDD Filename: DE096_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8260B

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
TB-030211	BENZENE	J	0.6	5	PQL	ug/L	J (all detects)

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP08-SA5A-QC-030211	BORON	J	2.24	5.30	PQL	mg/Kg	J (all detects)
	SODIUM	J	99.5	106	PQL	mg/Kg	
	TIN	J	2.49	10.6	PQL	mg/Kg	
SL-245-SA5A-SB-29.0-30.0	BORON	J	1.77	5.62	PQL	mg/Kg	J (all detects)
	TIN	J	2.77	11.2	PQL	mg/Kg	
SL-245-SA5A-SB-4.0-5.0	BORON	J	2.21	5.34	PQL	mg/Kg	J (all detects)
	SODIUM	J	99.8	107	PQL	mg/Kg	
	TIN	J	2.74	10.7	PQL	mg/Kg	
SL-245-SA5A-SB-9.0-10.0	BORON	J	2.42	5.52	PQL	mg/Kg	J (all detects)
	TIN	J	2.80	11.0	PQL	mg/Kg	
SL-246-SA5A-SB-4.0-5.0	BORON	J	1.84	5.42	PQL	mg/Kg	J (all detects)
	SODIUM	J	92.4	108	PQL	mg/Kg	
	TIN	J	2.80	10.8	PQL	mg/Kg	
SL-246-SA5A-SB-9.0-10.0	BORON	J	3.79	5.38	PQL	mg/Kg	J (all detects)
	TIN	J	2.44	10.8	PQL	mg/Kg	
	Zirconium	J	1.86	5.38	PQL	mg/Kg	
SL-247-SA5A-SB-4.0-5.0	BORON	J	4.10	5.64	PQL	mg/Kg	J (all detects)
	SODIUM	J	99.8	113	PQL	mg/Kg	
	TIN	J	2.65	11.3	PQL	mg/Kg	
	Zirconium	J	1.81	5.64	PQL	mg/Kg	
SL-247-SA5A-SB-9.0-10.0	BORON	J	3.85	5.36	PQL	mg/Kg	J (all detects)
	TIN	J	2.38	10.7	PQL	mg/Kg	
	Zirconium	J	1.95	5.36	PQL	mg/Kg	

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP08-SA5A-QC-030211	CADMIUM	J	0.0700	0.107	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0972	0.428	PQL	mg/Kg	
	SILVER	J	0.0183	0.107	PQL	mg/Kg	
SL-245-SA5A-SB-29.0-30.0	CADMIUM	J	0.0839	0.109	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.106	0.437	PQL	mg/Kg	
SL-245-SA5A-SB-4.0-5.0	ANTIMONY	J	0.0800	0.212	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0508	0.106	PQL	mg/Kg	
	SELENIUM	J	0.114	0.423	PQL	mg/Kg	
	SILVER	J	0.0143	0.106	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE096 **Laboratory: LL**

EDD Filename: DE096_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-245-SA5A-SB-9.0-10.0	CADMIUM	J	0.0879	0.109	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.140	0.438	PQL	mg/Kg	
	SILVER	J	0.0303	0.109	PQL	mg/Kg	
SL-246-SA5A-SB-4.0-5.0	CADMIUM	J	0.0885	0.105	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0448	0.421	PQL	mg/Kg	
SL-246-SA5A-SB-9.0-10.0	ANTIMONY	J	0.105	0.215	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.132	0.431	PQL	mg/Kg	
	SILVER	J	0.0400	0.108	PQL	mg/Kg	
SL-247-SA5A-SB-4.0-5.0	SELENIUM	J	0.0749	0.446	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0515	0.112	PQL	mg/Kg	
SL-247-SA5A-SB-9.0-10.0	SELENIUM	J	0.120	0.446	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0445	0.111	PQL	mg/Kg	

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP08-SA5A-QC-030211	HEXAVALENT CHROMIUM	J	0.44	1.1	PQL	mg/Kg	J (all detects)
SL-245-SA5A-SB-9.0-10.0	HEXAVALENT CHROMIUM	J	0.36	1.1	PQL	mg/Kg	J (all detects)
SL-246-SA5A-SB-9.0-10.0	HEXAVALENT CHROMIUM	J	0.51	1.1	PQL	mg/Kg	J (all detects)
SL-247-SA5A-SB-9.0-10.0	HEXAVALENT CHROMIUM	J	0.45	1.1	PQL	mg/Kg	J (all detects)

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-245-SA5A-SB-9.0-10.0	AROCLOR 1254	J	0.68	1.9	PQL	ug/Kg	J (all detects)

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP08-SA5A-QC-030211	ETHYLBENZENE	J	0.15	4.2	PQL	ug/Kg	J (all detects)
	m,p-Xylene	J	0.51	4.2	PQL	ug/Kg	
	METHYLENE CHLORIDE	J	0.78	4.2	PQL	ug/Kg	
SL-245-SA5A-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.62	3.7	PQL	ug/Kg	J (all detects)
SL-246-SA5A-SB-4.0-5.0	ETHYLBENZENE	J	0.13	4.0	PQL	ug/Kg	J (all detects)
	m,p-Xylene	J	0.42	4.0	PQL	ug/Kg	
	METHYLENE CHLORIDE	J	0.95	4.0	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE096 **Laboratory: LL**

EDD Filename: DE096_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-247-SA5A-SB-4.0-5.0	ETHYLBENZENE	J	0.18	4.5	PQL	ug/Kg	J (all detects)
	m,p-Xylene	J	0.53	4.5	PQL	ug/Kg	
	METHYLENE CHLORIDE	J	0.40	4.5	PQL	ug/Kg	

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-245-SA5A-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	20	360	PQL	ug/Kg	J (all detects)
SL-247-SA5A-SB-9.0-10.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	18	370	PQL	ug/Kg	J (all detects)

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-245-SA5A-SB-29.0-30.0	Di-n-octylphthalate	J	11	20	PQL	ug/Kg	J (all detects)
	NAPHTHALENE	J	1.0	1.9	PQL	ug/Kg	
SL-245-SA5A-SB-4.0-5.0	Di-n-octylphthalate	J	10	20	PQL	ug/Kg	J (all detects)
SL-245-SA5A-SB-9.0-10.0	CHRYSENE	J	1.0	1.8	PQL	ug/Kg	J (all detects)
	FLUORANTHENE	J	1.0	1.8	PQL	ug/Kg	
	NAPHTHALENE	J	0.98	1.8	PQL	ug/Kg	
	PHENANTHRENE	J	0.75	1.8	PQL	ug/Kg	
	PYRENE	J	0.99	1.8	PQL	ug/Kg	
SL-247-SA5A-SB-9.0-10.0	CHRYSENE	J	1.1	1.8	PQL	ug/Kg	J (all detects)

LDC #: 25911F4 **VALIDATION COMPLETENESS WORKSHEET** Date: 8-3-11

SDG #: DE096 ADR

Laboratory: Lancaster Laboratories Reviewer: CR

2nd Reviewer: A

METHOD: Metals (EPA SW 846 Method 6010B/6020A/7000)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	N	Sampling dates:
II.	ICP/MS Tune	—	
III.	Calibration	—	
IV.	Blanks	A	No quals
V.	ICP Interference Check Sample (ICS) Analysis	N	
VI.	Matrix Spike Analysis	N	MS/D (Al, Ba, Ca, Fe, Mg, Mn, Ti, Zn >4x)
VII.	Duplicate Sample Analysis	N	D (Sb, Cd, Ag, Zr <5x)
VIII.	Laboratory Control Samples (LCS)	A	LCS
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	SW	Co: 13% J/UJ
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	—	
XV	Field Blanks	—	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:

1	DUP08-SA5A-QC-030211	11	SL-245-SA5A-SB-4.0-5.0DUP	21		31	
2	SL-245-SA5A-SB-4.0-5.0	12		22		32	
3	SL-245-SA5A-SB-9.0-10.0	13		23		33	
4	SL-245-SA5A-SB-29.0-30.0	14		24		34	
5	SL-246-SA5A-SB-4.0-5.0	15		25		35	
6	SL-246-SA5A-SB-9.0-10.0	16		26		36	
7	SL-247-SA5A-SB-4.0-5.0	17		27		37	
8	SL-247-SA5A-SB-9.0-10.0	18		28		38	
9	SL-245-SA5A-SB-4.0-5.0MS	19		29		39	
10	SL-245-SA5A-SB-4.0-5.0MSD	20		30		40	

Notes:

SAMPLE DELIVERY GROUP

DE097

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
03-Mar-2011	SL-236-SA5A-SB-4.0-5.0	6222142	N	3050B	6010B	III
03-Mar-2011	SL-236-SA5A-SB-4.0-5.0	6222142	N	3050B	6020	III
03-Mar-2011	SL-236-SA5A-SB-4.0-5.0	6222142	N	3060A	7199	III
03-Mar-2011	SL-236-SA5A-SB-4.0-5.0	6222142	N	3550B	8082	III
03-Mar-2011	SL-236-SA5A-SB-4.0-5.0	6222142	N	3550B	8270C	III
03-Mar-2011	SL-236-SA5A-SB-4.0-5.0	6222142	N	3550B	8270C SIM	III
03-Mar-2011	SL-236-SA5A-SB-4.0-5.0	6222142	N	5035	8260B	III
03-Mar-2011	SL-236-SA5A-SB-4.0-5.0	6222142	N	5035	8260B SIM	III
03-Mar-2011	SL-236-SA5A-SB-4.0-5.0	6222142	N	Gen Prep	9045M	III
03-Mar-2011	SL-236-SA5A-SB-4.0-5.0	6222142	N	METHOD	300.0	III
03-Mar-2011	SL-236-SA5A-SB-4.0-5.0	6222142	N	METHOD	314.0	III
03-Mar-2011	SL-236-SA5A-SB-4.0-5.0	6222142	N	METHOD	7471A	III
03-Mar-2011	SL-236-SA5A-SB-9.0-10.0	6222143	N	3050B	6010B	III
03-Mar-2011	SL-236-SA5A-SB-9.0-10.0	6222143	N	3050B	6020	III
03-Mar-2011	SL-236-SA5A-SB-9.0-10.0	6222143	N	3060A	7199	III
03-Mar-2011	SL-236-SA5A-SB-9.0-10.0	6222143	N	3550B	8082	III
03-Mar-2011	SL-236-SA5A-SB-9.0-10.0	6222143	N	3550B	8270C	III
03-Mar-2011	SL-236-SA5A-SB-9.0-10.0	6222143	N	3550B	8270C SIM	III
03-Mar-2011	SL-236-SA5A-SB-9.0-10.0	6222143	N	Gen Prep	9045M	III
03-Mar-2011	SL-236-SA5A-SB-9.0-10.0	6222143	N	METHOD	300.0	III
03-Mar-2011	SL-236-SA5A-SB-9.0-10.0	6222143	N	METHOD	314.0	III
03-Mar-2011	SL-236-SA5A-SB-9.0-10.0	6222143	N	METHOD	7471A	III
03-Mar-2011	SL-249-SA5A-SB-2.5-3.5	6222144	N	3050B	6010B	III
03-Mar-2011	SL-249-SA5A-SB-2.5-3.5	6222144	N	3050B	6020	III
03-Mar-2011	SL-249-SA5A-SB-2.5-3.5	6222144	N	3060A	7199	III
03-Mar-2011	SL-249-SA5A-SB-2.5-3.5	6222144	N	3546	1625C	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
03-Mar-2011	SL-249-SA5A-SB-2.5-3.5	6222144	N	3550B	8015B	III
03-Mar-2011	SL-249-SA5A-SB-2.5-3.5	6222144	N	3550B	8015M	III
03-Mar-2011	SL-249-SA5A-SB-2.5-3.5	6222144	N	3550B	8082	III
03-Mar-2011	SL-249-SA5A-SB-2.5-3.5	6222144	N	3550B	8270C	III
03-Mar-2011	SL-249-SA5A-SB-2.5-3.5	6222144	N	3550B	8270C SIM	III
03-Mar-2011	SL-249-SA5A-SB-2.5-3.5	6222144	N	5035	8015M	III
03-Mar-2011	SL-249-SA5A-SB-2.5-3.5	6222144	N	5035	8260B	III
03-Mar-2011	SL-249-SA5A-SB-2.5-3.5	6222144	N	5035	8260B SIM	III
03-Mar-2011	SL-249-SA5A-SB-2.5-3.5	6222144	N	8330	8330A	III
03-Mar-2011	SL-249-SA5A-SB-2.5-3.5	6222144	N	Gen Prep	9045M	III
03-Mar-2011	SL-249-SA5A-SB-2.5-3.5	6222144	N	METHOD	300.0	III
03-Mar-2011	SL-249-SA5A-SB-2.5-3.5	6222144	N	METHOD	314.0	III
03-Mar-2011	SL-249-SA5A-SB-2.5-3.5	6222144	N	METHOD	7471A	III
03-Mar-2011	SL-249-SA5A-SB-2.5-3.5	6222144	N	METHOD	8015B	III
03-Mar-2011	SL-249-SA5A-SB-2.5-3.5	6222144	N	METHOD	8015M	III
03-Mar-2011	SL-249-SA5A-SB-2.5-3.5	6222144	N	METHOD	8315A	III
03-Mar-2011	SL-249-SA5A-SB-2.5-3.5	6222144	N	METHOD	9012B	III
03-Mar-2011	SL-249-SA5A-SB-2.5-3.5DUP	P222144D271534A	DUP	METHOD	9012B	III
03-Mar-2011	SL-249-SA5A-SB-2.5-3.5MSD	P222144M240518A	MSD	8330	8330A	III
03-Mar-2011	SL-249-SA5A-SB-2.5-3.5MSD	P222144M261511	MSD	3546	1625C	III
03-Mar-2011	SL-249-SA5A-SB-2.5-3.5MSD	P222144M320942A	MSD	3550B	8015B	III
03-Mar-2011	SL-249-SA5A-SB-2.5-3.5MSD	P222144M321828A	MSD	METHOD	8015M	III
03-Mar-2011	SL-249-SA5A-SB-2.5-3.5MS	P222144R240436A	MS	8330	8330A	III
03-Mar-2011	SL-249-SA5A-SB-2.5-3.5MS	P222144R261455	MS	3546	1625C	III
03-Mar-2011	SL-249-SA5A-SB-2.5-3.5MS	P222144R271536A	MS	METHOD	9012B	III
03-Mar-2011	SL-249-SA5A-SB-2.5-3.5MS	P222144R320858A	MS	3550B	8015B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
03-Mar-2011	SL-249-SA5A-SB-2.5-3.5MS	P222144R321810A	MS	METHOD	8015M	III
03-Mar-2011	SL-249-SA5A-SB-9.0-10.0	6222145	N	3050B	6010B	III
03-Mar-2011	SL-249-SA5A-SB-9.0-10.0	6222145	N	3050B	6020	III
03-Mar-2011	SL-249-SA5A-SB-9.0-10.0	6222145	N	3060A	7199	III
03-Mar-2011	SL-249-SA5A-SB-9.0-10.0	6222145	N	3546	1625C	III
03-Mar-2011	SL-249-SA5A-SB-9.0-10.0	6222145	N	3550B	8015B	III
03-Mar-2011	SL-249-SA5A-SB-9.0-10.0	6222145	N	3550B	8015M	III
03-Mar-2011	SL-249-SA5A-SB-9.0-10.0	6222145	N	3550B	8082	III
03-Mar-2011	SL-249-SA5A-SB-9.0-10.0	6222145	N	3550B	8270C	III
03-Mar-2011	SL-249-SA5A-SB-9.0-10.0	6222145	N	3550B	8270C SIM	III
03-Mar-2011	SL-249-SA5A-SB-9.0-10.0	6222145	N	5035	8015M	III
03-Mar-2011	SL-249-SA5A-SB-9.0-10.0	6222145	N	5035	8260B	III
03-Mar-2011	SL-249-SA5A-SB-9.0-10.0	6222145	N	5035	8260B SIM	III
03-Mar-2011	SL-249-SA5A-SB-9.0-10.0	6222145	N	8330	8330A	III
03-Mar-2011	SL-249-SA5A-SB-9.0-10.0	6222145	N	Gen Prep	9045M	III
03-Mar-2011	SL-249-SA5A-SB-9.0-10.0	6222145	N	METHOD	300.0	III
03-Mar-2011	SL-249-SA5A-SB-9.0-10.0	6222145	N	METHOD	314.0	III
03-Mar-2011	SL-249-SA5A-SB-9.0-10.0	6222145	N	METHOD	6850	III
03-Mar-2011	SL-249-SA5A-SB-9.0-10.0	6222145	N	METHOD	7471A	III
03-Mar-2011	SL-249-SA5A-SB-9.0-10.0	6222145	N	METHOD	8015B	III
03-Mar-2011	SL-249-SA5A-SB-9.0-10.0	6222145	N	METHOD	8015M	III
03-Mar-2011	SL-249-SA5A-SB-9.0-10.0	6222145	N	METHOD	8315A	III
03-Mar-2011	SL-249-SA5A-SB-9.0-10.0	6222145	N	METHOD	9012B	III
03-Mar-2011	SL-235-SA5A-SB-4.0-5.0	6222140	N	3050B	6010B	III
03-Mar-2011	SL-235-SA5A-SB-4.0-5.0	6222140	N	3050B	6020	III
03-Mar-2011	SL-235-SA5A-SB-4.0-5.0	6222140	N	3060A	7199	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
03-Mar-2011	SL-235-SA5A-SB-4.0-5.0	6222140	N	3550B	8082	III
03-Mar-2011	SL-235-SA5A-SB-4.0-5.0	6222140	N	3550B	8270C	III
03-Mar-2011	SL-235-SA5A-SB-4.0-5.0	6222140	N	3550B	8270C SIM	III
03-Mar-2011	SL-235-SA5A-SB-4.0-5.0	6222140	N	5035	8260B	III
03-Mar-2011	SL-235-SA5A-SB-4.0-5.0	6222140	N	5035	8260B SIM	III
03-Mar-2011	SL-235-SA5A-SB-4.0-5.0	6222140	N	Gen Prep	9045M	III
03-Mar-2011	SL-235-SA5A-SB-4.0-5.0	6222140	N	METHOD	300.0	III
03-Mar-2011	SL-235-SA5A-SB-4.0-5.0	6222140	N	METHOD	314.0	III
03-Mar-2011	SL-235-SA5A-SB-4.0-5.0	6222140	N	METHOD	7471A	III
03-Mar-2011	SL-235-SA5A-SB-8.5-9.5	6222141	N	3050B	6010B	III
03-Mar-2011	SL-235-SA5A-SB-8.5-9.5	6222141	N	3050B	6020	III
03-Mar-2011	SL-235-SA5A-SB-8.5-9.5	6222141	N	3060A	7199	III
03-Mar-2011	SL-235-SA5A-SB-8.5-9.5	6222141	N	3550B	8082	III
03-Mar-2011	SL-235-SA5A-SB-8.5-9.5	6222141	N	3550B	8270C	III
03-Mar-2011	SL-235-SA5A-SB-8.5-9.5	6222141	N	3550B	8270C SIM	III
03-Mar-2011	SL-235-SA5A-SB-8.5-9.5	6222141	N	Gen Prep	9045M	III
03-Mar-2011	SL-235-SA5A-SB-8.5-9.5	6222141	N	METHOD	300.0	III
03-Mar-2011	SL-235-SA5A-SB-8.5-9.5	6222141	N	METHOD	314.0	III
03-Mar-2011	SL-235-SA5A-SB-8.5-9.5	6222141	N	METHOD	7471A	III
03-Mar-2011	SL-234-SA5A-SB-4.0-5.0	6222138	N	3050B	6010B	III
03-Mar-2011	SL-234-SA5A-SB-4.0-5.0	6222138	N	3050B	6020	III
03-Mar-2011	SL-234-SA5A-SB-4.0-5.0	6222138	N	3060A	7199	III
03-Mar-2011	SL-234-SA5A-SB-4.0-5.0	6222138	N	3550B	8082	III
03-Mar-2011	SL-234-SA5A-SB-4.0-5.0	6222138	N	3550B	8270C	III
03-Mar-2011	SL-234-SA5A-SB-4.0-5.0	6222138	N	3550B	8270C SIM	III
03-Mar-2011	SL-234-SA5A-SB-4.0-5.0	6222138	N	5035	8260B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
03-Mar-2011	SL-234-SA5A-SB-4.0-5.0	6222138	N	5035	8260B SIM	III
03-Mar-2011	SL-234-SA5A-SB-4.0-5.0	6222138	N	Gen Prep	9045M	III
03-Mar-2011	SL-234-SA5A-SB-4.0-5.0	6222138	N	METHOD	300.0	III
03-Mar-2011	SL-234-SA5A-SB-4.0-5.0	6222138	N	METHOD	314.0	III
03-Mar-2011	SL-234-SA5A-SB-4.0-5.0	6222138	N	METHOD	7471A	III
03-Mar-2011	SL-234-SA5A-SB-4.0-5.0DUP	P222138D272354B	DUP	METHOD	300.0	III
03-Mar-2011	SL-234-SA5A-SB-4.0-5.0MSD	P222138M261056	MSD	3550B	8270C SIM	III
03-Mar-2011	SL-234-SA5A-SB-4.0-5.0MS	P222138R261025	MS	3550B	8270C SIM	III
03-Mar-2011	SL-234-SA5A-SB-4.0-5.0MS	P222138R270009B	MS	METHOD	300.0	III
03-Mar-2011	SL-234-SA5A-SB-9.0-10	6222139	N	3050B	6010B	III
03-Mar-2011	SL-234-SA5A-SB-9.0-10	6222139	N	3050B	6020	III
03-Mar-2011	SL-234-SA5A-SB-9.0-10	6222139	N	3060A	7199	III
03-Mar-2011	SL-234-SA5A-SB-9.0-10	6222139	N	3550B	8082	III
03-Mar-2011	SL-234-SA5A-SB-9.0-10	6222139	N	3550B	8270C	III
03-Mar-2011	SL-234-SA5A-SB-9.0-10	6222139	N	3550B	8270C SIM	III
03-Mar-2011	SL-234-SA5A-SB-9.0-10	6222139	N	Gen Prep	9045M	III
03-Mar-2011	SL-234-SA5A-SB-9.0-10	6222139	N	METHOD	300.0	III
03-Mar-2011	SL-234-SA5A-SB-9.0-10	6222139	N	METHOD	314.0	III
03-Mar-2011	SL-234-SA5A-SB-9.0-10	6222139	N	METHOD	7471A	III
03-Mar-2011	SL-234-SA5A-SB-9.0-10DUP	P222139D272235B	DUP	METHOD	314.0	III
03-Mar-2011	SL-234-SA5A-SB-9.0-10DUP	P222139D291030A	DUP	Gen Prep	9045M	III
03-Mar-2011	SL-234-SA5A-SB-9.0-10MS	P222139R272259B	MS	METHOD	314.0	III
03-Mar-2011	EB06-SA5A-030311	6222146	EB	3005A	6010B	III
03-Mar-2011	EB06-SA5A-030311	6222146	EB	3020A	6020	III
03-Mar-2011	EB06-SA5A-030311	6222146	EB	3510C	8082	III
03-Mar-2011	EB06-SA5A-030311	6222146	EB	3510C	8270C	III

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IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
03-Mar-2011	EB06-SA5A-030311	6222146	EB	3510C	8270C SIM	III
03-Mar-2011	EB06-SA5A-030311	6222146	EB	5030B	8260B	III
03-Mar-2011	EB06-SA5A-030311	6222146	EB	5030B	8260B SIM	III
03-Mar-2011	EB06-SA5A-030311	6222146	EB	Gen Prep	300.0	III
03-Mar-2011	EB06-SA5A-030311	6222146	EB	Gen Prep	314.0	III
03-Mar-2011	EB06-SA5A-030311	6222146	EB	Gen Prep	7199	III
03-Mar-2011	EB06-SA5A-030311	6222146	EB	METHOD	7470A	III
03-Mar-2011	TB-030311	6222147	TB	5030B	8015M	III
03-Mar-2011	TB-030311	6222147	TB	5030B	8260B	III
03-Mar-2011	TB-030311	6222147	TB	5030B	8260B SIM	III

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Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE097 | Laboratory: LL

EDD Filename: PrepDE097_v1 | eQAPP Name: CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: SL-234-SA5A-SB-4.0-5.0 *Collected:* 3/3/2011 3:53:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.7		0.86	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-234-SA5A-SB-9.0-10 *Collected:* 3/3/2011 3:55:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.0		0.90	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-235-SA5A-SB-4.0-5.0 *Collected:* 3/3/2011 2:33:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.9		0.90	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-235-SA5A-SB-8.5-9.5 *Collected:* 3/3/2011 2:38:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	3.7		0.91	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-236-SA5A-SB-4.0-5.0 *Collected:* 3/3/2011 9:53:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	3.3		0.89	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-236-SA5A-SB-9.0-10.0 *Collected:* 3/3/2011 9:58:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.3		0.90	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-249-SA5A-SB-2.5-3.5 *Collected:* 3/3/2011 12:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	3.5		0.88	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-249-SA5A-SB-9.0-10.0 *Collected:* 3/3/2011 12:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	3.2		0.88	MDL	1.1	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE097 **Laboratory: LL**

EDD Filename: PrepDE097_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **GENCHEM**

Method: **300.0** ***Matrix:*** **SO**

Method Category: **METALS**

Method: **6010B** ***Matrix:*** **SO**

Sample ID: **SL-234-SA5A-SB-4.0-5.0** ***Collected:*** **3/3/2011 3:53:00 PM** ***Analysis Type:*** **REA** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.89	J	0.925	MDL	5.20	PQL	mg/Kg	J	Z
CALCIUM	2080		6.37	MDL	20.8	PQL	mg/Kg	J	E
PHOSPHORUS	355		0.582	MDL	10.4	PQL	mg/Kg	J	Q
POTASSIUM	3390		18.7	MDL	52.0	PQL	mg/Kg	J	Q
SODIUM	82.9	J	38.8	MDL	104	PQL	mg/Kg	J	Z
TIN	2.48	J	1.04	MDL	10.4	PQL	mg/Kg	U	B
Zirconium	1.53	J	0.873	MDL	5.20	PQL	mg/Kg	J	Z

Sample ID: **SL-234-SA5A-SB-9.0-10** ***Collected:*** **3/3/2011 3:55:00 PM** ***Analysis Type:*** **REA** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.92	J	0.988	MDL	5.55	PQL	mg/Kg	J	Z
CALCIUM	1920		6.80	MDL	22.2	PQL	mg/Kg	J	E
PHOSPHORUS	127		0.622	MDL	11.1	PQL	mg/Kg	J	Q
POTASSIUM	2150		20.0	MDL	55.5	PQL	mg/Kg	J	Q
TIN	2.57	J	1.11	MDL	11.1	PQL	mg/Kg	U	B
Zirconium	1.77	J	0.932	MDL	5.55	PQL	mg/Kg	J	Z

Sample ID: **SL-235-SA5A-SB-4.0-5.0** ***Collected:*** **3/3/2011 2:33:00 PM** ***Analysis Type:*** **REA** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.92	J	0.976	MDL	5.49	PQL	mg/Kg	J	Z
CALCIUM	4930		6.72	MDL	21.9	PQL	mg/Kg	J	E
PHOSPHORUS	413		0.614	MDL	11.0	PQL	mg/Kg	J	Q
POTASSIUM	3070		19.7	MDL	54.9	PQL	mg/Kg	J	Q
SODIUM	82.7	J	40.9	MDL	110	PQL	mg/Kg	J	Z
TIN	2.61	J	1.10	MDL	11.0	PQL	mg/Kg	U	B
Zirconium	1.70	J	0.922	MDL	5.49	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE097 **Laboratory: LL**

EDD Filename: PrepDE097_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B ***Matrix:*** SO

Sample ID: SL-235-SA5A-SB-8.5-9.5 ***Collected:*** 3/3/2011 2:38:00 PM ***Analysis Type:*** REA ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.97	J	1.00	MDL	5.62	PQL	mg/Kg	J	Z
CALCIUM	2730		6.89	MDL	22.5	PQL	mg/Kg	J	E
PHOSPHORUS	327		0.629	MDL	11.2	PQL	mg/Kg	J	Q
POTASSIUM	1590		20.2	MDL	56.2	PQL	mg/Kg	J	Q
TIN	2.69	J	1.12	MDL	11.2	PQL	mg/Kg	U	B

Sample ID: SL-236-SA5A-SB-4.0-5.0 ***Collected:*** 3/3/2011 9:53:00 AM ***Analysis Type:*** REA ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.77	J	0.966	MDL	5.43	PQL	mg/Kg	J	Z
CALCIUM	2130		6.66	MDL	21.7	PQL	mg/Kg	J	E
PHOSPHORUS	290		0.608	MDL	10.9	PQL	mg/Kg	J	Q
POTASSIUM	2930		19.5	MDL	54.3	PQL	mg/Kg	J	Q
SODIUM	90.8	J	40.5	MDL	109	PQL	mg/Kg	J	Z
TIN	2.63	J	1.09	MDL	10.9	PQL	mg/Kg	U	B
Zirconium	1.63	J	0.912	MDL	5.43	PQL	mg/Kg	J	Z

Sample ID: SL-236-SA5A-SB-9.0-10.0 ***Collected:*** 3/3/2011 9:58:00 AM ***Analysis Type:*** REA ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.65	J	0.969	MDL	5.44	PQL	mg/Kg	J	Z
CALCIUM	2630		6.67	MDL	21.8	PQL	mg/Kg	J	E
PHOSPHORUS	331		0.610	MDL	10.9	PQL	mg/Kg	J	Q
POTASSIUM	1930		19.6	MDL	54.4	PQL	mg/Kg	J	Q
TIN	2.61	J	1.09	MDL	10.9	PQL	mg/Kg	U	B
Zirconium	1.56	J	0.914	MDL	5.44	PQL	mg/Kg	J	Z

Sample ID: SL-249-SA5A-SB-2.5-3.5 ***Collected:*** 3/3/2011 12:00:00 ***Analysis Type:*** REA ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	7850		6.44	MDL	21.0	PQL	mg/Kg	J	E
PHOSPHORUS	386		0.588	MDL	10.5	PQL	mg/Kg	J	Q
POTASSIUM	3160		18.9	MDL	52.5	PQL	mg/Kg	J	Q
TIN	2.53	J	1.05	MDL	10.5	PQL	mg/Kg	U	B
Zirconium	1.14	J	0.882	MDL	5.25	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE097 **Laboratory: LL**

EDD Filename: PrepDE097_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-249-SA5A-SB-9.0-10.0 *Collected:* 3/3/2011 12:10:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	2150		6.63	MDL	21.6	PQL	mg/Kg	J	E
PHOSPHORUS	202		0.605	MDL	10.8	PQL	mg/Kg	J	Q
POTASSIUM	1970		19.5	MDL	54.0	PQL	mg/Kg	J	Q
TIN	2.83	J	1.08	MDL	10.8	PQL	mg/Kg	U	B
Zirconium	1.16	J	0.908	MDL	5.40	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-234-SA5A-SB-4.0-5.0 *Collected:* 3/3/2011 3:53:00 PM *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0687	J	0.0636	MDL	0.212	PQL	mg/Kg	J	Z, Q
COBALT	5.59		0.0212	MDL	0.106	PQL	mg/Kg	J	A
SILVER	0.0259	J	0.0127	MDL	0.106	PQL	mg/Kg	J	Z
VANADIUM	34.4		0.0233	MDL	0.106	PQL	mg/Kg	J	Q

Sample ID: SL-234-SA5A-SB-4.0-5.0 *Collected:* 3/3/2011 3:53:00 PM *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0831	J	0.0424	MDL	0.424	PQL	mg/Kg	J	Z

Sample ID: SL-234-SA5A-SB-9.0-10 *Collected:* 3/3/2011 3:55:00 PM *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0842	J	0.0659	MDL	0.220	PQL	mg/Kg	J	Z, Q
CADMIUM	0.0874	J	0.0440	MDL	0.110	PQL	mg/Kg	J	Z
COBALT	26.1		0.0220	MDL	0.110	PQL	mg/Kg	J	A
SILVER	0.0252	J	0.0132	MDL	0.110	PQL	mg/Kg	J	Z
VANADIUM	43.1		0.0242	MDL	0.110	PQL	mg/Kg	J	Q

Sample ID: SL-234-SA5A-SB-9.0-10 *Collected:* 3/3/2011 3:55:00 PM *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0441	J	0.0440	MDL	0.440	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE097 **Laboratory: LL**

EDD Filename: PrepDE097_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6020** ***Matrix:*** **SO**

Sample ID: **SL-235-SA5A-SB-4.0-5.0** ***Collected:*** **3/3/2011 2:33:00 PM** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0828	J	0.0646	MDL	0.215	PQL	mg/Kg	J	Z, Q
COBALT	5.65		0.0215	MDL	0.108	PQL	mg/Kg	J	A
SILVER	0.0331	J	0.0129	MDL	0.108	PQL	mg/Kg	J	Z
VANADIUM	34.0		0.0237	MDL	0.108	PQL	mg/Kg	J	Q

Sample ID: **SL-235-SA5A-SB-4.0-5.0** ***Collected:*** **3/3/2011 2:33:00 PM** ***Analysis Type:*** **REA6** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0965	J	0.0430	MDL	0.430	PQL	mg/Kg	J	Z

Sample ID: **SL-235-SA5A-SB-8.5-9.5** ***Collected:*** **3/3/2011 2:38:00 PM** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0661	U	0.0661	MDL	0.220	PQL	mg/Kg	UJ	Q
CADMIUM	0.0767	J	0.0441	MDL	0.110	PQL	mg/Kg	J	Z
COBALT	5.62		0.0220	MDL	0.110	PQL	mg/Kg	J	A
SILVER	0.0335	J	0.0132	MDL	0.110	PQL	mg/Kg	J	Z
VANADIUM	50.8		0.0242	MDL	0.110	PQL	mg/Kg	J	Q

Sample ID: **SL-235-SA5A-SB-8.5-9.5** ***Collected:*** **3/3/2011 2:38:00 PM** ***Analysis Type:*** **REA6** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0655	J	0.0441	MDL	0.441	PQL	mg/Kg	J	Z

Sample ID: **SL-236-SA5A-SB-4.0-5.0** ***Collected:*** **3/3/2011 9:53:00 AM** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0651	U	0.0651	MDL	0.217	PQL	mg/Kg	UJ	Q
COBALT	5.45		0.0217	MDL	0.109	PQL	mg/Kg	J	A
SILVER	0.0397	J	0.0130	MDL	0.109	PQL	mg/Kg	J	Z
VANADIUM	32.2		0.0239	MDL	0.109	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE097 **Laboratory: LL**

EDD Filename: PrepDE097_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 ***Matrix:*** SO

Sample ID: SL-236-SA5A-SB-4.0-5.0 ***Collected:*** 3/3/2011 9:53:00 AM ***Analysis Type:*** REA6 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0816	J	0.0434	MDL	0.434	PQL	mg/Kg	J	Z

Sample ID: SL-236-SA5A-SB-9.0-10.0 ***Collected:*** 3/3/2011 9:58:00 AM ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0647	U	0.0647	MDL	0.216	PQL	mg/Kg	UJ	Q
CADMIUM	0.0842	J	0.0431	MDL	0.108	PQL	mg/Kg	J	Z
COBALT	6.87		0.0216	MDL	0.108	PQL	mg/Kg	J	A
SILVER	0.0657	J	0.0129	MDL	0.108	PQL	mg/Kg	J	Z
VANADIUM	52.7		0.0237	MDL	0.108	PQL	mg/Kg	J	Q

Sample ID: SL-236-SA5A-SB-9.0-10.0 ***Collected:*** 3/3/2011 9:58:00 AM ***Analysis Type:*** REA6 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0695	J	0.0431	MDL	0.431	PQL	mg/Kg	J	Z

Sample ID: SL-249-SA5A-SB-2.5-3.5 ***Collected:*** 3/3/2011 12:00:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0976	J	0.0642	MDL	0.214	PQL	mg/Kg	J	Z, Q
COBALT	9.50		0.0214	MDL	0.107	PQL	mg/Kg	J	A
SILVER	0.0413	J	0.0128	MDL	0.107	PQL	mg/Kg	J	Z
VANADIUM	59.0		0.0235	MDL	0.107	PQL	mg/Kg	J	Q

Sample ID: SL-249-SA5A-SB-2.5-3.5 ***Collected:*** 3/3/2011 12:00:00 ***Analysis Type:*** REA6 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.190	J	0.0428	MDL	0.428	PQL	mg/Kg	J	Z

Sample ID: SL-249-SA5A-SB-9.0-10.0 ***Collected:*** 3/3/2011 12:10:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0899	J	0.0649	MDL	0.216	PQL	mg/Kg	J	Z, Q
COBALT	7.58		0.0216	MDL	0.108	PQL	mg/Kg	J	A
SILVER	0.0629	J	0.0130	MDL	0.108	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE097 **Laboratory: LL**

EDD Filename: PrepDE097_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-249-SA5A-SB-9.0-10.0 *Collected:* 3/3/2011 12:10:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
VANADIUM	42.9		0.0238	MDL	0.108	PQL	mg/Kg	J	Q

Sample ID: SL-249-SA5A-SB-9.0-10.0 *Collected:* 3/3/2011 12:10:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0505	J	0.0432	MDL	0.432	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 7199 **Matrix:** SO

Sample ID: SL-234-SA5A-SB-4.0-5.0 *Collected:* 3/3/2011 3:53:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.45	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-235-SA5A-SB-4.0-5.0 *Collected:* 3/3/2011 2:33:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.45	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-235-SA5A-SB-8.5-9.5 *Collected:* 3/3/2011 2:38:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.45	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-236-SA5A-SB-9.0-10.0 *Collected:* 3/3/2011 9:58:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.55	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-249-SA5A-SB-2.5-3.5 *Collected:* 3/3/2011 12:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.47	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE097 **Laboratory: LL**

EDD Filename: PrepDE097_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 7199 **Matrix:** SO

Sample ID: SL-249-SA5A-SB-9.0-10.0 *Collected:* 3/3/2011 12:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.38	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Method Category: SVOA

Method: 1625C **Matrix:** SO

Sample ID: SL-249-SA5A-SB-2.5-3.5 *Collected:* 3/3/2011 12:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	23.6	J	18.4	MDL	36.8	PQL	ng/Kg	J	Z

Method Category: SVOA

Method: 8015M **Matrix:** SO

Sample ID: SL-249-SA5A-SB-2.5-3.5 *Collected:* 3/3/2011 12:00:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	3.1		0.44	MDL	1.3	PQL	mg/Kg	J	L
EFH (C21-C30)	19		0.44	MDL	1.3	PQL	mg/Kg	J	L
EFH (C30-C40)	27		0.44	MDL	1.3	PQL	mg/Kg	J	L

Sample ID: SL-249-SA5A-SB-9.0-10.0 *Collected:* 3/3/2011 12:10:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C21-C30)	0.62	J	0.44	MDL	1.3	PQL	mg/Kg	UJ	L, B
EFH (C30-C40)	3.0		0.44	MDL	1.3	PQL	mg/Kg	UJ	L, B

Method Category: SVOA

Method: 8270C **Matrix:** AQ

Sample ID: EB06-SA5A-030311 *Collected:* 3/3/2011 4:20:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
3,3'-DICHLOROBENZIDINE	2	U	2	MDL	5	PQL	ug/L	UJ	L
BENZOIC ACID	6	U	6	MDL	15	PQL	ug/L	UJ	E

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE097 **Laboratory: LL**

EDD Filename: PrepDE097_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C **Matrix: SO**

Sample ID: SL-236-SA5A-SB-4.0-5.0 *Collected:* 3/3/2011 9:53:00 AM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	21	J	18	MDL	370	PQL	ug/Kg	J	Z

Sample ID: SL-236-SA5A-SB-9.0-10.0 *Collected:* 3/3/2011 9:58:00 AM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	20	J	18	MDL	370	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8270C SIM **Matrix: AQ**

Sample ID: EB06-SA5A-030311 *Collected:* 3/3/2011 4:20:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	0.082	J	0.050	MDL	0.99	PQL	ug/L	U	B
Di-n-butylphthalate	0.43	J	0.050	MDL	0.99	PQL	ug/L	J	Z
NAPHTHALENE	0.031	J	0.030	MDL	0.050	PQL	ug/L	J	Z
PHENANTHRENE	0.041	J	0.0099	MDL	0.050	PQL	ug/L	J	Z

Method Category: SVOA

Method: 8270C SIM **Matrix: SO**

Sample ID: SL-234-SA5A-SB-4.0-5.0 *Collected:* 3/3/2011 3:53:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NAPHTHALENE	0.79	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-235-SA5A-SB-4.0-5.0 *Collected:* 3/3/2011 2:33:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NAPHTHALENE	0.84	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-236-SA5A-SB-4.0-5.0 *Collected:* 3/3/2011 9:53:00 AM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHRYSENE	1.2	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE097 **Laboratory: LL**

EDD Filename: PrepDE097_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C SIM **Matrix:** SO

Sample ID: SL-236-SA5A-SB-4.0-5.0 *Collected:* 3/3/2011 9:53:00 AM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NAPHTHALENE	1.2	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
PHENANTHRENE	0.74	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-249-SA5A-SB-2.5-3.5 *Collected:* 3/3/2011 12:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	1.0	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
NAPHTHALENE	1.3	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8330A **Matrix:** SO

Sample ID: SL-249-SA5A-SB-2.5-3.5 *Collected:* 3/3/2011 12:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
RDX	55	U	55	MDL	130	PQL	ug/Kg	UJ	Q

Method Category: VOA

Method: 8015B **Matrix:** SO

Sample ID: SL-249-SA5A-SB-2.5-3.5 *Collected:* 3/3/2011 12:00:00 *Analysis Type:* REA4 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHANOL	450	J	110	MDL	550	PQL	ug/Kg	J	Z

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: SL-234-SA5A-SB-4.0-5.0 *Collected:* 3/3/2011 3:53:00 PM *Analysis Type:* RES *Dilution:* 0.85

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.41	J	0.22	MDL	3.7	PQL	ug/Kg	U	B
TOLUENE	0.09	J	0.07	MDL	3.7	PQL	ug/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE097 **Laboratory: LL**

EDD Filename: PrepDE097_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **VOA**

Method: **8260B** ***Matrix:*** **SO**

Sample ID: **SL-235-SA5A-SB-4.0-5.0** ***Collected:*** **3/3/2011 2:33:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** **0.85**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.34	J	0.23	MDL	3.8	PQL	ug/Kg	U	B

Sample ID: **SL-236-SA5A-SB-4.0-5.0** ***Collected:*** **3/3/2011 9:53:00 AM** ***Analysis Type:*** **RES** ***Dilution:*** **0.79**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ETHYLBENZENE	0.14	J	0.05	MDL	3.5	PQL	ug/Kg	J	Z
m,p-Xylene	0.43	J	0.15	MDL	3.5	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	0.43	J	0.21	MDL	3.5	PQL	ug/Kg	U	B
TOLUENE	0.08	J	0.07	MDL	3.5	PQL	ug/Kg	U	B

Sample ID: **SL-249-SA5A-SB-2.5-3.5** ***Collected:*** **3/3/2011 12:00:00** ***Analysis Type:*** **RES** ***Dilution:*** **0.84**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.40	J	0.22	MDL	3.7	PQL	ug/Kg	U	B
TOLUENE	0.09	J	0.07	MDL	3.7	PQL	ug/Kg	U	B

Sample ID: **SL-249-SA5A-SB-9.0-10.0** ***Collected:*** **3/3/2011 12:10:00** ***Analysis Type:*** **RES** ***Dilution:*** **1.03**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ETHYLBENZENE	0.10	J	0.07	MDL	4.6	PQL	ug/Kg	J	Z
m,p-Xylene	0.33	J	0.19	MDL	4.6	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	0.47	J	0.27	MDL	4.6	PQL	ug/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE097 **Laboratory: LL**

EDD Filename: PrepDE097_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
*#	Professional Judgment
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Verification Correlation Coefficient
C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE097 **Laboratory: LL**

EDD Filename: PrepDE097_v1 **eQAPP Name: CDM_SSFL_110509**

F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation
L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery Lower Estimation

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE097 **Laboratory: LL**

EDD Filename: PrepDE097_v1 **eQAPP Name: CDM_SSFL_110509**

R	Continuing Calibration Verification Percent Recovery Lower Rejection
R	Continuing Calibration Verification Percent Recovery Upper Estimation
R	Continuing Calibration Verification Percent Recovery Upper Rejection
R	Continuing Calibration Verification Relative Response Factor
R	Initial Calibration Relative Response Factor
R	Initial Calibration Verification Percent Recovery Lower Estimation
R	Initial Calibration Verification Percent Recovery Lower Rejection
R	Initial Calibration Verification Percent Recovery Upper Estimation
R	Initial Calibration Verification Percent Recovery Upper Rejection
R	Initial Calibration Verification Relative Response Factor
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control Outlier Reports

DE097

Method Blank Outlier Report

Lab Reporting Batch ID: DE097 | Laboratory: LL

EDD Filename: DE097_v1 | eQAPP Name: CDM_SSFL_110509

Method: 6010B
Matrix: AQ

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P06848CB221929	3/10/2011 7:29:00 PM	LITHIUM	0.0049 mg/L	EB06-SA5A-030311

Method: 6010B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P06908BB222001	3/11/2011 8:01:00 PM	ALUMINUM CALCIUM IRON MAGNESIUM PHOSPHORUS TIN	6.34 mg/Kg 10.2 mg/Kg 5.30 mg/Kg 2.85 mg/Kg 1.24 mg/Kg 1.30 mg/Kg	SL-234-SA5A-SB-4.0-5.0 SL-234-SA5A-SB-9.0-10 SL-235-SA5A-SB-4.0-5.0 SL-235-SA5A-SB-8.5-9.5 SL-236-SA5A-SB-4.0-5.0 SL-236-SA5A-SB-9.0-10.0 SL-249-SA5A-SB-2.5-3.5 SL-249-SA5A-SB-9.0-10.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-234-SA5A-SB-4.0-5.0(REA)	TIN	2.48 mg/Kg	2.48U mg/Kg
SL-234-SA5A-SB-9.0-10(REA)	TIN	2.57 mg/Kg	2.57U mg/Kg
SL-235-SA5A-SB-4.0-5.0(REA)	TIN	2.61 mg/Kg	2.61U mg/Kg
SL-235-SA5A-SB-8.5-9.5(REA)	TIN	2.69 mg/Kg	2.69U mg/Kg
SL-236-SA5A-SB-4.0-5.0(REA)	TIN	2.63 mg/Kg	2.63U mg/Kg
SL-236-SA5A-SB-9.0-10.0(REA)	TIN	2.61 mg/Kg	2.61U mg/Kg
SL-249-SA5A-SB-2.5-3.5(REA)	TIN	2.53 mg/Kg	2.53U mg/Kg
SL-249-SA5A-SB-9.0-10.0(REA)	TIN	2.83 mg/Kg	2.83U mg/Kg

Method: 6020
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P06926AB221434A	3/16/2011 2:34:00 PM	COPPER	0.169 mg/Kg	SL-234-SA5A-SB-4.0-5.0 SL-234-SA5A-SB-9.0-10 SL-235-SA5A-SB-4.0-5.0 SL-235-SA5A-SB-8.5-9.5 SL-236-SA5A-SB-4.0-5.0 SL-236-SA5A-SB-9.0-10.0 SL-249-SA5A-SB-2.5-3.5 SL-249-SA5A-SB-9.0-10.0

Method Blank Outlier Report

Lab Reporting Batch ID: DE097 **Laboratory: LL**

EDD Filename: DE097_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8015M
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P73731AB320119A	3/16/2011 1:19:00 AM	EFH (C21-C30) EFH (C30-C40)	0.45 mg/Kg 1.3 mg/Kg	SL-249-SA5A-SB-2.5-3.5 SL-249-SA5A-SB-9.0-10.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-249-SA5A-SB-9.0-10.0(REA2)	EFH (C21-C30)	0.62 mg/Kg	1.3U mg/Kg
SL-249-SA5A-SB-9.0-10.0(REA2)	EFH (C30-C40)	3.0 mg/Kg	3.0U mg/Kg

Method: 8260B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB88B211159A	3/8/2011 11:59:00 AM	METHYLENE CHLORIDE TOLUENE	0.29 ug/Kg 0.19 ug/Kg	SL-234-SA5A-SB-4.0-5.0 SL-235-SA5A-SB-4.0-5.0 SL-236-SA5A-SB-4.0-5.0 SL-249-SA5A-SB-2.5-3.5 SL-249-SA5A-SB-9.0-10.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-234-SA5A-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.41 ug/Kg	3.7U ug/Kg
SL-234-SA5A-SB-4.0-5.0(RES)	TOLUENE	0.09 ug/Kg	3.7U ug/Kg
SL-235-SA5A-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.34 ug/Kg	3.8U ug/Kg
SL-236-SA5A-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.43 ug/Kg	3.5U ug/Kg
SL-236-SA5A-SB-4.0-5.0(RES)	TOLUENE	0.08 ug/Kg	3.5U ug/Kg
SL-249-SA5A-SB-2.5-3.5(RES)	METHYLENE CHLORIDE	0.40 ug/Kg	3.7U ug/Kg
SL-249-SA5A-SB-2.5-3.5(RES)	TOLUENE	0.09 ug/Kg	3.7U ug/Kg
SL-249-SA5A-SB-9.0-10.0(RES)	METHYLENE CHLORIDE	0.47 ug/Kg	4.6U ug/Kg

Method: 8270C SIM
Matrix: AQ

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKWD06B262354	3/15/2011 11:54:00 PM	BIS(2-ETHYLHEXYL)PHTHALATE	0.054 ug/L	EB06-SA5A-030311

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
EB06-SA5A-030311(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	0.082 ug/L	0.99U ug/L

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE097 **Laboratory: LL**

EDD Filename: DE097_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 300.0
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-234-SA5A-SB-4.0-5.0MS (SL-234-SA5A-SB-4.0-5.0 SL-234-SA5A-SB-9.0-10 SL-235-SA5A-SB-4.0-5.0 SL-235-SA5A-SB-8.5-9.5 SL-236-SA5A-SB-4.0-5.0 SL-236-SA5A-SB-9.0-10.0 SL-249-SA5A-SB-2.5-3.5 SL-249-SA5A-SB-9.0-10.0)	FLUORIDE	76	-	80.00-120.00	-	FLUORIDE	J (all detects) UJ (all non-detects)

Method: 8330A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-249-SA5A-SB-2.5-3.5MS (SL-249-SA5A-SB-2.5-3.5)	RDX	74	-	75.00-129.00	-	RDX	J(all detects) UJ(all non-detects)

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE097 **Laboratory: LL**

EDD Filename: DE097_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P7WBLCSQ260416 P7WBLCSY260441 (EB06-SA5A-030311)	3,3'-DICHLOROBENZIDINE BENZOIC ACID	47 -	- -	49.00-111.00 10.00-69.00	- 78 (30.00)	3,3'-DICHLOROBENZIDINE BENZOIC ACID	J (all detects) UJ (all non-detects)

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P06926AQ221437A (SL-234-SA5A-SB-4.0-5.0 SL -234-SA5A-SB-9.0-10 SL -235-SA5A-SB-4.0-5.0 SL -235-SA5A-SB-8.5-9.5 SL -236-SA5A-SB-4.0-5.0 SL -236-SA5A-SB-9.0-10.0 SL -249-SA5A-SB-2.5-3.5 SL -249-SA5A-SB-9.0-10.0)	ANTIMONY	65	-	80.00-120.00	-	ANTIMONY	No Qual SRM within QC

Method: 8015M
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P10731AQ320152A (SL-249-SA5A-SB-2.5-3.5 SL -249-SA5A-SB-9.0-10.0)	EFH (C12-C14) EFH (C15-C20) EFH (C21-C30) EFH (C30-C40)	115 119 126 116	- - - -	66.00-113.00 66.00-113.00 66.00-113.00 66.00-113.00	- - - -	EFH (C12-C14) EFH (C15-C20) EFH (C21-C30) EFH (C30-C40)	J(all detects)

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Reporting Limit Outliers

Lab Reporting Batch ID: DE097 | Laboratory: LL

EDD Filename: DE097_v1 | eQAPP Name: CDM_SSFL_110509

Method: 8270C SIM

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB06-SA5A-030311	BIS(2-ETHYLHEXYL)PHTHALATE	J	0.082	0.99	PQL	ug/L	J (all detects)
	Di-n-butylphthalate	J	0.43	0.99	PQL	ug/L	
	NAPHTHALENE	J	0.031	0.050	PQL	ug/L	
	PHENANTHRENE	J	0.041	0.050	PQL	ug/L	

Method: 1625C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-249-SA5A-SB-2.5-3.5	N-NITROSODIMETHYLAMINE	J	23.6	36.8	PQL	ng/Kg	J (all detects)

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-234-SA5A-SB-4.0-5.0	BORON	J	3.89	5.20	PQL	mg/Kg	J (all detects)
	SODIUM	J	82.9	104	PQL	mg/Kg	
	TIN	J	2.48	10.4	PQL	mg/Kg	
	Zirconium	J	1.53	5.20	PQL	mg/Kg	
SL-234-SA5A-SB-9.0-10	BORON	J	2.92	5.55	PQL	mg/Kg	J (all detects)
	TIN	J	2.57	11.1	PQL	mg/Kg	
	Zirconium	J	1.77	5.55	PQL	mg/Kg	
SL-235-SA5A-SB-4.0-5.0	BORON	J	3.92	5.49	PQL	mg/Kg	J (all detects)
	SODIUM	J	82.7	110	PQL	mg/Kg	
	TIN	J	2.61	11.0	PQL	mg/Kg	
	Zirconium	J	1.70	5.49	PQL	mg/Kg	
SL-235-SA5A-SB-8.5-9.5	BORON	J	3.97	5.62	PQL	mg/Kg	J (all detects)
	TIN	J	2.69	11.2	PQL	mg/Kg	
SL-236-SA5A-SB-4.0-5.0	BORON	J	3.77	5.43	PQL	mg/Kg	J (all detects)
	SODIUM	J	90.8	109	PQL	mg/Kg	
	TIN	J	2.63	10.9	PQL	mg/Kg	
	Zirconium	J	1.63	5.43	PQL	mg/Kg	
SL-236-SA5A-SB-9.0-10.0	BORON	J	3.65	5.44	PQL	mg/Kg	J (all detects)
	TIN	J	2.61	10.9	PQL	mg/Kg	
	Zirconium	J	1.56	5.44	PQL	mg/Kg	
SL-249-SA5A-SB-2.5-3.5	TIN	J	2.53	10.5	PQL	mg/Kg	J (all detects)
	Zirconium	J	1.14	5.25	PQL	mg/Kg	
SL-249-SA5A-SB-9.0-10.0	TIN	J	2.83	10.8	PQL	mg/Kg	J (all detects)
	Zirconium	J	1.16	5.40	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE097 **Laboratory: LL**

EDD Filename: DE097_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-234-SA5A-SB-4.0-5.0	ANTIMONY	J	0.0687	0.212	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0831	0.424	PQL	mg/Kg	
	SILVER	J	0.0259	0.106	PQL	mg/Kg	
SL-234-SA5A-SB-9.0-10	ANTIMONY	J	0.0842	0.220	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0874	0.110	PQL	mg/Kg	
	SELENIUM	J	0.0441	0.440	PQL	mg/Kg	
	SILVER	J	0.0252	0.110	PQL	mg/Kg	
SL-235-SA5A-SB-4.0-5.0	ANTIMONY	J	0.0828	0.215	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0965	0.430	PQL	mg/Kg	
	SILVER	J	0.0331	0.108	PQL	mg/Kg	
SL-235-SA5A-SB-8.5-9.5	CADMIUM	J	0.0767	0.110	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0655	0.441	PQL	mg/Kg	
	SILVER	J	0.0335	0.110	PQL	mg/Kg	
SL-236-SA5A-SB-4.0-5.0	SELENIUM	J	0.0816	0.434	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0397	0.109	PQL	mg/Kg	
SL-236-SA5A-SB-9.0-10.0	CADMIUM	J	0.0842	0.108	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0695	0.431	PQL	mg/Kg	
	SILVER	J	0.0657	0.108	PQL	mg/Kg	
SL-249-SA5A-SB-2.5-3.5	ANTIMONY	J	0.0976	0.214	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.190	0.428	PQL	mg/Kg	
	SILVER	J	0.0413	0.107	PQL	mg/Kg	
SL-249-SA5A-SB-9.0-10.0	ANTIMONY	J	0.0899	0.216	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0505	0.432	PQL	mg/Kg	
	SILVER	J	0.0629	0.108	PQL	mg/Kg	

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-234-SA5A-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.45	1.1	PQL	mg/Kg	J (all detects)
SL-235-SA5A-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.45	1.1	PQL	mg/Kg	J (all detects)
SL-235-SA5A-SB-8.5-9.5	HEXAVALENT CHROMIUM	J	0.45	1.1	PQL	mg/Kg	J (all detects)
SL-236-SA5A-SB-9.0-10.0	HEXAVALENT CHROMIUM	J	0.55	1.1	PQL	mg/Kg	J (all detects)
SL-249-SA5A-SB-2.5-3.5	HEXAVALENT CHROMIUM	J	0.47	1.1	PQL	mg/Kg	J (all detects)
SL-249-SA5A-SB-9.0-10.0	HEXAVALENT CHROMIUM	J	0.38	1.1	PQL	mg/Kg	J (all detects)

Method: 8015B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-249-SA5A-SB-2.5-3.5	METHANOL	J	450	550	PQL	ug/Kg	J (all detects)

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Reporting Limit Outliers

Lab Reporting Batch ID: DE097 **Laboratory: LL**

EDD Filename: DE097_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8015M

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-249-SA5A-SB-9.0-10.0	EFH (C21-C30)	J	0.62	1.3	PQL	mg/Kg	J (all detects)

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-234-SA5A-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.41	3.7	PQL	ug/Kg	J (all detects)
	TOLUENE	J	0.09	3.7	PQL	ug/Kg	
SL-235-SA5A-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.34	3.8	PQL	ug/Kg	J (all detects)
SL-236-SA5A-SB-4.0-5.0	ETHYLBENZENE	J	0.14	3.5	PQL	ug/Kg	J (all detects)
	m,p-Xylene	J	0.43	3.5	PQL	ug/Kg	
	METHYLENE CHLORIDE	J	0.43	3.5	PQL	ug/Kg	
	TOLUENE	J	0.08	3.5	PQL	ug/Kg	
SL-249-SA5A-SB-2.5-3.5	METHYLENE CHLORIDE	J	0.40	3.7	PQL	ug/Kg	J (all detects)
	TOLUENE	J	0.09	3.7	PQL	ug/Kg	
SL-249-SA5A-SB-9.0-10.0	ETHYLBENZENE	J	0.10	4.6	PQL	ug/Kg	J (all detects)
	m,p-Xylene	J	0.33	4.6	PQL	ug/Kg	
	METHYLENE CHLORIDE	J	0.47	4.6	PQL	ug/Kg	

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-236-SA5A-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	21	370	PQL	ug/Kg	J (all detects)
SL-236-SA5A-SB-9.0-10.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	20	370	PQL	ug/Kg	J (all detects)

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-234-SA5A-SB-4.0-5.0	NAPHTHALENE	J	0.79	1.8	PQL	ug/Kg	J (all detects)
SL-235-SA5A-SB-4.0-5.0	NAPHTHALENE	J	0.84	1.9	PQL	ug/Kg	J (all detects)
SL-236-SA5A-SB-4.0-5.0	CHRYSENE	J	1.2	1.8	PQL	ug/Kg	J (all detects)
	NAPHTHALENE	J	1.2	1.8	PQL	ug/Kg	
	PHENANTHRENE	J	0.74	1.8	PQL	ug/Kg	
SL-249-SA5A-SB-2.5-3.5	BENZO(B)FLUORANTHENE	J	1.0	1.8	PQL	ug/Kg	J (all detects)
	NAPHTHALENE	J	1.3	1.8	PQL	ug/Kg	

LDC #: 25911G4 **VALIDATION COMPLETENESS WORKSHEET** Date: 8-3-11
SDG #: DE097 ADR
Laboratory: Lancaster Laboratories Reviewer: OR
2nd Reviewer: A

METHOD: Metals (EPA SW 846 Method 6010B/6020A/7000)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	N	Sampling dates:
II.	ICP/MS Tune	—	
III.	Calibration	—	
IV.	Blanks	A	No quals
V.	ICP Interference Check Sample (ICS) Analysis	N	
VI.	Matrix Spike Analysis	N	MS/D (SDG: DE096)
VII.	Duplicate Sample Analysis	N	Dup ↓
VIII.	Laboratory Control Samples (LCS)	A	LCS/D
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	—	SDG: DE096
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	—	
XV	Field Blanks	ND	EB=9

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:

1	SL-234-SA5A-SB-4.0-5.0	11		21		31	
2	SL-234-SA5A-SB-9.0-10.0	12		22		32	
3	SL-235-SA5A-SB-4.0-5.0	13		23		33	
4	SL-235-SA5A-SB-8.5-9.5	14		24		34	
5	SL-236-SA5A-SB-4.0-5.0	15		25		35	
6	SL-236-SA5A-SB-9.0-10.0	16		26		36	
7	SL-249-SA5A-SB-2.5-3.5	17		27		37	
8	SL-249-SA5A-SB-9.0-10.0	18		28		38	
9	EB06-SA5A-030311	19		29		39	
10		20		30		40	

Notes:

SAMPLE DELIVERY GROUP

DE098

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
04-Mar-2011	SL-015-SA5A-SB-3.0-4.0	6223281	N	3050B	6010B	III
04-Mar-2011	SL-015-SA5A-SB-3.0-4.0	6223281	N	3050B	6020	III
04-Mar-2011	SL-015-SA5A-SB-3.0-4.0	6223281	N	3060A	7199	III
04-Mar-2011	SL-015-SA5A-SB-3.0-4.0	6223281	N	3550B	8082	III
04-Mar-2011	SL-015-SA5A-SB-3.0-4.0	6223281	N	3550B	8270C	III
04-Mar-2011	SL-015-SA5A-SB-3.0-4.0	6223281	N	3550B	8270C SIM	III
04-Mar-2011	SL-015-SA5A-SB-3.0-4.0	6223281	N	5035	8260B	III
04-Mar-2011	SL-015-SA5A-SB-3.0-4.0	6223281	N	5035	8260B SIM	III
04-Mar-2011	SL-015-SA5A-SB-3.0-4.0	6223281	N	Gen Prep	9045M	III
04-Mar-2011	SL-015-SA5A-SB-3.0-4.0	6223281	N	METHOD	300.0	III
04-Mar-2011	SL-015-SA5A-SB-3.0-4.0	6223281	N	METHOD	314.0	III
04-Mar-2011	SL-015-SA5A-SB-3.0-4.0	6223281	N	METHOD	6850	III
04-Mar-2011	SL-015-SA5A-SB-3.0-4.0	6223281	N	METHOD	7471A	III
04-Mar-2011	SL-015-SA5A-SB-3.0-4.0DUP	P223281D270745A	DUP	METHOD	300.0	III
04-Mar-2011	SL-015-SA5A-SB-3.0-4.0MSD	P223281M261338	MSD	3550B	8270C	III
04-Mar-2011	SL-015-SA5A-SB-3.0-4.0MS	P223281R261313	MS	3550B	8270C	III
04-Mar-2011	SL-015-SA5A-SB-3.0-4.0MS	P223281R270831A	MS	METHOD	300.0	III
04-Mar-2011	SL-233-SA5A-SB-4.0-5.0	6223282	N	3050B	6010B	III
04-Mar-2011	SL-233-SA5A-SB-4.0-5.0	6223282	N	3050B	6020	III
04-Mar-2011	SL-233-SA5A-SB-4.0-5.0	6223282	N	3060A	7199	III
04-Mar-2011	SL-233-SA5A-SB-4.0-5.0	6223282	N	3550B	8082	III
04-Mar-2011	SL-233-SA5A-SB-4.0-5.0	6223282	N	3550B	8270C	III
04-Mar-2011	SL-233-SA5A-SB-4.0-5.0	6223282	N	3550B	8270C SIM	III
04-Mar-2011	SL-233-SA5A-SB-4.0-5.0	6223282	N	5035	8260B	III
04-Mar-2011	SL-233-SA5A-SB-4.0-5.0	6223282	N	5035	8260B SIM	III
04-Mar-2011	SL-233-SA5A-SB-4.0-5.0	6223282	N	Gen Prep	9045M	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
04-Mar-2011	SL-233-SA5A-SB-4.0-5.0	6223282	N	METHOD	300.0	III
04-Mar-2011	SL-233-SA5A-SB-4.0-5.0	6223282	N	METHOD	314.0	III
04-Mar-2011	SL-233-SA5A-SB-4.0-5.0	6223282	N	METHOD	7471A	III
04-Mar-2011	SL-233-SA5A-SB-9.0-10	6223283	N	3050B	6010B	III
04-Mar-2011	SL-233-SA5A-SB-9.0-10	6223283	N	3050B	6020	III
04-Mar-2011	SL-233-SA5A-SB-9.0-10	6223283	N	3060A	7199	III
04-Mar-2011	SL-233-SA5A-SB-9.0-10	6223283	N	3550B	8082	III
04-Mar-2011	SL-233-SA5A-SB-9.0-10	6223283	N	3550B	8270C	III
04-Mar-2011	SL-233-SA5A-SB-9.0-10	6223283	N	3550B	8270C SIM	III
04-Mar-2011	SL-233-SA5A-SB-9.0-10	6223283	N	Gen Prep	9045M	III
04-Mar-2011	SL-233-SA5A-SB-9.0-10	6223283	N	METHOD	300.0	III
04-Mar-2011	SL-233-SA5A-SB-9.0-10	6223283	N	METHOD	314.0	III
04-Mar-2011	SL-233-SA5A-SB-9.0-10	6223283	N	METHOD	6850	III
04-Mar-2011	SL-233-SA5A-SB-9.0-10	6223283	N	METHOD	7471A	III
04-Mar-2011	SL-233-SA5A-SB-9.0-10DUP	P223283D291030B	DUP	Gen Prep	9045M	III
04-Mar-2011	TB-030411	6223284	TB	5030B	8260B	III
04-Mar-2011	TB-030411	6223284	TB	5030B	8260B SIM	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE098 **Laboratory: LL**

EDD Filename: DE098_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: GENCHEM

Method: 300.0 **Matrix: SO**

Sample ID: SL-015-SA5A-SB-3.0-4.0 *Collected:* 3/4/2011 9:16:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	5.4		0.95	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-233-SA5A-SB-4.0-5.0 *Collected:* 3/4/2011 11:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.2		0.90	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-233-SA5A-SB-9.0-10 *Collected:* 3/4/2011 11:08:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.1		0.93	MDL	1.2	PQL	mg/Kg	J	Q

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-015-SA5A-SB-3.0-4.0 *Collected:* 3/4/2011 9:16:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.56	J	1.04	MDL	5.86	PQL	mg/Kg	J	Z
CALCIUM	2540		7.18	MDL	23.4	PQL	mg/Kg	J	E
PHOSPHORUS	227		0.656	MDL	11.7	PQL	mg/Kg	J	Q
POTASSIUM	1460		21.1	MDL	58.6	PQL	mg/Kg	J	Q
TIN	2.83	J	1.17	MDL	11.7	PQL	mg/Kg	U	B
Zirconium	1.30	J	0.984	MDL	5.86	PQL	mg/Kg	J	Z

Sample ID: SL-233-SA5A-SB-4.0-5.0 *Collected:* 3/4/2011 11:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.28	J	0.968	MDL	5.44	PQL	mg/Kg	J	Z
CALCIUM	2240		6.67	MDL	21.8	PQL	mg/Kg	J	E
PHOSPHORUS	161		0.609	MDL	10.9	PQL	mg/Kg	J	Q
POTASSIUM	1700		19.6	MDL	54.4	PQL	mg/Kg	J	Q
SODIUM	104	J	40.6	MDL	109	PQL	mg/Kg	J	Z
TIN	2.53	J	1.09	MDL	10.9	PQL	mg/Kg	U	B
Zirconium	1.08	J	0.914	MDL	5.44	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE098 **Laboratory: LL**

EDD Filename: DE098_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B ***Matrix:*** SO

Sample ID: SL-233-SA5A-SB-9.0-10 ***Collected:*** 3/4/2011 11:08:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.28	J	1.02	MDL	5.71	PQL	mg/Kg	J	Z
CALCIUM	1980		7.00	MDL	22.9	PQL	mg/Kg	J	E
PHOSPHORUS	117		0.640	MDL	11.4	PQL	mg/Kg	J	Q
POTASSIUM	1820		20.6	MDL	57.1	PQL	mg/Kg	J	Q
TIN	2.67	J	1.14	MDL	11.4	PQL	mg/Kg	U	B
Zirconium	1.07	J	0.960	MDL	5.71	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 6020 ***Matrix:*** SO

Sample ID: SL-015-SA5A-SB-3.0-4.0 ***Collected:*** 3/4/2011 9:16:00 AM ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0544	J	0.0464	MDL	0.464	PQL	mg/Kg	J	Z

Sample ID: SL-015-SA5A-SB-3.0-4.0 ***Collected:*** 3/4/2011 9:16:00 AM ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0815	J	0.0696	MDL	0.232	PQL	mg/Kg	J	Z, Q
COBALT	5.56		0.0232	MDL	0.116	PQL	mg/Kg	J	A
SILVER	0.0730	J	0.0139	MDL	0.116	PQL	mg/Kg	J	Z
VANADIUM	44.1		0.0255	MDL	0.116	PQL	mg/Kg	J	Q

Sample ID: SL-233-SA5A-SB-4.0-5.0 ***Collected:*** 3/4/2011 11:05:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.126	J	0.0431	MDL	0.431	PQL	mg/Kg	J	Z

Sample ID: SL-233-SA5A-SB-4.0-5.0 ***Collected:*** 3/4/2011 11:05:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0646	U	0.0646	MDL	0.215	PQL	mg/Kg	UJ	Q
COBALT	5.80		0.0215	MDL	0.108	PQL	mg/Kg	J	A
SILVER	0.0462	J	0.0129	MDL	0.108	PQL	mg/Kg	J	Z
VANADIUM	46.5		0.0237	MDL	0.108	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE098 **Laboratory: LL**

EDD Filename: DE098_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS
Method: 6020 **Matrix:** SO

Sample ID: SL-233-SA5A-SB-9.0-10 *Collected:* 3/4/2011 11:08:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0679	U	0.0679	MDL	0.226	PQL	mg/Kg	UJ	Q
CADMIUM	0.0901	J	0.0453	MDL	0.113	PQL	mg/Kg	J	Z
COBALT	6.44		0.0226	MDL	0.113	PQL	mg/Kg	J	A
SILVER	0.0495	J	0.0136	MDL	0.113	PQL	mg/Kg	J	Z
VANADIUM	43.7		0.0249	MDL	0.113	PQL	mg/Kg	J	Q

Method Category: METALS
Method: 7199 **Matrix:** SO

Sample ID: SL-015-SA5A-SB-3.0-4.0 *Collected:* 3/4/2011 9:16:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.48	J	0.24	MDL	1.2	PQL	mg/Kg	U	B

Sample ID: SL-233-SA5A-SB-9.0-10 *Collected:* 3/4/2011 11:08:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.33	J	0.23	MDL	1.2	PQL	mg/Kg	U	B

Method Category: SVOA
Method: 8270C **Matrix:** SO

Sample ID: SL-015-SA5A-SB-3.0-4.0 *Collected:* 3/4/2011 9:16:00 AM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZIDINE	1400	U	1400	MDL	3900	PQL	ug/Kg	UJ	Q

Method Category: SVOA
Method: 8270C SIM **Matrix:** SO

Sample ID: SL-233-SA5A-SB-9.0-10 *Collected:* 3/4/2011 11:08:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Di-n-octylphthalate	13	J	7.0	MDL	21	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE098 **Laboratory: LL**

EDD Filename: DE098_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **VOA**

Method: **8260B** ***Matrix:*** **SO**

Sample ID: **SL-015-SA5A-SB-3.0-4.0** ***Collected:*** **3/4/2011 9:16:00 AM** ***Analysis Type:*** **RES** ***Dilution:*** **0.89**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ETHYLBENZENE	0.21	J	0.06	MDL	4.2	PQL	ug/Kg	J	Z
m,p-Xylene	0.66	J	0.18	MDL	4.2	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	0.43	J	0.25	MDL	4.2	PQL	ug/Kg	U	B
TOLUENE	0.10	J	0.08	MDL	4.2	PQL	ug/Kg	U	B

Sample ID: **SL-233-SA5A-SB-4.0-5.0** ***Collected:*** **3/4/2011 11:05:00** ***Analysis Type:*** **RES** ***Dilution:*** **0.82**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.65	J	0.22	MDL	3.7	PQL	ug/Kg	U	B
TOLUENE	0.09	J	0.07	MDL	3.7	PQL	ug/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE098 **Laboratory: LL**

EDD Filename: DE098_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
*#	Professional Judgment
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Verification Correlation Coefficient
C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE098 **Laboratory: LL**

EDD Filename: DE098_v1 **eQAPP Name: CDM_SSFL_110509**

F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation
L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery Lower Estimation

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE098 **Laboratory: LL**

EDD Filename: DE098_v1 **eQAPP Name: CDM_SSFL_110509**

R	Continuing Calibration Verification Percent Recovery Lower Rejection
R	Continuing Calibration Verification Percent Recovery Upper Estimation
R	Continuing Calibration Verification Percent Recovery Upper Rejection
R	Continuing Calibration Verification Relative Response Factor
R	Initial Calibration Relative Response Factor
R	Initial Calibration Verification Percent Recovery Lower Estimation
R	Initial Calibration Verification Percent Recovery Lower Rejection
R	Initial Calibration Verification Percent Recovery Upper Estimation
R	Initial Calibration Verification Percent Recovery Upper Rejection
R	Initial Calibration Verification Relative Response Factor
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control Outlier Reports

DE098

Method Blank Outlier Report

Lab Reporting Batch ID: DE098 | Laboratory: LL

EDD Filename: DE098_v1 | eQAPP Name: CDM_SSFL_110509

Method: 6010B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P06908BB222001	3/11/2011 8:01:00 PM	ALUMINUM CALCIUM IRON MAGNESIUM PHOSPHORUS TIN	6.34 mg/Kg 10.2 mg/Kg 5.30 mg/Kg 2.85 mg/Kg 1.24 mg/Kg 1.30 mg/Kg	SL-015-SA5A-SB-3.0-4.0 SL-233-SA5A-SB-4.0-5.0 SL-233-SA5A-SB-9.0-10

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-015-SA5A-SB-3.0-4.0(RES)	TIN	2.83 mg/Kg	2.83U mg/Kg
SL-233-SA5A-SB-4.0-5.0(RES)	TIN	2.53 mg/Kg	2.53U mg/Kg
SL-233-SA5A-SB-9.0-10(RES)	TIN	2.87 mg/Kg	2.67U mg/Kg

Method: 6020
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P06926AB221434A	3/16/2011 2:34:00 PM	COPPER	0.169 mg/Kg	SL-015-SA5A-SB-3.0-4.0 SL-233-SA5A-SB-4.0-5.0 SL-233-SA5A-SB-9.0-10

Method: 7199
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
11066BB271726A	3/8/2011 5:26:00 PM	HEXAVALENT CHROMIUM	0.49 mg/Kg	SL-015-SA5A-SB-3.0-4.0 SL-233-SA5A-SB-4.0-5.0 SL-233-SA5A-SB-9.0-10

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-015-SA5A-SB-3.0-4.0(RES)	HEXAVALENT CHROMIUM	0.48 mg/Kg	0.48U mg/Kg
SL-233-SA5A-SB-9.0-10(RES)	HEXAVALENT CHROMIUM	0.33 mg/Kg	0.33U mg/Kg

Method: 8260B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB88B211159A	3/8/2011 11:59:00 AM	METHYLENE CHLORIDE TOLUENE	0.29 ug/Kg 0.19 ug/Kg	SL-015-SA5A-SB-3.0-4.0 SL-233-SA5A-SB-4.0-5.0

Method Blank Outlier Report

Lab Reporting Batch ID: DE098 **Laboratory: LL**

EDD Filename: DE098_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8260B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-015-SA5A-SB-3.0-4.0(RES)	METHYLENE CHLORIDE	0.43 ug/Kg	4.2U ug/Kg
SL-015-SA5A-SB-3.0-4.0(RES)	TOLUENE	0.10 ug/Kg	4.2U ug/Kg
SL-233-SA5A-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.65 ug/Kg	3.7U ug/Kg
SL-233-SA5A-SB-4.0-5.0(RES)	TOLUENE	0.09 ug/Kg	3.7U ug/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE098 **Laboratory: LL**

EDD Filename: DE098_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-015-SA5A-SB-3.0-4.0MS SL-015-SA5A-SB-3.0-4.0MSD (SL-015-SA5A-SB-3.0-4.0)	BENZIDINE	29	32	35.00-141.00	-	BENZIDINE	J (all detects) UJ (all non-detects)

Method: 300.0
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-015-SA5A-SB-3.0-4.0MS (SL-015-SA5A-SB-3.0-4.0 SL-233-SA5A-SB-4.0-5.0 SL-233-SA5A-SB-9.0-10)	FLUORIDE	49	-	80.00-120.00	-	FLUORIDE	J(all detects) UJ(all non-detects)

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE098 | Laboratory: LL

EDD Filename: DE098_v1 | eQAPP Name: CDM_SSFL_110509

Method: 6020

Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P06926AQ221437A (SL-015-SA5A-SB-3.0-4.0 SL -233-SA5A-SB-4.0-5.0 SL -233-SA5A-SB-9.0-10)	ANTIMONY	65	-	80.00-120.00	-	ANTIMONY	No Qual SRM within QC limits

Reporting Limit Outliers

Lab Reporting Batch ID: DE098 **Laboratory: LL**

EDD Filename: DE098_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-015-SA5A-SB-3.0-4.0	BORON	J	3.56	5.86	PQL	mg/Kg	J (all detects)
	TIN	J	2.83	11.7	PQL	mg/Kg	
	Zirconium	J	1.30	5.86	PQL	mg/Kg	
SL-233-SA5A-SB-4.0-5.0	BORON	J	3.28	5.44	PQL	mg/Kg	J (all detects)
	SODIUM	J	104	109	PQL	mg/Kg	
	TIN	J	2.53	10.9	PQL	mg/Kg	
	Zirconium	J	1.08	5.44	PQL	mg/Kg	
SL-233-SA5A-SB-9.0-10	BORON	J	2.28	5.71	PQL	mg/Kg	J (all detects)
	TIN	J	2.67	11.4	PQL	mg/Kg	
	Zirconium	J	1.07	5.71	PQL	mg/Kg	

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-015-SA5A-SB-3.0-4.0	ANTIMONY	J	0.0815	0.232	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0544	0.464	PQL	mg/Kg	
	SILVER	J	0.0730	0.116	PQL	mg/Kg	
SL-233-SA5A-SB-4.0-5.0	SELENIUM	J	0.126	0.431	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0462	0.108	PQL	mg/Kg	
SL-233-SA5A-SB-9.0-10	CADMIUM	J	0.0901	0.113	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0495	0.113	PQL	mg/Kg	

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-015-SA5A-SB-3.0-4.0	HEXAVALENT CHROMIUM	J	0.48	1.2	PQL	mg/Kg	J (all detects)
SL-233-SA5A-SB-9.0-10	HEXAVALENT CHROMIUM	J	0.33	1.2	PQL	mg/Kg	J (all detects)

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-015-SA5A-SB-3.0-4.0	ETHYLBENZENE	J	0.21	4.2	PQL	ug/Kg	J (all detects)
	m,p-Xylene	J	0.66	4.2	PQL	ug/Kg	
	METHYLENE CHLORIDE	J	0.43	4.2	PQL	ug/Kg	
	TOLUENE	J	0.10	4.2	PQL	ug/Kg	
SL-233-SA5A-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.65	3.7	PQL	ug/Kg	J (all detects)
	TOLUENE	J	0.09	3.7	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE098 | Laboratory: LL

EDD Filename: DE098_v1 | eQAPP Name: CDM_SSFL_110509

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-233-SA5A-SB-9.0-10	Di-n-octylphthalate	J	13	21	PQL	ug/Kg	J (all detects)

LDC #: 25911H4 **VALIDATION COMPLETENESS WORKSHEET** Date: 8-3-11

SDG #: DE098 ADR

Laboratory: Lancaster Laboratories

Reviewer: OR

2nd Reviewer: A

METHOD: Metals (EPA SW 846 Method 6010B/6020A/7000)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	N	Sampling dates:
II.	ICP/MS Tune	—	
III.	Calibration	—	
IV.	Blanks	A	No Quals
V.	ICP Interference Check Sample (ICS) Analysis	N	
VI.	Matrix Spike Analysis	N	MS/D (SDG: DE096)
VII.	Duplicate Sample Analysis	N	Dup
VIII.	Laboratory Control Samples (LCS)	A	LCS
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	—	SDG: DE096
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	—	
XV	Field Blanks	—	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:

1	SL-015-SA5A-SB-3.0-4.0	11		21		31	
2	SL-233-SA5A-SB-4.0-5.0	12		22		32	
3	SL-233-SA5A-SB-9.0-10.0	13		23		33	
4		14		24		34	
5		15		25		35	
6		16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

SAMPLE DELIVERY GROUP

DE099

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
07-Mar-2011	TB-030711	6224310	TB	5030B	8015M	III
07-Mar-2011	TB-030711	6224310	TB	5030B	8260B	III
07-Mar-2011	TB-030711	6224310	TB	5030B	8260B SIM	III
07-Mar-2011	SL-007-SA5A-SB-4.0-5.0	6224306	N	3050B	6010B	III
07-Mar-2011	SL-007-SA5A-SB-4.0-5.0	6224306	N	3050B	6020	III
07-Mar-2011	SL-007-SA5A-SB-4.0-5.0	6224306	N	3060A	7199	III
07-Mar-2011	SL-007-SA5A-SB-4.0-5.0	6224306	N	3546	1625C	III
07-Mar-2011	SL-007-SA5A-SB-4.0-5.0	6224306	N	3550B	8015B	III
07-Mar-2011	SL-007-SA5A-SB-4.0-5.0	6224306	N	3550B	8015M	III
07-Mar-2011	SL-007-SA5A-SB-4.0-5.0	6224306	N	3550B	8082	III
07-Mar-2011	SL-007-SA5A-SB-4.0-5.0	6224306	N	3550B	8270C	III
07-Mar-2011	SL-007-SA5A-SB-4.0-5.0	6224306	N	3550B	8270C SIM	III
07-Mar-2011	SL-007-SA5A-SB-4.0-5.0	6224306	N	5035	8015M	III
07-Mar-2011	SL-007-SA5A-SB-4.0-5.0	6224306	N	5035	8260B	III
07-Mar-2011	SL-007-SA5A-SB-4.0-5.0	6224306	N	5035	8260B SIM	III
07-Mar-2011	SL-007-SA5A-SB-4.0-5.0	6224306	N	8330	8330A	III
07-Mar-2011	SL-007-SA5A-SB-4.0-5.0	6224306	N	Gen Prep	9045M	III
07-Mar-2011	SL-007-SA5A-SB-4.0-5.0	6224306	N	METHOD	300.0	III
07-Mar-2011	SL-007-SA5A-SB-4.0-5.0	6224306	N	METHOD	314.0	III
07-Mar-2011	SL-007-SA5A-SB-4.0-5.0	6224306	N	METHOD	7471A	III
07-Mar-2011	SL-007-SA5A-SB-4.0-5.0	6224306	N	METHOD	8015B	III
07-Mar-2011	SL-007-SA5A-SB-4.0-5.0	6224306	N	METHOD	8015M	III
07-Mar-2011	SL-007-SA5A-SB-4.0-5.0	6224306	N	METHOD	8315A	III
07-Mar-2011	SL-007-SA5A-SB-4.0-5.0	6224306	N	METHOD	9012B	III
07-Mar-2011	SL-007-SA5A-SB-4.0-5.0DUP	P224306D271757A	DUP	METHOD	314.0	III
07-Mar-2011	SL-007-SA5A-SB-4.0-5.0MSD	P224306M321925A	MSD	METHOD	8015M	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
07-Mar-2011	SL-007-SA5A-SB-4.0-5.0MSD	P224306M322152A	MSD	METHOD	8015B	III
07-Mar-2011	SL-007-SA5A-SB-4.0-5.0MS	P224306R271821A	MS	METHOD	314.0	III
07-Mar-2011	SL-007-SA5A-SB-4.0-5.0MS	P224306R321908A	MS	METHOD	8015M	III
07-Mar-2011	SL-007-SA5A-SB-4.0-5.0MS	P224306R322138A	MS	METHOD	8015B	III
07-Mar-2011	SL-007-SA5A-SB-9.0-10.0	6224307	N	3050B	6010B	III
07-Mar-2011	SL-007-SA5A-SB-9.0-10.0	6224307	N	3050B	6020	III
07-Mar-2011	SL-007-SA5A-SB-9.0-10.0	6224307	N	3060A	7199	III
07-Mar-2011	SL-007-SA5A-SB-9.0-10.0	6224307	N	3546	1625C	III
07-Mar-2011	SL-007-SA5A-SB-9.0-10.0	6224307	N	3550B	8015B	III
07-Mar-2011	SL-007-SA5A-SB-9.0-10.0	6224307	N	3550B	8015M	III
07-Mar-2011	SL-007-SA5A-SB-9.0-10.0	6224307	N	3550B	8082	III
07-Mar-2011	SL-007-SA5A-SB-9.0-10.0	6224307	N	3550B	8270C	III
07-Mar-2011	SL-007-SA5A-SB-9.0-10.0	6224307	N	3550B	8270C SIM	III
07-Mar-2011	SL-007-SA5A-SB-9.0-10.0	6224307	N	5035	8015M	III
07-Mar-2011	SL-007-SA5A-SB-9.0-10.0	6224307	N	5035	8260B	III
07-Mar-2011	SL-007-SA5A-SB-9.0-10.0	6224307	N	5035	8260B SIM	III
07-Mar-2011	SL-007-SA5A-SB-9.0-10.0	6224307	N	8330	8330A	III
07-Mar-2011	SL-007-SA5A-SB-9.0-10.0	6224307	N	Gen Prep	9045M	III
07-Mar-2011	SL-007-SA5A-SB-9.0-10.0	6224307	N	METHOD	300.0	III
07-Mar-2011	SL-007-SA5A-SB-9.0-10.0	6224307	N	METHOD	314.0	III
07-Mar-2011	SL-007-SA5A-SB-9.0-10.0	6224307	N	METHOD	7471A	III
07-Mar-2011	SL-007-SA5A-SB-9.0-10.0	6224307	N	METHOD	8015B	III
07-Mar-2011	SL-007-SA5A-SB-9.0-10.0	6224307	N	METHOD	8015M	III
07-Mar-2011	SL-007-SA5A-SB-9.0-10.0	6224307	N	METHOD	8315A	III
07-Mar-2011	SL-007-SA5A-SB-9.0-10.0	6224307	N	METHOD	9012B	III
07-Mar-2011	SL-013-SA5A-SB-2.5-3.5	6224308	N	3050B	6010B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
07-Mar-2011	SL-013-SA5A-SB-2.5-3.5	6224308	N	3050B	6020	III
07-Mar-2011	SL-013-SA5A-SB-2.5-3.5	6224308	N	3060A	7199	III
07-Mar-2011	SL-013-SA5A-SB-2.5-3.5	6224308	N	3550B	8082	III
07-Mar-2011	SL-013-SA5A-SB-2.5-3.5	6224308	N	3550B	8270C	III
07-Mar-2011	SL-013-SA5A-SB-2.5-3.5	6224308	N	3550B	8270C SIM	III
07-Mar-2011	SL-013-SA5A-SB-2.5-3.5	6224308	N	5035	8260B	III
07-Mar-2011	SL-013-SA5A-SB-2.5-3.5	6224308	N	5035	8260B SIM	III
07-Mar-2011	SL-013-SA5A-SB-2.5-3.5	6224308	N	Gen Prep	9045M	III
07-Mar-2011	SL-013-SA5A-SB-2.5-3.5	6224308	N	METHOD	300.0	III
07-Mar-2011	SL-013-SA5A-SB-2.5-3.5	6224308	N	METHOD	314.0	III
07-Mar-2011	SL-013-SA5A-SB-2.5-3.5	6224308	N	METHOD	7471A	III
07-Mar-2011	SL-012-SA5A-SB-2.0-3.0	6224309	N	3050B	6010B	III
07-Mar-2011	SL-012-SA5A-SB-2.0-3.0	6224309	N	3050B	6020	III
07-Mar-2011	SL-012-SA5A-SB-2.0-3.0	6224309	N	3060A	7199	III
07-Mar-2011	SL-012-SA5A-SB-2.0-3.0	6224309	N	3546	1625C	III
07-Mar-2011	SL-012-SA5A-SB-2.0-3.0	6224309	N	3550B	8015B	III
07-Mar-2011	SL-012-SA5A-SB-2.0-3.0	6224309	N	3550B	8015M	III
07-Mar-2011	SL-012-SA5A-SB-2.0-3.0	6224309	N	3550B	8082	III
07-Mar-2011	SL-012-SA5A-SB-2.0-3.0	6224309	N	3550B	8270C	III
07-Mar-2011	SL-012-SA5A-SB-2.0-3.0	6224309	N	3550B	8270C SIM	III
07-Mar-2011	SL-012-SA5A-SB-2.0-3.0	6224309	N	5035	8015M	III
07-Mar-2011	SL-012-SA5A-SB-2.0-3.0	6224309	N	5035	8260B	III
07-Mar-2011	SL-012-SA5A-SB-2.0-3.0	6224309	N	5035	8260B SIM	III
07-Mar-2011	SL-012-SA5A-SB-2.0-3.0	6224309	N	8330	8330A	III
07-Mar-2011	SL-012-SA5A-SB-2.0-3.0	6224309	N	Gen Prep	9045M	III
07-Mar-2011	SL-012-SA5A-SB-2.0-3.0	6224309	N	METHOD	300.0	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
07-Mar-2011	SL-012-SA5A-SB-2.0-3.0	6224309	N	METHOD	314.0	III
07-Mar-2011	SL-012-SA5A-SB-2.0-3.0	6224309	N	METHOD	7471A	III
07-Mar-2011	SL-012-SA5A-SB-2.0-3.0	6224309	N	METHOD	8015B	III
07-Mar-2011	SL-012-SA5A-SB-2.0-3.0	6224309	N	METHOD	8015M	III
07-Mar-2011	SL-012-SA5A-SB-2.0-3.0	6224309	N	METHOD	8315A	III
07-Mar-2011	SL-012-SA5A-SB-2.0-3.0	6224309	N	METHOD	9012B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE099 | Laboratory: LL

EDD Filename: DE099_v1 | eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-007-SA5A-SB-4.0-5.0 *Collected:* 3/7/2011 10:56:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	5.04	J	0.974	MDL	5.47	PQL	mg/Kg	J	Z
SODIUM	91.4	J	40.8	MDL	109	PQL	mg/Kg	J	Z
TIN	2.70	J	1.09	MDL	10.9	PQL	mg/Kg	U	B
Zirconium	1.60	J	0.919	MDL	5.47	PQL	mg/Kg	J	Z

Sample ID: SL-007-SA5A-SB-9.0-10.0 *Collected:* 3/7/2011 11:04:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	4.87	J	1.06	MDL	5.94	PQL	mg/Kg	J	Z
SODIUM	118	J	44.3	MDL	119	PQL	mg/Kg	J	Z
TIN	3.00	J	1.19	MDL	11.9	PQL	mg/Kg	U	B
Zirconium	1.62	J	0.998	MDL	5.94	PQL	mg/Kg	J	Z

Sample ID: SL-012-SA5A-SB-2.0-3.0 *Collected:* 3/7/2011 4:09:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	4.21	J	1.02	MDL	5.76	PQL	mg/Kg	J	Z
TIN	2.85	J	1.15	MDL	11.5	PQL	mg/Kg	U	B
Zirconium	1.22	J	0.967	MDL	5.76	PQL	mg/Kg	J	Z

Sample ID: SL-013-SA5A-SB-2.5-3.5 *Collected:* 3/7/2011 3:24:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	3.23	J	1.11	MDL	11.1	PQL	mg/Kg	U	B
Zirconium	1.79	J	0.934	MDL	5.56	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-007-SA5A-SB-4.0-5.0 *Collected:* 3/7/2011 10:56:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0832	J	0.0446	MDL	0.446	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE099 **Laboratory: LL**

EDD Filename: DE099_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6020** ***Matrix:*** **SO**

Sample ID: **SL-007-SA5A-SB-4.0-5.0** ***Collected:*** **3/7/2011 10:56:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.150	J	0.0669	MDL	0.223	PQL	mg/Kg	J	Z
CADMIUM	0.0932	J	0.0446	MDL	0.112	PQL	mg/Kg	J	Z
SILVER	0.0449	J	0.0134	MDL	0.112	PQL	mg/Kg	J	Z

Sample ID: **SL-007-SA5A-SB-9.0-10.0** ***Collected:*** **3/7/2011 11:04:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0884	J	0.0471	MDL	0.471	PQL	mg/Kg	J	Z

Sample ID: **SL-007-SA5A-SB-9.0-10.0** ***Collected:*** **3/7/2011 11:04:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.190	J	0.0706	MDL	0.235	PQL	mg/Kg	J	Z
CADMIUM	0.0886	J	0.0471	MDL	0.118	PQL	mg/Kg	J	Z
SILVER	0.0984	J	0.0141	MDL	0.118	PQL	mg/Kg	J	Z

Sample ID: **SL-012-SA5A-SB-2.0-3.0** ***Collected:*** **3/7/2011 4:09:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.101	J	0.0691	MDL	0.230	PQL	mg/Kg	J	Z
CADMIUM	0.0463	J	0.0461	MDL	0.115	PQL	mg/Kg	J	Z
SILVER	0.0331	J	0.0138	MDL	0.115	PQL	mg/Kg	J	Z

Sample ID: **SL-013-SA5A-SB-2.5-3.5** ***Collected:*** **3/7/2011 3:24:00 PM** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0682	J	0.0453	MDL	0.453	PQL	mg/Kg	J	Z

Sample ID: **SL-013-SA5A-SB-2.5-3.5** ***Collected:*** **3/7/2011 3:24:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.0914	J	0.0453	MDL	0.113	PQL	mg/Kg	J	Z
SILVER	0.102	J	0.0136	MDL	0.113	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE099 | Laboratory: LL

EDD Filename: DE099_v1 | eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 7199 **Matrix:** SO

Sample ID: SL-007-SA5A-SB-4.0-5.0 *Collected:* 3/7/2011 10:56:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.40	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-007-SA5A-SB-9.0-10.0 *Collected:* 3/7/2011 11:04:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.43	J	0.24	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-012-SA5A-SB-2.0-3.0 *Collected:* 3/7/2011 4:09:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.33	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Method Category: SVOA

Method: 1625C **Matrix:** SO

Sample ID: SL-007-SA5A-SB-4.0-5.0 *Collected:* 3/7/2011 10:56:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	37.2	J	19.0	MDL	37.9	PQL	ng/Kg	J	Z

Sample ID: SL-007-SA5A-SB-9.0-10.0 *Collected:* 3/7/2011 11:04:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	21.4	J	20.2	MDL	40.4	PQL	ng/Kg	J	Z

Method Category: SVOA

Method: 8015M **Matrix:** SO

Sample ID: SL-012-SA5A-SB-2.0-3.0 *Collected:* 3/7/2011 4:09:00 PM *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DIETHYLENE GLYCOL	5.8	U	5.8	MDL	15	PQL	mg/Kg	UJ	S
ETHYLENE GLYCOL	5.8	U	5.8	MDL	15	PQL	mg/Kg	UJ	S
Propylene glycol	5.8	U	5.8	MDL	15	PQL	mg/Kg	UJ	S

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE099 **Laboratory: LL**

EDD Filename: DE099_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA
Method: 8082 **Matrix:** SO

Sample ID: SL-012-SA5A-SB-2.0-3.0 *Collected:* 3/7/2011 4:09:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 1268	0.87	J	0.38	MDL	2.0	PQL	ug/Kg	J	Z

Method Category: SVOA
Method: 8270C SIM **Matrix:** SO

Sample ID: SL-012-SA5A-SB-2.0-3.0 *Collected:* 3/7/2011 4:09:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	1.3	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	0.82	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
Di-n-octylphthalate	12	J	7.0	MDL	21	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	1.3	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
PHENANTHRENE	1.5	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z

Method Category: VOA
Method: 8260B **Matrix:** SO

Sample ID: SL-007-SA5A-SB-4.0-5.0 *Collected:* 3/7/2011 10:56:00 *Analysis Type:* RES *Dilution:* 0.83

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	1.7	J	0.23	MDL	3.8	PQL	ug/Kg	U	B

Sample ID: SL-007-SA5A-SB-9.0-10.0 *Collected:* 3/7/2011 11:04:00 *Analysis Type:* RES *Dilution:* 0.85

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.80	J	0.25	MDL	4.1	PQL	ug/Kg	U	B

Sample ID: SL-012-SA5A-SB-2.0-3.0 *Collected:* 3/7/2011 4:09:00 PM *Analysis Type:* RES *Dilution:* 0.84

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.86	J	0.23	MDL	3.9	PQL	ug/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE099 **Laboratory: LL**

EDD Filename: DE099_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **VOA**

Method: **8260B** ***Matrix:*** **SO**

Sample ID: **SL-013-SA5A-SB-2.5-3.5** ***Collected:*** **3/7/2011 3:24:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** **0.94**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	1.0	J	0.26	MDL	4.4	PQL	ug/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE099 **Laboratory: LL**

EDD Filename: DE099_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
*#	Professional Judgment
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Verification Correlation Coefficient
C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE099 **Laboratory: LL**

EDD Filename: DE099_v1 **eQAPP Name: CDM_SSFL_110509**

F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation
L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery Lower Estimation

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE099 **Laboratory: LL**

EDD Filename: DE099_v1 **eQAPP Name: CDM_SSFL_110509**

R	Continuing Calibration Verification Percent Recovery Lower Rejection
R	Continuing Calibration Verification Percent Recovery Upper Estimation
R	Continuing Calibration Verification Percent Recovery Upper Rejection
R	Continuing Calibration Verification Relative Response Factor
R	Initial Calibration Relative Response Factor
R	Initial Calibration Verification Percent Recovery Lower Estimation
R	Initial Calibration Verification Percent Recovery Lower Rejection
R	Initial Calibration Verification Percent Recovery Upper Estimation
R	Initial Calibration Verification Percent Recovery Upper Rejection
R	Initial Calibration Verification Relative Response Factor
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control Outlier Reports

DE099

Method Blank Outlier Report

Lab Reporting Batch ID: DE099 **Laboratory: LL**

EDD Filename: DE099_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **6010B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P06908DB220545	3/11/2011 5:45:00 AM	CALCIUM PHOSPHORUS TIN	7.51 mg/Kg 1.37 mg/Kg 1.47 mg/Kg	SL-007-SA5A-SB-4.0-5.0 SL-007-SA5A-SB-9.0-10.0 SL-012-SA5A-SB-2.0-3.0 SL-013-SA5A-SB-2.5-3.5

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-007-SA5A-SB-4.0-5.0(RES)	TIN	2.70 mg/Kg	2.70U mg/Kg
SL-007-SA5A-SB-9.0-10.0(RES)	TIN	3.00 mg/Kg	3.00U mg/Kg
SL-012-SA5A-SB-2.0-3.0(RES)	TIN	2.85 mg/Kg	2.85U mg/Kg
SL-013-SA5A-SB-2.5-3.5(RES)	TIN	3.23 mg/Kg	3.23U mg/Kg

Method: **6020**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P06926BB221308A	3/12/2011 1:08:00 PM	COPPER	0.241 mg/Kg	SL-007-SA5A-SB-4.0-5.0 SL-007-SA5A-SB-9.0-10.0 SL-012-SA5A-SB-2.0-3.0 SL-013-SA5A-SB-2.5-3.5

Method: **8015M**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P76760AB322112A	3/19/2011 9:12:00 PM	EFH (C21-C30) EFH (C30-C40) EFH (C8-C11)	0.48 mg/Kg 2.6 mg/Kg 0.47 mg/Kg	SL-007-SA5A-SB-4.0-5.0 SL-007-SA5A-SB-9.0-10.0 SL-012-SA5A-SB-2.0-3.0

Method: **8260B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB91B211222A	3/10/2011 12:22:00 PM	METHYLENE CHLORIDE	0.68 ug/Kg	SL-007-SA5A-SB-4.0-5.0 SL-007-SA5A-SB-9.0-10.0 SL-012-SA5A-SB-2.0-3.0 SL-013-SA5A-SB-2.5-3.5

Method Blank Outlier Report

Lab Reporting Batch ID: DE099 | Laboratory: LL

EDD Filename: DE099_v1 | eQAPP Name: CDM_SSFL_110509

Method: **8260B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-007-SA5A-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.7 ug/Kg	3.8U ug/Kg
SL-007-SA5A-SB-9.0-10.0(RES)	METHYLENE CHLORIDE	0.80 ug/Kg	4.1U ug/Kg
SL-012-SA5A-SB-2.0-3.0(RES)	METHYLENE CHLORIDE	0.86 ug/Kg	3.9U ug/Kg
SL-013-SA5A-SB-2.5-3.5(RES)	METHYLENE CHLORIDE	1.0 ug/Kg	4.4U ug/Kg

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE099 | Laboratory: LL

EDD Filename: DE099_v1 | eQAPP Name: CDM_SSFL_110509

Method: 6020

Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P06926BQ221311A (SL-007-SA5A-SB-4.0-5.0 SL -007-SA5A-SB-9.0-10.0 SL -012-SA5A-SB-2.0-3.0 SL -013-SA5A-SB-2.5-3.5)	ANTIMONY	124	-	80.00-120.00	-	ANTIMONY	No Qual SRM within QC limits

Surrogate Outlier Report

Lab Reporting Batch ID: DE099 **Laboratory: LL**

EDD Filename: DE099_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8015M**
Matrix: **SO**

Sample ID	*Surrogate*	*Sample % Recovery*	*% Recovery Limits*	*Affected Compounds*	*Flag*
SL-012-SA5A-SB-2.0-3.0	TETRAMETHYLENE GLYCOL	25	29.00-137.00	All Target Analytes	J (all detects) UJ (all non-detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE099 **Laboratory: LL**

EDD Filename: DE099_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1625C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-007-SA5A-SB-4.0-5.0	N-NITROSODIMETHYLAMINE	J	37.2	37.9	PQL	ng/Kg	J (all detects)
SL-007-SA5A-SB-9.0-10.0	N-NITROSODIMETHYLAMINE	J	21.4	40.4	PQL	ng/Kg	J (all detects)

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-007-SA5A-SB-4.0-5.0	BORON	J	5.04	5.47	PQL	mg/Kg	J (all detects)
	SODIUM	J	91.4	109	PQL	mg/Kg	
	TIN	J	2.70	10.9	PQL	mg/Kg	
	Zirconium	J	1.60	5.47	PQL	mg/Kg	
SL-007-SA5A-SB-9.0-10.0	BORON	J	4.87	5.94	PQL	mg/Kg	J (all detects)
	SODIUM	J	118	119	PQL	mg/Kg	
	TIN	J	3.00	11.9	PQL	mg/Kg	
	Zirconium	J	1.62	5.94	PQL	mg/Kg	
SL-012-SA5A-SB-2.0-3.0	BORON	J	4.21	5.76	PQL	mg/Kg	J (all detects)
	TIN	J	2.85	11.5	PQL	mg/Kg	
	Zirconium	J	1.22	5.76	PQL	mg/Kg	
SL-013-SA5A-SB-2.5-3.5	TIN	J	3.23	11.1	PQL	mg/Kg	J (all detects)
	Zirconium	J	1.79	5.56	PQL	mg/Kg	

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-007-SA5A-SB-4.0-5.0	ANTIMONY	J	0.150	0.223	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0932	0.112	PQL	mg/Kg	
	SELENIUM	J	0.0832	0.446	PQL	mg/Kg	
	SILVER	J	0.0449	0.112	PQL	mg/Kg	
SL-007-SA5A-SB-9.0-10.0	ANTIMONY	J	0.190	0.235	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0886	0.118	PQL	mg/Kg	
	SELENIUM	J	0.0884	0.471	PQL	mg/Kg	
	SILVER	J	0.0984	0.118	PQL	mg/Kg	
SL-012-SA5A-SB-2.0-3.0	ANTIMONY	J	0.101	0.230	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0463	0.115	PQL	mg/Kg	
	SILVER	J	0.0331	0.115	PQL	mg/Kg	
SL-013-SA5A-SB-2.5-3.5	CADMIUM	J	0.0914	0.113	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0682	0.453	PQL	mg/Kg	
	SILVER	J	0.102	0.113	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE099 **Laboratory: LL**

EDD Filename: DE099_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-007-SA5A-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.40	1.1	PQL	mg/Kg	J (all detects)
SL-007-SA5A-SB-9.0-10.0	HEXAVALENT CHROMIUM	J	0.43	1.2	PQL	mg/Kg	J (all detects)
SL-012-SA5A-SB-2.0-3.0	HEXAVALENT CHROMIUM	J	0.33	1.2	PQL	mg/Kg	J (all detects)

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-012-SA5A-SB-2.0-3.0	Aroclor 1268	J	0.87	2.0	PQL	ug/Kg	J (all detects)

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-007-SA5A-SB-4.0-5.0	METHYLENE CHLORIDE	J	1.7	3.8	PQL	ug/Kg	J (all detects)
SL-007-SA5A-SB-9.0-10.0	METHYLENE CHLORIDE	J	0.80	4.1	PQL	ug/Kg	J (all detects)
SL-012-SA5A-SB-2.0-3.0	METHYLENE CHLORIDE	J	0.86	3.9	PQL	ug/Kg	J (all detects)
SL-013-SA5A-SB-2.5-3.5	METHYLENE CHLORIDE	J	1.0	4.4	PQL	ug/Kg	J (all detects)

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-012-SA5A-SB-2.0-3.0	BENZO(A)ANTHRACENE	J	1.3	1.9	PQL	ug/Kg	J (all detects)
	DIBENZO(A,H)ANTHRACENE	J	0.82	1.9	PQL	ug/Kg	
	Di-n-octylphthalate	J	12	21	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.3	1.9	PQL	ug/Kg	
	PHENANTHRENE	J	1.5	1.9	PQL	ug/Kg	

LDC #: 25911K4

VALIDATION COMPLETENESS WORKSHEET

Date: 8/3/11

SDG #: DE099

ADR

Laboratory: Lancaster Laboratories

Reviewer: CR

2nd Reviewer: [illegible]

METHOD: Metals (EPA SW 846 Method 6010B/6020A/7000)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	N	Sampling dates:
II.	ICP/MS Tune	—	
III.	Calibration	—	
IV.	Blanks	A	No Qual
V.	ICP Interference Check Sample (ICS) Analysis	N	
VI.	Matrix Spike Analysis	N	CS
VII.	Duplicate Sample Analysis	N	↓
VIII.	Laboratory Control Samples (LCS)	A	LCS
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	N	Not performed
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	—	
XV	Field Blanks	—	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: Soil

1	SL-007-SA5A-SB-4.0-5.0	11		21		31	
2	SL-007-SA5A-SB-9.0-10.0	12		22		32	
3	SL-013-SA5A-SB-2.5-3.5	13		23		33	
4	SL-012-SA5A-SB-2.0-3.0	14		24		34	
5		15		25		35	
6		16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
08-Mar-2011	TB-030811	6225086	TB	5030B	8015M	III
08-Mar-2011	TB-030811	6225086	TB	5030B	8260B	III
08-Mar-2011	TB-030811	6225086	TB	5030B	8260B SIM	III
08-Mar-2011	SL-006-SA5A-SB-2.0-3.0	6225085	N	3050B	6010B	III
08-Mar-2011	SL-006-SA5A-SB-2.0-3.0	6225085	N	3050B	6020	III
08-Mar-2011	SL-006-SA5A-SB-2.0-3.0	6225085	N	3060A	7199	III
08-Mar-2011	SL-006-SA5A-SB-2.0-3.0	6225085	N	3546	1625C	III
08-Mar-2011	SL-006-SA5A-SB-2.0-3.0	6225085	N	3550B	8015B	III
08-Mar-2011	SL-006-SA5A-SB-2.0-3.0	6225085	N	3550B	8015M	III
08-Mar-2011	SL-006-SA5A-SB-2.0-3.0	6225085	N	3550B	8082	III
08-Mar-2011	SL-006-SA5A-SB-2.0-3.0	6225085	N	3550B	8270C	III
08-Mar-2011	SL-006-SA5A-SB-2.0-3.0	6225085	N	3550B	8270C SIM	III
08-Mar-2011	SL-006-SA5A-SB-2.0-3.0	6225085	N	5035	8015M	III
08-Mar-2011	SL-006-SA5A-SB-2.0-3.0	6225085	N	5035	8260B	III
08-Mar-2011	SL-006-SA5A-SB-2.0-3.0	6225085	N	5035	8260B SIM	III
08-Mar-2011	SL-006-SA5A-SB-2.0-3.0	6225085	N	8330	8330A	III
08-Mar-2011	SL-006-SA5A-SB-2.0-3.0	6225085	N	Gen Prep	9045M	III
08-Mar-2011	SL-006-SA5A-SB-2.0-3.0	6225085	N	METHOD	300.0	III
08-Mar-2011	SL-006-SA5A-SB-2.0-3.0	6225085	N	METHOD	314.0	III
08-Mar-2011	SL-006-SA5A-SB-2.0-3.0	6225085	N	METHOD	7471A	III
08-Mar-2011	SL-006-SA5A-SB-2.0-3.0	6225085	N	METHOD	8015B	III
08-Mar-2011	SL-006-SA5A-SB-2.0-3.0	6225085	N	METHOD	8015M	III
08-Mar-2011	SL-006-SA5A-SB-2.0-3.0	6225085	N	METHOD	8315A	III
08-Mar-2011	SL-006-SA5A-SB-2.0-3.0	6225085	N	METHOD	9012B	III
08-Mar-2011	SL-006-SA5A-SB-2.0-3.0DUP	P225085D290945A	DUP	Gen Prep	9045M	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE100 **Laboratory: LL**

EDD Filename: DE100_v1. **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: **SL-006-SA5A-SB-2.0-3.0** ***Collected:*** **3/8/2011 9:56:00 AM** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.91	J	0.965	MDL	5.42	PQL	mg/Kg	J	Z
TIN	3.01	J	1.08	MDL	10.8	PQL	mg/Kg	U	B

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: **SL-006-SA5A-SB-2.0-3.0** ***Collected:*** **3/8/2011 9:56:00 AM** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.290	J	0.0430	MDL	0.430	PQL	mg/Kg	J	Z

Sample ID: **SL-006-SA5A-SB-2.0-3.0** ***Collected:*** **3/8/2011 9:56:00 AM** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	126		0.116	MDL	0.430	PQL	mg/Kg	J	E, A

Sample ID: **SL-006-SA5A-SB-2.0-3.0** ***Collected:*** **3/8/2011 9:56:00 AM** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.109	J	0.0644	MDL	0.215	PQL	mg/Kg	J	Z, Q
ARSENIC	11.5		0.0859	MDL	0.430	PQL	mg/Kg	J	E
CADMIUM	0.0983	J	0.0430	MDL	0.107	PQL	mg/Kg	J	Z, Q
COPPER	16.5		0.0709	MDL	0.430	PQL	mg/Kg	J	A
LEAD	12.7		0.0112	MDL	0.215	PQL	mg/Kg	J	Q, A
NICKEL	25.7		0.107	MDL	0.430	PQL	mg/Kg	J	Q, A
SILVER	0.0161	J	0.0129	MDL	0.107	PQL	mg/Kg	J	Z
THALLIUM	0.436		0.0322	MDL	0.107	PQL	mg/Kg	J	Q
ZINC	90.8		0.601	MDL	3.22	PQL	mg/Kg	J	A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE100 **Laboratory: LL**

EDD Filename: DE100_v1. **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS
Method: 7199 **Matrix:** SO

Sample ID: SL-006-SA5A-SB-2.0-3.0 *Collected:* 3/8/2011 9:56:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.24	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Method Category: SVOA
Method: 1625C **Matrix:** SO

Sample ID: SL-006-SA5A-SB-2.0-3.0 *Collected:* 3/8/2011 9:56:00 AM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	28.3	J	18.3	MDL	36.5	PQL	ng/Kg	J	Z

Method Category: SVOA
Method: 8015M **Matrix:** SO

Sample ID: SL-006-SA5A-SB-2.0-3.0 *Collected:* 3/8/2011 9:56:00 AM *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	0.64	J	0.44	MDL	1.3	PQL	mg/Kg	UJ	L, B

Method Category: SVOA
Method: 8082 **Matrix:** SO

Sample ID: SL-006-SA5A-SB-2.0-3.0 *Collected:* 3/8/2011 9:56:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L
Aroclor 5442	2.0	J	1.1	MDL	3.6	PQL	ug/Kg	J	Z, L
Aroclor 5460	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE100 **Laboratory: LL**

EDD Filename: DE100_v1. **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C SIM **Matrix:** SO

Sample ID: **SL-006-SA5A-SB-2.0-3.0** ***Collected:*** **3/8/2011 9:56:00 AM** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Di-n-octylphthalate	11	J	6.6	MDL	20	PQL	ug/Kg	J	Z

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: **SL-006-SA5A-SB-2.0-3.0** ***Collected:*** **3/8/2011 9:56:00 AM** ***Analysis Type:*** **RES** ***Dilution:*** **0.98**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.55	J	0.26	MDL	4.3	PQL	ug/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE100 **Laboratory: LL**

EDD Filename: DE100_v1. **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
*#	Professional Judgment
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Verification Correlation Coefficient
C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE100 **Laboratory: LL**

EDD Filename: DE100_v1. **eQAPP Name: CDM_SSFL_110509**

F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation
L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery Lower Estimation

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE100 **Laboratory: LL**

EDD Filename: DE100_v1. **eQAPP Name: CDM_SSFL_110509**

R	Continuing Calibration Verification Percent Recovery Lower Rejection
R	Continuing Calibration Verification Percent Recovery Upper Estimation
R	Continuing Calibration Verification Percent Recovery Upper Rejection
R	Continuing Calibration Verification Relative Response Factor
R	Initial Calibration Relative Response Factor
R	Initial Calibration Verification Percent Recovery Lower Estimation
R	Initial Calibration Verification Percent Recovery Lower Rejection
R	Initial Calibration Verification Percent Recovery Upper Estimation
R	Initial Calibration Verification Percent Recovery Upper Rejection
R	Initial Calibration Verification Relative Response Factor
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control Outlier Reports

DE100

Method Blank Outlier Report

Lab Reporting Batch ID: DE100 **Laboratory: LL**

EDD Filename: DE100_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 6010B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P07508AB221918	3/17/2011 7:18:00 PM	CALCIUM PHOSPHORUS TIN	8.02 mg/Kg 1.34 mg/Kg 1.44 mg/Kg	SL-006-SA5A-SB-2.0-3.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-006-SA5A-SB-2.0-3.0(RES)	TIN	3.01 mg/Kg	3.01U mg/Kg

Method: 6020
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P07526AB222150A	3/18/2011 9:50:00 PM	LEAD ZINC	0.0105 mg/Kg 0.644 mg/Kg	SL-006-SA5A-SB-2.0-3.0

Method: 8015M
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P73731AB320119A	3/16/2011 1:19:00 AM	EFH (C21-C30) EFH (C30-C40)	0.45 mg/Kg 1.3 mg/Kg	SL-006-SA5A-SB-2.0-3.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-006-SA5A-SB-2.0-3.0(REA2)	EFH (C30-C40)	0.64 mg/Kg	1.3U mg/Kg

Method: 8260B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB91B211222A	3/10/2011 12:22:00 PM	METHYLENE CHLORIDE	0.68 ug/Kg	SL-006-SA5A-SB-2.0-3.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-006-SA5A-SB-2.0-3.0(RES)	METHYLENE CHLORIDE	0.55 ug/Kg	4.3U ug/Kg

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE100 | Laboratory: LL

EDD Filename: DE100_v1. | eQAPP Name: CDM_SSFL_110509

Method: 8015M
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P10731AQ320152A (SL-006-SA5A-SB-2.0-3.0)	EFH (C12-C14)	115	-	66.00-113.00	-	EFH (C12-C14)	J (all detects)
	EFH (C15-C20)	119	-	66.00-113.00	-	EFH (C15-C20)	
	EFH (C21-C30)	126	-	66.00-113.00	-	EFH (C21-C30)	
	EFH (C30-C40)	116	-	66.00-113.00	-	EFH (C30-C40)	

Method: 8082
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P10754AY240521A (SL-006-SA5A-SB-2.0-3.0)	Aroclor 5442	-	74	75.00-125.00	-	Aroclor 5432, 5442, 5460	J(all detects) UJ(all non-detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE100 **Laboratory: LL**

EDD Filename: DE100_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 1625C
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-006-SA5A-SB-2.0-3.0	N-NITROSODIMETHYLAMINE	J	28.3	36.5	PQL	ng/Kg	J (all detects)

Method: 6010B
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-006-SA5A-SB-2.0-3.0	BORON	J	3.91	5.42	PQL	mg/Kg	J (all detects)
	TIN	J	3.01	10.8	PQL	mg/Kg	

Method: 6020
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-006-SA5A-SB-2.0-3.0	ANTIMONY	J	0.109	0.215	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0983	0.107	PQL	mg/Kg	
	SELENIUM	J	0.290	0.430	PQL	mg/Kg	
	SILVER	J	0.0161	0.107	PQL	mg/Kg	

Method: 7199
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-006-SA5A-SB-2.0-3.0	HEXAVALENT CHROMIUM	J	0.24	1.1	PQL	mg/Kg	J (all detects)

Method: 8015M
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-006-SA5A-SB-2.0-3.0	EFH (C30-C40)	J	0.64	1.3	PQL	mg/Kg	J (all detects)

Method: 8082
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-006-SA5A-SB-2.0-3.0	Aroclor 5442	J	2.0	3.6	PQL	ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE100 **Laboratory: LL**

EDD Filename: DE100_v1. **eQAPP Name: CDM_SSFL_110509**

Method: **8260B**

Matrix: **SO**

SampleID	*Analyte*	*Lab Qual*	*Result*	*Reporting Limit*	*RL Type*	*Units*	*Flag*
SL-006-SA5A-SB-2.0-3.0	METHYLENE CHLORIDE	J	0.55	4.3	PQL	ug/Kg	J (all detects)

Method: **8270C SIM**

Matrix: **SO**

SampleID	*Analyte*	*Lab Qual*	*Result*	*Reporting Limit*	*RL Type*	*Units*	*Flag*
SL-006-SA5A-SB-2.0-3.0	Di-n-octylphthalate	J	11	20	PQL	ug/Kg	J (all detects)

LDC #: 25786B4

SDG #: DE100

Laboratory: Lancaster Laboratories

VALIDATION COMPLETENESS WORKSHEET

ADR

Date: 7/8/11

Page: 1 of 1

Reviewer: [illegible]

2nd Reviewer: [illegible]

METHOD: Metals (EPA SW 846 Method 6010B/6020A/7000)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	N	Sampling dates:
II.	ICP/MS Tune	—	
III.	Calibration	—	
IV.	Blanks	A	ICB/CCB hits → No Qual
V.	ICP Interference Check Sample (ICS) Analysis	N	
VI.	Matrix Spike Analysis	N	MS/D (See DE102)
VII.	Duplicate Sample Analysis	N	Dup
VIII.	Laboratory Control Samples (LCS)	N	LCS
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	SW	J/UJ/A (SDG: DE102) → (Ba, Cu, Pb, Ni, Zn)
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	—	
XV	Field Blanks	—	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: Soil

1	SL-006-SA5A-SB-2.0-3.0	11		21		31	
2		12		22		32	
3		13		23		33	
4		14		24		34	
5		15		25		35	
6		16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
09-Mar-2011	TB-030911	6226877	TB	5030B	8015M	IV
09-Mar-2011	TB-030911	6226877	TB	5030B	8260B	IV
09-Mar-2011	TB-030911	6226877	TB	5030B	8260B SIM	IV
09-Mar-2011	SL-225-SA5B-SB-2.0-3.0	6226876	N	3050B	6010B	IV
09-Mar-2011	SL-225-SA5B-SB-2.0-3.0	6226876	N	3050B	6020	IV
09-Mar-2011	SL-225-SA5B-SB-2.0-3.0	6226876	N	3060A	7199	IV
09-Mar-2011	SL-225-SA5B-SB-2.0-3.0	6226876	N	3546	1625C	IV
09-Mar-2011	SL-225-SA5B-SB-2.0-3.0	6226876	N	3550B	8015B	IV
09-Mar-2011	SL-225-SA5B-SB-2.0-3.0	6226876	N	3550B	8015M	IV
09-Mar-2011	SL-225-SA5B-SB-2.0-3.0	6226876	N	3550B	8082	IV
09-Mar-2011	SL-225-SA5B-SB-2.0-3.0	6226876	N	3550B	8270C	IV
09-Mar-2011	SL-225-SA5B-SB-2.0-3.0	6226876	N	3550B	8270C SIM	IV
09-Mar-2011	SL-225-SA5B-SB-2.0-3.0	6226876	N	5035	8015M	IV
09-Mar-2011	SL-225-SA5B-SB-2.0-3.0	6226876	N	5035	8260B	IV
09-Mar-2011	SL-225-SA5B-SB-2.0-3.0	6226876	N	5035	8260B SIM	IV
09-Mar-2011	SL-225-SA5B-SB-2.0-3.0	6226876	N	8330	8330A	IV
09-Mar-2011	SL-225-SA5B-SB-2.0-3.0	6226876	N	Gen Prep	9045M	IV
09-Mar-2011	SL-225-SA5B-SB-2.0-3.0	6226876	N	METHOD	300.0	IV
09-Mar-2011	SL-225-SA5B-SB-2.0-3.0	6226876	N	METHOD	314.0	IV
09-Mar-2011	SL-225-SA5B-SB-2.0-3.0	6226876	N	METHOD	7471A	IV
09-Mar-2011	SL-225-SA5B-SB-2.0-3.0	6226876	N	METHOD	8015B	IV
09-Mar-2011	SL-225-SA5B-SB-2.0-3.0	6226876	N	METHOD	8015M	IV
09-Mar-2011	SL-225-SA5B-SB-2.0-3.0	6226876	N	METHOD	8315A	IV
09-Mar-2011	SL-225-SA5B-SB-2.0-3.0	6226876	N	METHOD	9012B	IV
09-Mar-2011	SL-304-SA5B-SB-3.0-4.0	6226875	N	3050B	6010B	IV
09-Mar-2011	SL-304-SA5B-SB-3.0-4.0	6226875	N	3050B	6020	IV

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
09-Mar-2011	SL-304-SA5B-SB-3.0-4.0	6226875	N	3060A	7199	IV
09-Mar-2011	SL-304-SA5B-SB-3.0-4.0	6226875	N	3546	1625C	IV
09-Mar-2011	SL-304-SA5B-SB-3.0-4.0	6226875	N	3550B	8015B	IV
09-Mar-2011	SL-304-SA5B-SB-3.0-4.0	6226875	N	3550B	8015M	IV
09-Mar-2011	SL-304-SA5B-SB-3.0-4.0	6226875	N	3550B	8082	IV
09-Mar-2011	SL-304-SA5B-SB-3.0-4.0	6226875	N	3550B	8270C	IV
09-Mar-2011	SL-304-SA5B-SB-3.0-4.0	6226875	N	3550B	8270C SIM	IV
09-Mar-2011	SL-304-SA5B-SB-3.0-4.0	6226875	N	5035	8015M	IV
09-Mar-2011	SL-304-SA5B-SB-3.0-4.0	6226875	N	5035	8260B	IV
09-Mar-2011	SL-304-SA5B-SB-3.0-4.0	6226875	N	5035	8260B SIM	IV
09-Mar-2011	SL-304-SA5B-SB-3.0-4.0	6226875	N	8330	8330A	IV
09-Mar-2011	SL-304-SA5B-SB-3.0-4.0	6226875	N	Gen Prep	9045M	IV
09-Mar-2011	SL-304-SA5B-SB-3.0-4.0	6226875	N	METHOD	300.0	IV
09-Mar-2011	SL-304-SA5B-SB-3.0-4.0	6226875	N	METHOD	314.0	IV
09-Mar-2011	SL-304-SA5B-SB-3.0-4.0	6226875	N	METHOD	7471A	IV
09-Mar-2011	SL-304-SA5B-SB-3.0-4.0	6226875	N	METHOD	8015B	IV
09-Mar-2011	SL-304-SA5B-SB-3.0-4.0	6226875	N	METHOD	8015M	IV
09-Mar-2011	SL-304-SA5B-SB-3.0-4.0	6226875	N	METHOD	8315A	IV
09-Mar-2011	SL-304-SA5B-SB-3.0-4.0	6226875	N	METHOD	9012B	IV

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE101 **Laboratory: LL**

EDD Filename: DE101_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: GENCHEM
Method: 300.0 **Matrix:** SO

Sample ID: SL-225-SA5B-SB-2.0-3.0 **Collected:** 3/9/2011 9:20:00 AM **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	4.6		0.93	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-304-SA5B-SB-3.0-4.0 **Collected:** 3/9/2011 12:30:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	3.3		0.92	MDL	1.2	PQL	mg/Kg	J	Q

Method Category: METALS
Method: 6010B **Matrix:** SO

Sample ID: SL-225-SA5B-SB-2.0-3.0 **Collected:** 3/9/2011 9:20:00 AM **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	6.35		1.00	MDL	5.62	PQL	mg/Kg	J	I
TIN	3.01	J	1.12	MDL	11.2	PQL	mg/Kg	U	B
Zirconium	2.48	J	0.944	MDL	5.62	PQL	mg/Kg	J	Z, I

Sample ID: SL-304-SA5B-SB-3.0-4.0 **Collected:** 3/9/2011 12:30:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	7.65		0.987	MDL	5.55	PQL	mg/Kg	J	I
TIN	3.59	J	1.11	MDL	11.1	PQL	mg/Kg	U	B
Zirconium	1.28	J	0.932	MDL	5.55	PQL	mg/Kg	J	Z, I

Method Category: METALS
Method: 6020 **Matrix:** SO

Sample ID: SL-225-SA5B-SB-2.0-3.0 **Collected:** 3/9/2011 9:20:00 AM **Analysis Type:** REA **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.186	J	0.0454	MDL	0.454	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE101 **Laboratory: LL**

EDD Filename: DE101_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-225-SA5B-SB-2.0-3.0 ***Collected:*** 3/9/2011 9:20:00 AM ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	180		0.123	MDL	0.454	PQL	mg/Kg	J	E, A

Sample ID: SL-225-SA5B-SB-2.0-3.0 ***Collected:*** 3/9/2011 9:20:00 AM ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.133	J	0.0681	MDL	0.227	PQL	mg/Kg	J	Z, Q
ARSENIC	7.28		0.0908	MDL	0.454	PQL	mg/Kg	J	E
CADMIUM	0.243		0.0454	MDL	0.113	PQL	mg/Kg	J	Q
COPPER	12.3		0.0749	MDL	0.454	PQL	mg/Kg	J	A
LEAD	8.16		0.0118	MDL	0.227	PQL	mg/Kg	J	Q, A
NICKEL	21.4		0.113	MDL	0.454	PQL	mg/Kg	J	Q, A
SILVER	0.110	J	0.0136	MDL	0.113	PQL	mg/Kg	J	Z
THALLIUM	0.303		0.0340	MDL	0.113	PQL	mg/Kg	J	Q
ZINC	75.1		0.635	MDL	3.40	PQL	mg/Kg	J	A

Sample ID: SL-304-SA5B-SB-3.0-4.0 ***Collected:*** 3/9/2011 12:30:00 ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.143	J	0.0452	MDL	0.452	PQL	mg/Kg	J	Z

Sample ID: SL-304-SA5B-SB-3.0-4.0 ***Collected:*** 3/9/2011 12:30:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	181		0.122	MDL	0.452	PQL	mg/Kg	J	E, A

Sample ID: SL-304-SA5B-SB-3.0-4.0 ***Collected:*** 3/9/2011 12:30:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.196	J	0.0678	MDL	0.226	PQL	mg/Kg	J	Z, Q
ARSENIC	15.4		0.0905	MDL	0.452	PQL	mg/Kg	J	E
CADMIUM	0.142		0.0452	MDL	0.113	PQL	mg/Kg	J	Q
COPPER	25.3		0.0746	MDL	0.452	PQL	mg/Kg	J	A
LEAD	19.2		0.0118	MDL	0.226	PQL	mg/Kg	J	Q, A
NICKEL	39.5		0.113	MDL	0.452	PQL	mg/Kg	J	Q, A
THALLIUM	0.368		0.0339	MDL	0.113	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE101 **Laboratory: LL**

EDD Filename: DE101_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS
Method: 6020 **Matrix:** SO

Sample ID: SL-304-SA5B-SB-3.0-4.0 **Collected:** 3/9/2011 12:30:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ZINC	121		0.633	MDL	3.39	PQL	mg/Kg	J	A

Method Category: METALS
Method: 7199 **Matrix:** SO

Sample ID: SL-225-SA5B-SB-2.0-3.0 **Collected:** 3/9/2011 9:20:00 AM **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.36	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-304-SA5B-SB-3.0-4.0 **Collected:** 3/9/2011 12:30:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.51	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Method Category: METALS
Method: 7471A **Matrix:** SO

Sample ID: SL-304-SA5B-SB-3.0-4.0 **Collected:** 3/9/2011 12:30:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0234	J	0.0031	MDL	0.110	PQL	mg/Kg	J	Z

Method Category: SVOA
Method: 1625C **Matrix:** SO

Sample ID: SL-225-SA5B-SB-2.0-3.0 **Collected:** 3/9/2011 9:20:00 AM **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	27.4	J	19.3	MDL	38.6	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE101 **Laboratory: LL**

EDD Filename: DE101_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8015M **Matrix:** SO

Sample ID: **SL-225-SA5B-SB-2.0-3.0** ***Collected:*** **3/9/2011 9:20:00 AM** ***Analysis Type:*** **REA2** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C21-C30)	0.73	J	0.46	MDL	1.4	PQL	mg/Kg	UJ	L, B
EFH (C30-C40)	1.7		0.46	MDL	1.4	PQL	mg/Kg	UJ	L, B

Sample ID: **SL-304-SA5B-SB-3.0-4.0** ***Collected:*** **3/9/2011 12:30:00** ***Analysis Type:*** **REA2** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C21-C30)	1.0	J	0.46	MDL	1.4	PQL	mg/Kg	UJ	L, B
EFH (C30-C40)	2.6		0.46	MDL	1.4	PQL	mg/Kg	UJ	L, B

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: **SL-225-SA5B-SB-2.0-3.0** ***Collected:*** **3/9/2011 9:20:00 AM** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	1.2	U	1.2	MDL	3.8	PQL	ug/Kg	UJ	L
Aroclor 5442	1.2	U	1.2	MDL	3.8	PQL	ug/Kg	UJ	L
Aroclor 5460	1.2	U	1.2	MDL	3.8	PQL	ug/Kg	UJ	L

Sample ID: **SL-304-SA5B-SB-3.0-4.0** ***Collected:*** **3/9/2011 12:30:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	1.2	U	1.2	MDL	3.8	PQL	ug/Kg	UJ	L
Aroclor 5442	1.2	U	1.2	MDL	3.8	PQL	ug/Kg	UJ	L
Aroclor 5460	1.2	U	1.2	MDL	3.8	PQL	ug/Kg	UJ	L

Method Category: SVOA

Method: 8270C SIM **Matrix:** SO

Sample ID: **SL-225-SA5B-SB-2.0-3.0** ***Collected:*** **3/9/2011 9:20:00 AM** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)PYRENE	0.84	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
CHRYSENE	0.48	J	0.39	MDL	1.9	PQL	ug/Kg	J	Z
NAPHTHALENE	1.4	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE101 **Laboratory: LL**

EDD Filename: DE101_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA
Method: 8270C SIM **Matrix:** SO

Sample ID: SL-304-SA5B-SB-3.0-4.0 *Collected:* 3/9/2011 12:30:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Di-n-octylphthalate	12	J	6.9	MDL	21	PQL	ug/Kg	J	Z

Method Category: VOA
Method: 8260B **Matrix:** AQ

Sample ID: TB-030911 *Collected:* 3/9/2011 8:00:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	6	U	6	MDL	20	PQL	ug/L	UJ	C
Chlorotrifluoroethylene	2	U	2	MDL	5	PQL	ug/L	UJ	C
DICHLORODIFLUOROMETHANE	2	U	2	MDL	5	PQL	ug/L	UJ	C

Method Category: VOA
Method: 8260B **Matrix:** SO

Sample ID: SL-225-SA5B-SB-2.0-3.0 *Collected:* 3/9/2011 9:20:00 AM *Analysis Type:* RES *Dilution:* 0.83

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-HEXANONE	1.5	U	1.5	MDL	7.7	PQL	ug/Kg	UJ	C
4-METHYL-2-PENTANONE (MIBK)	0.38	U	0.38	MDL	7.7	PQL	ug/Kg	UJ	C
BROMOCHLOROMETHANE	0.32	U	0.32	MDL	3.9	PQL	ug/Kg	UJ	C
METHYLENE CHLORIDE	0.84	J	0.23	MDL	3.9	PQL	ug/Kg	U	B

Sample ID: SL-304-SA5B-SB-3.0-4.0 *Collected:* 3/9/2011 12:30:00 *Analysis Type:* RES *Dilution:* 0.82

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-HEXANONE	1.5	U	1.5	MDL	7.6	PQL	ug/Kg	UJ	C
4-METHYL-2-PENTANONE (MIBK)	0.37	U	0.37	MDL	7.6	PQL	ug/Kg	UJ	C
BROMOCHLOROMETHANE	0.31	U	0.31	MDL	3.8	PQL	ug/Kg	UJ	C
METHYLENE CHLORIDE	0.81	J	0.23	MDL	3.8	PQL	ug/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE101 **Laboratory: LL**

EDD Filename: DE101_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
I	Interference Check Sample Analysis
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Verification Correlation Coefficient
C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE101 **Laboratory: LL**

EDD Filename: DE101_v1 **eQAPP Name: CDM_SSFL_110509**

F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation
L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery Lower Estimation

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE101 **Laboratory: LL**

EDD Filename: DE101_v1 **eQAPP Name: CDM_SSFL_110509**

R	Continuing Calibration Verification Percent Recovery Lower Rejection
R	Continuing Calibration Verification Percent Recovery Upper Estimation
R	Continuing Calibration Verification Percent Recovery Upper Rejection
R	Continuing Calibration Verification Relative Response Factor
R	Initial Calibration Relative Response Factor
R	Initial Calibration Verification Percent Recovery Lower Estimation
R	Initial Calibration Verification Percent Recovery Lower Rejection
R	Initial Calibration Verification Percent Recovery Upper Estimation
R	Initial Calibration Verification Percent Recovery Upper Rejection
R	Initial Calibration Verification Relative Response Factor
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control Outlier Reports

DE101

Method Blank Outlier Report

Lab Reporting Batch ID: DE101 **Laboratory: LL**

EDD Filename: DE101_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P07508AB221918	3/17/2011 7:18:00 PM	CALCIUM PHOSPHORUS TIN	8.02 mg/Kg 1.34 mg/Kg 1.44 mg/Kg	SL-225-SA5B-SB-2.0-3.0 SL-304-SA5B-SB-3.0-4.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-225-SA5B-SB-2.0-3.0(RES)	TIN	3.01 mg/Kg	3.01U mg/Kg
SL-304-SA5B-SB-3.0-4.0(RES)	TIN	3.59 mg/Kg	3.59U mg/Kg

Method: 6020
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P07526AB222150A	3/18/2011 9:50:00 PM	LEAD ZINC	0.0105 mg/Kg 0.644 mg/Kg	SL-225-SA5B-SB-2.0-3.0 SL-304-SA5B-SB-3.0-4.0

Method: 8015M
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P73731AB320119A	3/16/2011 1:19:00 AM	EFH (C21-C30) EFH (C30-C40)	0.45 mg/Kg 1.3 mg/Kg	SL-225-SA5B-SB-2.0-3.0 SL-304-SA5B-SB-3.0-4.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-225-SA5B-SB-2.0-3.0(REA2)	EFH (C21-C30)	0.73 mg/Kg	1.4U mg/Kg
SL-225-SA5B-SB-2.0-3.0(REA2)	EFH (C30-C40)	1.7 mg/Kg	1.7U mg/Kg
SL-304-SA5B-SB-3.0-4.0(REA2)	EFH (C21-C30)	1.0 mg/Kg	1.4U mg/Kg
SL-304-SA5B-SB-3.0-4.0(REA2)	EFH (C30-C40)	2.6 mg/Kg	2.6U mg/Kg

Method: 8260B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB92B211246A	3/11/2011 12:46:00 PM	METHYLENE CHLORIDE	0.65 ug/Kg	SL-225-SA5B-SB-2.0-3.0 SL-304-SA5B-SB-3.0-4.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-225-SA5B-SB-2.0-3.0(RES)	METHYLENE CHLORIDE	0.84 ug/Kg	3.9U ug/Kg
SL-304-SA5B-SB-3.0-4.0(RES)	METHYLENE CHLORIDE	0.81 ug/Kg	3.8U ug/Kg

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE101 **Laboratory: LL**

EDD Filename: DE101_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8015M
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P10731AQ320152A (SL-225-SA5B-SB-2.0-3.0 SL -304-SA5B-SB-3.0-4.0)	EFH (C12-C14) EFH (C15-C20) EFH (C21-C30) EFH (C30-C40)	115 119 126 116	- - - -	66.00-113.00 66.00-113.00 66.00-113.00 66.00-113.00	- - - -	EFH (C12-C14) EFH (C15-C20) EFH (C21-C30) EFH (C30-C40)	J (all detects)

Method: 8082
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P10746AQ241933A **P10746AY241915A** (SL-225-SA5B-SB-2.0-3.0 SL -304-SA5B-SB-3.0-4.0)	Aroclor 5442	72	73	75.00-125.00	-	Aroclor 5432, 5442, 5460	J(all detects) UJ(all non-detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE101 **Laboratory: LL**

EDD Filename: DE101_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1625C
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-225-SA5B-SB-2.0-3.0	N-NITROSODIMETHYLAMINE	J	27.4	38.6	PQL	ng/Kg	J (all detects)

Method: 6010B
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-225-SA5B-SB-2.0-3.0	TIN Zirconium	J J	3.01 2.48	11.2 5.62	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-304-SA5B-SB-3.0-4.0	TIN Zirconium	J J	3.59 1.28	11.1 5.55	PQL PQL	mg/Kg mg/Kg	J (all detects)

Method: 6020
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-225-SA5B-SB-2.0-3.0	ANTIMONY SELENIUM SILVER	J J J	0.133 0.186 0.110	0.227 0.454 0.113	PQL PQL PQL	mg/Kg mg/Kg mg/Kg	J (all detects)
SL-304-SA5B-SB-3.0-4.0	ANTIMONY SELENIUM	J J	0.196 0.143	0.226 0.452	PQL PQL	mg/Kg mg/Kg	J (all detects)

Method: 7199
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-225-SA5B-SB-2.0-3.0	HEXAVALENT CHROMIUM	J	0.36	1.2	PQL	mg/Kg	J (all detects)
SL-304-SA5B-SB-3.0-4.0	HEXAVALENT CHROMIUM	J	0.51	1.2	PQL	mg/Kg	J (all detects)

Method: 7471A
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-304-SA5B-SB-3.0-4.0	MERCURY	J	0.0234	0.110	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE101 **Laboratory: LL**

EDD Filename: DE101_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8015M
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-225-SA5B-SB-2.0-3.0	EFH (C21-C30)	J	0.73	1.4	PQL	mg/Kg	J (all detects)
SL-304-SA5B-SB-3.0-4.0	EFH (C21-C30)	J	1.0	1.4	PQL	mg/Kg	J (all detects)

Method: 8260B
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-225-SA5B-SB-2.0-3.0	METHYLENE CHLORIDE	J	0.84	3.9	PQL	ug/Kg	J (all detects)
SL-304-SA5B-SB-3.0-4.0	METHYLENE CHLORIDE	J	0.81	3.8	PQL	ug/Kg	J (all detects)

Method: 8270C SIM
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-225-SA5B-SB-2.0-3.0	BENZO(A)PYRENE	J	0.84	1.9	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	0.48	1.9	PQL	ug/Kg	
	NAPHTHALENE	J	1.4	1.9	PQL	ug/Kg	
SL-304-SA5B-SB-3.0-4.0	Di-n-octylphthalate	J	12	21	PQL	ug/Kg	J (all detects)

Enclosure II

EPA Level IV Validation Reports

LDC Report# 25786C1a

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	March 9, 2011
LDC Report Date:	July 14, 2011
Matrix:	Soil/Water
Parameters:	Volatiles
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE101

Sample Identification

SL-304-SA5B-SB-3.0-4.0
SL-225-SA5B-SB-2.0-3.0
TB-030911

Introduction

This data review covers 2 soil samples and one water sample listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8260B for Volatiles.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 30.0% for all compounds.

In the case where the laboratory used a calibration curve to evaluate the compounds, all coefficients of determination (r^2) were greater than or equal to 0.990 .

Average relative response factors (RRF) for all compounds were within method and validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs) and 25.0% for all other compounds with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
3/11/11	4-Methyl-2-pentanone	43	SL-304-SA5B-SB-3.0-4.0 SL-225-SA5B-SB-2.0-3.0	J (all detects) UJ (all non-detects)	A
	2-Hexanone	51	VBLKB92	J (all detects) UJ (all non-detects)	

The percent differences (%D) of the second source calibration standard were less than or equal to 25.0% for all compounds with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
3/1/11 (bm01v02)	Bromochloromethane	36	SL-304-SA5B-SB-3.0-4.0 SL-225-SA5B-SB-2.0-3.0 VBLKB92	J (all detects) UJ (all non-detects)	A
2/10/11 (yf10v20)	Dichlorodifluoromethane Acetone	30 28	TB-030911 VBLKY51	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A
2/10/11 (yf10v31)	Chlorotrifluoroethene	32	TB-030911 VBLKY51	J (all detects) UJ (all non-detects)	A

All of the continuing calibration relative response factors (RRF) were within method and validation criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No volatile contaminants were found in the method blanks with the following exceptions:

Method Blank ID	Analysis Date	Compound TIC (RT in minutes)	Concentration	Associated Samples
VBLKB92	3/11/11	Methylene chloride	0.65 ug/Kg	SL-304-SA5B-SB-3.0-4.0 SL-225-SA5B-SB-2.0-3.0

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated method blanks with the following exceptions:

Sample	Compound TIC (RT in minutes)	Reported Concentration	Modified Final Concentration
SL-304-SA5B-SB-3.0-4.0	Methylene chloride	0.81 ug/Kg	3.8U ug/Kg
SL-225-SA5B-SB-2.0-3.0	Methylene chloride	0.84 ug/Kg	3.9U ug/Kg

Sample TB-030911 was identified as a trip blank. No volatile contaminants were found in this blank.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE101	All compounds reported below the RL.	J (all detects)	A

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was acceptable.

XV. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Volatiles - Data Qualification Summary - SDG DE101

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE101	SL-304-SA5B-SB-3.0-4.0 SL-225-SA5B-SB-2.0-3.0	4-Methyl-2-pentanone 2-Hexanone	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A	Continuing calibration (%D) (C)
DE101	SL-304-SA5B-SB-3.0-4.0 SL-225-SA5B-SB-2.0-3.0	Bromochloromethane	J (all detects) UJ (all non-detects)	A	Continuing calibration (ICV %D) (C)
DE101	TB-030911	Dichlorodifluoromethane Acetone Chlorotrifluoroethene	J (all detects) UJ (all non-detects)	A	Continuing calibration (ICV %D) (C)
DE101	SL-304-SA5B-SB-3.0-4.0 SL-225-SA5B-SB-2.0-3.0 TB-030911	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
Volatiles - Laboratory Blank Data Qualification Summary - SDG DE101

SDG	Sample	Compound TIC (RT in minutes)	Modified Final Concentration	A or P	Code
DE101	SL-304-SA5B-SB-3.0-4.0	Methylene chloride	3.8U ug/Kg	A	B
DE101	SL-225-SA5B-SB-2.0-3.0	Methylene chloride	3.9U ug/Kg	A	B

Santa Susana Field Laboratory
Volatiles - Field Blank Data Qualification Summary - SDG DE101

No Sample Data Qualified in this SDG

LDC #: 25786C1a **VALIDATION COMPLETENESS WORKSHEET** Date: 7/11/11

SDG #: DE101 Level IV Page: 1 of 1

Laboratory: Lancaster Laboratories Reviewer: JG

2nd Reviewer: [illegible]

METHOD: GC/MS Volatiles (EPA SW 846 Method 8260B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 3/09/11
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	A	% RSD ≤ 30 ✓
IV.	Continuing calibration/ICV	SW	CCV/ICV ≤ 25
V.	Blanks	SW	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	N	Client spec
VIII.	Laboratory control samples	A	LCS/D
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A	
XI.	Target compound identification	A	
XII.	Compound quantitation/CRQLs	A	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	A	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	N	
XVII.	Field blanks	ND	TB = 3

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: Soil + Water

1	SL-304-SA5B-SB-3.0-4.0 S	11	VBLKB92	21		31	
2	SL-225-SA5B-SB-2.0-3.0 ↓	12	VBLKY51	22		32	
3	TB-030911 W	13		23		33	
4		14		24		34	
5		15		25		35	
6		16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

LDC #: 25786 C1a

VALIDATION FINDINGS CHECKLIST

Reviewer: JVG
2nd Reviewer: C

Method: Volatiles (EPA SW 846 Method 8260B)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. GC/MS Instrument performance check				
Were the BFB performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
III. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Was a curve fit used for evaluation?	✓			
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?	✓			
Were all percent relative standard deviations (%RSD) ≤ 30% and relative response factors (RRF) ≥ 0.05?	✓			
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓			
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Were all percent differences (%D) < 25% and relative response factors (RRF) > 0.05?		✓		
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed at least once every 12 hours for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.	✓			
VI. Surrogate spikes				
Were all surrogate %R within QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.		✓		
Was a MS/MSD analyzed every 20 samples of each matrix?		✓		
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			

LDC #: 25786 C1a

VALIDATION FINDINGS CHECKLIST

Reviewer: JVG
2nd Reviewer: [illegible]

Validation Area	Yes	No	NA	Findings/Comments
Was an LCS analyzed per analytical batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?		✓		
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
X. Internal standards				
Were internal standard area counts within -50% or +100% of the associated calibration standard?	✓			
Were retention times within ± 30 seconds of the associated calibration standard?	✓			
XI. Target compound identification				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?	✓			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	✓			
Were chromatogram peaks verified and accounted for?	✓			
XII. Compound quantitation/CRQLs				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	✓			
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XIII. Tentatively identified compounds (TICs)				
Were the major ions (> 10 percent relative intensity) in the reference spectrum evaluated in sample spectrum?			✓	
Were relative intensities of the major ions within ± 20% between the sample and the reference spectra?			✓	
Did the raw data indicate that the laboratory performed a library search for all required peaks in the chromatograms (samples and blanks)?		✓		
XIV. System performance				
System performance was found to be acceptable.	✓			
XV. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XVI. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XVII. Field blanks				
Field blanks were identified in this SDG.	✓			
Target compounds were detected in the field blanks.		✓		

TARGET COMPOUND WORKSHEET

METHOD: VOA (EPA SW 846 Method 8260B)

A. Chloromethane*	U. 1,1,2-Trichloroethane	OO. 2,2-Dichloropropane	III. n-Butylbenzene	CCCC.1-Chlorohexane
B. Bromomethane	V. Benzene	PP. Bromochloromethane	JJJ. 1,2-Dichlorobenzene	DDDD. Isopropyl alcohol
C. Vinyl choride**	W. trans-1,3-Dichloropropene	QQ. 1,1-Dichloropropene	KKK. 1,2,4-Trichlorobenzene	EEEE. Acetonitrile
D. Chloroethane	X. Bromoform*	RR. Dibromomethane	LLL. Hexachlorobutadiene	FFFF. Acrolein
E. Methylene chloride	Y. 4-Methyl-2-pentanone	SS. 1,3-Dichloropropane	MMM. Naphthalene	GGGG. Acrylonitrile
F. Acetone	Z. 2-Hexanone	TT. 1,2-Dibromoethane	NNN. 1,2,3-Trichlorobenzene	HHHH. 1,4-Dioxane
G. Carbon disulfide	AA. Tetrachloroethene	UU. 1,1,1,2-Tetrachloroethane	OOO. 1,3,5-Trichlorobenzene	IIII. Isobutyl alcohol
H. 1,1-Dichloroethene**	BB. 1,1,2,2-Tetrachloroethane*	VV. Isopropylbenzene	PPP. trans-1,2-Dichloroethene	JJJJ. Methacrylonitrile
I. 1,1-Dichloroethane*	CC. Toluene**	WW. Bromobenzene	QQQ. cis-1,2-Dichloroethene	KKKK. Propionitrile
J. 1,2-Dichloroethene, total	DD. Chlorobenzene*	XX. 1,2,3-Trichloropropane	RRR. m,p-Xylenes	LLLL. Ethyl ether
K. Chloroform**	EE. Ethylbenzene**	YY. n-Propylbenzene	SSS. o-Xylene	MMMM. Benzyl chloride
L. 1,2-Dichloroethane	FF. Styrene	ZZ. 2-Chlorotoluene	TTT. 1,1,2-Trichloro-1,2,2-trifluoroethane	NNNN. Chlorotrifluoroethene
M. 2-Butanone	GG. Xylenes, total	AAA. 1,3,5-Trimethylbenzene	UUU. 1,2-Dichlorotetrafluoroethane	OOOO.
N. 1,1,1-Trichloroethane	HH. Vinyl acetate	BBB. 4-Chlorotoluene	VVV. 4-Ethyltoluene	PPPP.
O. Carbon tetrachloride	II. 2-Chloroethylvinyl ether	CCC. tert-Butylbenzene	WWW. Ethanol	QQQQ.
P. Bromodichloromethane	JJ. Dichlorodifluoromethane	DDD. 1,2,4-Trimethylbenzene	XXX. Di-isopropyl ether	RRRR.
Q. 1,2-Dichloropropane**	KK. Trichlorofluoromethane	EEE. sec-Butylbenzene	YYY. tert-Butanol	SSSS.
R. cis-1,3-Dichloropropene	LL. Methyl-tert-butyl ether	FFF. 1,3-Dichlorobenzene	ZZZ. tert-Butyl alcohol	TTTT.
S. Trichloroethene	MM. 1,2-Dibromo-3-chloropropane	GGG. p-Isopropyltoluene	AAAA. Ethyl tert-butyl ether	UUUU.
T. Dibromochloromethane	NN. Methyl ethyl ketone	HHH. 1,4-Dichlorobenzene	BBBB. tert-Amyl methyl ether	VVVV.

* = System performance check compounds (SPCC) for RRF ; ** = Calibration check compounds (CCC) for %RSD.

LDC #: 25786 C1a

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Reviewer: JDG
2nd Reviewer: [illegible]

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)
Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?
Y N N/A Were percent differences (%D) and relative response factors (RRF) within method criteria for all CCC's and SPCC's ?
Y N N/A Were all %D and RRFs within the validation criteria of ≤25 %D and ≥0.05 RRF ?

#	Date	Standard ID	Compound	Finding %D (Limit: ≤25.0%)	Finding RRF (Limit: ≥0.05)	Associated Samples	Qualifications
	3/01/11	bm01v02 (1CV)	PP	36		1, 2, VBLKB92	J/UJ/A (C)
	2/10/11	yf10v20 (1CV)	JJ	30		3, VBLKY51	
			F	28			
	2/10/11	yf10v31 (1CV)	NNNN	32			
	3/11/11	bm11c01 (CCV)	Y	43		1, 2, VBLKB92	
			Z	51			

LDC #: 25786 C1a

VALIDATION FINDINGS WORKSHEET
Blanks

Page: 1 of 1
Reviewer: NG
2nd Reviewer: C

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)
Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a method blank associated with every sample in this SDG?
Y N N/A Was a method blank analyzed at least once every 12 hours for each matrix and concentration?
Y N N/A Was there contamination in the method blanks? If yes, please see the qualifications below.

Blank analysis date: 3/11/11
Conc. units: ug/kg Associated Samples: 1, 2 Code: B

Compound	Blank ID	Sample Identification								
	VBlkB92	1	2							
Methylene chloride E	0.65	0.81/3.81	0.84/3.94							
Acetone										
CRQL										

Blank analysis date:
Conc. units: Associated Samples:

Compound	Blank ID	Sample Identification								
Methylene chloride										
Acetone										
CRQL										

All results were qualified using the criteria stated below except those circled.

Note: Common contaminants such as Methylene chloride, Acetone, 2-Butanone, Carbon disulfide and TICs that were detected in samples within ten times the associated method blank concentration were qualified as not detected, "U". Other contaminants within five times the method blank concentration were also qualified as not detected, "U".

LDC #: 25786 G1a

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 2
Reviewer: JVG
2nd Reviewer: [illegible]

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

$RRF = (A_x)(C_{is})/(A_{is})(C_x)$
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

A_x = Area of Compound
C_x = Concentration of compound
S= Standard deviation of the RRFs

A_{is} = Area of associated internal standard
C_{is} = Concentration of internal standard
X = Mean of the RRFs

#	Standard ID	Calibration Date	Compound (IS)	Reported RRF (RRF 50 std)	Recalculated RRF (RRF 50 std)	Reported Average RRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL	02/10/11	Acetone (FBZ)	0.0410	0.0410	0.0429	0.0429	14	14
	HP09953		Toluene (CBZ)	1.0041	1.0041	0.9969	0.9969	3	3
			1,1,2,2-TCA (DCB)	0.9767	0.9767	0.9569	0.9569	7	7

Cis/Cx	Ax	Ais
50/100	89674	1092991
50/50	801855	798571
50/50	469555	480763

Conc	Acetone	Toluene	1,1,2,2-TCA
4	0.0509	0.9810	0.9274
10	0.0498	1.0449	1.0560
20	0.0411	0.9670	0.9796
50	0.0410	1.0041	0.9767
100	0.0392	0.9917	0.9563
300	0.0352	0.9929	0.8454
S =	0.0429	0.9969	0.9569
X =	0.0062	0.0266	0.0693

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25786 C1a

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: JVG
2nd Reviewer: [illegible]

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

$RRF = (A_x)(C_{is})/(A_{is})(C_x)$
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

A_x = Area of Compound
C_x = Concentration of compound
S= Standard deviation of the RRFs

A_{is} = Area of associated internal standard
C_{is} = Concentration of internal standard
X = Mean of the RRFs

#	Standard ID	Calibration Date	Compound (IS)	Reported RRF (RRF 50 std)	Recalculated RRF (RRF 50 std)	Reported Average RRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL	03/01/11	Methylene chloride (FBZ)	0.3130	0.3130	0.3108	0.3108	9	9
	HP09953		Toluene (CBZ)	0.8498	0.8498	0.8282	0.8282	7	7
			1,1,2,2-TCA (DCB)	0.6532	0.6532	0.6201	0.6201	8	8

Cis/Cx	Ax	Ais
50/50	386013	1233308
50/50	744690	876328
50/50	348637	533776

Conc	MeCl2	Toluene	1,1,2,2-TCA
4	0.3324	0.7056	0.5983
10	0.3397	0.8565	0.6441
20	0.3240	0.8626	0.6605
50	0.3130	0.8498	0.6532
100	0.2960	0.8430	0.6335
300	0.2596	0.8516	0.5312
S =	0.3108	0.8282	0.6201
X =	0.0294	0.0604	0.0487

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC # 15786 C1a

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: JVG
2nd Reviewer:

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
RRF = (Ax)(Cis)/(Ais)(Cx)

Where:
ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
Ax = Area of compound,
Cx = Concentration of compound,
Ais = Area of associated internal standard
Cis = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (IS)	Average RRF (Initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported % D	Recalculated %D
1	bm11c01	3/11/11	Methylene chloride (FBZ)	0.3108	0.3329	0.3329	7	7
	HP09953		Toluene (CBZ)	0.8282	0.8396	0.8396	1	1
			1,1,2,2-TCA (DCB)	0.6201	0.6949	0.6949	12	12
2	ym15c01	3/15/11	Acetone (FBZ)	0.0429	0.0349	0.0349	19	19
	HP09953		Toluene (CBZ)	0.9969	0.9799	0.9799	2	2
			1,1,2,2-TCA (DCB)	0.9569	0.9412	0.9412	2	2

CCV1

Cis/Cx	Compound	Response cpd	Response IS
50/50	Methylene chloride (FBZ)	371724	1116713
50/50	Toluene (CBZ)	681059	811125
50/50	1,1,2,2-TCA (DCB)	346480	498629

CCV2

Cis/Cx	Compound	Response cpd	Response IS
50/100	Acetone (FBZ)	87554	1255591
50/50	Toluene (CBZ)	907450	926042
50/50	1,1,2,2-TCA (DCB)	523870	556600

LDC #: 25786 C1C

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: JVG
2nd reviewer: [illegible]

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: A 1

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8	50	49.34	99	99	0
Bromofluorobenzene		47.41	95	95	
1,2-Dichloroethane-d4		50.32	101	101	
Dibromofluoromethane		49.64	99	99	

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Dibromofluoromethane					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Dibromofluoromethane					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Dibromofluoromethane					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Dibromofluoromethane					

LDC #: 25786 C1a

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample Results Verification

Reviewer: DVG
2nd Reviewer: [illegible]

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratoy control sample and laboratory control sample duplicate (if applicable) were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * SSC/SA Where: SSC = Spiked sample concentration
SA = Spike added

RPD = I LCSC - LCSDC I * 2/(LCSC + LCSDC) LCSC = Laboraotry control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCS ID: LCS/D1B92

Compound	Spike Added (ug/kg)		Spiked Sample Concentration (ug/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalculated
1,1-Dichloroethene	20.0	20.0	22.78	22.12	114	114	111	111	3	3
Trichloroethene	↓	↓	20.23	20.05	101	101	100	100	1	1
Benzene	↓	↓	21.23	20.79	106	106	104	104	✓	✓
Toluene	↓	↓	20.32	19.82	102	102	99	99	✓	2.5
Chlorobenzene	↓	↓	19.75	19.30	99	99	96	96.5	✓	2

Comments: Refer to Laboratory Control Sample findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

DC #: 25786 C1a

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: JVG
2nd reviewer: C

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

Y N N/A Were all reported results recalculated and verified for all level IV samples?

Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(DF)}{(A_{is})(RRF)(V_o)(\%S)}$

A_x	=	Area of the characteristic ion (EICP) for the compound to be measured
A_{is}	=	Area of the characteristic ion (EICP) for the specific internal standard
I_s	=	Amount of internal standard added in nanograms (ng)
RRF	=	Relative response factor of the calibration standard.
V_o	=	Volume or weight of sample pruged in milliliters (ml) or grams (g).
Df	=	Dilution factor.
%S	=	Percent solids, applicable to soils and solid matrices only.

Example:

Sample I.D. # 1, MeCl

Conc. = $\frac{(5517)(50.0)(5\,ml)}{(1039581)(0.3100)(6.11\,g)(0.867)}$

= 0.806

≈ 0.81 ug/kg

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	March 9, 2011
LDC Report Date:	July 14, 2011
Matrix:	Soil/Water
Parameters:	1,4-Dioxane
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE101

Sample Identification

SL-304-SA5B-SB-3.0-4.0
SL-225-SA5B-SB-2.0-3.0
TB-030911

Introduction

This data review covers 2 soil samples and one water sample listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8260B using Selected Ion Monitoring (SIM) for 1,4-Dioxane.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 30.0% for 1,4-Dioxane.

Average relative response factors (RRF) for all compounds were within method and validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 25.0% for 1,4-Dioxane.

The percent differences (%D) of the second source calibration standard were less than or equal to 25.0% for 1,4-Dioxane.

All of the continuing calibration relative response factors (RRF) were within method and validation criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No 1,4-dioxane was found in the method blanks.

Sample TB-030911 was identified as a trip blank. No 1,4-dioxane was found in this blank.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE101	All compounds reported below the RL.	J (all detects)	A

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was acceptable.

XV. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
1,4-Dioxane - Data Qualification Summary - SDG DE101

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE101	SL-304-SA5B-SB-3.0-4.0 SL-225-SA5B-SB-2.0-3.0 TB-030911	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
1,4-Dioxane - Laboratory Blank Data Qualification Summary - SDG DE101

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
1,4-Dioxane - Field Blank Data Qualification Summary - SDG DE101

No Sample Data Qualified in this SDG

LDC #: 25786C1b

SDG #: DE101

Laboratory: Lancaster Laboratories

VALIDATION COMPLETENESS WORKSHEET

Level IV

Date: 7/11/11

Page: 1 of 1

Reviewer: DV

2nd Reviewer: [illegible]

METHOD: GC/MS 1,4-Dioxane (EPA SW 846 Method 8260B-SIM)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 3/09/11
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	A	% RSD ≤ 30%
IV.	Continuing calibration/ICV	A	CCV/ICV ≤ 25%
V.	Blanks	A	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	N	client spec
VIII.	Laboratory control samples	A	LCS/D
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A	
XI.	Target compound identification	A	
XII.	Compound quantitation/CRQLs	A	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	A	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	N	
XVII.	Field blanks	ND	TB = 3

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:

1	SL-304-SA5B-SB-3.0-4.0 S	11	VBLK E57	21		31	
2	SL-225-SA5B-SB-2.0-3.0	12	VBLK E55	22		32	
3	TB-030911 W	13		23		33	
4		14		24		34	
5		15		25		35	
6		16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

LDC #: 25786 C1b

VALIDATION FINDINGS CHECKLIST

Reviewer: JVG
2nd Reviewer: A

Method: Volatiles (EPA SW 846 Method 8260B)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. GC/MS instrument performance check				
Were the BFB performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
III. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Was a curve fit used for evaluation?		✓		
Did the initial calibration meet the curve fit acceptance criteria of > 0.990?			✓	
Were all percent relative standard deviations (%RSD) ≤ 30% and relative response factors (RRF) > 0.05?	✓			
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓			
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Were all percent differences (%D) < 25% and relative response factors (RRF) > 0.05?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed at least once every 12 hours for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.		✓		
Was a MS/MSD analyzed every 20 samples of each matrix?		✓		
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			

LDC #: 25786C1b

VALIDATION FINDINGS CHECKLIST

Reviewer: JVG
2nd Reviewer: C

Validation Area	Yes	No	NA	Findings/Comments
Was an LCS analyzed per analytical batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?		✓		
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
X. Internal standards				
Were internal standard area counts within -50% or +100% of the associated calibration standard?	✓			
Were retention times within ± 30 seconds of the associated calibration standard?	✓			
XI. Target compound identification				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?	✓			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	✓			
Were chromatogram peaks verified and accounted for?	✓			
XII. Compound quantitation/CRQLs				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	✓			
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XIII. Tentatively identified compounds (TICs)				
Were the major ions (> 10 percent relative intensity) in the reference spectrum evaluated in sample spectrum?			✓	
Were relative intensities of the major ions within ± 20% between the sample and the reference spectra?			✓	
Did the raw data indicate that the laboratory performed a library search for all required peaks in the chromatograms (samples and blanks)?			✓	
XIV. System performance				
System performance was found to be acceptable.	✓			
XV. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XVI. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XVII. Field blanks				
Field blanks were identified in this SDG.	✓			
Target compounds were detected in the field blanks.		✓		

LDC # 25786 C1b

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: JVG
2nd Reviewer: [illegible]

METHOD: GC/MS VOA (EPA SW 846 Method 8260B-SIM)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

RRF = (Ax)(Cis)/(Ais)(Cx)
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

Ax = Area of Compound
Cx = Concentration of compound
S= Standard deviation of the RRFs

Ais = Area of associated internal standard
Cis = Concentration of internal standard
X = Mean of the RRFs

#	Standard ID	Calibration Date	Compound (IS)	Reported RRF (RRF 10 std)	Recalculated RRF (RRF 10 std)	Reported Average RRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL	11/1/10	1,4-Dioxane (1,4-D-d8)	1.3193	1.3359	1.3219	1.3219	1	1
	HP15648								

Cis/Cx	Ax	Ax
10/10	29359	21977

Conc	RRF
0.5	1.3291
2.0	1.3004
5.0	1.3359
10.0	1.3193
25.0	1.3248
X =	1.3219
S =	0.0135

LDC # 25786 C1b

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: JVG
2nd Reviewer: C

METHOD: GC/MS VOA (EPA SW 846 Method 8260B-SIM)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

RRF = (Ax)(Cis)/(Ais)(Cx)
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

Ax = Area of Compound
Cx = Concentration of compound
S= Standard deviation of the RRFs

Ais = Area of associated internal standard
Cis = Concentration of internal standard
X = Mean of the RRFs

#	Standard ID	Calibration Date	Compound (IS)	Reported RRF (RRF 10 std)	Recalculated RRF (RRF 10 std)	Reported Average RRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL	11/7/10	1,4-Dioxane (1,4-D-d8)	1.3392	1.3392	1.3396	1.3396	2	2
	HP15648								

Cis/Cx	Ax	Ax
10/10	25596	19113

Conc	RRF
0.5	1.3082
2.0	1.3793
5.0	1.3539
10.0	1.3392
25.0	1.3175
X =	1.3396
S =	0.0285

LDC #: 25786C1b

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: JVG
2nd reviewer: A

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: 1

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8	10	9.496	95	95	0
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Dibromofluoromethane					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Dibromofluoromethane					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Dibromofluoromethane					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Dibromofluoromethane					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Dibromofluoromethane					

LDC #: 25786C1b

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample Results Verification

Reviewer: JVG
2nd Reviewer: [illegible]

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratoy control sample and laboratory control sample duplicate (if applicable) were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * SSC/SA Where: SSC = Spiked sample concentration
SA = Spike added

RPD = I LCSC - LCSDC I * 2/(LCSC + LCSDC) LCSC = Laboraotry control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCS ID: LCS/D # 57

Compound	Spike Added (ug/kg)		Spiked Sample Concentration (ug/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
1,4-Dioxane ~~1,1 Dichloroethene~~	125	125	135.79	130.19	109	109	104	104	4	4
Trichloroethene										
Benzene										
Toluene										
Chlorobenzene										

Comments: Refer to Laboratory Control Sample findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

.DC #: 25786C1b

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: JVG
2nd reviewer: [illegible]

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

Y N N/A Were all reported results recalculated and verified for all level IV samples?

Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(DF)}{(A_{is})(RRF)(V_o)(\%S)}$

A_x	=	Area of the characteristic ion (EICP) for the compound to be measured
A_{is}	=	Area of the characteristic ion (EICP) for the specific internal standard
I_s	=	Amount of internal standard added in nanograms (ng)
RRF	=	Relative response factor of the calibration standard.
V_o	=	Volume or weight of sample pruged in milliliters (ml) or grams (g).
Df	=	Dilution factor.
%S	=	Percent solids, applicable to soils and solid matrices only.

Example:

Sample I.D. _____ , ND

Conc. = (_____)(_____)(_____) / (_____)(_____)(_____)(_____)

=

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification

LDC Report# 25786C2a

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	March 9, 2011
LDC Report Date:	July 14, 2011
Matrix:	Soil
Parameters:	Semivolatiles
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE101

Sample Identification

SL-304-SA5B-SB-3.0-4.0
SL-225-SA5B-SB-2.0-3.0

Introduction

This data review covers 2 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8270C for Semivolatiles.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 30.0% for all compounds.

In the case where the laboratory used a calibration curve to evaluate the compounds, all coefficients of determination (r^2) were greater than or equal to 0.990 .

Average relative response factors (RRF) for all compounds were within method and validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs) and 25.0% for all other compounds.

The percent differences (%D) of the second source calibration standard were less than or equal to 25.0% for all compounds.

All of the continuing calibration relative response factors (RRF) were within method and validation criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No semivolatile contaminants were found in the method blanks.

No field blanks were identified in this SDG.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE101	All compounds reported below the RL.	J (all detects)	A

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was acceptable.

XV. Overall Assessment

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Semivolatiles - Data Qualification Summary - SDG DE101

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE101	SL-304-SA5B-SB-3.0-4.0 SL-225-SA5B-SB-2.0-3.0	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
Semivolatiles - Laboratory Blank Data Qualification Summary - SDG DE101

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Semivolatiles - Field Blank Data Qualification Summary - SDG DE101

No Sample Data Qualified in this SDG

LDC #: 25786C2a

SDG #: DE101

Laboratory: Lancaster Laboratories

VALIDATION COMPLETENESS WORKSHEET

Level IV

Date: 7/11/11

Page: 1 of 1

Reviewer: DVG

2nd Reviewer: C

METHOD: GC/MS Semivolatiles (EPA SW 846 Method 8270C)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 3/09/11
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	A	% RSD ≤ 30% r²
IV.	Continuing calibration/ICV	A	CCV/ICV ≤ 25%
V.	Blanks	A	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	N	Client spec
VIII.	Laboratory control samples	A	LCS
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A	
XI.	Target compound identification	A	
XII.	Compound quantitation/CRQLs	A	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	A	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	N	
XVII.	Field blanks	N	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:

Soil

1	SL-304-SA5B-SB-3.0-4.0	11	SBLKLA 074	21		31	
2	SL-225-SA5B-SB-2.0-3.0	12		22		32	
3		13		23		33	
4		14		24		34	
5		15		25		35	
6		16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

DC #: 25786 C2a

VALIDATION FINDINGS CHECKLIST

Reviewer: JVR
2nd Reviewer: A

Method: Semivolatiles (EPA SW 846 Method 8270C)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. GC/MS Instrument performance check				
Were the DFTPP performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
III. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Was a curve fit used for evaluation?	✓			
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?	✓			
Were all percent relative standard deviations (%RSD) ≤ 30% and relative response factors (RRF) ≥ 0.05?	✓			
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓			
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Were all percent differences (%D) ≤ 25% and relative response factors (RRF) ≥ 0.05?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within QC limits?	✓			
If 2 or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R?			✓	
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.		✓		
Was a MS/MSD analyzed every 20 samples of each matrix?		✓		
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			

DC #: 25786 C2a

VALIDATION FINDINGS CHECKLIST

Reviewer: NV
2nd Reviewer: C

Validation Area	Yes	No	NA	Findings/Comments
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?		✓		
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
X. Internal standards				
Were internal standard area counts within -50% or +100% of the associated calibration standard?	✓			
Were retention times within ± 30 seconds from the associated calibration standard?	✓			
XI. Target compound identification				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?	✓			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	✓			
Were chromatogram peaks verified and accounted for?	✓			
XII. Compound quantitation/CRQLs				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	✓			
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XIII. Tentatively identified compounds (TICs)				
Were the major ions (> 10 percent relative intensity) in the reference spectrum evaluated in sample spectrum?			✓	
Were relative intensities of the major ions within ± 20% between the sample and the reference spectra?			✓	
Did the raw data indicate that the laboratory performed a library search for all required peaks in the chromatograms (samples and blanks)?		✓		
XIV. System performance				
System performance was found to be acceptable.	✓			
XV. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XVI. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XVII. Field blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

LDC #: 25786C2a

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: JVG
2nd Reviewer: [illegible]

METHOD: GC/MS SVOA (EPA SW 846 Method 8270C)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

$RRF = (A_x)(C_{is})/(A_{is})(C_x)$
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

A_x = Area of Compound
C_x = Concentration of compound,
S= Standard deviation of the RRFs,

A_{is} = Area of associated internal standard
C_{is} = Concentration of internal standard
X = Mean of the RRFs

#	Standard ID	Calibration Date	Compound (IS)	Reported RRF (RRF 40 std)	Recalculated RRF (RRF 40 std)	Reported Average RRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL	03/18/11	Phenol (IS1)	3.164	3.164	3.132	3.132	3	3
			2,4-Dichlorophenol (IS2)	0.334	0.334	0.325	0.325	4	4
	HP09572		2,4,5-Trichlorophenol (IS3)	0.425	0.425	0.415	0.415	6	6
			Pentachlorophenol (IS4)	0.140	0.140	0.133	0.133	10	10
			Benzidine (IS5)	0.971	0.971	0.900	0.900	6	6

Conc IS/Cpd	Area cpd	Area IS
40/50	948454	239817
40/50	429574	1028868
40/50	368237	693280
40/50	225994	1291520
40/150	5204665	1429812

Conc	Phenol	2,4-DCP	2,4,5-TCP	PCP	Benzidine
5	3.025	0.315	0.411	0.117	0.847
15	3.025	0.307	0.378	0.122	0.866
30	3.116	0.320	0.401	0.126	0.899
50	3.164	0.334	0.425	0.140	0.971
80	3.315	0.340	0.453	0.148	0.956
120	3.144	0.333	0.421	0.146	0.859
X =	3.132	0.325	0.415	0.133	0.900
S =	0.108	0.013	0.025	0.013	0.053

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC # 25786C2a

VALIDATION FINDINGS WORSHEET
Continuing Calibration Calculation Verification

Reviewer: JVG
2nd Reviewer: C

METHOD: GC/MS SVOA (EPA SW 846 Method 8270C)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
RRF = (Ax)(Cis)/(Ais)(Cx)

ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
Ax = Area of compound,

Cx = Concentration of compound,
Ais = Area of associated internal standard
Cis = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (IS)	Average RRF (Initial)	Reported RRF (CCV)	Recalculated RRF (CCV)	Reported % D	Recalculated %D
1	ec1111	03/22/11	Phenol (IS1)	3.132	3.262	3.262	4	4
			2,4-Dichlorophenol (IS2)	0.325	0.336	0.336	3	3
	HP09572		2,4,5-Trichlorophenol (IS3)	0.415	0.432	0.432	4	4
			Pentachlorophenol (IS4)	0.133	0.143	0.143	7	7.5
			Benzidine (IS5)	0.900	0.942	0.942	5	5

CCV1

Compound (IS)	Cis/Cx	Ax	Ais
Phenol (IS1)	40/80	1323116	202784
2,4-Dichlorophenol (IS2)	40/80	630874	938630
2,4,5-Trichlorophenol (IS3)	40/80	547610	634444
Pentachlorophenol (IS4)	40/80	329643	1150918
Benzidine (IS5)	40/240	6683296	1182958

LDC #: 26786C 2a

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: JW
2nd reviewer: C

METHOD: GC/MS Semivolatiles (EPA SW 846 Method 8270C)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5	100	66.51	67	67	0
2-Fluorobiphenyl		77.03	77	77	
Terphenyl-d14		85.20	85	85	
Phenol-d5	200	150.68	75	75	
2-Fluorophenol		156.20	78	78	
2,4,6-Tribromophenol		146.27	73	73	
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5					
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5					
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: JVG
2nd Reviewer: C

METHOD: GC/MS BNA (EPA SW 846 Method 8270C)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SC/SA Where: SSC = Spike concentration
SA = Spike added

RPD = I LCSC - LCSDC I * 2/(LCSC + LCSDC) LCSC = Laboraotry control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCS/LCSD samples: 074LA LCS

Compound	Spike Added (ug/kg)		Spike Concentration (ug/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalculated
Phenol	1666.67	NA	1546.5	NA	93	93				
N-Nitroso-di-n-propylamine			1422.08		85	85				
4-Chloro-3-methylphenol			1585.76		95	95				
Acenaphthene			1509.04		91	91				
Pentachlorophenol			1502.15		90	90				
Pyrene			1692.03		102	102				

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

DC #: 25 786 C 2a

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: JVG

2nd reviewer: C

METHOD: GC/MS BNA (EPA SW 846 Method 8270C)

Y N N/A Were all reported results recalculated and verified for all level IV samples?

Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(V_t)(DF)(2.0)}{(A_{is})(RRF)(V_o)(V_i)(\%S)}$

A_x	=	Area of the characteristic ion (EICP) for the compound to be measured
A_{is}	=	Area of the characteristic ion (EICP) for the specific internal standard
I_s	=	Amount of internal standard added in nanograms (ng)
V_o	=	Volume or weight of sample extract in milliliters (ml) or grams (g).
V_i	=	Volume of extract injected in microliters (ul)
V_t	=	Volume of the concentrated extract in microliters (ul)
Df	=	Dilution Factor.
%S	=	Percent solids, applicable to soil and solid matrices only.
2.0	=	Factor of 2 to account for GPC cleanup

Example:

Sample I.D. _____ , _____ ND

Conc. = (_____)(_____)(_____)(_____)(_____) / (_____)(_____)(_____)(_____)(_____)

=

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification

LDC Report# 25786C2b

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	March 9, 2011
LDC Report Date:	July 14, 2011
Matrix:	Soil
Parameters:	Semivolatiles
Validation Level:	Level IV
Laboratory:	Lancaster laboratories
Sample Delivery Group (SDG):	DE101

Sample Identification

SL-304-SA5B-SB-3.0-4.0
SL-225-SA5B-SB-2.0-3.0

Introduction

This data review covers 2 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Semivolatiles.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 30.0% for all compounds.

In the case where the laboratory used a calibration curve to evaluate the compounds, all coefficients of determination (r^2) were greater than or equal to 0.990 .

Average relative response factors (RRF) for all compounds were within method and validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs) and 25.0% for all other compounds.

The percent differences (%D) of the second source calibration standard were less than or equal to 25.0% for all compounds.

All of the continuing calibration relative response factors (RRF) were within method and validation criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No semivolatile contaminants were found in the method blanks.

No field blanks were identified in this SDG.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE101	All compounds reported below the RL.	J (all detects)	A

XIII. Tentatively Identified Compounds (TICs)

All tentatively identified compounds were within validation criteria.

XIV. System Performance

The system performance was acceptable.

XV. Overall Assessment

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Semivolatiles- Data Qualification Summary - SDG DE101

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE101	SL-304-SA5B-SB-3.0-4.0 SL-225-SA5B-SB-2.0-3.0	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
Semivolatiles- Laboratory Blank Data Qualification Summary - SDG DE101

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Semivolatiles- Field Blank Data Qualification Summary - SDG DE101

No Sample Data Qualified in this SDG

LDC #: 25786C2b

VALIDATION COMPLETENESS WORKSHEET

Level IV

SDG #: DE101

Laboratory: Lancaster Laboratories

Date: 7/11/11

Page: 1 of 1

Reviewer: JVG

2nd Reviewer: [illegible]

METHOD: GC/MS ~~Polynuclear Aromatic Hydrocarbons~~ SVOA (EPA SW 846 Method 8270C-SIM)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 3/09/11
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	A	% RSD ≤ 30 % r ✓
IV.	Continuing calibration/ICV	A	CCV/ICV ≤ 25 %
V.	Blanks	JVG ~~SW~~ A	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	N	client spec
VIII.	Laboratory control samples	A	LCS
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A	
XI.	Target compound identification	A	
XII.	Compound quantitation/CRQLs	A	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	A	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	N	
XVII.	Field blanks	N	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: Soil

1	SL-304-SA5B-SB-3.0-4.0	11	SBLKLB0749	21		31	
2	SL-225-SA5B-SB-2.0-3.0	12		22		32	
3		13		23		33	
4		14		24		34	
5		15		25		35	
6		16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

DC #: 25786 C26

VALIDATION FINDINGS CHECKLIST

Reviewer: JVR
2nd Reviewer: [illegible]

Method: Semivolatiles (EPA SW 846 Method 8270C)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. GC/MS Instrument performance check				
Were the DFTPP performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
III. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Was a curve fit used for evaluation?	✓			
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?	✓			
Were all percent relative standard deviations (%RSD) ≤ 30% and relative response factors (RRF) ≥ 0.05?	✓			
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓			
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Were all percent differences (%D) ≤ 25% and relative response factors (RRF) ≥ 0.05?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within QC limits?	✓			
If 2 or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R?			✓	
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.		✓		
Was a MS/MSD analyzed every 20 samples of each matrix?		✓		
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			

DC #: 25 786 C26

VALIDATION FINDINGS CHECKLIST

Reviewer: NB
2nd Reviewer: C

Validation Area	Yes	No	NA	Findings/Comments
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?		✓		
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
X. Internal standards				
Were internal standard area counts within -50% or +100% of the associated calibration standard?	✓			
Were retention times within ± 30 seconds from the associated calibration standard?	✓			
XI. Target compound identification				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?	✓			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	✓			
Were chromatogram peaks verified and accounted for?	✓			
XII. Compound quantitation/CRQLs				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	✓			
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XIII. Tentatively identified compounds (TICs)				
Were the major ions (> 10 percent relative intensity) in the reference spectrum evaluated in sample spectrum?			✓	
Were relative intensities of the major ions within ± 20% between the sample and the reference spectra?			✓	
Did the raw data indicate that the laboratory performed a library search for all required peaks in the chromatograms (samples and blanks)?		✓		
XIV. System performance				
System performance was found to be acceptable.	✓			
XV. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XVI. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XVII. Field blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

VALIDATION FINDINGS WORKSHEET

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

A. Phenol**	P. Bis(2-chloroethoxy)methane	EE. 2,6-Dinitrotoluene	TT. Pentachlorophenol**	III. Benzo(a)pyrene**
B. Bis (2-chloroethyl) ether	Q. 2,4-Dichlorophenol**	FF. 3-Nitroaniline	UU. Phenanthrene	JJJ. Indeno(1,2,3-cd)pyrene
C. 2-Chlorophenol	R. 1,2,4-Trichlorobenzene	GG. Acenaphthene**	VV. Anthracene	KKK. Dibenz(a,h)anthracene
D. 1,3-Dichlorobenzene	S. Naphthalene	HH. 2,4-Dinitrophenol*	WW. Carbazole	LLL. Benzo(g,h,i)perylene
E. 1,4-Dichlorobenzene**	T. 4-Chloroaniline	II. 4-Nitrophenol*	XX. Di-n-butylphthalate	MMM. Bis(2-Chloroisopropyl)ether
F. 1,2-Dichlorobenzene	U. Hexachlorobutadiene**	JJ. Dibenzofuran	YY. Fluoranthene**	NNN. Aniline
G. 2-Methylphenol	V. 4-Chloro-3-methylphenol**	KK. 2,4-Dinitrotoluene	ZZ. Pyrene	OOO. N-Nitrosodimethylamine
H. 2,2'-Oxybis(1-chloropropane)	W. 2-Methylnaphthalene	LL. Diethylphthalate	AAA. Butylbenzylphthalate	PPP. Benzoic Acid
I. 4-Methylphenol	X. Hexachlorocyclopentadiene*	MM. 4-Chlorophenyl-phenyl ether	BBB. 3,3'-Dichlorobenzidine	QQQ. Benzyl alcohol
J. N-Nitroso-di-n-propylamine*	Y. 2,4,6-Trichlorophenol**	NN. Fluorene	CCC. Benzo(a)anthracene	RRR. Pyridine
K. Hexachloroethane	Z. 2,4,5-Trichlorophenol	OO. 4-Nitroaniline	DDD. Chrysene	SSS. Benzidine
L. Nitrobenzene	AA. 2-Chloronaphthalene	PP. 4,6-Dinitro-2-methylphenol	EEE. Bis(2-ethylhexyl)phthalate	TTT.
M. Isophorone	BB. 2-Nitroaniline	QQ. N-Nitrosodiphenylamine (1)**	FFF. Di-n-octylphthalate**	UUU
N. 2-Nitrophenol**	CC. Dimethylphthalate	RR. 4-Bromophenyl-phenylether	GGG. Benzo(b)fluoranthene	VVV.
O. 2,4-Dimethylphenol	DD. Acenaphthylene	SS. Hexachlorobenzene	HHH. Benzo(k)fluoranthene	WWW.

Notes:* = System performance check compound (SPCC) for RRF; ** = Calibration check compound (CCC) for %RSD.

LDC #: 25 786 C2b

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: JVG
2nd Reviewer: C

METHOD: GC/MS SVOA (EPA SW 846 Method 8270C-SIM)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

$RRF = (A_x)(C_{is})/(A_{is})(C_x)$
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

A_x = Area of Compound
C_x = Concentration of compound,
S= Standard deviation of the RRFs,

A_{is} = Area of associated internal standard
C_{is} = Concentration of internal standard
X = Mean of the RRFs

#	Standard ID	Calibration Date	Compound (IS)	Reported RRF (RRF 1.0 std)	Recalculated RRF (RRF 1.0 std)	Reported Average RRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL	03/18/11	NDMA (IS1)	0.961	0.961	0.954	0.954	2	2
			Naphthalene (IS2)	1.013	1.013	1.036	1.036	6	6
	HP10976		Diethylphthalate (IS3)	1.114	1.114	1.170	1.170	9	9
			Phenanthrene (IS4)	1.093	1.093	1.130	1.130	8	8
			Chrysene (IS5)	1.143	1.143	1.166	1.166	6	6
			Benzo(a)pyrene (IS6)	1.342	1.342	1.349	1.349	11	11

Cis/Cx	Ax	Ais
1/1	84069	87467
1/1	343632	339282
1/1	230725	207135
1/1	371146	339484
1/1	404794	354001
1/1	356552	265697

Conc	NDMA	Naphthalene	Diethylphthalate	Phenanthrene	Chrysene	benzo(a)py
0.05	0.940	1.004	1.122	1.077	1.125	1.199
0.2	0.949	1.008	1.063	1.090	1.149	1.265
0.5	0.945	1.012	1.146	1.080	1.116	1.252
1	0.961	1.013	1.114	1.093	1.143	1.342
5	0.945	1.023	1.201	1.131	1.159	1.415
10	0.982	1.154	1.374	1.308	1.305	1.622
X =	0.9537	1.036	1.170	1.130	1.166	1.349
S =	0.016	0.058	0.110	0.089	0.070	0.154

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC # 25786 C26

VALIDATION FINDINGS WORSHEET
Continuing Calibration Calculation Verification

Reviewer: JVG
2nd Reviewer:

METHOD: GC/MS SVOA (EPA SW 846 Method 8270C-SIM)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
RRF = (Ax)(Cis)/(Ais)(Cx)

ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
Ax = Area of compound,

Cx = Concentration of compound,
Ais = Area of associated internal standard
Cis = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (IS)	Average RRF (Initial)	Reported RRF (CCV)	Recalculated RRF (CCV)	Reported % D	Recalculated %D
1	ic0731	03/21/11	NDMA (IS1)	0.954	0.888	0.888	7	7
			Naphthalene (IS2)	1.036	1.008	1.008	3	3
	HP10976		Diethylphthalate (IS3)	1.170	1.182	1.182	1	1
			Phenanthrene (IS4)	1.130	1.074	1.074	5	5
			Chrysene (IS5)	1.166	1.131	1.131	3	3
			Benzo(a)pyrene (IS6)	1.349	1.372	1.372	2	2
2	ic0761c	03/22/11	NDMA (IS1)	0.954	0.941	0.941	1	1
			Naphthalene (IS2)	1.036	1.020	1.020	2	2
	HP10976		Diethylphthalate (IS3)	1.170	1.132	1.132	3	3
			Phenanthrene (IS4)	1.130	1.119	1.119	1	1
			Chrysene (IS5)	1.166	1.162	1.162	0	0
			Benzo(a)pyrene (IS6)	1.349	1.426	1.426	6	6

CV1		CCV1		CCV2	
Cis/Cx	Compound (IS)	Ax	Ais	Ax	Ais
1/1	NDMA (IS1)	61481	69258	518033	110155
1/1	Naphthalene (IS2)	270627	268373	2154258	422526
1/1	Diethylphthalate (IS3)	197889	167481	1410707	249186
1/1	Phenanthrene (IS4)	314728	292993	2312417	413165
1/1	Chrysene (IS5)	392338	346835	2860871	492553
1/1	Benzo(a)pyrene (IS6)	369048	268898	2761651	387316

LDC #: 25786 C26

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: JVB
2nd reviewer: C

METHOD: GC/MS Semivolatiles (EPA SW 846 Method 8270C)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5	1.0	0.891	~~85~~ 89	89	0
2-Fluorobiphenyl	↓	0.823	82	82	↓
Terphenyl-d14	↓	0.817	82	82	↓
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5					
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5					
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: JVG

2nd Reviewer: C

METHOD: GC/MS BNA (EPA SW 846 Method 8270C)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SC/SA

Where: SSC = Spike concentration
SA = Spike added

RPD = I LCSC - LCSDC I * 2/(LCSC + LCSDC)

LCSC = Laboraotry control sample concentration

LCSDC = Laboratory control sample duplicate concentration

LCS/LCSD samples: 07d LB LCS

Compound	Spike Added (ug/kg)		Spike Concentration (ug/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
Phenol										
N-Nitroso-di-n-propylamine										
4-Chloro-3-methylphenol										
Acenaphthene	33.33	NA	30.45	NA	91	91				
Pentachlorophenol										
Pyrene	33.33		30.46		91	91				

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25786 C2b

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: JK
2nd reviewer: A

METHOD: GC/MS BNA (EPA SW 846 Method 8270C)

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(V_t)(DF)(2.0)}{(A_{is})(RRF)(V_o)(V_i)(\%S)}$

A_x	=	Area of the characteristic ion (EICP) for the compound to be measured
A_{is}	=	Area of the characteristic ion (EICP) for the specific internal standard
I_s	=	Amount of internal standard added in nanograms (ng)
V_o	=	Volume or weight of sample extract in milliliters (ml) or grams (g).
V_i	=	Volume of extract injected in microliters (ul)
V_t	=	Volume of the concentrated extract in microliters (ul)
Df	=	Dilution Factor.
%S	=	Percent solids, applicable to soil and solid matrices only.
2.0	=	Factor of 2 to account for GPC cleanup

Example:

Sample I.D. #2, Benzo (a) pyrene

Conc. = $\frac{(11356)(1.00)(1\ ml)(1000)(\quad)}{(386194)(1.349)(30.0\ g)(0.864)(\quad)}$

= 0.84 ug/kg

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification

LDC Report# 25786C2c

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	March 9, 2011
LDC Report Date:	July 14, 2011
Matrix:	Soil
Parameters:	N-Nitrosodimethylamine
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE101

Sample Identification

SL-304-SA5B-SB-3.0-4.0
SL-225-SA5B-SB-2.0-3.0

Introduction

This data review covers 2 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA Method 1625C for N-Nitrosodimethylamine.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance check is not required for by this method.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 30.0% for N-Nitrosodimethylamine.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for N-Nitrosodimethylamine.

The percent difference (%D) of the second source calibration standard were less than or equal to 30.0% for N-Nitrosodimethylamine.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No N-nitrosodimethylamine was found in the method blanks.

No field blanks were identified in this SDG.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE101	All compounds reported below the RL.	J (all detects)	A

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was within validation criteria.

XV. Overall Assessment

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
N-Nitrosodimethylamine - Data Qualification Summary - SDG DE101

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE101	SL-304-SA5B-SB-3.0-4.0 SL-225-SA5B-SB-2.0-3.0	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
N-Nitrosodimethylamine - Laboratory Blank Data Qualification Summary - SDG DE101

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
N-Nitrosodimethylamine - Field Blank Data Qualification Summary - SDG DE101

No Sample Data Qualified in this SDG

LDC #: 25786C2c

SDG #: DE101

Laboratory: Lancaster Laboratories

VALIDATION COMPLETENESS WORKSHEET

Level IV

Date: 7/12/11

Page: 1 of 1

Reviewer: [illegible]

2nd Reviewer: [illegible]

METHOD: GC/MS N-Nitrosodimethylamine (EPA Method 1625C)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 3/09 /11
II.	GC/MS Instrument performance check	N	Not reqd.
III.	Initial calibration	A	% RSD ≤ 30 %
IV.	Continuing calibration/ICV	A	CCV ≤ 20 % ICV ≤ 30 %
V.	Blanks	A	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	N	Client Spec
VIII.	Laboratory control samples	A	LCS
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A	
XI.	Target compound identification	A	
XII.	Compound quantitation/CRQLs	A	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	A	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	N	
XVII.	Field blanks	N	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: Soil

1	SL-304-SA5B-SB-3.0-4.0	11	SBLKLA070	21		31	
2	SL-225-SA5B-SB-2.0-3.0	12		22		32	
3		13		23		33	
4		14		24		34	
5		15		25		35	
6		16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

DC #: 25786 C2C

VALIDATION FINDINGS CHECKLIST

Reviewer: JVR
2nd Reviewer: C

Method: Semivolatiles (EPA SW 846 Method 8270C)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. GC/MS Instrument performance check				
Were the DFTPP performance results reviewed and found to be within the specified criteria?	✓		✓	
Were all samples analyzed within the 12 hour clock criteria?	✓		✓	
III. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Was a curve fit used for evaluation?		✓		
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?			✓	
Were all percent relative standard deviations (%RSD) ≤ 30% and relative response factors (RRF) ≥ 0.05?	✓			
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓			
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Were all percent differences (%D) ≤ 25% and relative response factors (RRF) ≥ 0.05?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within QC limits?	✓		✓	
If 2 or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R?			✓	
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.		✓		
Was a MS/MSD analyzed every 20 samples of each matrix?		✓		
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			

DC #: 25786 C2C

VALIDATION FINDINGS CHECKLIST

Reviewer: NV
2nd Reviewer: C

Validation Area	Yes	No	NA	Findings/Comments
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?		✓		
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
X. Internal standards				
Were internal standard area counts within -50% or +100% of the associated calibration standard?	✓			
Were retention times within ± 30 seconds from the associated calibration standard?	✓			
XI. Target compound identification				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?	✓			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	✓			
Were chromatogram peaks verified and accounted for?	✓			
XII. Compound quantitation/CRQLs				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	✓			
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XIII. Tentatively identified compounds (TICs)				
Were the major ions (> 10 percent relative intensity) in the reference spectrum evaluated in sample spectrum?			✓	
Were relative intensities of the major ions within ± 20% between the sample and the reference spectra?			✓	
Did the raw data indicate that the laboratory performed a library search for all required peaks in the chromatograms (samples and blanks)?		✓		
XIV. System performance				
System performance was found to be acceptable.	✓			
XV. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XVI. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XVII. Field blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

LDC # 25786 C2C

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: JVG
2nd Reviewer: [illegible]

METHOD: GC/MS NDMA (EPA Method 1625C)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

RRF = (Ax)(Cis)/(Ais)(Cx)
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

Ax = Area of Compound
Cx = Concentration of compound
S= Standard deviation of the RRFs

Ais = Area of associated internal standard
Cis = Concentration of internal standard
X = Mean of the RRFs

#	Standard ID	Calibration Date	Compound (IS)	Reported RRF (RRF 25 std)	Recalculated RRF (RRF 25 std)	Reported Average RRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL	3/16/2011	NDMA (NDMA-d6)	1.0690	1.0693	1.2120	1.2120	16	16
	TE16311								

Cis/Cx	Ax	Ax
25/25	90106	84266

Conc	RRF
1.0	1.512
5.0	1.387
10.0	1.149
25.0	1.069
50.0	1.122
100.0	1.033
X =	1.2120
S =	0.1924

LDC # 25786C2C

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Calculation Verification

Reviewer: JVG
2nd Reviewer: [illegible]

METHOD: GC/MS NDMA (EPA Method 1625C)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
RRF = (Ax)(Cis)/(Ais)(Cx)

Where:
ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
Ax = Area of compound
Cx = Concentration of compound,
Ais = Area of associated internal standard
Cis = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (IS)	CCV RRF	Reported RRF	Recalculated RRF	Reported % D	Recalculated %D
1	ac168	3/16/2011	NDMA (NDMA-d6)	1.2120	1.08759	1.08759	10	10
	TE16311							

	Compound (IS)	Cis/Cx	Ax	Ais
CCV1	NDMA (NDMA-d6)	25/25	87859	80783

LDC #: 25786 C2C

VALIDATION FINDINGS WORKSHEET

Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: NG

2nd Reviewer: [illegible]

METHOD: GC/MS ~~BNA~~ NDMA (EPA SW 846 Method ~~8270C~~ 1625C)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SC/SA

Where: SSC = Spike concentration
SA = Spike added

RPD = I LCSC - LCSDC I * 2/(LCSC + LCSDC)

LCSC = Laboraotry control sample concentration

LCSDC = Laboratory control sample duplicate concentration

LCS/LCSD samples: 070LA LCS

Compound	Spike Added (ng/kg)		Spike Concentration (ng/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
~~Phenol~~ NDMA	833.33	NA	708.97	NA	85	85				
N-Nitroso-di-n-propylamine										
4-Chloro-3-methylphenol										
Acenaphthene										
Pentachlorophenol										
Pyrene										

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25786C2C

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: JVG
2nd reviewer: C

METHOD: GC/MS ~~BNA~~ NDMA (EPA SW 846 Method ~~8270C~~ 16256)

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(V_t)(DF)(2.0)}{(A_{is})(RRF)(V_o)(V_i)(\%S)}$

A_x	=	Area of the characteristic ion (EICP) for the compound to be measured
A_{is}	=	Area of the characteristic ion (EICP) for the specific internal standard
I_s	=	Amount of internal standard added in nanograms (ng)
V_o	=	Volume or weight of sample extract in milliliters (ml) or grams (g).
V_i	=	Volume of extract injected in microliters (ul)
V_t	=	Volume of the concentrated extract in microliters (ul)
Df	=	Dilution Factor.
%S	=	Percent solids, applicable to soil and solid matrices only.
2.0	=	Factor of 2 to account for GPC cleanup

Example:

Sample I.D. #7, NDMA

Conc. = $\frac{(2853)(25)(1\,ml)(1000)(\quad)}{(82980)(1.212)(30.0\,g)(0.864)(\quad)}$

= 27.4 ng/kg

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification

LDC Report# 25786C3b

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	March 9, 2011
LDC Report Date:	July 14, 2011
Matrix:	Soil
Parameters:	Polychlorinated Biphenyls
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE101

Sample Identification

SL-304-SA5B-SB-3.0-4.0
SL-225-SA5B-SB-2.0-3.0

Introduction

This data review covers 2 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8082 for Polychlorinated Biphenyls.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/ECD Instrument Performance Check

Instrument performance was acceptable unless noted otherwise under initial calibration and continuing calibration sections.

III. Initial Calibration

Initial calibration of multicomponent compounds was performed for the primary (quantitation) column as required by the method.

The percent relative standard deviations (%RSD) were less than or equal to 20.0% for all compounds.

Retention time windows were evaluated and considered technically acceptable.

IV. Continuing Calibration

Continuing calibration was performed at required frequencies.

The percent differences (%D) of calibration factors in continuing standard mixtures were within the 20.0% QC limits with the following exceptions:

Date	Standard	Column	Compound	%D	Associated Samples	Affected Compound	Flag	A or P
3/16/11	4C20069.29R	R1	Aroclor-5442	26.2	110740006A-BLK	Aroclor-5442	J (all detects) UJ (all non-detects)	A
3/16/11	4C20069.29R	R2	Aroclor-5442	32.2	110740006A-BLK	Aroclor-5442	J (all detects) UJ (all non-detects)	A

The percent difference (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

Retention times (RT) of all compounds in the calibration standards were within QC limits.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polychlorinated biphenyl contaminants were found in the method blanks.

No field blanks were identified in this SDG.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

LCS ID (Associated Samples)	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Affected Compound	Flag	A or P
11074006A-LCS/D (All samples in SDG DE101)	Aroclor-5442	72 (75-125)	73 (75-125)	-	Aroclor-5442 Aroclor-5432 Aroclor-5460	J (all detects) UJ (all non-detects)	P

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Florisil Cartridge Check

Florisil cleanup was not required and therefore not performed in this SDG.

XI. GPC Calibration

GPC cleanup was not required and therefore not performed in this SDG.

XII. Target Compound Identification

All target compound identifications were within validation criteria.

XIII. Compound Quantitation and Reported CRQLs

All compound quantitation and CRQLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE101	All compounds reported below the RL.	J (all detects)	A

XIV. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XV. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Polychlorinated Biphenyls - Data Qualification Summary - SDG DE101

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE101	SL-304-SA5B-SB-3.0-4.0 SL-225-SA5B-SB-2.0-3.0	Aroclor-5442 Aroclor-5432 Aroclor-5460	J (all detects) UJ (all non-detects)	P	Laboratory control samples (%R) (L)
DE101	SL-304-SA5B-SB-3.0-4.0 SL-225-SA5B-SB-2.0-3.0	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
Polychlorinated Biphenyls - Laboratory Blank Data Qualification Summary - SDG DE101

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Polychlorinated Biphenyls - Field Blank Data Qualification Summary - SDG DE101

No Sample Data Qualified in this SDG

LDC #: 25786C3b

SDG #: DE101

Laboratory: Lancaster Laboratories

VALIDATION COMPLETENESS WORKSHEET

Level IV

Date: 7-13-11

Page: 1 of 1

Reviewer: [illegible]

2nd Reviewer: [illegible]

METHOD: GC Polychlorinated Biphenyls (EPA SW 846 Method 8082)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 3/9/11
II.	GC/ECD Instrument Performance Check	N	
III.	Initial calibration	A	%RSD ≤ 20
IV.	Continuing calibration/ICV	SW	ICV/CCV ≤ 20%
V.	Blanks	A	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	N	Client Specified
VIII.	Laboratory control samples	SW	LCS/D
IX.	Regional quality assurance and quality control	N	
X.	Florisil cartridge check	N	
XI.	GPC Calibration	N	
XII.	Target compound identification	A	
XIII.	Compound quantitation and reported CRQLs	A	
XIV.	Overall assessment of data	A	
XV.	Field duplicates	N	
XVI.	Field blanks	N	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:

1	SL-304-SA5B-SB-3.0-4.0 S	11		21		31	1107/0006A-BLK
2	SL-225-SA5B-SB-2.0-3.0 S	12		22		32	
3		13		23		33	
4		14		24		34	
5		15		25		35	
6		16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

LDC #: 25786C3b
SDG #: See Cover

VALIDATION FINDINGS CHECKLIST

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

Method: Pesticides/PCBs (EPA SW 846 Method 8081/8082)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. GC/ECD Instrument performance check				
Was the instrument performance found to be acceptable?	✓			
III. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Was a linear fit used for evaluation? If yes, were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation? If Yes, what was the acceptance criteria used?		✓		
Did the initial calibration meet the curve fit acceptance criteria?			✓	
Were the RT windows properly established?	✓			
Were the required standard concentrations analyzed in the initial calibration?	✓			
IV. Continuing calibration				
What type of continuing calibration calculation was performed? ✓ %D or ____%R				
Were Evaluation mix standards analyzed prior to the initial calibration and sample analysis?			✓	
Were endrin and 4,4'-DDT breakdowns ≤ 15% for individual breakdown in the Evaluation mix standards?			✓	
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20% or percent recovieries 80-120%?	✓			
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Were extract cleanup blanks analyzed with every batch requiring clean-up?	✓			
Was there contamination in the method blanks or clean-up blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?	✓			
If the percent recovery (%R) of one or more surrogates was outside QC limits, was a reanalysis performed to confirm %R?			✓	
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?			✓	
VII. Matrix spike/Matrix spike duplicates				

LDC #: 25786C36
SDG #: See cover

VALIDATION FINDINGS CHECKLIST

Reviewer: [illegible]
2nd Reviewer: [illegible]

Validation Area	Yes	No	NA	Findings/Comments
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.		✓		
Was a MS/MSD analyzed every 20 samples of each matrix?		✓		
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	NA	✓		
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?		✓		
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
X. Target compound identification				
Were the retention times of reported detects within the RT windows?	✓			
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions, dry weight factors, and clean-up activities applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XV. Field blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

VALIDATION FINDINGS WORKSHEET

METHOD: Pesticide/PCBs (EPASW 846 Method 8081/8082)

A. alpha-BHC	I. Dieldrin	Q. Endrin ketone	Y. Aroclor-1242	GG. Chlordane
B. beta-BHC	J. 4,4'-DDE	R. Endrin aldehyde	Z. Aroclor-1248	HH. Chlordane (Technical)
C. delta-BHC	K. Endrin	S. alpha-Chlordane	AA. Aroclor-1254	II. Aroclor 5442
D. gamma-BHC	L. Endosulfan II	T. gamma-Chlordane	BB. Aroclor-1260	JJ. 5432
E. Heptachlor	M. 4,4'-DDD	U. Toxaphene	CC. 2,4'-DDD	KK. 5460
F. Aldrin	N. Endosulfan sulfate	V. Aroclor-1016	DD. 2,4'-DDE	LL.
G. Heptachlor epoxide	O. 4,4'-DDT	W. Aroclor-1221	EE. 2,4'-DDT	MM.
H. Endosulfan I	P. Methoxychlor	X. Aroclor-1232	FF. Hexachlorobenzene	NN.

Notes:

LDC #: 25786C35
SDG #: See cover

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Page: 1 of 1
Reviewer: KT
2nd Reviewer: [illegible]

METHOD: GC Pesticides/PCBs (EPA SW 846 Method 8081/8082)
Please see qualifications below for all questions answered "N" Not applicable questions are identified as "N/A".

Y N N/A Were Evaluation mix standards run before initial calibration and before samples?
Y N N/A Were Endrin & 4,4'-DDT breakdowns acceptable in the Evaluation Mix standard (≤15.0% for individual breakdowns)?
Y N N/A Was at least one standard run daily to verify the working curve?
Y N N/A Did the continuing calibration standards meet the percent difference (%D) of ≤20.0%?

Level IV/D Only

Y N N/A Were the retention times for all calibrated compounds within their respective acceptance windows?

#	Date	Standard ID	Column	Compound	%D (Limit ≤ 20.0)	RT (Limits)	Associated Samples	Qualifications
	3/16/11	4C20069.29R	P1	II	26.2	( )	BLK	J/UJ/A (C)
			P2	II	32.2	( )		✓
						( )		
						( )		
						( )		
						( )		
						( )		
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A. alpha-BHC
B. beta-BHC
C. delta-BHC
D. gamma-BHC
E. Heptachlor
F. Aldrin
G. Heptachlor epoxide
H. Endosulfan I
I. Dieldrin
J. 4,4'-DDE
K. Endrin
L. Endosulfan II
M. 4,4'-DDD
N. Endosulfan sulfate
O. 4,4'-DDT
P. Methoxychlor
Q. Endrin ketone
R. Endrin aldehyde
S. alpha-Chlordane
T. gamma-Chlordane
U. Toxaphene
V. Aroclor-1016
W. Aroclor-1221
X. Aroclor-1232
Y. Aroclor-1242
Z. Aroclor-1248
AA. Aroclor-1254
BB. Aroclor-1260
CC. 2,4'-DDD
DD. 2,4'-DDE
EE. 2,4'-DDT
FF. Hexachlorobenzene
GG. Chlordane
HH. Chlordane (Technical)

Reviewer: A

2nd Reviewer: ✓

; #: 25786C55

3 #: -

VALIDATION FINDINGS WORKSHEET
Laboratory Control Samples (LCS)

THOD: ✓ GC ___ HPLC

ase see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

'N N/A Were a laboratory control samples (LCS) and laboratory control sample duplicate (LCSD) analyzed for each matrix in this SDG?

(N) N/A Were the LCS percent recoveries (%R) and relative percent differences (RPD) within the QC limits?

vel IV/D Only

N N/A Was an LCS analyzed every 20 samples for each matrix or whenever a sample extraction was performed?

#	LCS/LCSD ID	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
	11074006A-LCS/D	II	72 (75-125)	73 (75-125)	( )	ALL	J/UJ/P (gml II-KK)
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
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			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		

LDC #: 25784C66
SDG #: See Cover

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC Pesticides/PCBs (EPA SW 846 Method 8081/8082)

The calibration factors (CF) and relative standard deviation (%RSD) were recalculated using the following calculations:

CF = A/C
Average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

Where: A = Area of compound
C = Concentration of compound
S = Standard deviation of calibration factors
X = Mean of calibration factors

#	Standard ID	Calibration Date	Compound	Reported CF (200 std)	Recalculated CF (200 std)	Reported CF (initial)	Recalculated CF (intial)	Reported %RSD	Recalculated %RSD
1	ICAL	3/10/11	BB (R1 Peak1)	17	17	18	18	6.9	6.9
			↓ (R2 Peak1)	237	237	236	236	8.7	8.7
2									
3									
4									

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

NICLCrev.wpd

LDC #: 25786C36
SDG #: See cover

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC Pesticides/PCBs (EPA SW 846 Method 8081/8082)

Percent difference (%D) = 100 * (N - C)/N

Where: N = Initial Calibration Factor or Nominal Amount (ng)
C = Calibration Factor from Continuing Calibration Standard or Calculated Amount (ng)

Standard ID	Calibration Date/Time	Compound	Average ~~CF~~/ CCV ~~Conc~~	Reported CF/~~Conc~~ CCV	Recalculated CF/~~Conc~~ CCV	Reported %D	Recalculated %D
4C20069.27R	3/16/11	BB (R_1)	200.00	183.04	183.04	8.5	8.5
		↓ (R_2)	200.00	179.02	179.02	10.5	10.5
4C20069.51R	3/17/11	BB (R_1)	200.00	189.22	189.22	5.4	5.4
		↓ (R_2)	200.00	186.70	186.70	6.7	6.7

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: [illegible]
SDG #: See Cover

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: [illegible]
2nd reviewer: [illegible]

METHOD: GC Pesticides/PCBs (EPA SW 846 Method 8081/8082)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: 2

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
Tetrachloro-m-xylene	A	1.04	0.769543	74	74	0
Tetrachloro-m-xylene						
Decachlorobiphenyl	A	1.04	0.963205	92	92	0
Decachlorobiphenyl						

Sample ID: _____

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
Tetrachloro-m-xylene						
Tetrachloro-m-xylene						
Decachlorobiphenyl						
Decachlorobiphenyl						

Sample ID: _____

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
Tetrachloro-m-xylene						
Tetrachloro-m-xylene						
Decachlorobiphenyl						
Decachlorobiphenyl						

Sample ID: _____

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
Tetrachloro-m-xylene						
Tetrachloro-m-xylene						
Decachlorobiphenyl						
Decachlorobiphenyl						

Notes: _____

LDC #: 25786C3b
SDG #: See Cover

VALIDATION FINDINGS WORKSHEET

Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC Pesticides/PCBs (EPA SW 846 Method 8081/8082)

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100* (SSC-SC)/SA

Where: SSC = Spiked sample concentration
SA = Spike added
SC = Concentration

RPD = I LCS - LCSD I * 2/(LCS + LCSD)

LCS = Laboratory control sample percent recovery
LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: 1107400GA-LCS

Compound	Spike Added (ug/kg)		Spiked Sample Concentration (ug/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
gamma-BHC										
4,4'-DDT										
Aroclor 1260	16.67	n/a	15.5	n/a	93	93				

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25786C36
SDG #: See Cover

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd reviewer: [illegible]

METHOD: GC Pesticides/PCBs (EPA SW 846 Method 8081/8082)

N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Example:

Sample I.D. ALL ALL :

Conc. =

= ND

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification

Note:

LDC Report# 25786C4

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	March 9, 2011
LDC Report Date:	July 13, 2011
Matrix:	Soil
Parameters:	Metals
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE101

Sample Identification

SL-304-SA5B-SB-3.0-4.0
SL-225-SA5B-SB-2.0-3.0

Introduction

This data review covers 2 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Methods 6010B, 6020, and 7000 for Metals. The metals analyzed were Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Phosphorus, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, and Zirconium.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review (January 2010).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. ICPMS Tune

The mass calibration was within 0.1 AMU and the percent relative standard deviation (%RSD) was less than or equal to 5% .

III. Calibration

An initial calibration was performed.

The frequency and analysis criteria of the initial calibration verification (ICV) and continuing calibration verification (CCV) were met.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No metal contaminants were found in the initial, continuing and preparation blanks with the following exceptions:

Method Blank ID	Analyte	Maximum Concentration	Associated Samples
PB (prep blank)	Calcium Lead Phosphorus Tin Zinc	8.017 mg/Kg 0.011 mg/Kg 1.342 mg/Kg 1.444 mg/Kg 0.644 mg/Kg	All samples in SDG DE101
ICB/CCB	Copper Titanium	2.7 ug/L 1.1 ug/L	All samples in SDG DE101

Data qualification by the initial, continuing and preparation blanks (ICB/CCB/PBs) was based on the maximum contaminant concentration in the ICB/CCB/PBs in the analysis of each analyte. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated method blanks with the following exceptions:

Sample	Analyte	Reported Concentration	Modified Final Concentration
SL-304-SA5B-SB-3.0-4.0	Tin	3.6 mg/Kg	3.6U mg/Kg
SL-225-SA5B-SB-2.0-3.0	Tin	3.0 mg/Kg	3.0U mg/Kg

No field blanks were identified in this SDG.

V. ICP Interference Check Sample (ICS) Analysis

The frequency of analysis was met.

The criteria for analysis were met with the following exceptions:

ICS ID	Date/ Time	Analyte	Concentration (Limits)	Associated Samples	Flag	A or P
ICSA	3/17/11 (19:02, 21:26)	Boron	23 ug/L (≤8.9)	SL-304-SA5B-SB-3.0-4.0 SL-225-SA5B-SB-2.0-3.0	J (all detects)	A
ICSA	3/17/11 (19:02, 21:26)	Zirconium	-13 ug/L (≤8.4)	SL-304-SA5B-SB-3.0-4.0 SL-225-SA5B-SB-2.0-3.0	J (all detects) UJ (all non-detects)	A

Samples were qualified as estimated (J/UJ) if the interferent concentrations in the samples were greater than ninety percent of the spiked interferent concentrations in the ICSA.

VI. Matrix Spike Analysis

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Analyte	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
SL-114-SA5A-SB-4.0-5.0MS/MSD (All samples in SDG DE101)	Antimony	50 (75-125)	45 (75-125)	-	J (all detects) UJ (all non-detects)	A
SL-114-SA5A-SB-4.0-5.0MS/MSD (All samples in SDG DE101)	Cadmium Lead Nickel Thallium	128 (75-125) 162 (75-125) 160 (75-125) 128 (75-125)	- - - -	- - - -	J (all detects) J (all detects) J (all detects) J (all detects)	A

VII. Duplicate Sample Analysis

Duplicate (DUP) sample analyses were reviewed for each matrix as applicable. Results were within QC limits with the following exceptions:

DUP ID (Associated Samples)	Analyte	RPD (Limits)	Difference (Limits)	Flag	A or P
SL-114-SA5A-SB-4.0-5.0DUP (All samples in SDG DE101)	Arsenic Barium	23 (≤20) 23 (≤20)	- -	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Internal Standards

All internal standard percent recoveries (%R) were within QC limits.

X. Furnace Atomic Absorption QC

Graphite furnace atomic absorption was not utilized in this SDG.

XI. ICP Serial Dilution

ICP serial dilution analysis was performed by the laboratory. The analysis criteria were met with the following exceptions:

Diluted Sample	Analyte	%D (Limits)	Associated Samples	Flag	A or P
SL-114-SA5A-SB-4.0-5.0	Barium Copper Lead Nickel Zinc	14 (≤10) 27 (≤10) 15 (≤10) 17 (≤10) 20 (≤10)	All samples in SDG DE101	J (all detects) UJ (all non-detects)	A

XII. Sample Result Verification

All sample result verifications were acceptable.

All analytes reported below the RL and above the MDL were qualified as follows:

Sample	Analyte	Flag	A or P
All samples in SDG DE101	All analytes reported below the RL and above the MDL.	J (all detects)	A

XIII. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XIV. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Metals - Data Qualification Summary - SDG DE101

SDG	Sample	Analyte	Flag	A or P	Reason (Code)
DE101	SL-304-SA5B-SB-3.0-4.0 SL-225-SA5B-SB-2.0-3.0	Boron	J (all detects)	A	ICP interference check sample analysis (concentration) (I)
DE101	SL-304-SA5B-SB-3.0-4.0 SL-225-SA5B-SB-2.0-3.0	Zirconium	J (all detects) UJ (all non-detects)	A	ICP interference check sample analysis (concentration) (I)
DE101	SL-304-SA5B-SB-3.0-4.0 SL-225-SA5B-SB-2.0-3.0	Antimony	J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicate (%R) (Q)
DE101	SL-304-SA5B-SB-3.0-4.0 SL-225-SA5B-SB-2.0-3.0	Cadmium Lead Nickel Thallium	J (all detects) J (all detects) J (all detects) J (all detects)	A	Matrix spike/Matrix spike duplicate (%R) (Q)
DE101	SL-304-SA5B-SB-3.0-4.0 SL-225-SA5B-SB-2.0-3.0	Arsenic Barium	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A	Duplicate sample analysis (RPD) (E)
DE101	SL-304-SA5B-SB-3.0-4.0 SL-225-SA5B-SB-2.0-3.0	Barium Copper Lead Nickel Zinc	J (all detects) UJ (all non-detects)	A	ICP serial dilution (%D) (A)
DE101	SL-304-SA5B-SB-3.0-4.0 SL-225-SA5B-SB-2.0-3.0	All analytes reported below the RL and above the MDL.	J (all detects)	A	Sample result verification (Z)

Santa Susana Field Laboratory
Metals - Laboratory Blank Data Qualification Summary - SDG DE101

SDG	Sample	Analyte	Modified Final Concentration	A or P	Code
DE101	SL-304-SA5B-SB-3.0-4.0	Tin	3.6U mg/Kg	A	B
DE101	SL-225-SA5B-SB-2.0-3.0	Tin	3.0U mg/Kg	A	B

Santa Susana Field Laboratory
Metals - Field Blank Data Qualification Summary - SDG DE101

No Sample Data Qualified in this SDG

LDC #: 25786C4

SDG #: DE101

Laboratory: Lancaster Laboratories

VALIDATION COMPLETENESS WORKSHEET

Level IV

Date: 7-11-11

Page: 1 of 1

Reviewer: MG

2nd Reviewer: [illegible]

METHOD: Metals (EPA SW 846 Method 6010B/6020A/7000)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 3-9-11
II.	ICP/MS Tune	A	
III.	Calibration	A	
IV.	Blanks	SW	
V.	ICP Interference Check Sample (ICS) Analysis	SW	
VI.	Matrix Spike Analysis	SW	MS/MSD (SDG: DE102)
VII.	Duplicate Sample Analysis	SW	DUP ↓
VIII.	Laboratory Control Samples (LCS)	A	LCS
IX.	Internal Standard (ICP-MS)	A	
X.	Furnace Atomic Absorption QC	N	not utilized
XI.	ICP Serial Dilution	SW	
XII.	Sample Result Verification	A	
XIII.	Overall Assessment of Data	A	
XIV.	Field Duplicates	N	
XV	Field Blanks	N	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: all soil

1	SL-304-SA5B-SB-3.0-4.0	11		21		31	
2	SL-225-SA5B-SB-2.0-3.0	12		22		32	
3		13		23		33	
4		14		24		34	
5		15		25		35	
6		16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20	PBS	30		40	

Notes:

_DC #: 25786C4

VALIDATION FINDINGS CHECKLIST

Reviewer: MG
2nd Reviewer: ✓

Method: Metals (EPA SW 846 Method 6010B/7000/6020)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. ICP/MS Tune				
Were all isotopes in the tuning solution mass resolution within 0.1 amu?	✓			
Were %RSD of isotopes in the tuning solution ≤5%?	✓			
III. Calibration				
Were all instruments calibrated daily, each set-up time?	✓			
Were the proper number of standards used?	✓			
Were all initial and continuing calibration verification %Rs within the 90-110% (80-120% for mercury) QC limits?	✓			
Were all initial calibration correlation coefficients ≥ 0.995?	✓			
IV. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.	✓			
V. ICP Interference Check Sample				
Were ICP interference check samples performed daily?	✓			
Were the AB solution percent recoveries (%R) with the 80-120% QC limits?	✓			
VI. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and duplicate (DUP) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD or MS/DUP. Soil / Water.	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the 75-125 QC limits? If the sample concentration exceeded the spike concentration by a factor of 4 or more, no action was taken.		✓		
Were the MS/MSD or duplicate relative percent differences (RPD) ≤ 20% for waters and ≤ 35% for soil samples? A control limit of +/- RL(+/-2X RL for soil) was used for samples that were ≤ 5X the RL, including when only one of the duplicate sample values were ≤ 5X the RL.	✓			
VII. Laboratory control samples				
Was an LCS anaylzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the 80-120% QC limits for water samples and laboratory established QC limits for soils?	✓			

LDC #: J5786C4

VALIDATION FINDINGS CHECKLIST

Reviewer: MG
2nd Reviewer: [illegible]

Validation Area	Yes	No	NA	Findings/Comments
VIII. Furnace Atomic Absorption QC				
If MSA was performed, was the correlation coefficients > 0.995?			✓	
Do all applicable analysies have duplicate injections? (Level IV only)			✓	
For sample concentrations > RL, are applicable duplicate injection RSD values < 20%? (Level IV only)			✓	
Were analytical spike recoveries within the 85-115% QC limits?			✓	
IX. ICP Serial Dilution				
Was an ICP serial dilution analyzed if analyte concentrations were > 50X the MDL (ICP)/>100X the MDL(ICP/MS)?	✓			
Were all percent differences (%Ds) < 10%?		✓		
Was there evidence of negative interference? If yes, professional judgement will be used to qualify the data.		✓		
X. Internal Standards (EPA SW 846 Method 6020/EPA 200.8)				
Were all the percent recoveries (%R) within the 30-120% (6020)/60-125% (200.8) of the intensity of the internal standard in the associated initial calibration?	✓			
If the %Rs were outside the criteria, was a reanalysis performed?			✓	
XI. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?		✓		
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
XII. Sample Result Verification				
Were RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target analytes were detected in the field duplicates.			✓	
XV. Field blanks				
Field blanks were identified in this SDG.		✓		
Target analytes were detected in the field blanks.			✓	

LDC #: 25786C4
SDG #: —

VALIDATION FINDINGS WORKSHEET
Sample Specific Element Reference

Page: 1 of 1
Reviewer: MG
2nd reviewer: [illegible]

All circled elements are applicable to each sample.

Sample ID	Matrix	Target Analyte List (TAL)
1, 2	S	Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, ___
1, 2	S	Nb, Pd, P, Pt, Sn, Sr, Ti, W, U, Li, S, Zr, ___
		Nb, Pd, P, Pt, Sn, Sr, Ti, W, U, Li, S, Zr, ___
		Nb, Pd, P, Pt, Sn, Sr, Ti, W, U, Li, S, Zr, ___
		Nb, Pd, P, Pt, Sn, Sr, Ti, W, U, Li, S, Zr, ___
		Nb, Pd, P, Pt, Sn, Sr, Ti, W, U, Li, S, Zr, ___
		Nb, Pd, P, Pt, Sn, Sr, Ti, W, U, Li, S, Zr, ___
		Nb, Pd, P, Pt, Sn, Sr, Ti, W, U, Li, S, Zr, ___
		Nb, Pd, P, Pt, Sn, Sr, Ti, W, U, Li, S, Zr, ___
		Nb, Pd, P, Pt, Sn, Sr, Ti, W, U, Li, S, Zr, ___
		Nb, Pd, P, Pt, Sn, Sr, Ti, W, U, Li, S, Zr, ___
		Nb, Pd, P, Pt, Sn, Sr, Ti, W, U, Li, S, Zr, ___
		Nb, Pd, P, Pt, Sn, Sr, Ti, W, U, Li, S, Zr, ___
Analysis Method		
ICP	S	Li, S, Al, B, Ca, Fe, Mg, Mn, P, K, Na, Sr, Sn, Ti, Zr
ICP-MS	↓	Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, ___
ICP-MS		Nb, Pd, P, Pt, Sn, Sr, Ti, W, U, Zr, ___
GFAA		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, CN^-

Comments: Mercury by CVAA if performed
Nb: Niobium, Pd: Palladium, P: Phosphorus, Pt: Platinum, S: Sulfur, W: Tungsten, U: Uranium, Zr: Zirconium

LDC #: 25786C4

VALIDATION FINDINGS WORKSHEET
PB/ICB/CCB QUALIFIED SAMPLES

Reviewer: MG
2nd Reviewer: [illegible]

METHOD: Trace metals (EPA SW 864 Method 6010B/6020/7000)
Sample Concentration units, unless otherwise noted: mg/kg
Soil preparation factor applied: 100x; ICP-MS 2x dil
Associated Samples: all

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit	1	2								
Ca	8.017			40.085										
Cu			2.7	2.7										
Pb	0.011			0.055										
P	1.342			6.71										
Ti			1.1	0.55										
Sn	1.444			7.22	3.6	3.0								
Zn	0.644			3.22										

Samples with analyte concentrations within five times the associated ICB, CCB or PB concentration are listed above with the identifications from the Validation Completeness Worksheet. These sample results were qualified as not detected, "U".

Note : a - The listed analyte concentration is the highest ICB, CCB, or PB detected in the analysis of each element.

LDC #: 25786C4

VALIDATION FINDINGS WORKSHEET
ICP Interference Check Sample

Reviewer: MG
2nd Reviewer: [illegible]

METHOD: Trace Metals (EPA SW 846 Method 6010/6020/7000)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were ICP interference check samples performed as required?

Y N N/A Were the AB solution percent recoveries (%R) within the control limits of 80-120% ?

LEVEL IV ONLY:

Y N N/A Were recalculated results acceptable? See Level IV Recalculation Worksheet for recalculations.

#	Date	ICS Identification	Analyte	Finding (µg/L) ICSA (≤ MDL)	Associated Samples	Qualifications
1	3-17-11	ICSA (19:02, 21:26)	B	23 (8.9)	1	J dets / A (I)
			Li	6 (2.2)		No Qual
			Mn	4 (0.78)		
			P	16 (5.6)		
			Sr	3 (0.62)		
			Zr	-13 (8.4)		J / UJ / A (I)
2	3-17-11	ICSA (19:02, 21:26)	B	23 (8.9)	2	J dets / A (I)
			Li	6 (2.2)		No Qual
			Mn	4 (0.78)		
			P	16 (5.6)		
			Sr	3 (0.62)		
			Zr	-13 (8.4)		J / UJ / A (I)

Comments: Fe > 90% ICSA

LDC #: 25786C4

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Reviewer: MG
2nd Reviewer: [illegible]

METHOD: Trace metals (EPA SW 846 Method 6010/6020/7000)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a matrix spike analyzed for each matrix in this SDG?

Y N N/A Were matrix spike percent recoveries (%R) within the control limits of 75-125? If the sample concentration exceeded the spike concentration by a factor of 4 or more, no action was taken.

Y N N/A Were all duplicate sample relative percent differences (RPD) ≤ 20% for water samples and ≤35% for soil samples?

LEVEL IV ONLY:

Y N N/A Were recalculated results acceptable? See Level IV Recalculation Worksheet for recalculations.

#	MS/MSD ID	Soil Matrix	Analyte	MS %Recovery	MSD %Recovery	RPD (Limits)	Associated Samples	Qualifications
1	SL-114-SA5A-S	B-4.0-5.0	Sb	50 (75-125)	45 (75-125)		all	J/UJ/A (Q)
	MS/MSD	↓	Cd	128 ( )			↓	J dets/A
	↓	↓	Pb	162 ( )			↓	↓
			Ni	160 ( )				
			Tl	128 ( )				

Comments:

MSD.4SW

LDC #: 25786C4

VALIDATION FINDINGS WORKSHEET
Duplicate Analysis

Reviewer: MG
2nd Reviewer: [illegible]

METHOD: Trace Metals (EPA SW 846 Method 6010/6020/7000)
Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

(Y) N N/A Was a duplicate sample analyzed for each matrix in this SDG?

Y (N) N/A Were all duplicate sample relative percent differences (RPD) ≤ 20% for water samples and ≤ 35% for soil samples? If no, see qualifications below. A control limit of ±R.L. (±2X R.L. for soil) was used for sample values that were <5X the R.L., including the case when only one of the duplicate sample values was <5X R.L.. If field blanks were used for laboratory duplicates, note in the Overall Assessment.

LEVEL IV ONLY:

(Y) N N/A Were recalculated results acceptable? See Level IV Recalculation Worksheet for recalculations.

#	Date	Duplicate ID	Soil Matrix	Analyte	RPD (Limits)	Difference (Limits)	Associated Samples	Qualifications
1		SL-114-SA5A-SB-4	.0-5.0	As	23 (≤ 20)		all	J / UJ / A (E)
		DUP ↓	↓	Ba	23 (↓)		↓	↓ ↓

Comments:

DUP.4SW

LDC #: 25786C4

VALIDATION FINDINGS WORKSHEET
ICP Serial Dilution

Page: 1 of 1
Reviewer: MG
2nd Reviewer: [illegible]

METHOD: Trace Metals (EPA SW 846 Method 6010/6020/7000)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A If analyte concentrations were > 50X the MDL (ICP) ,or >100X the MDL (ICP/MS), was a serial dilution analyzed?
Y N N/A Were ICP serial dilution percent differences (%D) ≤10%?
Y N N/A Is there evidence of negative interference? If yes, professional judgement will be used to qualify the data.

LEVEL IV ONLY:

Y N N/A Were recalculated results acceptable? See Level IV Recalculation Worksheet for recalculations.

#	Date	Diluted Sample ID	Matrix	Analyte	%D (Limits)	Associated Samples	Qualifications
1		SL-114-SA5A-SB-	Soil 4.0-5.0	Ba	14 (≤10)	all	J/UJ/A (A)
		↓	↓	Cu	27 (↓)	↓	↓ ↓
				Pb	15 (↓)		
				Ni	17 (↓)		
				Zn	20 (↓)		

Comments:

SDILICPMS.wpd

LDC #: 25786C4

VALIDATION FINDINGS WORKSHEET
Initial and Continuing Calibration Calculation Verification

Reviewer: MG
2nd Reviewer: [illegible]

METHOD: Trace Metals (EPA SW 846 Method 6010/6020/7000)

An initial and continuing calibration verification percent recovery (%R) was recalculated for each type of analysis using the following formula:

$\%R = \frac{Found}{True} \times 100$

Where, Found = concentration (in ug/L) of each analyte measured in the analysis of the ICV or CCV solution
True = concentration (in ug/L) of each analyte in the ICV or CCV source

Standard ID	Type of Analysis	Element	Found (ug/L)	True (ug/L)	Recalculated %R	Reported %R	Acceptable (Y/N)
1851 ICV	ICP (Initial calibration)	Fe	31366.83	30000.0	104.6	104.6	Y
2128 ICV	ICP/MS (Initial calibration)	Be	53.65	50.0	107.3	107.3	↓
0502 ICV	CVAA (Initial calibration)	Hg	2.47	2.5	98.8	98.8	↓
1959 CCV2	ICP (Continuing calibration)	Sn	492.37	500.0	98.5	98.5	↓
2271 CCV2	ICP/MS (Continuing calibration)	Tl	25.41	25.0	101.6	101.6	↓
0534 CCV3	CVAA (Continuing calibration)	Hg	1.05	1.0	105.0	105.0	↓
	GFAA (Initial calibration)						
	GFAA (Continuing calibation)						

Comments: Refer to Calibration Verification findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25786C4

VALIDATION FINDINGS WORKSHEET
Level IV Recalculation Worksheet

Page: 1 of 1
Reviewer: MG
2nd Reviewer: L

METHOD: Trace Metals (EPA SW 846 Method 6010/6020/7000)

Percent recoveries (%R) for an ICP interference check sample, a laboratory control sample and a matrix spike sample were recalculated using the following formula:

$\%R = \frac{Found}{True} \times 100$

Where, Found = Concentration of each analyte measured in the analysis of the sample. For the matrix spike calculation, Found = SSR (spiked sample result) - SR (sample result).
True = Concentration of each analyte in the source.

A sample and duplicate relative percent difference (RPD) was recalculated using the following formula:

$RPD = \frac{|S-D|}{(S+D)/2} \times 100$

Where, S = Original sample concentration
D = Duplicate sample concentration

An ICP serial dilution percent difference (%D) was recalculated using the following formula:

$\%D = \frac{|I-SDR|}{I} \times 100$

Where, I = Initial Sample Result (mg/L)
SDR = Serial Dilution Result (mg/L) (Instrument Reading x 5)

Sample ID	Type of Analysis	Element	Found / S / I (units)	True / D / SDR (units)	Recalculated %R / RPD / %D	Reported %R / RPD / %D	Acceptable (Y/N)
ICSAB	ICP interference check	Cd	19.77 (µg/L)	20 (µg/L)	98.8	99.0	Y
LCS	Laboratory control sample	Ag	49.38 (mg/kg)	46.2 (mg/kg)	107	107	↓
-114-SA5A-SB-4.0-5.0 MS	Matrix spike	Sb	(SSR-SR) 0.78 (mg/kg)	1.55 (mg/kg)	50	50	↓
-114-SA5A-SB-4.0-5.0 DUP	Duplicate	As	9.31 (mg/kg)	7.38 (mg/kg)	23	23	↓
-114-SA5A-SB-4.0-5.0	ICP serial dilution	Zn	326.40 (µg/L)	261.05 (µg/L)	20	20	↓

Comments: Refer to appropriate worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

TOTCLC.4SW

LDC #: 25786C4

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: MG
2nd reviewer: ✓

METHOD: Trace Metals (EPA SW 846 Method 6010/6020/7000)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

(Y) N N/A Have results been reported and calculated correctly?
(Y) N N/A Are results within the calibrated range of the instruments and within the linear range of the ICP?
(Y) N N/A Are all detection limits below the CRDL?

Detected analyte results for # 1, Al were recalculated and verified using the following equation:

Concentration = $\frac{(RD)(FV)(Dil)}{(In.\ Vol.)}$

RD = Raw data concentration
FV = Final volume (ml)
In. Vol. = Initial volume (ml) or weight (G)
Dil = Dilution factor

Recalculation:

$$\frac{(262.66216\ mg/L)(0.100\ L)}{(0.00104\ kg)(0.867)} = 29130.3\ mg/kg$$

#	Sample ID	Analyte	Reported Concentration (mg/kg)	Calculated Concentration (mg/kg)	Acceptable (Y/N)
1	1	Al	29100	29100	Y
		Sb	0.20	0.20	
		As	15.4	15.4	
		Ba	181	181	
		Be	1.8	1.8	
		B	7.7	7.7	
		Cd	0.14	0.14	
		Ca	5590	5590	
		Cr	43.7	43.7	
		Co	16.4	16.4	
		Cu	25.3	25.3	
		Fe	38700	38700	
		Pb	19.2	19.2	
		Li	53.2	53.2	
		Mg	8930	8930	
		Mn	441	441	
		Hg	0.023	0.023	
		Mo	0.62	0.62	
		Ni	39.5	39.5	
		P	173	173	

Note:

LDC #: 25786C4

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: MG
2nd reviewer: ✓

METHOD: Trace Metals (EPA SW 846 Method 6010/6020/7000)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Have results been reported and calculated correctly?
Y N N/A Are results within the calibrated range of the instruments and within the linear range of the ICP?
Y N N/A Are all detection limits below the CRDL?

Detected analyte results for #1, Tl were recalculated and verified using the following equation:

Concentration = (RD)(FV)(Dil) / (In. Vol.)

RD = Raw data concentration
FV = Final volume (ml)
In. Vol. = Initial volume (ml) or weight (G)
Dil = Dilution factor

Recalculation:

$$\frac{(1.62900\ \mu g/L)(0.100\ L)(2)}{(1.02\ g)(0.867)} = 0.3684\ \mu g/g \text{ or } mg/kg$$

#	Sample ID	Analyte	Reported Concentration (mg/kg)	Calculated Concentration (mg/kg)	Acceptable (Y/N)
1	1 cont'd.	K	2140	2140	Y
		Se	0.14	0.14	
		Ag	0.21	0.21	
		Na	470	470	
		Sr	40.6	40.6	
		Tl	0.37	0.37	
		Sn	3.6	3.6	
		Ti	1380	1380	
		V	79.7	79.7	
		Zn	121	121	
		Zr	1.3	1.3	

Note:

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	March 9, 2011
LDC Report Date:	July 14, 2011
Matrix:	Soil
Parameters:	Wet Chemistry
Validation Level:	Level IV
Laboratory, Area IV:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE101

Sample Identification

SL-304-SA5B-SB-3.0-4.0
SL-225-SA5B-SB-2.0-3.0

Introduction

This data review covers 2 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 9012B for Cyanide, EPA Method 300.0 for Nitrate and Fluoride, EPA SW 846 Method 7199 for Hexavalent Chromium, EPA SW 846 Method 9045C for pH, and EPA Method 314.0 for Perchlorate.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review (January 2010).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a Laboratory, Area IV deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

All criteria for the initial calibration of each method were met.

III. Calibration Verification

Calibration verification frequency and analysis criteria were met for each method when applicable.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No contaminant concentrations were found in the initial, continuing and preparation blanks.

No field blanks were identified in this SDG.

V. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) analyses were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Analyte	%R (Limits)	Flag	A or P
SL-114-SA5A-SB-4.0-5.0MS (All samples in SDG DE101)	Fluoride	72 (80-120)	J (all detects) UJ (all non-detects)	A

VI. Duplicates

Duplicate (DUP) sample analyses were reviewed for each matrix as applicable. Results were within QC limits.

VII. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and were within QC limits.

VIII. Sample Result Verification

All sample result verifications were acceptable

All analytes reported below the RL were qualified as follows:

Sample	Analyte	Flag	A or P
All samples in SDG DE101	All analytes reported below the RL and above the MDL.	J (all detects)	A

IX. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

X. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Wet Chemistry - Data Qualification Summary - SDG DE101

SDG	Sample	Analyte	Flag	A or P	Reason (Code)
DE101	SL-304-SA5B-SB-3.0-4.0 SL-225-SA5B-SB-2.0-3.0	Fluoride	J (all detects) UJ (all non-detects)	A	Matrix spike analysis (%R) (Q)
DE101	SL-304-SA5B-SB-3.0-4.0 SL-225-SA5B-SB-2.0-3.0	All analytes reported below the RL and above the MDL.	J (all detects)	A	Sample result verification (Z)

Santa Susana Field Laboratory
Wet Chemistry – Laboratory Blank Data Qualification Summary - SDG DE101

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Wet Chemistry - Field Blank Data Qualification Summary - SDG DE101

No Sample Data Qualified in this SDG

LDC #: 25786C6

SDG #: DE101

Laboratory: Lancaster Laboratories

VALIDATION COMPLETENESS WORKSHEET

Level IV

MA.

Date: 7-11-11

Page: 1 of 1

Reviewer: MG

2nd Reviewer: ✓

METHOD: (Analyte) Cyanide (EPA SW846 Method 9012B), Nitrate-N, Fluoride (EPA Method 300.0), Hexavalent Chromium (EPA SW846 Method 7199), ~~Oxidation Reduction Potential (ASTM D1498)~~, pH (~~EPA Method 150.1~~/EPA SW846 Method 9045C) Perchlorate (EPA Method 314.0)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 3-9-11
IIa.	Initial calibration	A	
IIb.	Calibration verification	A	
III.	Blanks	A	
IV	Matrix Spike/Matrix Spike Duplicates	SW	MS (SDG: DE102)
V	Duplicates	A	DUP (↓)
VI.	Laboratory control samples	A	LCS
VII.	Sample result verification	A	
VIII.	Overall assessment of data	A	
IX.	Field duplicates	N	
X.	Field blanks	N	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: all soil

1	SL-304-SA5B-SB-3.0-4.0	11		21		31	
2	SL-225-SA5B-SB-2.0-3.0	12		22		32	
3		13		23		33	
4		14		24		34	
5		15		25		35	
6		16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20	PBS	30		40	

Notes:

LDC #: 25786C6

VALIDATION FINDINGS CHECKLIST

Reviewer: MG
2nd Reviewer: [illegible]

Method: Inorganics (EPA Method see cover)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Calibration				
Were all instruments calibrated daily, each set-up time?	✓			
Were the proper number of standards used?	✓			
Were all initial calibration correlation coefficients ≥ 0.995?	✓			
Were all initial and continuing calibration verification %Rs within the 90-110% QC limits?	✓			
Were titrant checks performed as required? (Level IV only)			✓	
Were balance checks performed as required? (Level IV only)			✓	
III. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
IV. Matrix spike/Matrix spike duplicates and Duplicates				
Were a matrix spike (MS) and duplicate (DUP) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD or MS/DUP. Soil / Water.	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the 75-125 QC limits? If the sample concentration exceeded the spike concentration by a factor of 4 or more, no action was taken.		✓		
Were the MS/MSD or duplicate relative percent differences (RPD) ≤ 20% for waters and ≤ 35% for soil samples? A control limit of ≤ CRDL(≤ 2X CRDL for soil) was used for samples that were ≤ 5X the CRDL, including when only one of the duplicate sample values were ≤ 5X the CRDL.	✓			
V. Laboratory control samples				
Was an LCS anaylzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the 80-120% (85-115% for Method 300.0) QC limits?	✓			
VI. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?		✓		
Were the performance evaluation (PE) samples within the acceptance limits?			✓	

LDC #: 25786C6

VALIDATION FINDINGS WORKSHEET
Sample Specific Analysis Reference

Reviewer: MG
2nd reviewer: [illegible]

All circled methods are applicable to each sample.

Sample ID	Matrix	Parameter
1, 2	S	pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4

Comments:

LDC #: 25786C6

VALIDATION FINDINGS WORKSHEET
Matrix Spike Analysis

Reviewer: MG
2nd Reviewer: ✓

METHOD: Inorganics, Method see cover

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a matrix spike analyzed for each matrix in this SDG?

Y N N/A Were matrix spike percent recoveries (%R) within the control limits of 75-125 (85-115% for Method 300.0)? If the sample concentration exceeded the spike concentration by a factor of 4 or more, no action was taken.

LEVEL IV ONLY:

Y N N/A Were recalculated results acceptable? See Level IV Recalculation Worksheet for recalculations.

#	Date	Matrix Spike ID	Matrix	Analyte	%R	Associated Samples	Qualifications
1		SL-114-SA5A-SB-4 MS	Soil .0-5.0	F	72 (80-120)	all	J/UJ/A

Comments:

LDC #: 25786C6

VALIDATION FINDINGS WORKSHEET
Initial and Continuing Calibration Calculation Verification

Reviewer: MG
2nd Reviewer: [illegible]

METHOD: Inorganics, Method see cover

The correlation coefficient (r) for the calibration of F was recalculated. Calibration date: 3-17-11

An initial or continuing calibration verification percent recovery (%R) was recalculated for each type of analysis using the following formula:

%R = Found x 100 / True

Where, Found = concentration of each analyte measured in the analysis of the ICV or CCV solution
True = concentration of each analyte in the ICV or CCV source

Type of Analysis	Analyte	Standard ID	Conc Found (units)	Area True (units)	Recalculated r or %R	Reported r or %R	Acceptable (Y/N)
Initial calibration	F	Blank	0.0 (mg/L)	0	r^2 = 0.998403	r^2 = 0.998704	Y
		Standard 1	0.1 ( )	0.014			
		Standard 2	0.4 ( )	0.057			
		Standard 3	1.0 ( )	0.167			
		Standard 4	2.0 ( )	0.342			
		Standard 5	3.0 ( )	0.543			
		Standard 6	–	–			
		Standard 7	–	–			
Calibration verification	NO_3-N	1643 CCV	1.491 (mg/L)	1.5 (mg/L)	99	99	
Calibration verification	CN	1530 CCV	0.1567 (mg/L)	0.15 (mg/L)	104	104	
Calibration verification	Cr VI	1151 CCV	201.09 (µg/L)	200 (µg/L)	101	101	

Comments: Refer to Calibration Verification findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25786C6

VALIDATION FINDINGS WORKSHEET
Level IV Recalculation Worksheet

Page: 1 of 1
Reviewer: MG
2nd Reviewer: [illegible]

METHOD: Inorganics, Method see cover

Percent recoveries (%R) for a laboratory control sample and a matrix spike sample were recalculated using the following formula:

%R = Found / True x 100 Where, Found = concentration of each analyte measured in the analysis of the sample. For the matrix spike calculation, Found = SSR (spiked sample result) - SR (sample result).
True = concentration of each analyte in the source.

A sample and duplicate relative percent difference (RPD) was recalculated using the following formula:

RPD = |S-D| / (S+D)/2 x 100 Where, S = Original sample concentration
D = Duplicate sample concentration

Sample ID	Type of Analysis	Element	Found / S (units)	True / D (units)	Recalculated %R / RPD	Reported %R / RPD	Acceptable (Y/N)
1709 LCS	Laboratory control sample	ClO_4	560.29 (mg/kg)	500 (mg/kg)	112	not reported	Y
L-114-SA5A-SB-4.0-5.0 MS	Matrix spike sample	F	(SSR-SR) 7.3 (mg/kg)	10.18 (mg/kg)	72	72	↓
L-114-SA5A-SB-4.0-5.0 DUP	Duplicate sample	NO_3-N	1.7 (mg/kg)	1.5 (mg/kg)	12	13	↓

Comments: Refer to appropriate worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

TOTCLC.6

LDC #: 25786C6

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: MG
2nd reviewer: ✓

METHOD: Inorganics, Method See cover

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Have results been reported and calculated correctly?
Y N N/A Are results within the calibrated range of the instruments?
Y N N/A Are all detection limits below the CRQL?

Compound (analyte) results for #1, NO_3-N reported with a positive detect were recalculated and verified using the following equation:

Concentration =

$y = mx + b$
where $m = 0.2859$
$b = -0.0192$

Recalculation:

$0.031 = 0.2859(x) - 0.0192$

0.176 mg/L $= x$

then $\frac{(0.176 \text{ mg/L})(0.050 \text{ L})}{(0.00492 \text{ kg})(0.867)} = 2.063$ mg/kg

#	Sample ID	Analyte	Reported Concentration (mg/kg)	Calculated Concentration (mg/kg)	Acceptable (Y/N)
1	1	F	3.3	3.3	Y
		NO_3-N	2.1	2.1	↓
		Cr VI	0.51	0.51	↓
		pH	7.87 (pH unit)	7.87 (pH unit)	↓

Note:

RECALC.6

LDC Report# 25786C7

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	March 9, 2011
LDC Report Date:	July 14, 2011
Matrix:	Soil/Water
Parameters:	Total Petroleum Hydrocarbons as Gasoline
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE101

Sample Identification

SL-304-SA5B-SB-3.0-4.0
SL-225-SA5B-SB-2.0-3.0
TB-030911

Introduction

This data review covers 2 soil samples and one water sample listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8015B for Total Petroleum Hydrocarbons (TPH) as Gasoline.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0% .

III. Calibration Verification

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 20.0% QC limits.

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No total petroleum hydrocarbons as gasoline contaminants were found in the method blanks.

Sample TB-030911 was identified as a trip blank. No total petroleum hydrocarbons as gasoline contaminants were found in this blank.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VI. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VII. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE101	All compounds reported below the RL.	J (all detects)	A

X. System Performance

The system performance was acceptable.

XI. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XII. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Total Petroleum Hydrocarbons as Gasoline - Data Qualification Summary - SDG DE101

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE101	SL-304-SA5B-SB-3.0-4.0 SL-225-SA5B-SB-2.0-3.0 TB-030911	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
Total Petroleum Hydrocarbons as Gasoline - Laboratory Blank Data Qualification Summary - SDG DE101

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Total Petroleum Hydrocarbons as Gasoline - Field Blank Data Qualification Summary - SDG DE101

No Sample Data Qualified in this SDG

LDC #: 25786C7

SDG #: DE101

Laboratory: Lancaster Laboratories

VALIDATION COMPLETENESS WORKSHEET

Level IV

Date: 7-12-11

Page: 1 of 1

Reviewer: [illegible]

2nd Reviewer: [illegible]

METHOD: GC TPH as Gasoline (EPA SW 846 Method 8015B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 3/9/11
II	Initial calibration	A	%RSD ≤ 20%
III.	Calibration verification/ICV	A	ICV/CCV ≤ 20%
IV.	Blanks	A	
V	Surrogate recovery	A	
VI.	Matrix spike/Matrix spike duplicates	N	client specified
VII.	Laboratory control samples	A	LCS/D
VIII.	Target compound identification	A	
IX.	Compound Quantitation and CRQLs	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	N	
XIII.	Field blanks	ND	TB=3

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:

1	SL-304-SA5B-SB-3.0-4.0 S	11		21		31	11073A34A-Blk S
2	SL-225-SA5B-SB-2.0-3.0 S	12		22		32	11075A20A-Blk W
3	TB-030911 W	13		23		33	
4		14		24		34	
5		15		25		35	
6		16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

LDC #: [illegible]

VALIDATION FINDINGS CHECKLIST

Reviewer: [illegible]
2nd Reviewer: [illegible]

Method: X GC ____ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Was a linear fit used for evaluation? If yes, were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation? If Yes, what was the acceptance criteria used?		✓		
Did the initial calibration meet the curve fit acceptance criteria?			✓	
Were the RT windows properly established?	✓			
IV. Continuing calibration				
What type of continuing calibration calculation was performed? ✓ %D or ____ %R				
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20%.0 or percent recoveries 80-120%?	✓			
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?	✓			
If the percent recovery (%R) of one or more surrogates was outside QC limits, was a reanalysis performed to confirm %R?			✓	
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.		✓		
Was a MS/MSD analyzed every 20 samples of each matrix?		✓		
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				

LDC #: 45486L4

VALIDATION FINDINGS CHECKLIST

Reviewer: M
2nd Reviewer: [illegible]

Validation Area	Yes	No	NA	Findings/Comments
Were performance evaluation (PE) samples performed?		✓		
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
X. Target compound identification				
Were the retention times of reported detects within the RT windows?	✓			
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XV. Field blanks				
Field blanks were identified in this SDG.	✓			
Target compounds were detected in the field blanks.		✓		

LDC #: [illegible]
SDG #: See Cover

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC X HPLC ____

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

#	Standard ID	Calibration Date	Compound	Reported CF (118 std)	Recalculated CF (118 std)	Reported Average CF (Initial)	Recalculated Average CF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL	5/14/10	GRO	7676	7676	8050	8050	5.2	5.2
	ICAL	11/29/10	GRO	39008	39008	37329	37329	127	127
2									
3									
4									

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

SDG #: See Cover

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC X HPLC ____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF - CF)/ave. CF
CF = A/C

Where: ave. CF = initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(ical)/ CCV ~~Conc.~~	Reported CF/~~Conc.~~ CCV	Recalculated CF/~~Conc.~~ CCV	Reported %D	Recalculated %D
1	20075002	3/16/11	GRO	550.00	619.19	619.19	12.6	12.6
	340735.0002	3/14/11	GRO	220.00	195.34	195.34	11.2	11.2
2								
3								
4								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

Surrogate Results Verification

Reviewer: [illegible]
2nd reviewer: C

METHOD: X GC __ HPLC

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: 3

Surrogate	Detector Column	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
TFT	FID	30	19.568	65.2	65.2	0

Sample ID:

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

Sample ID:

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

Sample ID:

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

Sample ID:

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

Notes:

LDC #: _____

VALIDATION FINDINGS WORKSHEET

Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: X GC __ HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

%Recovery = 100 * (SSC - SC)/SA

RPD =(((SSCLCS - SSCLCSD) * 2) / (SSCLCS + SSCLCSD))*100

Where SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory Control Sample
SC = Sample concentration
LCSD = Laboratory Control Sample duplicate

LCS/LCSD samples: 11073A34A-LCS

Compound	Spike Added (mg/kg)		Spike Sample Concentration (mg/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)	11	n/a	7.9	n/a	72	72				
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)										
2,4,6-Trinitrotoluene (8330)										

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25786C7

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: KJ
2nd Reviewer: [illegible]

METHOD: X GC __ HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= (A)(Fv)(Df) / (RF)(Vs or Ws)(%S/100)

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound in the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID. ALL Compound Name GRO

Concentration = ND

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications

Comments:

LDC Report# 25786C8

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	March 9, 2011
LDC Report Date:	July 14, 2011
Matrix:	Soil
Parameters:	Total Petroleum Hydrocarbons as Extractables
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE101

Sample Identification

SL-304-SA5B-SB-3.0-4.0
SL-225-SA5B-SB-2.0-3.0

Introduction

This data review covers 2 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8015B for Total Petroleum Hydrocarbons (TPH) as Extractables.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0% .

III. Calibration Verification

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 20.0% QC limits.

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No total petroleum hydrocarbons as extractable contaminants were found in the method blanks with the following exceptions:

Method Blank ID	Extraction Date	Compound	Concentration	Associated Samples
110730021A-BLK	3/16/11	C21-C30 C30-C40	0.45 mg/Kg 1.3 mg/Kg	All samples in SDG DE101

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated method blanks with the following exceptions:

Sample	Compound	Reported Concentration	Modified Final Concentration
SL-304-SA5B-SB-3.0-4.0	C21-C30 C30-C40	1.0 mg/Kg 2.6 mg/Kg	1.38U mg/Kg 2.6U mg/Kg
SL-225-SA5B-SB-2.0-3.0	C21-C30 C30-C40	0.73 mg/Kg 1.7 mg/Kg	1.38U mg/Kg 1.7U mg/Kg

No field blanks were identified in this SDG.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VI. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VII. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits with the following exceptions:

LCS ID	Compound	%R (Limits)	Associated Samples	Flag	A or P
110730021A-LCS	C12-C14 C15-C20 C21-C30 C30-C40	115 (66-113) 119 (66-113) 126 (66-113) 116 (66-113)	All samples in SDG DE101	J (all detects) J (all detects) J (all detects) J (all detects)	P

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE101	All compounds reported below the RL.	J (all detects)	A

X. System Performance

The system performance was acceptable.

XI. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XII. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Total Petroleum Hydrocarbons as Extractables - Data Qualification Summary - SDG DE101

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE101	SL-304-SA5B-SB-3.0-4.0 SL-225-SA5B-SB-2.0-3.0	C12-C14 C15-C20 C21-C30 C30-C40	J (all detects) J (all detects) J (all detects) J (all detects)	P	Laboratory control samples (%R) (L)
DE101	SL-304-SA5B-SB-3.0-4.0 SL-225-SA5B-SB-2.0-3.0	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
Total Petroleum Hydrocarbons as Extractables - Laboratory Blank Data Qualification Summary - SDG DE101

SDG	Sample	Compound	Modified Final Concentration	A or P	Code
DE101	SL-304-SA5B-SB-3.0-4.0	C21-C30 C30-C40	1.38U mg/Kg 2.6U mg/Kg	A	B
DE101	SL-225-SA5B-SB-2.0-3.0	C21-C30 C30-C40	1.38U mg/Kg 1.7U mg/Kg	A	B

Santa Susana Field Laboratory
Total Petroleum Hydrocarbons as Extractables - Field Blank Data Qualification Summary - SDG DE101

No Sample Data Qualified in this SDG

LDC #: 25786C8

SDG #: DE101

Laboratory: Lancaster Laboratories

VALIDATION COMPLETENESS WORKSHEET

Level IV

Date: 7-12-11

Page: 1 of 1

Reviewer: [illegible]

2nd Reviewer: [illegible]

METHOD: GC TPH as Extractables (EPA SW 846 Method 8015B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 3/9/11
II	Initial calibration	A	%RSD ≤ 20
III.	Calibration verification/ICV	A	ICV/CCV ≤ 20%
IV.	Blanks	SW	
V	Surrogate recovery	A	
VI.	Matrix spike/Matrix spike duplicates	N	Client Specified
VII.	Laboratory control samples	SW	LCS
VIII.	Target compound identification	A	
IX.	Compound Quantitation and CRQLs	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	N	
XIII.	Field blanks	N	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: ALL SOIL

1	SL-304-SA5B-SB-3.0-4.0	11		21		31	11073002/A-BLK
2	SL-225-SA5B-SB-2.0-3.0	12		22		32	
3		13		23		33	
4		14		24		34	
5		15		25		35	
6		16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

LDC #: 2 J T806 5

VALIDATION FINDINGS CHECKLIST

Reviewer: [illegible]
2nd Reviewer: [illegible]

Method: X GC ____ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Was a linear fit used for evaluation? If yes, were all percent relative standard deviations (%RSD) < 20%?	✓			
Was a curve fit used for evaluation? If Yes, what was the acceptance criteria used?		✓		
Did the initial calibration meet the curve fit acceptance criteria?			✓	
Were the RT windows properly established?	✓			
IV. Continuing calibration				
What type of continuing calibration calculation was performed? ____ %D or ____ %R				
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) < 20%.0 or percent recoveries 80-120%?	✓			
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.	✓			
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?	✓			
If the percent recovery (%R) of one or more surrogates was outside QC limits, was a reanalysis performed to confirm %R?			✓	
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.		✓		
Was a MS/MSD analyzed every 20 samples of each matrix?		✓		
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?		✓		
IX. Regional Quality Assurance and Quality Control				

LDC #: LJ T0645

VALIDATION FINDINGS CHECKLIST

Reviewer: LM
2nd Reviewer: [illegible]

Validation Area	Yes	No	NA	Findings/Comments
Were performance evaluation (PE) samples performed?		✓		
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
X. Target compound identification				
Were the retention times of reported detects within the RT windows?	✓			
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XV. Field blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

LDC #: 2578608
SDG #: See Cover

VALIDATION FINDINGS WORKSHEET
Blanks

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: X GC ___ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were all samples associated with a given method blank?
Y N N/A Was a method blank performed for each matrix and whenever a sample extraction procedure was performed? "B"
Y N N/A Was a method blank performed with each extraction batch?
Y N N/A Were any contaminants found in the method blanks? If yes, please see findings below.

Level IV/D Only

Y N N/A (Gasoline and aromatics only)Was a method blank analyzed with each 24 hour batch?
Y N N/A Was a method blank analyzed for each analytical / extraction batch of ≤20 samples?

Blank extraction date: ___ **Blank analysis date:** ~~3/19/11~~ 3/16/11 **Associated samples:** ALL
Conc. units: mg/kg

Compound	Blank ID	Sample Identification						
		1	2					
C21-C30	0.45	1.0/1.38U	0.73/1.38U					
C30-C40	1.3	2.6/U	1.7/U					

Blank extraction date: ___ **Blank analysis date:** ___ **Associated samples:** ___
Conc. units: ___

Compound	Blank ID	Sample Identification						

ALL CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
All contaminants within five times the method blank concentration were qualified as not detected, "U".

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were a laboratory control samples (LCS) and laboratory control sample duplicate (LCSD) analyzed for each matrix in this SDG?

Y N N/A Were the LCS percent recoveries (%R) and relative percent differences (RPD) within the QC limits?

Level IV/D Only

Y N N/A Was an LCS analyzed every 20 samples for each matrix or whenever a sample extraction was performed?

#	LCS/LCSD ID	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
	11073002/A-LCS	C12-C14	115 (66-113)	( )	( )	ALL	J detects/P (L)
		C15-C20	119 ( )	( )	( )		
		C21-C30	126 ( )	( )	( )		
		C30-C40	116 ( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
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			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		

LDC #: [illegible]
SDG #: See Cover

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC X HPLC ____

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the followin calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

#	Standard ID	Calibration Date	Compound	Reported CF (288 std)	Recalculated CF (288 std)	Reported Average CF (Initial)	Recalculated Average CF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL	3/11/11	C8-C40	16811	16811	16752	16752	1.4	1.4
2									
3									
4									

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

INICLC.1SB

SDG #: See Cover

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC X HPLC ____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF - CF)/ave. CF
CF = A/C

Where: ave. CF = initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(ical)/ CCV Conc.	Reported CF/Conc. CCV	Recalculated CF/Conc. CCV	Reported %D	Recalculated %D
1	J073.62R	3/15/11	C8-C40	575.96	615.38	615.38	6.8	6.8
2								
3								
4								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

Surrogate Results Verification

Reviewer: [illegible]
2nd reviewer: [illegible]

METHOD: X GC __ HPLC

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: _____

Surrogate	Detector/ Column	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Chlorobenzene	FID	1.00	.8015	80	80	0
O-Terphenyl	FID	1.00	1.066	107	107	0

Sample ID: _____

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

Sample ID: _____

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

Sample ID: _____

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

Sample ID: _____

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

Notes: _____

LDC #: [illegible]

VALIDATION FINDINGS WORKSHEET

Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: X GC __HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

%Recovery = 100 * (SSC - SC)/SA

RPD =(((SSCLCS - SSCLCSD) * 2) / (SSCLCS + SSCLCSD))*100

Where SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory Control Sample
SC = Sample concentration
LCSD = Laboratory Control Sample duplicate

LCS/LCSD samples: 110730021A-LCS

Compound	Spike Added (mg/kg)		Spike Sample Concentration (mg/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)										
~~Diesel~~ C8-C40 (8015)	.84	n/a	.8	n/a	95	95				
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)										
2,4,6-Trinitrotoluene (8330)										

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 2578608

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: X GC ___ HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= (A)(Fv)(Df) / (RF)(Vs or Ws)(%S/100)

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound In the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID. 1 Compound Name C30-C40

Concentration = (2288706)(1mL) / (16752)(60.1g)(.867)

= 2.6 mg/kg

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications

Comments:

SAMPCALCnew.wpd

LDC Report# 25786C40

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	March 9, 2011
LDC Report Date:	July 14, 2011
Matrix:	Soil
Parameters:	Explosives
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE101

Sample Identification

SL-304-SA5B-SB-3.0-4.0
SL-225-SA5B-SB-2.0-3.0

Introduction

This data review covers 2 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8330A for Explosives.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration of compounds was performed for the primary (quantitation) column and confirmation column as required by the method.

The percent relative standard deviations (%RSD) were less than or equal to 20.0% for all compounds.

In the case where the laboratory used a calibration curve to evaluate the compounds, all coefficients of determination (r^2) were greater than or equal to 0.990 .

Retention time windows were evaluated and considered technically acceptable.

III. Calibration Verification

Calibration verification was performed at the required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 20.0% QC limits.

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

Retention times (RT) of all compounds in the calibration standards were within QC limits.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No explosive contaminants were found in the method blanks.

No field blanks were identified in this SDG.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VI. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VII. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE101	All compounds reported below the RL.	J (all detects)	A

X. System Performance

The system performance was acceptable.

XI. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XII. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Explosives - Data Qualification Summary - SDG DE101

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE101	SL-304-SA5B-SB-3.0-4.0 SL-225-SA5B-SB-2.0-3.0	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
Explosives - Laboratory Blank Data Qualification Summary - SDG DE101

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Explosives - Field Blank Data Qualification Summary - SDG DE101

No Sample Data Qualified in this SDG

LDC #: 25786C40 **VALIDATION COMPLETENESS WORKSHEET** Date: 7-12-11
SDG #: DE101 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: HPLC Explosives (EPA SW 846 Method 8330A)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 3/9/11
II	Initial calibration	A	r/%RSD ≤ 20, r²
III.	Calibration verification/ICV	A	ICV/CCV ≤ 20%
IV.	Blanks	A	
V	Surrogate recovery	A	
VI.	Matrix spike/Matrix spike duplicates	N	Client Specified
VII.	Laboratory control samples	A	LCS/D
VIII.	Target compound identification	A	
IX.	Compound Quantitation and CRQLs	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	N	
XIII.	Field blanks	N	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: ALL soil

1	SL-304-SA5B-SB-3.0-4.0	11		21		31	1107/0003A-BLK
2	SL-225-SA5B-SB-2.0-3.0	12		22		32	
3		13		23		33	
4		14		24		34	
5		15		25		35	
6		16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

LDC #: [illegible]

VALIDATION FINDINGS CHECKLIST

Reviewer: [illegible]
2nd Reviewer: [illegible]

Method: ____ GC ✓ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Was a linear fit used for evaluation? If yes, were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation? If Yes, what was the acceptance criteria used?	✓			
Did the initial calibration meet the curve fit acceptance criteria?	✓			
Were the RT windows properly established?	✓			
IV. Continuing calibration				
What type of continuing calibration calculation was performed? ✓ %D or ____ %R				
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20%.0 or percent recoveries 80-120%?	✓			
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?	✓			
If the percent recovery (%R) of one or more surrogates was outside QC limits, was a reanalysis performed to confirm %R?			✓	
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.				
Was a MS/MSD analyzed every 20 samples of each matrix?		✓		
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
X. Regional Quality Assurance and Quality Control				

LDC #: 25786 L4U

VALIDATION FINDINGS CHECKLIST

Reviewer: MA
2nd Reviewer: A

Validation Area	Yes	No	NA	Findings/Comments
Were performance evaluation (PE) samples performed?		✓		
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
X. Target compound identification				
Were the retention times of reported detects within the RT windows?	✓			
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XV. Field blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

LDC #: [illegible]
SDG #: See Cover

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC _____ HPLC X

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the followin calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

#	Standard ID	Calibration Date	Compound	Reported CF (500.6 std)	Recalculated CF (500.6 std)	Reported Average CF (initial)	Recalculated Average CF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	3/8/11	RDX (ClA)	86.4	86.4	95.2	95.2	16.1	16.1
			2,4,6-TNT	195	195	197	197	0.8	0.8
2			(ClB) for confirmation only						
3									
4									

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

SDG #: See Cover

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC_____ HPLC X

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF - CF)/ave. CF
CF = A/C

Where: ave. CF = initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(ical)/ CCV Conc.	Reported CF/Conc. CCV	Recalculated CF/Conc. CCV	Reported %D	Recalculated %D
1	2E12067.06R	3/15/11	RDX (CCA)	493.50	456.84	456.84	7.4	7.4
			2,4,6-TNT ↓	500.50	500.41	500.41	0	0
2	2E12067.18R	3/16/11	RDX (CCA)	987.00	919.70	919.70	6.8	6.8
			2,4,6-TNT ↓	1001.00	1010.61	1010.61	1.0	1.0
3								
4								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

Surrogate Results Verification

Reviewer: [illegible]
2nd reviewer: [illegible]

METHOD: ___ GC X HPLC

he percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

; Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

ample ID: 1

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
2-NMX	A	1923.43	2135.01	111	111	0

ample ID:

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

ample ID:

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

ample ID:

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

ample ID:

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

lotes:

VALIDATION FINDINGS WORKSHEET

Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: AT

2nd Reviewer: C

METHOD: ___ GC X HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

%Recovery = 100 * (SSC - SC)/SA

RPD =(((SSCLCS - SSCLCSD) * 2) / (SSCLCS + SSCLCSD))*100

Where SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory Control Sample
SC = Sample concentration
LCSD = Laboratory Control Sample duplicate

LCS/LCSD samples: 110710003A-LCS

Compound	Spike Added (ug/kg)		Spike Sample Concentration (ug/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)										
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)	2000.25	n/a	2040.55	n/a	102	102				
2,4,6-Trinitrotoluene (8330)	1999.2	n/a	2304.23	n/a	115	115				

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25786C40

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: ___ GC X HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= (A)(Fv)(Df) / (RF)(Vs or Ws)(%S/100)

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound in the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID. ALL Compound Name ALL

Concentration = ND

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications

Comments:

SAMPCALCnew.wpd

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	March 9, 2011
LDC Report Date:	July 14, 2011
Matrix:	Soil
Parameters:	Terphenyls
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE101

Sample Identification

SL-304-SA5B-SB-3.0-4.0
SL-225-SA5B-SB-2.0-3.0

Introduction

This data review covers 2 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8015B for Terphenyls.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0% .

III. Calibration Verification

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 20.0% QC limits.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No terphenyl contaminants were found in the method blanks.

No field blanks were identified in this SDG.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VI. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VII. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria.

The QAPP reporting limits (RL) were met with the following exceptions:

Sample	Compound	Finding	Criteria	Flag	A or P
All samples in SDG DE101	o-Terphenyl m-Terphenyl p-Terphenyl	Laboratory reporting limit reported at 3.5 mg/Kg.	Reporting limit should be reported at 0.167 mg/Kg per the QAPP.	None None None	P

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE101	All compounds reported below the RL.	J (all detects)	A

X. System Performance

The system performance was acceptable.

XI. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XII. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Terphenyls - Data Qualification Summary - SDG DE101

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE101	SL-304-SA5B-SB-3.0-4.0 SL-225-SA5B-SB-2.0-3.0	o-Terphenyl m-Terphenyl p-Terphenyl	None None None	P	Compound quantitation and CRQLs (*IX)
DE101	SL-304-SA5B-SB-3.0-4.0 SL-225-SA5B-SB-2.0-3.0	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
Terphenyls - Laboratory Blank Data Qualification Summary - SDG DE101

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Terphenyls - Field Blank Data Qualification Summary - SDG DE101

No Sample Data Qualified in this SDG

LDC #: 25786C41

SDG #: DE101

Laboratory: Lancaster Laboratories

VALIDATION COMPLETENESS WORKSHEET

Level IV

Date: 7-13-11

Page: 1 of 1

Reviewer:

2nd Reviewer:

METHOD: GC Terphenyls (EPA SW 846 Method 8015B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 3/29/11
II	Initial calibration	A	%RSD ≤ 20
III.	Calibration verification/ICV	A	CCV ≤ 20 %
IV.	Blanks	A	
V	Surrogate recovery	A	
VI.	Matrix spike/Matrix spike duplicates	N	Client Specified
VII.	Laboratory control samples	A	LCS
VIII.	Target compound identification	A	
IX.	Compound Quantitation and CRQLs	A SW	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	N	
XIII.	Field blanks	N	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: All soil

1 75	SL-304-SA5B-SB-3.0-4.0	11		21		31	110730020A-Blk
2 76	SL-225-SA5B-SB-2.0-3.0	12		22		32	
3		13		23		33	
4		14		24		34	
5		15		25		35	
6		16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

LDC #: 25 100-11

VALIDATION FINDINGS CHECKLIST

Reviewer: MT
2nd Reviewer: [illegible]

Method: ✓ GC _____ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Was a linear fit used for evaluation? If yes, were all percent relative standard deviations (%RSD) < 20%?	✓			
Was a curve fit used for evaluation? If Yes, what was the acceptance criteria used?		✓		
Did the initial calibration meet the curve fit acceptance criteria?			✓	
Were the RT windows properly established?	✓			
IV. Continuing calibration				
What type of continuing calibration calculation was performed? ✓ %D or ___ %R				
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) < 20%.0 or percent recoveries 80-120%?	✓			
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?	✓			
If the percent recovery (%R) of one or more surrogates was outside QC limits, was a reanalysis performed to confirm %R?			✓	
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.		✓		
Was a MS/MSD analyzed every 20 samples of each matrix?		✓		
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
X. Regional Quality Assurance and Quality Control				

LDC #: L5466G1

VALIDATION FINDINGS CHECKLIST

Reviewer: M
2nd Reviewer: C

Validation Area	Yes	No	NA	Findings/Comments
Were performance evaluation (PE) samples performed?		✓		
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
X. Target compound identification				
Were the retention times of reported detects within the RT windows?	✓			
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XV. Field blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

SDG #: See cover

Compound Quantitation and Reported CRQLs

Reviewer: M
2nd Reviewer: A

METHOD: X **GC** __ **HPLC**

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Level IV/D Only

N N/A Were CRQLs adjusted for sample dilutions, dry weight factors, etc.?

N N/A Did the reported results for detected target compounds agree within 10.0% of the recalculated results?

#	Compound Name	Finding	Associated Samples	Qualifications
	ALL	lab RL's higher than	ALL	TEXT (Z)
		QAPP.		
		QAPP = 0.167 mg/kg		
		Lab = 3.5 mg/kg		

Comments: See sample calculation verification worksheet for recalculations

LDC #: [illegible]
SDG #: See Cover

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC X HPLC ____

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the followin calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

#	Standard ID	Calibration Date	Compound	Reported CF (17.74 std)	Recalculated CF (17.74 std)	Reported Average CF (initial)	Recalculated Average CF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	3/16/11	O-Terphenyl	2.59 E4	2.59 E4	2.54 E4	2.57 E4	2.1	2.1
2									
3									
4									

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

SDG #: See Cover

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: MT
2nd Reviewer: [illegible]

METHOD: GC X HPLC ____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF - CF)/ave. CF
CF = A/C

Where: ave. CF = Initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(ical)/ CCV conc.	Reported CF/conc. CCV	Recalculated CF/conc. CCV	Reported %D	Recalculated %D
1	R073.53R	3/16/11	O-Terphenyl	35.48	35.18	35.18	0.9	0.9
	R073.64R	3/16/11	O-Terphenyl	35.48	35.40	35.40	0.2	0.2
2								
3								
4								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

.DC #: [illegible]

VALIDATION FINDINGS WORKSHEET

Surrogate Results Verification

Page: 1 of 1

Reviewer: [illegible]

2nd reviewer: [illegible]

METHOD: X GC __ HPLC

he percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: _____

Surrogate	Detector/ Column	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
n-Tricontane	FID	0.333	0.255163	77	77	0

Sample ID: _____

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Sample ID: _____

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Sample ID: _____

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Sample ID: _____

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Notes: _____

LDC #: _____

VALIDATION FINDINGS WORKSHEET

Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: M
2nd Reviewer: C

METHOD: X GC __ HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

%Recovery = 100 * (SSC - SC)/SA

RPD =(((SSCLCS - SSCLCSD) * 2) / (SSCLCS + SSCLCSD))*100

Where SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory Control Sample
SC = Sample concentration
LCSD = Laboratory Control Sample duplicate

LCS/LCSD samples: 1107300204-LCS

Compound	Spike Added (mg/kg)		Spike Sample Concentration (mg/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)										
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)										
2,4,6-Trinitrotoluene (8330)										
O-Terphenyl	1.67	na	1.61	na	96	96				

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25786C41

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: X GC ___ HPLC

X N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= (A)(Fv)(Df) / (RF)(Vs or Ws)(%S/100)

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound in the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID. ALL Compound Name ALL

Concentration = _____

MD

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications

Comments: _____

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	March 9, 2011
LDC Report Date:	July 13, 2011
Matrix:	Soil
Parameters:	Alcohols
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE101

Sample Identification

SL-304-SA5B-SB-3.0-4.0
SL-225-SA5B-SB-2.0-3.0

Introduction

This data review covers 2 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8015B for Alcohols.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0% .

Retention time windows were evaluated and considered technically acceptable.

III. Calibration Verification

Calibration verification was performed at required frequencies.

The percent differences (%D) of calibration factors in continuing standard mixtures were within the 20.0% QC limits.

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

Retention times (RT) of all compounds in the calibration standards were within QC limits.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No alcohol contaminants were found in the method blanks.

No field blanks were identified in this SDG.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VI. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VII. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE101	All compounds reported below the RL.	J (all detects)	A

X. System Performance

The system performance was acceptable.

XI. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XII. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Alcohols - Data Qualification Summary - SDG DE101

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE101	SL-304-SA5B-SB-3.0-4.0 SL-225-SA5B-SB-2.0-3.0	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
Alcohols - Laboratory Blank Data Qualification Summary - SDG DE101

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Alcohols - Field Blank Data Qualification Summary - SDG DE101

No Sample Data Qualified in this SDG

LDC #: 25786C43

SDG #: DE101

Laboratory: Lancaster Laboratories

VALIDATION COMPLETENESS WORKSHEET

Level IV

Date: 7/11/11

Page: 1 of 1

Reviewer: JM

2nd Reviewer: A

METHOD: GC Alcohols (EPA SW 846 Method 8015B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 3/09/11
II	Initial calibration	A	% RSD ≤ 20 %
III.	Calibration verification/ICV	A	CCV/ICV ≤ 20 %
IV.	Blanks	A	
V	Surrogate recovery	A	
VI.	Matrix spike/Matrix spike duplicates	N	Client Spec
VII.	Laboratory control samples	A	LCS
VIII.	Target compound identification	A	
IX.	Compound Quantitation and CRQLs	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	N	
XIII.	Field blanks	N	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:

Soil

1	SL-304-SA5B-SB-3.0-4.0	11	PBLK26075	21		31	
2	SL-225-SA5B-SB-2.0-3.0	12		22		32	
3		13		23		33	
4		14		24		34	
5		15		25		35	
6		16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

LDC #: 25786 C43

VALIDATION FINDINGS CHECKLIST

Reviewer: JVG
2nd Reviewer: [illegible]

Method: ✓ GC ____ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Was a linear fit used for evaluation? If yes, were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation? If Yes, what was the acceptance criteria used?		✓		
Did the initial calibration meet the curve fit acceptance criteria?			✓	
Were the RT windows properly established?	✓			
IV. Continuing calibration				
What type of continuing calibration calculation was performed? ✓ %D or ____ %R	✓			
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20%.0 or percent recoveries 80-120%?	✓			
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?	✓			
If the percent recovery (%R) of one or more surrogates was outside QC limits, was a reanalysis performed to confirm %R?			✓	
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.		✓		
Was a MS/MSD analyzed every 20 samples of each matrix?		✓		
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				

LDC #: 25786 C43

VALIDATION FINDINGS CHECKLIST

Reviewer: JVG
2nd Reviewer: C

Validation Area	Yes	No	NA	Findings/Comments
Were performance evaluation (PE) samples performed?		✓		
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
X. Target compound identification				
Were the retention times of reported detects within the RT windows?	✓			
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XV. Field blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

LDC #: 25786 C43

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: JVG
2nd Reviewer: A

METHOD: GC ✓ HPLC _____

The calibration factors (CF), average CF, and relative standard deviation (%RSD) were recalculated for compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

Where:
A = Area of compound
C = Concentration of compound
S = Standard deviation of calibration factors
X = Mean of calibration factors

#	Standard ID	Calibration Date	Compound	Reported (CF 5000 std)	Recalculated (CF 5000 std)	Reported Average RRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL	3/4/2011	Methanol	6.070	6.071	6.110	6.110	6.1	6.1
	H2739B								

C	A
5000	30354

Conc	Methanol
1000	6.500
2500	6.480
5000	6.070
10000	5.790
2.37	5.710
X=	6.110
S=	0.372

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #25786C43

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: JVG
2nd Reviewer:

METHOD: GC_____HPLC_____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration percent difference (%D) values were recalculated for the compounds identified below using the following calculation:

Percent difference (%D) = 100 * (N - C)/N

Where: N = Initial Calibration Factor or Nominal Amount
C = Calibration Factor from Continuing Calibration Standard or Calculated Amount

#	Standard ID	Calibration Date	Compound	CCV Conc	Reported Conc	Recalculated Conc	Reported % D	Recalculated %D
1	0003	3/16/2011	Methanol	2500	2382.57	2382.82	4.7	4.7
	H2739B							

	Compound	Area	CF
CCV1	Methanol	14559	6.110

LDC #: 25786 C43

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Page: 1 of 1
Reviewer: JVG
2nd reviewer: [illegible]

METHOD: ✓ GC __ HPLC

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: 1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
Acetone	SP-1000	250	2254.25	90	90	0

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

LDC #: 25786 C4y

VALIDATION FINDINGS WORKSHEET

Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: JVG

2nd Reviewer: C

METHOD: /GC __HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

%Recovery = 100 * (SSC - SC)/SA

RPD =(({SSCLCS - SSCLCSD} * 2) / (SSCLCS + SSCLCSD))*100

Where SSC = Spiked sample concentration; SA = Spike added; LCS = Laboratory Control Sample; SC = Sample concentration; LCSD = Laboratory Control Sample duplicate

LCS/LCSD samples: LCS 26075

Compound	Spike Added (ug/kg)		Spike Sample Concentration (ug/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
~~Gasoline~~ Meat (8015)	2500	NA	2277.61	NA	91	91				
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)										
2,4,6-Trinitrotoluene (8330)										

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25786C43

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: JVG
2nd Reviewer: C

METHOD: ✓ GC ___ HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= (A)(Fv)(Df) / (RF)(Vs or Ws)(%S/100)

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound In the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID._____ Compound Name ND

Concentration =_____

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications

Comments:

SAMPCALCnew.wpd

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	March 9, 2011
LDC Report Date:	July 13, 2011
Matrix:	Soil
Parameters:	Glycols
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE101

Sample Identification

SL-304-SA5B-SB-3.0-4.0
SL-225-SA5B-SB-2.0-3.0

Introduction

This data review covers 2 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8015B for Glycols.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0%.

Retention time windows were evaluated and considered technically acceptable.

III. Calibration Verification

Calibration verification was performed at required frequencies.

The percent differences (%D) of calibration factors in continuing standard mixtures were within the 20.0% QC limits.

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

Retention times (RT) of all compounds in the calibration standards were within QC limits.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No glycol contaminants were found in the method blanks.

No field blanks were identified in this SDG.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VI. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VII. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE101	All compounds reported below the RL.	J (all detects)	A

X. System Performance

The system performance was acceptable.

XI. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XII. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Glycols - Data Qualification Summary - SDG DE101

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE101	SL-304-SA5B-SB-3.0-4.0 SL-225-SA5B-SB-2.0-3.0	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
Glycols - Laboratory Blank Data Qualification Summary - SDG DE101

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Glycols - Field Blank Data Qualification Summary - SDG DE101

No Sample Data Qualified in this SDG

LDC #: 25786C45

SDG #: DE101

Laboratory: Lancaster Laboratories

VALIDATION COMPLETENESS WORKSHEET

Level IV

Date: 7/11/11

Page: 1 of 1

Reviewer: JVC

2nd Reviewer: [illegible]

METHOD: GC Glycols (EPA SW 846 Method 8015B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 3/09/11
II	Initial calibration	A	% RSD ≤ 20 %
III.	Calibration verification/ICV	A	CCV/ICV ≤ 20 %
IV.	Blanks	A	
V	Surrogate recovery	A	
VI.	Matrix spike/Matrix spike duplicates	N	Client spec
VII.	Laboratory control samples	A	LCS
VIII.	Target compound identification	A	
IX.	Compound Quantitation and CRQLs	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	N	
XIII.	Field blanks	N	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: Soil

1	SL-~~314~~ 304-SA5B-~~SB-0.0-0.5~~ SB-3.0-4.0	11	PBLK07073	21		31	
2	SL-~~316~~ 225-SA5B-SB-~~4.5-5.5~~ 2.0-3.0	12		22		32	
3	~~SL-328-SA5B-SB-3.5-4.5~~	13		23		33	
4		14		24		34	
5		15		25		35	
6		16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

LDC #: 25786 C45

VALIDATION FINDINGS CHECKLIST

Reviewer: JVG
2nd Reviewer: C

Method: ✓ GC _____ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Was a linear fit used for evaluation? If yes, were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation? If Yes, what was the acceptance criteria used?		✓		
Did the initial calibration meet the curve fit acceptance criteria?			✓	
Were the RT windows properly established?	✓			
IV. Continuing calibration				
What type of continuing calibration calculation was performed? ✓ %D or ____ %R	✓			
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20%.0 or percent recoveries 80-120%?	✓			
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?	✓			
If the percent recovery (%R) of one or more surrogates was outside QC limits, was a reanalysis performed to confirm %R?			✓	
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.		✓		
Was a MS/MSD analyzed every 20 samples of each matrix?		✓		
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				

LDC #: 25786 C45

VALIDATION FINDINGS CHECKLIST

Reviewer: JVG
2nd Reviewer: C

Validation Area	Yes	No	NA	Findings/Comments
Were performance evaluation (PE) samples performed?		✓		
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
X. Target compound identification				
Were the retention times of reported detects within the RT windows?	✓			
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XV. Field blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

LDC #: 25786C 48

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: JVG
2nd Reviewer: [illegible]

METHOD: GC ✓ HPLC _____

The calibration factors (CF), average CF, and relative standard deviation (%RSD) were recalculated for compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

Where:
H = Height of compound
C = Concentration of compound
S = Standard deviation of calibration factors
X = Mean of calibration factors

#	Standard ID	Calibration Date	Compound	Reported (211.111 std)	Recalculated (211.111 std)	Reported Average RRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL	3/16/2011	Ethylene glycol	176.6665	176.6667	184.8493	184.8493	10.7	10.7
	H6612A								

C	H
211.111	37296.28

Conc	Ethylene glycol
10.556	181.1939
52.778	160.0332
105.556	192.6461
211.111	176.6665
316.667	179.3655
527.778	219.1904
X=	184.8493
S=	19.831

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC # 25786C48

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: JVG
2nd Reviewer: [illegible]

METHOD: GC ✓ HPLC_____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration percent difference (%D) values were recalculated for the compounds identified below using the following calculation:

Percent difference (%D) = 100 * (N - C)/N

Where: N = Initial Calibration Factor or Nominal Amount
C = Calibration Factor from Continuing Calibration Standard or Calculated Amount

#	Standard ID	Calibration Date	Compound	CCV Conc	Reported Conc	Recalculated Conc	Reported % D	Recalculated %D
1	0023	3/16/2011	Ethylene glycol	105.56	120.77	120.77	14.4	14.4

	Compound	Height	CF
CCV1	Ethylene glycol	22324	184.85

LDC #: 25786C45

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: JVG
2nd reviewer: A

METHOD: ✓ GC __ HPLC

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
Tetramethylene glycol	Col. A	196.86	121.88	62 ✓	62 ✓	0

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

LDC #: 25786C45

VALIDATION FINDINGS WORKSHEET

Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: JVG

2nd Reviewer: [illegible]

METHOD: ✓ GC __HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

%Recovery = 100 * (SSC - SC)/SA

RPD =(({SSCLCS - SSCLCSD} * 2) / (SSCLCS + SSCLCSD))*100

Where SSC = Spiked sample concentration; SA = Spike added; LCS = Laboratory Control Sample; SC = Sample concentration; LCSD = Laboratory Control Sample duplicate

LCS/LCSD samples: LCS07073

Compound	Spike Added (mg/kg)		Spike Sample Concentration (mg/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
~~Gasoline~~ Gylcol (8015)	205.03	NA	173.75	NA	85	84.5				
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)										
2,4,6-Trinitrotoluene (8330)										

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25786C45

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: JVG
2nd Reviewer: C

METHOD: ✓ **GC** __ **HPLC**

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= (A)(Fv)(Df) / (RF)(Vs or Ws)(%S/100)

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound In the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID._____ Compound Name ND

Concentration =_____

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications

Comments:

SAMPCALCnew.wpd

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	March 9, 2011
LDC Report Date:	July 14, 2011
Matrix:	Soil
Parameters:	Formaldehyde
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE101

Sample Identification

SL-304-SA5B-SB-3.0-4.0
SL-225-SA5B-SB-2.0-3.0

Introduction

This data review covers 2 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8315A for Formaldehyde.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0% .

III. Calibration Verification

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 20.0% QC limits.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No formaldehyde was found in the method blanks.

No field blanks were identified in this SDG.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VI. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VII. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE101	All compounds reported below the RL.	J (all detects)	A

X. System Performance

The system performance was acceptable.

XI. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XII. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Formaldehyde - Data Qualification Summary - SDG DE101

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE101	SL-304-SA5B-SB-3.0-4.0 SL-225-SA5B-SB-2.0-3.0	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
Formaldehyde - Laboratory Blank Data Qualification Summary - SDG DE101

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Formaldehyde - Field Blank Data Qualification Summary - SDG DE101

No Sample Data Qualified in this SDG

LDC #: 25786C71 **VALIDATION COMPLETENESS WORKSHEET** Date: 7-12-4
SDG #: DE101 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: HPLC Formaldehyde (EPA SW 846 Method 8315A)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 3/9/4
II	Initial calibration	A	%RSD≤20
III.	Calibration verification/~~ICV~~	A	CCV≤20%
IV.	Blanks	A	
V	Surrogate recovery	A	
VI.	Matrix spike/Matrix spike duplicates	N	Client Specified
VII.	Laboratory control samples	A	LCS
VIII.	Target compound identification	A	
IX.	Compound Quantitation and CRQLs	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	N	
XIII.	Field blanks	N	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:

All soil

1	SL-304-SA5B-SB-3.0-4.0	11		21		31	110730008A-BLK
2	SL-225-SA5B-SB-2.0-3.0	12		22		32	
3		13		23		33	
4		14		24		34	
5		15		25		35	
6		16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

LDC #: 25T0011

VALIDATION FINDINGS CHECKLIST

Reviewer: [illegible]
2nd Reviewer: [illegible]

Method: ____ GC ___X___ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Was a linear fit used for evaluation? If yes, were all percent relative standard deviations (%RSD) < 20%?	✓			
Was a curve fit used for evaluation? If Yes, what was the acceptance criteria used?		✓		
Did the initial calibration meet the curve fit acceptance criteria?			✓	
Were the RT windows properly established?	✓			
IV. Continuing calibration				
What type of continuing calibration calculation was performed? ✓ %D or ___ %R				
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) < 20%.0 or percent recoveries 80-120%?	✓			
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?	✓			
If the percent recovery (%R) of one or more surrogates was outside QC limits, was a reanalysis performed to confirm %R?			✓	
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.		✓		
Was a MS/MSD analyzed every 20 samples of each matrix?		✓		
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
X. Regional Quality Assurance and Quality Control				

LDC #: 'L5 T86C47

VALIDATION FINDINGS CHECKLIST

Reviewer: JA
2nd Reviewer: A

Validation Area	Yes	No	NA	Findings/Comments
Were performance evaluation (PE) samples performed?		✓		
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
X. Target compound identification				
Were the retention times of reported detects within the RT windows?	✓			
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XV. Field blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

LDC #: [illegible]
SDG #: See Cover

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC_____ HPLC X

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the followin calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

#	Standard ID	Calibration Date	Compound	Reported CF (2882 std)	Recalculated CF (2882 std)	Reported Average CF (Initial)	Recalculated Average CF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL	3/16/11	Formaldehyde	61.5	61.5	59.8	59.8	4.0	4.0
2									
3									
4									

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

SDG #: See Cover

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC_____ HPLC X

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF - CF)/ave. CF
CF = A/C

Where: ave. CF = initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(ical)/ CCV Conc.	Reported CF/Conc. CCV	Recalculated CF/Conc. CCV	Reported %D	Recalculated %D
1	F4075.20R	3/16/11	Formaldehyde	199000	1956.33	1956.33	1.7	1.7
2								
3								
4								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

Surrogate Results Verification

Reviewer: [illegible]
2nd reviewer: [illegible]

METHOD: ___ GC X HPLC

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: 2

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Butyraldehyde	A	3948.53	3869.57	98	98	0

Sample ID:

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

Sample ID:

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

Sample ID:

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

Sample ID:

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

Notes:

LDC #: _____

VALIDATION FINDINGS WORKSHEET

Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: ___ GC X HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

%Recovery = 100 * (SSC - SC)/SA

RPD =(((SSCLCS - SSCLCSD) * 2) / (SSCLCS + SSCLCSD))*100

Where SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory Control Sample
SC = Sample concentration
LCSD = Laboratory Control Sample duplicate

LCS/LCSD samples: 110730008A- LCS

Compound	Spike Added (ug/kg)		Spike Sample Concentration (ug/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)										
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)										
2,4,6-Trinitrotoluene (8330)										
Formaldehyde	50/0	n/a	4496.35	n/a	96	96				

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25786C71

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: M
2nd Reviewer: C

METHOD: ___ GC X HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= (A)(Fv)(Df) / (RF)(Vs or Ws)(%S/100)

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound In the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID. ALL Compound Name Formaldehyde

Concentration = _____

MD

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications

Comments: _____

SAMPLE DELIVERY GROUP

DE102

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
11-Mar-2011	TB-031111	6228986	TB	5030B	8015M	III
11-Mar-2011	TB-031111	6228986	TB	5030B	8260B	III
11-Mar-2011	TB-031111	6228986	TB	5030B	8260B SIM	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0	6228978	N	3050B	6010B	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0	6228978	N	3050B	6020	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0	6228978	N	3060A	7199	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0	6228978	N	3546	1625C	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0	6228978	N	3550B	8015B	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0	6228978	N	3550B	8015M	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0	6228978	N	3550B	8082	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0	6228978	N	3550B	8270C	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0	6228978	N	3550B	8270C SIM	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0	6228978	N	5035	8015M	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0	6228978	N	5035	8260B	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0	6228978	N	5035	8260B SIM	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0	6228978	N	8330	8330A	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0	6228978	N	Gen Prep	9045M	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0	6228978	N	METHOD	300.0	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0	6228978	N	METHOD	314.0	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0	6228978	N	METHOD	7471A	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0	6228978	N	METHOD	8015B	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0	6228978	N	METHOD	8015M	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0	6228978	N	METHOD	8315A	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0	6228978	N	METHOD	9012B	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0MS	6228979	MS	3050B	6010B	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0MS	6228979	MS	3050B	6020	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0MS	6228979	MS	3060A	7199	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0MS	6228979	MS	3546	1625C	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0MS	6228979	MS	3550B	8015B	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0MS	6228979	MS	3550B	8015M	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0MS	6228979	MS	3550B	8082	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0MS	6228979	MS	3550B	8270C	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0MS	6228979	MS	3550B	8270C SIM	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0MS	6228979	MS	5035	8015M	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0MS	6228979	MS	5035	8260B	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0MS	6228979	MS	5035	8260B SIM	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0MS	6228979	MS	8330	8330A	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0MS	6228979	MS	METHOD	300.0	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0MS	6228979	MS	METHOD	314.0	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0MS	6228979	MS	METHOD	7471A	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0MS	6228979	MS	METHOD	8015B	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0MS	6228979	MS	METHOD	8015M	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0MS	6228979	MS	METHOD	8315A	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0MS	6228979	MS	METHOD	9012B	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0MSD	6228980	MSD	3050B	6010B	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0MSD	6228980	MSD	3050B	6020	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0MSD	6228980	MSD	3546	1625C	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0MSD	6228980	MSD	3550B	8015B	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0MSD	6228980	MSD	3550B	8015M	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0MSD	6228980	MSD	3550B	8082	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0MSD	6228980	MSD	3550B	8270C	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0MSD	6228980	MSD	3550B	8270C SIM	III

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IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0MSD	6228980	MSD	5035	8015M	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0MSD	6228980	MSD	5035	8260B	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0MSD	6228980	MSD	5035	8260B SIM	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0MSD	6228980	MSD	8330	8330A	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0MSD	6228980	MSD	METHOD	7471A	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0MSD	6228980	MSD	METHOD	8015B	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0MSD	6228980	MSD	METHOD	8015M	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0MSD	6228980	MSD	METHOD	8315A	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0DUP	6228981	DUP	3050B	6010B	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0DUP	6228981	DUP	3050B	6020	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0DUP	6228981	DUP	3060A	7199	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0DUP	6228981	DUP	Gen Prep	9045M	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0DUP	6228981	DUP	METHOD	300.0	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0DUP	6228981	DUP	METHOD	314.0	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0DUP	6228981	DUP	METHOD	7471A	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0DUP	6228981	DUP	METHOD	9012B	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0MSD	P228978M320217A	MSD	3550B	8015M	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0MS	P228978R320152A	MS	3550B	8015M	III
11-Mar-2011	SL-114-SA5A-SB-9.0-10.0	6228982	N	3050B	6010B	III
11-Mar-2011	SL-114-SA5A-SB-9.0-10.0	6228982	N	3050B	6020	III
11-Mar-2011	SL-114-SA5A-SB-9.0-10.0	6228982	N	3060A	7199	III
11-Mar-2011	SL-114-SA5A-SB-9.0-10.0	6228982	N	3546	1625C	III
11-Mar-2011	SL-114-SA5A-SB-9.0-10.0	6228982	N	3550B	8015B	III
11-Mar-2011	SL-114-SA5A-SB-9.0-10.0	6228982	N	3550B	8015M	III
11-Mar-2011	SL-114-SA5A-SB-9.0-10.0	6228982	N	3550B	8082	III
11-Mar-2011	SL-114-SA5A-SB-9.0-10.0	6228982	N	3550B	8270C	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
11-Mar-2011	SL-114-SA5A-SB-9.0-10.0	6228982	N	3550B	8270C SIM	III
11-Mar-2011	SL-114-SA5A-SB-9.0-10.0	6228982	N	5035	8015M	III
11-Mar-2011	SL-114-SA5A-SB-9.0-10.0	6228982	N	5035	8260B	III
11-Mar-2011	SL-114-SA5A-SB-9.0-10.0	6228982	N	5035	8260B SIM	III
11-Mar-2011	SL-114-SA5A-SB-9.0-10.0	6228982	N	8330	8330A	III
11-Mar-2011	SL-114-SA5A-SB-9.0-10.0	6228982	N	Gen Prep	9045M	III
11-Mar-2011	SL-114-SA5A-SB-9.0-10.0	6228982	N	METHOD	300.0	III
11-Mar-2011	SL-114-SA5A-SB-9.0-10.0	6228982	N	METHOD	314.0	III
11-Mar-2011	SL-114-SA5A-SB-9.0-10.0	6228982	N	METHOD	7471A	III
11-Mar-2011	SL-114-SA5A-SB-9.0-10.0	6228982	N	METHOD	8015B	III
11-Mar-2011	SL-114-SA5A-SB-9.0-10.0	6228982	N	METHOD	8015M	III
11-Mar-2011	SL-114-SA5A-SB-9.0-10.0	6228982	N	METHOD	8315A	III
11-Mar-2011	SL-114-SA5A-SB-9.0-10.0	6228982	N	METHOD	9012B	III
11-Mar-2011	DUP09-SA5A-QC-031111	6228975	FD	3050B	6010B	III
11-Mar-2011	DUP09-SA5A-QC-031111	6228975	FD	3050B	6020	III
11-Mar-2011	DUP09-SA5A-QC-031111	6228975	FD	3060A	7199	III
11-Mar-2011	DUP09-SA5A-QC-031111	6228975	FD	3546	1625C	III
11-Mar-2011	DUP09-SA5A-QC-031111	6228975	FD	3550B	8015B	III
11-Mar-2011	DUP09-SA5A-QC-031111	6228975	FD	3550B	8015M	III
11-Mar-2011	DUP09-SA5A-QC-031111	6228975	FD	3550B	8082	III
11-Mar-2011	DUP09-SA5A-QC-031111	6228975	FD	3550B	8270C	III
11-Mar-2011	DUP09-SA5A-QC-031111	6228975	FD	3550B	8270C SIM	III
11-Mar-2011	DUP09-SA5A-QC-031111	6228975	FD	5035	8015M	III
11-Mar-2011	DUP09-SA5A-QC-031111	6228975	FD	5035	8260B	III
11-Mar-2011	DUP09-SA5A-QC-031111	6228975	FD	5035	8260B SIM	III
11-Mar-2011	DUP09-SA5A-QC-031111	6228975	FD	8330	8330A	III

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Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
11-Mar-2011	DUP09-SA5A-QC-031111	6228975	FD	Gen Prep	9045M	III
11-Mar-2011	DUP09-SA5A-QC-031111	6228975	FD	METHOD	300.0	III
11-Mar-2011	DUP09-SA5A-QC-031111	6228975	FD	METHOD	314.0	III
11-Mar-2011	DUP09-SA5A-QC-031111	6228975	FD	METHOD	7471A	III
11-Mar-2011	DUP09-SA5A-QC-031111	6228975	FD	METHOD	8015B	III
11-Mar-2011	DUP09-SA5A-QC-031111	6228975	FD	METHOD	8015M	III
11-Mar-2011	DUP09-SA5A-QC-031111	6228975	FD	METHOD	8315A	III
11-Mar-2011	DUP09-SA5A-QC-031111	6228975	FD	METHOD	9012B	III
11-Mar-2011	SL-112-SA5A-SB-8.5-9.5	6228976	N	3050B	6010B	III
11-Mar-2011	SL-112-SA5A-SB-8.5-9.5	6228976	N	3050B	6020	III
11-Mar-2011	SL-112-SA5A-SB-8.5-9.5	6228976	N	3060A	7199	III
11-Mar-2011	SL-112-SA5A-SB-8.5-9.5	6228976	N	3546	1625C	III
11-Mar-2011	SL-112-SA5A-SB-8.5-9.5	6228976	N	3550B	8015B	III
11-Mar-2011	SL-112-SA5A-SB-8.5-9.5	6228976	N	3550B	8015M	III
11-Mar-2011	SL-112-SA5A-SB-8.5-9.5	6228976	N	3550B	8082	III
11-Mar-2011	SL-112-SA5A-SB-8.5-9.5	6228976	N	3550B	8270C	III
11-Mar-2011	SL-112-SA5A-SB-8.5-9.5	6228976	N	3550B	8270C SIM	III
11-Mar-2011	SL-112-SA5A-SB-8.5-9.5	6228976	N	5035	8015M	III
11-Mar-2011	SL-112-SA5A-SB-8.5-9.5	6228976	N	5035	8260B	III
11-Mar-2011	SL-112-SA5A-SB-8.5-9.5	6228976	N	5035	8260B SIM	III
11-Mar-2011	SL-112-SA5A-SB-8.5-9.5	6228976	N	8330	8330A	III
11-Mar-2011	SL-112-SA5A-SB-8.5-9.5	6228976	N	Gen Prep	9045M	III
11-Mar-2011	SL-112-SA5A-SB-8.5-9.5	6228976	N	METHOD	300.0	III
11-Mar-2011	SL-112-SA5A-SB-8.5-9.5	6228976	N	METHOD	314.0	III
11-Mar-2011	SL-112-SA5A-SB-8.5-9.5	6228976	N	METHOD	7471A	III
11-Mar-2011	SL-112-SA5A-SB-8.5-9.5	6228976	N	METHOD	8015B	III

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Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
11-Mar-2011	SL-112-SA5A-SB-8.5-9.5	6228976	N	METHOD	8015M	III
11-Mar-2011	SL-112-SA5A-SB-8.5-9.5	6228976	N	METHOD	8315A	III
11-Mar-2011	SL-112-SA5A-SB-8.5-9.5	6228976	N	METHOD	9012B	III
11-Mar-2011	SL-112-SA5A-SB-14.0-15.0	6228977	N	3050B	6010B	III
11-Mar-2011	SL-112-SA5A-SB-14.0-15.0	6228977	N	3050B	6020	III
11-Mar-2011	SL-112-SA5A-SB-14.0-15.0	6228977	N	3060A	7199	III
11-Mar-2011	SL-112-SA5A-SB-14.0-15.0	6228977	N	3546	1625C	III
11-Mar-2011	SL-112-SA5A-SB-14.0-15.0	6228977	N	3550B	8015B	III
11-Mar-2011	SL-112-SA5A-SB-14.0-15.0	6228977	N	3550B	8015M	III
11-Mar-2011	SL-112-SA5A-SB-14.0-15.0	6228977	N	3550B	8082	III
11-Mar-2011	SL-112-SA5A-SB-14.0-15.0	6228977	N	3550B	8270C	III
11-Mar-2011	SL-112-SA5A-SB-14.0-15.0	6228977	N	3550B	8270C SIM	III
11-Mar-2011	SL-112-SA5A-SB-14.0-15.0	6228977	N	5035	8015M	III
11-Mar-2011	SL-112-SA5A-SB-14.0-15.0	6228977	N	5035	8260B	III
11-Mar-2011	SL-112-SA5A-SB-14.0-15.0	6228977	N	5035	8260B SIM	III
11-Mar-2011	SL-112-SA5A-SB-14.0-15.0	6228977	N	8330	8330A	III
11-Mar-2011	SL-112-SA5A-SB-14.0-15.0	6228977	N	Gen Prep	9045M	III
11-Mar-2011	SL-112-SA5A-SB-14.0-15.0	6228977	N	METHOD	300.0	III
11-Mar-2011	SL-112-SA5A-SB-14.0-15.0	6228977	N	METHOD	314.0	III
11-Mar-2011	SL-112-SA5A-SB-14.0-15.0	6228977	N	METHOD	7471A	III
11-Mar-2011	SL-112-SA5A-SB-14.0-15.0	6228977	N	METHOD	8015B	III
11-Mar-2011	SL-112-SA5A-SB-14.0-15.0	6228977	N	METHOD	8015M	III
11-Mar-2011	SL-112-SA5A-SB-14.0-15.0	6228977	N	METHOD	8315A	III
11-Mar-2011	SL-112-SA5A-SB-14.0-15.0	6228977	N	METHOD	9012B	III
11-Mar-2011	SL-227-SA5B-SB-2.5-3.5	6228985	N	3050B	6010B	III
11-Mar-2011	SL-227-SA5B-SB-2.5-3.5	6228985	N	3050B	6020	III

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Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
11-Mar-2011	SL-227-SA5B-SB-2.5-3.5	6228985	N	3060A	7199	III
11-Mar-2011	SL-227-SA5B-SB-2.5-3.5	6228985	N	3546	1625C	III
11-Mar-2011	SL-227-SA5B-SB-2.5-3.5	6228985	N	3550B	8015B	III
11-Mar-2011	SL-227-SA5B-SB-2.5-3.5	6228985	N	3550B	8015M	III
11-Mar-2011	SL-227-SA5B-SB-2.5-3.5	6228985	N	3550B	8082	III
11-Mar-2011	SL-227-SA5B-SB-2.5-3.5	6228985	N	3550B	8270C	III
11-Mar-2011	SL-227-SA5B-SB-2.5-3.5	6228985	N	3550B	8270C SIM	III
11-Mar-2011	SL-227-SA5B-SB-2.5-3.5	6228985	N	5035	8015M	III
11-Mar-2011	SL-227-SA5B-SB-2.5-3.5	6228985	N	5035	8260B	III
11-Mar-2011	SL-227-SA5B-SB-2.5-3.5	6228985	N	5035	8260B SIM	III
11-Mar-2011	SL-227-SA5B-SB-2.5-3.5	6228985	N	8330	8330A	III
11-Mar-2011	SL-227-SA5B-SB-2.5-3.5	6228985	N	Gen Prep	9045M	III
11-Mar-2011	SL-227-SA5B-SB-2.5-3.5	6228985	N	METHOD	300.0	III
11-Mar-2011	SL-227-SA5B-SB-2.5-3.5	6228985	N	METHOD	314.0	III
11-Mar-2011	SL-227-SA5B-SB-2.5-3.5	6228985	N	METHOD	7471A	III
11-Mar-2011	SL-227-SA5B-SB-2.5-3.5	6228985	N	METHOD	8015B	III
11-Mar-2011	SL-227-SA5B-SB-2.5-3.5	6228985	N	METHOD	8015M	III
11-Mar-2011	SL-227-SA5B-SB-2.5-3.5	6228985	N	METHOD	8315A	III
11-Mar-2011	SL-227-SA5B-SB-2.5-3.5	6228985	N	METHOD	9012B	III
11-Mar-2011	SL-113-SA5A-SB-9.0-10.0	6228983	N	3050B	6010B	III
11-Mar-2011	SL-113-SA5A-SB-9.0-10.0	6228983	N	3050B	6020	III
11-Mar-2011	SL-113-SA5A-SB-9.0-10.0	6228983	N	3060A	7199	III
11-Mar-2011	SL-113-SA5A-SB-9.0-10.0	6228983	N	3546	1625C	III
11-Mar-2011	SL-113-SA5A-SB-9.0-10.0	6228983	N	3550B	8015B	III
11-Mar-2011	SL-113-SA5A-SB-9.0-10.0	6228983	N	3550B	8015M	III
11-Mar-2011	SL-113-SA5A-SB-9.0-10.0	6228983	N	3550B	8082	III

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Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
11-Mar-2011	SL-113-SA5A-SB-9.0-10.0	6228983	N	3550B	8270C	III
11-Mar-2011	SL-113-SA5A-SB-9.0-10.0	6228983	N	3550B	8270C SIM	III
11-Mar-2011	SL-113-SA5A-SB-9.0-10.0	6228983	N	5035	8015M	III
11-Mar-2011	SL-113-SA5A-SB-9.0-10.0	6228983	N	5035	8260B	III
11-Mar-2011	SL-113-SA5A-SB-9.0-10.0	6228983	N	5035	8260B SIM	III
11-Mar-2011	SL-113-SA5A-SB-9.0-10.0	6228983	N	8330	8330A	III
11-Mar-2011	SL-113-SA5A-SB-9.0-10.0	6228983	N	Gen Prep	9045M	III
11-Mar-2011	SL-113-SA5A-SB-9.0-10.0	6228983	N	METHOD	300.0	III
11-Mar-2011	SL-113-SA5A-SB-9.0-10.0	6228983	N	METHOD	314.0	III
11-Mar-2011	SL-113-SA5A-SB-9.0-10.0	6228983	N	METHOD	7471A	III
11-Mar-2011	SL-113-SA5A-SB-9.0-10.0	6228983	N	METHOD	8015B	III
11-Mar-2011	SL-113-SA5A-SB-9.0-10.0	6228983	N	METHOD	8015M	III
11-Mar-2011	SL-113-SA5A-SB-9.0-10.0	6228983	N	METHOD	8315A	III
11-Mar-2011	SL-113-SA5A-SB-9.0-10.0	6228983	N	METHOD	9012B	III
11-Mar-2011	SL-113-SA5A-SB-14.0-15	6228984	N	3050B	6010B	III
11-Mar-2011	SL-113-SA5A-SB-14.0-15	6228984	N	3050B	6020	III
11-Mar-2011	SL-113-SA5A-SB-14.0-15	6228984	N	3060A	7199	III
11-Mar-2011	SL-113-SA5A-SB-14.0-15	6228984	N	3546	1625C	III
11-Mar-2011	SL-113-SA5A-SB-14.0-15	6228984	N	3550B	8015B	III
11-Mar-2011	SL-113-SA5A-SB-14.0-15	6228984	N	3550B	8015M	III
11-Mar-2011	SL-113-SA5A-SB-14.0-15	6228984	N	3550B	8082	III
11-Mar-2011	SL-113-SA5A-SB-14.0-15	6228984	N	3550B	8270C	III
11-Mar-2011	SL-113-SA5A-SB-14.0-15	6228984	N	3550B	8270C SIM	III
11-Mar-2011	SL-113-SA5A-SB-14.0-15	6228984	N	5035	8015M	III
11-Mar-2011	SL-113-SA5A-SB-14.0-15	6228984	N	5035	8260B	III
11-Mar-2011	SL-113-SA5A-SB-14.0-15	6228984	N	5035	8260B SIM	III

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IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
11-Mar-2011	SL-113-SA5A-SB-14.0-15	6228984	N	8330	8330A	III
11-Mar-2011	SL-113-SA5A-SB-14.0-15	6228984	N	Gen Prep	9045M	III
11-Mar-2011	SL-113-SA5A-SB-14.0-15	6228984	N	METHOD	300.0	III
11-Mar-2011	SL-113-SA5A-SB-14.0-15	6228984	N	METHOD	314.0	III
11-Mar-2011	SL-113-SA5A-SB-14.0-15	6228984	N	METHOD	7471A	III
11-Mar-2011	SL-113-SA5A-SB-14.0-15	6228984	N	METHOD	8015B	III
11-Mar-2011	SL-113-SA5A-SB-14.0-15	6228984	N	METHOD	8015M	III
11-Mar-2011	SL-113-SA5A-SB-14.0-15	6228984	N	METHOD	8315A	III
11-Mar-2011	SL-113-SA5A-SB-14.0-15	6228984	N	METHOD	9012B	III
11-Mar-2011	SL-113-SA5A-SB-14.0-15DUP	P228984D271627A	DUP	METHOD	9012B	III
11-Mar-2011	SL-113-SA5A-SB-14.0-15MS	P228984R271631A	MS	METHOD	9012B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE102 | Laboratory: LL

EDD Filename: DE102_v1. | eQAPP Name: CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 | Matrix: SO

Sample ID: DUP09-SA5A-QC-031111 | Collected: 3/11/2011 8:58:00 | Analysis Type: RES | Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	5.2		0.97	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-112-SA5A-SB-14.0-15.0 | Collected: 3/11/2011 12:16:00 | Analysis Type: RES | Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.3		0.90	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-112-SA5A-SB-8.5-9.5 | Collected: 3/11/2011 12:06:00 | Analysis Type: RES | Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.6		0.89	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-113-SA5A-SB-14.0-15 | Collected: 3/11/2011 3:39:00 | Analysis Type: RES | Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	3.6		0.87	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-113-SA5A-SB-9.0-10.0 | Collected: 3/11/2011 3:29:00 | Analysis Type: RES | Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.8		0.90	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-114-SA5A-SB-4.0-5.0 | Collected: 3/11/2011 8:34:00 | Analysis Type: RES | Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	6.6		1.0	MDL	1.3	PQL	mg/Kg	J	Q

Sample ID: SL-114-SA5A-SB-9.0-10.0 | Collected: 3/11/2011 8:43:00 | Analysis Type: RES | Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	5.9		1.0	MDL	1.3	PQL	mg/Kg	J	Q

Sample ID: SL-227-SA5B-SB-2.5-3.5 | Collected: 3/11/2011 2:10:00 | Analysis Type: RES | Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	5.6		0.91	MDL	1.1	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE102 **Laboratory: LL**

EDD Filename: DE102_v1. **eQAPP Name: CDM_SSFL_110509**

Method Category: GENCHEM
Method: 300.0 **Matrix:** SO

Method Category: METALS
Method: 6010B **Matrix:** SO

Sample ID: **DUP09-SA5A-QC-031111** ***Collected:*** **3/11/2011 8:58:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	18500		7.30	MDL	23.8	PQL	mg/Kg	J	FD
TIN	3.01	J	1.19	MDL	11.9	PQL	mg/Kg	U	B
Zirconium	5.35	J	1.00	MDL	5.96	PQL	mg/Kg	J	Z

Sample ID: **SL-112-SA5A-SB-14.0-15.0** ***Collected:*** **3/11/2011 12:16:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	4.47	J	0.974	MDL	5.47	PQL	mg/Kg	J	Z
TIN	2.63	J	1.09	MDL	10.9	PQL	mg/Kg	U	B

Sample ID: **SL-112-SA5A-SB-8.5-9.5** ***Collected:*** **3/11/2011 12:06:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	4.79	J	0.977	MDL	5.49	PQL	mg/Kg	J	Z
TIN	2.79	J	1.10	MDL	11.0	PQL	mg/Kg	U	B
Zirconium	1.74	J	0.922	MDL	5.49	PQL	mg/Kg	J	Z

Sample ID: **SL-113-SA5A-SB-14.0-15** ***Collected:*** **3/11/2011 3:39:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.77	J	0.942	MDL	5.29	PQL	mg/Kg	J	Z
TIN	2.09	J	1.06	MDL	10.6	PQL	mg/Kg	U	B

Sample ID: **SL-113-SA5A-SB-9.0-10.0** ***Collected:*** **3/11/2011 3:29:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	4.17	J	0.993	MDL	5.58	PQL	mg/Kg	J	Z
TIN	2.57	J	1.12	MDL	11.2	PQL	mg/Kg	U	B
Zirconium	0.941	J	0.938	MDL	5.58	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE102 **Laboratory: LL**

EDD Filename: DE102_v1. **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: **SL-114-SA5A-SB-4.0-5.0** ***Collected:*** **3/11/2011 8:34:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	35900		7.64	MDL	24.9	PQL	mg/Kg	J	FD
TIN	3.11	J	1.25	MDL	12.5	PQL	mg/Kg	U	B
Zirconium	5.57	J	1.05	MDL	6.23	PQL	mg/Kg	J	Z

Sample ID: **SL-114-SA5A-SB-9.0-10.0** ***Collected:*** **3/11/2011 8:43:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.95	J	1.23	MDL	12.3	PQL	mg/Kg	U	B
Zirconium	5.48	J	1.03	MDL	6.13	PQL	mg/Kg	J	Z

Sample ID: **SL-227-SA5B-SB-2.5-3.5** ***Collected:*** **3/11/2011 2:10:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	5.19	J	0.985	MDL	5.54	PQL	mg/Kg	J	Z
TIN	2.90	J	1.11	MDL	11.1	PQL	mg/Kg	U	B
Zirconium	2.06	J	0.930	MDL	5.54	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: **DUP09-SA5A-QC-031111** ***Collected:*** **3/11/2011 8:58:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.162	J	0.0481	MDL	0.481	PQL	mg/Kg	J	Z

Sample ID: **DUP09-SA5A-QC-031111** ***Collected:*** **3/11/2011 8:58:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	160		0.130	MDL	0.481	PQL	mg/Kg	J	E, A

Sample ID: **DUP09-SA5A-QC-031111** ***Collected:*** **3/11/2011 8:58:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.227	J	0.0722	MDL	0.241	PQL	mg/Kg	J	Z, Q
ARSENIC	8.98		0.0962	MDL	0.481	PQL	mg/Kg	J	E

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE102 **Laboratory: LL**

EDD Filename: DE102_v1. **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: **DUP09-SA5A-QC-031111** ***Collected:*** **3/11/2011 8:58:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.383		0.0481	MDL	0.120	PQL	mg/Kg	J	Q
COPPER	17.7		0.0794	MDL	0.481	PQL	mg/Kg	J	A
LEAD	13.2		0.0125	MDL	0.241	PQL	mg/Kg	J	Q, A
NICKEL	29.7		0.120	MDL	0.481	PQL	mg/Kg	J	Q, A
SILVER	0.0505	J	0.0144	MDL	0.120	PQL	mg/Kg	J	Z
THALLIUM	0.441		0.0361	MDL	0.120	PQL	mg/Kg	J	Q
ZINC	89.9		0.674	MDL	3.61	PQL	mg/Kg	J	A

Sample ID: **SL-112-SA5A-SB-14.0-15.0** ***Collected:*** **3/11/2011 12:16:00** ***Analysis Type:*** **REA** ***Dilution:*** **5**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ZINC	209		1.56	MDL	8.37	PQL	mg/Kg	J	A

Sample ID: **SL-112-SA5A-SB-14.0-15.0** ***Collected:*** **3/11/2011 12:16:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.119	J	0.0446	MDL	0.446	PQL	mg/Kg	J	Z

Sample ID: **SL-112-SA5A-SB-14.0-15.0** ***Collected:*** **3/11/2011 12:16:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	87.3		0.121	MDL	0.446	PQL	mg/Kg	J	E, A

Sample ID: **SL-112-SA5A-SB-14.0-15.0** ***Collected:*** **3/11/2011 12:16:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0670	U	0.0670	MDL	0.223	PQL	mg/Kg	UJ	Q
ARSENIC	3.88		0.0893	MDL	0.446	PQL	mg/Kg	J	E
CADMIUM	0.0949	J	0.0446	MDL	0.112	PQL	mg/Kg	J	Z, Q
COPPER	9.73		0.0737	MDL	0.446	PQL	mg/Kg	J	A
LEAD	4.25		0.0116	MDL	0.223	PQL	mg/Kg	J	Q, A
NICKEL	9.27		0.112	MDL	0.446	PQL	mg/Kg	J	Q, A
SILVER	0.0247	J	0.0134	MDL	0.112	PQL	mg/Kg	J	Z
THALLIUM	0.253		0.0335	MDL	0.112	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE102 **Laboratory: LL**

EDD Filename: DE102_v1. **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: **SL-112-SA5A-SB-8.5-9.5** ***Collected:*** **3/11/2011 12:06:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0998	J	0.0426	MDL	0.426	PQL	mg/Kg	J	Z

Sample ID: **SL-112-SA5A-SB-8.5-9.5** ***Collected:*** **3/11/2011 12:06:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	115		0.115	MDL	0.426	PQL	mg/Kg	J	E, A

Sample ID: **SL-112-SA5A-SB-8.5-9.5** ***Collected:*** **3/11/2011 12:06:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0640	U	0.0640	MDL	0.213	PQL	mg/Kg	UJ	Q
ARSENIC	4.94		0.0853	MDL	0.426	PQL	mg/Kg	J	E
CADMIUM	0.119		0.0426	MDL	0.107	PQL	mg/Kg	J	Q
COPPER	8.04		0.0704	MDL	0.426	PQL	mg/Kg	J	A
LEAD	5.56		0.0111	MDL	0.213	PQL	mg/Kg	J	Q, A
NICKEL	12.5		0.107	MDL	0.426	PQL	mg/Kg	J	Q, A
SILVER	0.0245	J	0.0128	MDL	0.107	PQL	mg/Kg	J	Z
THALLIUM	0.294		0.0320	MDL	0.107	PQL	mg/Kg	J	Q
ZINC	74.1		0.597	MDL	3.20	PQL	mg/Kg	J	A

Sample ID: **SL-113-SA5A-SB-14.0-15** ***Collected:*** **3/11/2011 3:39:00** ***Analysis Type:*** **REA** ***Dilution:*** **20**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ZINC	1100		5.93	MDL	31.8	PQL	mg/Kg	J	A

Sample ID: **SL-113-SA5A-SB-14.0-15** ***Collected:*** **3/11/2011 3:39:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	132		0.114	MDL	0.424	PQL	mg/Kg	J	E, A

Sample ID: **SL-113-SA5A-SB-14.0-15** ***Collected:*** **3/11/2011 3:39:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0635	U	0.0635	MDL	0.212	PQL	mg/Kg	UJ	Q
ARSENIC	3.22		0.0847	MDL	0.424	PQL	mg/Kg	J	E

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE102 **Laboratory: LL**

EDD Filename: DE102_v1. **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: **SL-113-SA5A-SB-14.0-15** ***Collected:*** **3/11/2011 3:39:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.171		0.0424	MDL	0.106	PQL	mg/Kg	J	Q
COPPER	17.9		0.0699	MDL	0.424	PQL	mg/Kg	J	A
LEAD	3.63		0.0110	MDL	0.212	PQL	mg/Kg	J	Q, A
NICKEL	7.84		0.106	MDL	0.424	PQL	mg/Kg	J	Q, A
SILVER	0.0263	J	0.0127	MDL	0.106	PQL	mg/Kg	J	Z
THALLIUM	0.225		0.0318	MDL	0.106	PQL	mg/Kg	J	Q

Sample ID: **SL-113-SA5A-SB-9.0-10.0** ***Collected:*** **3/11/2011 3:29:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0866	J	0.0451	MDL	0.451	PQL	mg/Kg	J	Z

Sample ID: **SL-113-SA5A-SB-9.0-10.0** ***Collected:*** **3/11/2011 3:29:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	69.8		0.122	MDL	0.451	PQL	mg/Kg	J	E, A

Sample ID: **SL-113-SA5A-SB-9.0-10.0** ***Collected:*** **3/11/2011 3:29:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0676	U	0.0676	MDL	0.225	PQL	mg/Kg	UJ	Q
ARSENIC	4.09		0.0902	MDL	0.451	PQL	mg/Kg	J	E
CADMIUM	0.138		0.0451	MDL	0.113	PQL	mg/Kg	J	Q
COPPER	6.37		0.0744	MDL	0.451	PQL	mg/Kg	J	A
LEAD	4.50		0.0117	MDL	0.225	PQL	mg/Kg	J	Q, A
NICKEL	9.69		0.113	MDL	0.451	PQL	mg/Kg	J	Q, A
SILVER	0.0199	J	0.0135	MDL	0.113	PQL	mg/Kg	J	Z
THALLIUM	0.250		0.0338	MDL	0.113	PQL	mg/Kg	J	Q
ZINC	58.9		0.631	MDL	3.38	PQL	mg/Kg	J	A

Sample ID: **SL-114-SA5A-SB-4.0-5.0** ***Collected:*** **3/11/2011 8:34:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.162	J	0.0503	MDL	0.503	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE102 **Laboratory: LL**

EDD Filename: DE102_v1. **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: **SL-114-SA5A-SB-4.0-5.0** ***Collected:*** **3/11/2011 8:34:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	152		0.136	MDL	0.503	PQL	mg/Kg	J	E, A

Sample ID: **SL-114-SA5A-SB-4.0-5.0** ***Collected:*** **3/11/2011 8:34:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.290		0.0755	MDL	0.252	PQL	mg/Kg	J	Q
ARSENIC	9.31		0.101	MDL	0.503	PQL	mg/Kg	J	E
CADMIUM	0.445		0.0503	MDL	0.126	PQL	mg/Kg	J	Q
COPPER	17.7		0.0830	MDL	0.503	PQL	mg/Kg	J	A
LEAD	13.3		0.0131	MDL	0.252	PQL	mg/Kg	J	Q, A
NICKEL	27.7		0.126	MDL	0.503	PQL	mg/Kg	J	Q, A
SILVER	0.0781	J	0.0151	MDL	0.126	PQL	mg/Kg	J	Z
THALLIUM	0.419		0.0377	MDL	0.126	PQL	mg/Kg	J	Q
ZINC	82.1		0.704	MDL	3.77	PQL	mg/Kg	J	A

Sample ID: **SL-114-SA5A-SB-9.0-10.0** ***Collected:*** **3/11/2011 8:43:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.134	J	0.0495	MDL	0.495	PQL	mg/Kg	J	Z

Sample ID: **SL-114-SA5A-SB-9.0-10.0** ***Collected:*** **3/11/2011 8:43:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	122		0.134	MDL	0.495	PQL	mg/Kg	J	E, A

Sample ID: **SL-114-SA5A-SB-9.0-10.0** ***Collected:*** **3/11/2011 8:43:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.187	J	0.0743	MDL	0.248	PQL	mg/Kg	J	Z, Q
ARSENIC	7.53		0.0990	MDL	0.495	PQL	mg/Kg	J	E
CADMIUM	0.336		0.0495	MDL	0.124	PQL	mg/Kg	J	Q
COPPER	15.4		0.0817	MDL	0.495	PQL	mg/Kg	J	A
LEAD	11.3		0.0129	MDL	0.248	PQL	mg/Kg	J	Q, A
NICKEL	24.4		0.124	MDL	0.495	PQL	mg/Kg	J	Q, A
SILVER	0.0375	J	0.0149	MDL	0.124	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE102 **Laboratory: LL**

EDD Filename: DE102_v1. **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-114-SA5A-SB-9.0-10.0 *Collected:* 3/11/2011 8:43:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
THALLIUM	0.310		0.0371	MDL	0.124	PQL	mg/Kg	J	Q
ZINC	69.5		0.693	MDL	3.71	PQL	mg/Kg	J	A

Sample ID: SL-227-SA5B-SB-2.5-3.5 *Collected:* 3/11/2011 2:10:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.145	J	0.0447	MDL	0.447	PQL	mg/Kg	J	Z

Sample ID: SL-227-SA5B-SB-2.5-3.5 *Collected:* 3/11/2011 2:10:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	140		0.121	MDL	0.447	PQL	mg/Kg	J	E, A

Sample ID: SL-227-SA5B-SB-2.5-3.5 *Collected:* 3/11/2011 2:10:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0901	J	0.0671	MDL	0.224	PQL	mg/Kg	J	Z, Q
ARSENIC	7.07		0.0894	MDL	0.447	PQL	mg/Kg	J	E
CADMIUM	0.161		0.0447	MDL	0.112	PQL	mg/Kg	J	Q
COPPER	12.1		0.0738	MDL	0.447	PQL	mg/Kg	J	A
LEAD	17.7		0.0116	MDL	0.224	PQL	mg/Kg	J	Q, A
NICKEL	20.9		0.112	MDL	0.447	PQL	mg/Kg	J	Q, A
SILVER	0.0645	J	0.0134	MDL	0.112	PQL	mg/Kg	J	Z
THALLIUM	0.335		0.0335	MDL	0.112	PQL	mg/Kg	J	Q
ZINC	67.8		0.626	MDL	3.35	PQL	mg/Kg	J	A

Method Category: METALS

Method: 7199 **Matrix: SO**

Sample ID: DUP09-SA5A-QC-031111 *Collected:* 3/11/2011 8:58:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.29	J	0.24	MDL	1.2	PQL	mg/Kg	J	Z, FD

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE102 **Laboratory: LL**

EDD Filename: DE102_v1. **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 7199 **Matrix: SO**

Sample ID: SL-112-SA5A-SB-8.5-9.5 *Collected:* 3/11/2011 12:06:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.23	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-114-SA5A-SB-4.0-5.0 *Collected:* 3/11/2011 8:34:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.26	U	0.26	MDL	1.3	PQL	mg/Kg	UJ	FD

Sample ID: SL-227-SA5B-SB-2.5-3.5 *Collected:* 3/11/2011 2:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.65	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 7471A **Matrix: SO**

Sample ID: DUP09-SA5A-QC-031111 *Collected:* 3/11/2011 8:58:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0083	J	0.0033	MDL	0.115	PQL	mg/Kg	J	Z

Sample ID: SL-112-SA5A-SB-14.0-15.0 *Collected:* 3/11/2011 12:16:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0162	J	0.0030	MDL	0.106	PQL	mg/Kg	J	Z

Sample ID: SL-112-SA5A-SB-8.5-9.5 *Collected:* 3/11/2011 12:06:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0093	J	0.0031	MDL	0.107	PQL	mg/Kg	J	Z

Sample ID: SL-113-SA5A-SB-14.0-15 *Collected:* 3/11/2011 3:39:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0337	J	0.0030	MDL	0.105	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE102 **Laboratory: LL**

EDD Filename: DE102_v1. **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 7471A **Matrix: SO**

Sample ID: SL-114-SA5A-SB-4.0-5.0 **Collected:** 3/11/2011 8:34:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0091	J	0.0036	MDL	0.125	PQL	mg/Kg	J	Z

Sample ID: SL-114-SA5A-SB-9.0-10.0 **Collected:** 3/11/2011 8:43:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0079	J	0.0034	MDL	0.119	PQL	mg/Kg	J	Z

Method Category: SVOA

Method: 1625C **Matrix: SO**

Sample ID: SL-114-SA5A-SB-4.0-5.0 **Collected:** 3/11/2011 8:34:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	216	U	216	MDL	432	PQL	ng/Kg	UJ	Q

Sample ID: SL-114-SA5A-SB-9.0-10.0 **Collected:** 3/11/2011 8:43:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	351	J	211	MDL	421	PQL	ng/Kg	J	Z

Method Category: SVOA

Method: 8015M **Matrix: SO**

Sample ID: DUP09-SA5A-QC-031111 **Collected:** 3/11/2011 8:58:00 **Analysis Type:** REA2 **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	0.48	U	0.48	MDL	1.4	PQL	mg/Kg	UJ	FD
EFH (C21-C30)	1.0	J	0.48	MDL	1.4	PQL	mg/Kg	J	Z, L, FD
EFH (C30-C40)	2.9		0.48	MDL	1.4	PQL	mg/Kg	J	L, FD

Sample ID: SL-112-SA5A-SB-14.0-15.0 **Collected:** 3/11/2011 12:16:00 **Analysis Type:** REA2 **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C21-C30)	1.5		0.45	MDL	1.4	PQL	mg/Kg	J	L
EFH (C30-C40)	3.1		0.45	MDL	1.4	PQL	mg/Kg	J	L

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE102 **Laboratory: LL**

EDD Filename: DE102_v1. **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8015M **Matrix:** SO

Sample ID: **SL-113-SA5A-SB-14.0-15** ***Collected:*** **3/11/2011 3:39:00** ***Analysis Type:*** **REA2** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C21-C30)	1.2	J	0.44	MDL	1.3	PQL	mg/Kg	J	Z, L
EFH (C30-C40)	5.3		0.44	MDL	1.3	PQL	mg/Kg	J	L

Sample ID: **SL-113-SA5A-SB-9.0-10.0** ***Collected:*** **3/11/2011 3:29:00** ***Analysis Type:*** **REA2** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C21-C30)	5.5		0.45	MDL	1.4	PQL	mg/Kg	J	L
EFH (C30-C40)	19		0.45	MDL	1.4	PQL	mg/Kg	J	L

Sample ID: **SL-114-SA5A-SB-4.0-5.0** ***Collected:*** **3/11/2011 8:34:00** ***Analysis Type:*** **REA** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DIETHYLENE GLYCOL	6.5	U	6.5	MDL	16	PQL	mg/Kg	UJ	Q

Sample ID: **SL-114-SA5A-SB-4.0-5.0** ***Collected:*** **3/11/2011 8:34:00** ***Analysis Type:*** **REA2** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	2.0		0.52	MDL	1.6	PQL	mg/Kg	J	Q, L, FD
EFH (C21-C30)	7.3		0.52	MDL	1.6	PQL	mg/Kg	J	Q, L, FD
EFH (C30-C40)	29		0.52	MDL	1.6	PQL	mg/Kg	J	L, FD

Sample ID: **SL-114-SA5A-SB-9.0-10.0** ***Collected:*** **3/11/2011 8:43:00** ***Analysis Type:*** **REA2** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C21-C30)	1.5		0.51	MDL	1.5	PQL	mg/Kg	J	L
EFH (C30-C40)	3.7		0.51	MDL	1.5	PQL	mg/Kg	J	L

Sample ID: **SL-227-SA5B-SB-2.5-3.5** ***Collected:*** **3/11/2011 2:10:00** ***Analysis Type:*** **REA2** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C21-C30)	2.3		0.45	MDL	1.4	PQL	mg/Kg	J	L
EFH (C30-C40)	5.9		0.45	MDL	1.4	PQL	mg/Kg	J	L

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE102 **Laboratory: LL**

EDD Filename: DE102_v1. **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: **DUP09-SA5A-QC-031111** ***Collected:*** **3/11/2011 8:58:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	1.2	U	1.2	MDL	4.0	PQL	ug/Kg	UJ	L
Aroclor 5442	1.2	U	1.2	MDL	4.0	PQL	ug/Kg	UJ	L
Aroclor 5460	1.2	U	1.2	MDL	4.0	PQL	ug/Kg	UJ	L

Sample ID: **SL-112-SA5A-SB-14.0-15.0** ***Collected:*** **3/11/2011 12:16:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L

Sample ID: **SL-112-SA5A-SB-8.5-9.5** ***Collected:*** **3/11/2011 12:06:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	0.59	J	0.43	MDL	1.9	PQL	ug/Kg	J	Z
Aroclor 5432	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L

Sample ID: **SL-113-SA5A-SB-14.0-15** ***Collected:*** **3/11/2011 3:39:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	0.69	J	0.43	MDL	1.9	PQL	ug/Kg	J	Z
Aroclor 5432	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L

Sample ID: **SL-113-SA5A-SB-9.0-10.0** ***Collected:*** **3/11/2011 3:29:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	0.71	J	0.44	MDL	1.9	PQL	ug/Kg	J	Z
Aroclor 5432	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L
Aroclor 5460	1.4	J	1.1	MDL	3.7	PQL	ug/Kg	J	Z, L

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE102 **Laboratory: LL**

EDD Filename: DE102_v1. **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: **SL-114-SA5A-SB-4.0-5.0** ***Collected:*** **3/11/2011 8:34:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	1.3	U	1.3	MDL	4.3	PQL	ug/Kg	UJ	L
Aroclor 5442	1.3	U	1.3	MDL	4.3	PQL	ug/Kg	UJ	L
Aroclor 5460	1.3	U	1.3	MDL	4.3	PQL	ug/Kg	UJ	L

Sample ID: **SL-114-SA5A-SB-9.0-10.0** ***Collected:*** **3/11/2011 8:43:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	1.3	U	1.3	MDL	4.2	PQL	ug/Kg	UJ	L
Aroclor 5442	1.3	U	1.3	MDL	4.2	PQL	ug/Kg	UJ	L
Aroclor 5460	1.3	U	1.3	MDL	4.2	PQL	ug/Kg	UJ	L

Sample ID: **SL-227-SA5B-SB-2.5-3.5** ***Collected:*** **3/11/2011 2:10:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	0.45	J	0.44	MDL	1.9	PQL	ug/Kg	J	Z
Aroclor 5432	1.1	U	1.1	MDL	3.8	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.8	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.8	PQL	ug/Kg	UJ	L

Method Category: SVOA

Method: 8270C **Matrix: SO**

Sample ID: **SL-112-SA5A-SB-8.5-9.5** ***Collected:*** **3/11/2011 12:06:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	25	J	18	MDL	180	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	20	J	18	MDL	180	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	25	J	18	MDL	180	PQL	ug/Kg	J	Z
CHRYSENE	24	J	18	MDL	180	PQL	ug/Kg	J	Z
FLUORANTHENE	20	J	18	MDL	180	PQL	ug/Kg	J	Z
PYRENE	28	J	18	MDL	180	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE102 **Laboratory: LL**

EDD Filename: DE102_v1. **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: **SL-114-SA5A-SB-4.0-5.0** ***Collected:*** **3/11/2011 8:34:00** ***Analysis Type:*** **RES-ACID** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4-CHLORO-3-METHYLPHENOL	43	U	43	MDL	220	PQL	ug/Kg	UJ	Q

Method Category: SVOA

Method: 8270C SIM **Matrix:** SO

Sample ID: **SL-112-SA5A-SB-14.0-15.0** ***Collected:*** **3/11/2011 12:16:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHRYSENE	0.82	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z
FLUORANTHENE	1.0	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
PHENANTHRENE	1.1	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
PYRENE	1.1	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: **SL-112-SA5A-SB-8.5-9.5** ***Collected:*** **3/11/2011 12:06:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DIBENZO(A,H)ANTHRACENE	0.78	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	1.5	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
PHENANTHRENE	0.88	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: **SL-113-SA5A-SB-14.0-15** ***Collected:*** **3/11/2011 3:39:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NAPHTHALENE	0.81	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: **SL-113-SA5A-SB-9.0-10.0** ***Collected:*** **3/11/2011 3:29:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	0.88	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
CHRYSENE	0.53	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: **SL-114-SA5A-SB-9.0-10.0** ***Collected:*** **3/11/2011 8:43:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	1.2	J	0.84	MDL	2.1	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE102 **Laboratory: LL**

EDD Filename: DE102_v1. **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C SIM **Matrix:** SO

Sample ID: **SL-114-SA5A-SB-9.0-10.0** ***Collected:*** **3/11/2011 8:43:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)PYRENE	1.2	J	0.84	MDL	2.1	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	1.5	J	0.84	MDL	2.1	PQL	ug/Kg	J	Z
CHRYSENE	1.5	J	0.42	MDL	2.1	PQL	ug/Kg	J	Z
FLUORANTHENE	1.3	J	0.84	MDL	2.1	PQL	ug/Kg	J	Z
PYRENE	1.3	J	0.84	MDL	2.1	PQL	ug/Kg	J	Z

Sample ID: **SL-227-SA5B-SB-2.5-3.5** ***Collected:*** **3/11/2011 2:10:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	0.80	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	0.94	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
CHRYSENE	0.75	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z
NAPHTHALENE	1.0	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8315A **Matrix:** SO

Sample ID: **SL-112-SA5A-SB-14.0-15.0** ***Collected:*** **3/11/2011 12:16:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FORMALDEHYDE	730	J	680	MDL	1700	PQL	ug/Kg	J	Z

Sample ID: **SL-113-SA5A-SB-14.0-15** ***Collected:*** **3/11/2011 3:39:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FORMALDEHYDE	840	J	650	MDL	1600	PQL	ug/Kg	J	Z

Method Category: VOA

Method: 8015B **Matrix:** SO

Sample ID: **SL-114-SA5A-SB-4.0-5.0** ***Collected:*** **3/11/2011 8:34:00** ***Analysis Type:*** **REA3** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
m-Terphenyl	1.9	U	1.9	MDL	4.5	PQL	mg/Kg	UJ	Q
p-Terphenyl	1.9	U	1.9	MDL	4.5	PQL	mg/Kg	UJ	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE102 **Laboratory: LL**

EDD Filename: DE102_v1. **eQAPP Name: CDM_SSFL_110509**

Method Category: VOA

Method: 8015B **Matrix:** SO

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: DUP09-SA5A-QC-031111 *Collected:* 3/11/2011 8:58:00 *Analysis Type:* RES *Dilution:* 0.85

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.78	J	0.25	MDL	4.1	PQL	ug/Kg	U	B

Sample ID: SL-112-SA5A-SB-14.0-15.0 *Collected:* 3/11/2011 12:16:00 *Analysis Type:* RES *Dilution:* 0.95

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.72	J	0.26	MDL	4.3	PQL	ug/Kg	U	B

Sample ID: SL-112-SA5A-SB-8.5-9.5 *Collected:* 3/11/2011 12:06:00 *Analysis Type:* RES *Dilution:* 0.99

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	1.8	J	0.26	MDL	4.4	PQL	ug/Kg	U	B

Sample ID: SL-113-SA5A-SB-14.0-15 *Collected:* 3/11/2011 3:39:00 *Analysis Type:* RES *Dilution:* 0.84

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZENE	0.12	J	0.09	MDL	3.7	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	2.2	J	0.22	MDL	3.7	PQL	ug/Kg	U	B

Sample ID: SL-113-SA5A-SB-9.0-10.0 *Collected:* 3/11/2011 3:29:00 *Analysis Type:* RES *Dilution:* 0.9

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	1.3	J	0.24	MDL	4.0	PQL	ug/Kg	U	B

Sample ID: SL-114-SA5A-SB-4.0-5.0 *Collected:* 3/11/2011 8:34:00 *Analysis Type:* RES *Dilution:* 0.94

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	1.0	J	0.29	MDL	4.9	PQL	ug/Kg	U	B

Sample ID: SL-114-SA5A-SB-9.0-10.0 *Collected:* 3/11/2011 8:43:00 *Analysis Type:* RES *Dilution:* 0.88

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.70	J	0.27	MDL	4.4	PQL	ug/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE102 **Laboratory: LL**

EDD Filename: DE102_v1. **eQAPP Name: CDM_SSFL_110509**

Method Category: **VOA**

Method: **8260B** ***Matrix:*** **SO**

Sample ID: **SL-227-SA5B-SB-2.5-3.5** ***Collected:*** **3/11/2011 2:10:00** ***Analysis Type:*** **RES** ***Dilution:*** **0.97**

Analyte	*Lab Result*	*Lab Qual*	*DL*	*DL Type*	*RL*	*RL Type*	*Units*	*Data Review Qual*	*Reason Code*
METHYLENE CHLORIDE	0.95	J	0.26	MDL	4.4	PQL	ug/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE102 **Laboratory: LL**

EDD Filename: DE102_v1. **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
*#	Professional Judgment
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Verification Correlation Coefficient
C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE102 **Laboratory: LL**

EDD Filename: DE102_v1. **eQAPP Name: CDM_SSFL_110509**

F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation
L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery Lower Estimation

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE102 **Laboratory: LL**

EDD Filename: DE102_v1. **eQAPP Name: CDM_SSFL_110509**

R	Continuing Calibration Verification Percent Recovery Lower Rejection
R	Continuing Calibration Verification Percent Recovery Upper Estimation
R	Continuing Calibration Verification Percent Recovery Upper Rejection
R	Continuing Calibration Verification Relative Response Factor
R	Initial Calibration Relative Response Factor
R	Initial Calibration Verification Percent Recovery Lower Estimation
R	Initial Calibration Verification Percent Recovery Lower Rejection
R	Initial Calibration Verification Percent Recovery Upper Estimation
R	Initial Calibration Verification Percent Recovery Upper Rejection
R	Initial Calibration Verification Relative Response Factor
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control Outlier Reports

DE102

Method Blank Outlier Report

Lab Reporting Batch ID: DE102 **Laboratory: LL**

EDD Filename: DE102_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 6010B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P07508AB221918	3/17/2011 7:18:00 PM	CALCIUM PHOSPHORUS TIN	8.02 mg/Kg 1.34 mg/Kg 1.44 mg/Kg	DUP09-SA5A-QC-031111 SL-112-SA5A-SB-14.0-15.0 SL-112-SA5A-SB-8.5-9.5 SL-113-SA5A-SB-14.0-15 SL-113-SA5A-SB-9.0-10.0 SL-114-SA5A-SB-4.0-5.0 SL-114-SA5A-SB-9.0-10.0 SL-227-SA5B-SB-2.5-3.5

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
DUP09-SA5A-QC-031111(RES)	TIN	3.01 mg/Kg	3.01U mg/Kg
SL-112-SA5A-SB-14.0-15.0(RES)	TIN	2.63 mg/Kg	2.63U mg/Kg
SL-112-SA5A-SB-8.5-9.5(RES)	TIN	2.79 mg/Kg	2.79U mg/Kg
SL-113-SA5A-SB-14.0-15(RES)	TIN	2.09 mg/Kg	2.09U mg/Kg
SL-113-SA5A-SB-9.0-10.0(RES)	TIN	2.57 mg/Kg	2.57U mg/Kg
SL-114-SA5A-SB-4.0-5.0(RES)	TIN	3.11 mg/Kg	3.11U mg/Kg
SL-114-SA5A-SB-9.0-10.0(RES)	TIN	2.95 mg/Kg	2.95U mg/Kg
SL-227-SA5B-SB-2.5-3.5(RES)	TIN	2.90 mg/Kg	2.90U mg/Kg

Method: 6020
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P07526AB222150A	3/18/2011 9:50:00 PM	LEAD ZINC	0.0105 mg/Kg 0.644 mg/Kg	DUP09-SA5A-QC-031111 SL-112-SA5A-SB-14.0-15.0 SL-112-SA5A-SB-8.5-9.5 SL-113-SA5A-SB-14.0-15 SL-113-SA5A-SB-9.0-10.0 SL-114-SA5A-SB-4.0-5.0 SL-114-SA5A-SB-9.0-10.0 SL-227-SA5B-SB-2.5-3.5

Method: 8015M
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P76760AB322112A	3/19/2011 9:12:00 PM	EFH (C21-C30) EFH (C30-C40) EFH (C8-C11)	0.48 mg/Kg 2.6 mg/Kg 0.47 mg/Kg	SL-112-SA5A-SB-8.5-9.5
P81813AB321805A	3/24/2011 6:05:00 PM	EFH (C30-C40)	0.54 mg/Kg	DUP09-SA5A-QC-031111 SL-112-SA5A-SB-14.0-15.0 SL-113-SA5A-SB-14.0-15 SL-113-SA5A-SB-9.0-10.0 SL-114-SA5A-SB-4.0-5.0 SL-114-SA5A-SB-9.0-10.0 SL-227-SA5B-SB-2.5-3.5

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Method Blank Outlier Report

Lab Reporting Batch ID: DE102 **Laboratory: LL**

EDD Filename: DE102_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 8015M
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

Method: 8260B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB95B211312A	3/15/2011 1:12:00 PM	METHYLENE CHLORIDE TOLUENE	0.67 ug/Kg 0.11 ug/Kg	DUP09-SA5A-QC-031111 SL-112-SA5A-SB-14.0-15.0 SL-112-SA5A-SB-8.5-9.5 SL-113-SA5A-SB-14.0-15 SL-113-SA5A-SB-9.0-10.0 SL-114-SA5A-SB-4.0-5.0 SL-114-SA5A-SB-9.0-10.0 SL-227-SA5B-SB-2.5-3.5

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
DUP09-SA5A-QC-031111(RES)	METHYLENE CHLORIDE	0.78 ug/Kg	4.1U ug/Kg
SL-112-SA5A-SB-14.0-15.0(RES)	METHYLENE CHLORIDE	0.72 ug/Kg	4.3U ug/Kg
SL-112-SA5A-SB-8.5-9.5(RES)	METHYLENE CHLORIDE	1.8 ug/Kg	4.4U ug/Kg
SL-113-SA5A-SB-14.0-15(RES)	METHYLENE CHLORIDE	2.2 ug/Kg	3.7U ug/Kg
SL-113-SA5A-SB-9.0-10.0(RES)	METHYLENE CHLORIDE	1.3 ug/Kg	4.0U ug/Kg
SL-114-SA5A-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.0 ug/Kg	4.9U ug/Kg
SL-114-SA5A-SB-9.0-10.0(RES)	METHYLENE CHLORIDE	0.70 ug/Kg	4.4U ug/Kg
SL-227-SA5B-SB-2.5-3.5(RES)	METHYLENE CHLORIDE	0.95 ug/Kg	4.4U ug/Kg

Method: 8270C SIM
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKLK07B260657	3/24/2011 6:57:00 AM	Di-n-butylphthalate Di-n-octylphthalate	11 ug/Kg 11 ug/Kg	DUP09-SA5A-QC-031111 SL-112-SA5A-SB-14.0-15.0 SL-112-SA5A-SB-8.5-9.5 SL-113-SA5A-SB-14.0-15 SL-113-SA5A-SB-9.0-10.0 SL-114-SA5A-SB-4.0-5.0 SL-114-SA5A-SB-9.0-10.0 SL-227-SA5B-SB-2.5-3.5

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE102 **Laboratory: LL**

EDD Filename: DE102_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-114-SA5A-SB-4.0-5.0MS (DUP09-SA5A-QC-031111 SL-112-SA5A-SB-14.0-15.0 SL-112-SA5A-SB-8.5-9.5 SL-113-SA5A-SB-14.0-15 SL-113-SA5A-SB-9.0-10.0 SL-114-SA5A-SB-4.0-5.0 SL-114-SA5A-SB-9.0-10.0 SL-227-SA5B-SB-2.5-3.5)	CADMIUM LEAD NICKEL THALLIUM	128 162 160 128	- - - -	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	- - - -	CADMIUM LEAD NICKEL THALLIUM	J (all detects)
SL-114-SA5A-SB-4.0-5.0MS **SL-114-SA5A-SB-4.0-5.0MSD** (DUP09-SA5A-QC-031111 SL-112-SA5A-SB-14.0-15.0 SL-112-SA5A-SB-8.5-9.5 SL-113-SA5A-SB-14.0-15 SL-113-SA5A-SB-9.0-10.0 SL-114-SA5A-SB-4.0-5.0 SL-114-SA5A-SB-9.0-10.0 SL-227-SA5B-SB-2.5-3.5)	ANTIMONY ZINC	50 66	45 69	75.00-125.00 75.00-125.00	- -	ANTIMONY ZINC	J(all detects) UJ(all non-detects) Zn No Qual, >4x
SL-114-SA5A-SB-4.0-5.0MS (DUP09-SA5A-QC-031111 SL-112-SA5A-SB-14.0-15.0 SL-112-SA5A-SB-8.5-9.5 SL-113-SA5A-SB-14.0-15 SL-113-SA5A-SB-9.0-10.0 SL-114-SA5A-SB-4.0-5.0 SL-114-SA5A-SB-9.0-10.0 SL-227-SA5B-SB-2.5-3.5)	BARIUM	134	-	75.00-125.00	-	BARIUM	No Qual, >4x

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-114-SA5A-SB-4.0-5.0MS **SL-114-SA5A-SB-4.0-5.0MSD** (DUP09-SA5A-QC-031111 SL-112-SA5A-SB-14.0-15.0 SL-112-SA5A-SB-8.5-9.5 SL-113-SA5A-SB-14.0-15 SL-113-SA5A-SB-9.0-10.0 SL-114-SA5A-SB-4.0-5.0 SL-114-SA5A-SB-9.0-10.0 SL-227-SA5B-SB-2.5-3.5)	ALUMINUM CALCIUM TITANIUM	1171 6342 163	414 7873 138	75.00-125.00 75.00-125.00 75.00-125.00	- - -	ALUMINUM CALCIUM TITANIUM	No Qual, >4x
SL-114-SA5A-SB-4.0-5.0MS **SL-114-SA5A-SB-4.0-5.0MSD** (DUP09-SA5A-QC-031111 SL-112-SA5A-SB-14.0-15.0 SL-112-SA5A-SB-8.5-9.5 SL-113-SA5A-SB-14.0-15 SL-113-SA5A-SB-9.0-10.0 SL-114-SA5A-SB-4.0-5.0 SL-114-SA5A-SB-9.0-10.0 SL-227-SA5B-SB-2.5-3.5)	IRON MAGNESIUM MANGANESE	-650 -50 -167	-2631 -194 -131	75.00-125.00 75.00-125.00 75.00-125.00	- - -	IRON MAGNESIUM MANGANESE	No Qual, >4x

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE102 **Laboratory: LL**

EDD Filename: DE102_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 300.0
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-114-SA5A-SB-4.0-5.0MS (DUP09-SA5A-QC-031111 SL-112-SA5A-SB-14.0-15.0 SL-112-SA5A-SB-8.5-9.5 SL-113-SA5A-SB-14.0-15 SL-113-SA5A-SB-9.0-10.0 SL-114-SA5A-SB-4.0-5.0 SL-114-SA5A-SB-9.0-10.0 SL-227-SA5B-SB-2.5-3.5)	FLUORIDE	72	-	80.00-120.00	-	FLUORIDE	J(all detects) UJ(all non-detects)

Method: 1625C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-114-SA5A-SB-4.0-5.0MS **SL-114-SA5A-SB-4.0-5.0MSD** (SL-114-SA5A-SB-4.0-5.0)	N-NITROSODIMETHYLAMINE	68	67	70.00-130.00	-	N-NITROSODIMETHYLAMINE	J(all detects) UJ(all non-detects)

Method: 8270C SIM
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-114-SA5A-SB-4.0-5.0MS **SL-114-SA5A-SB-4.0-5.0MSD** (SL-114-SA5A-SB-4.0-5.0)	Di-n-butylphthalate	77	73	78.00-160.00	-	Di-n-butylphthalate	J(all detects) UJ(all non-detects)

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-114-SA5A-SB-4.0-5.0MS (SL-114-SA5A-SB-4.0-5.0)	4-CHLORO-3-METHYLPHENOL	75	-	76.00-110.00	-	4-CHLORO-3-METHYLPHENOL	J(all detects) UJ(all non-detects)

Method: 8015M
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-114-SA5A-SB-4.0-5.0MS **SL-114-SA5A-SB-4.0-5.0MSD** (SL-114-SA5A-SB-4.0-5.0)	DIETHYLENE GLYCOL	54	-	59.00-109.00	21 (20.00)	DIETHYLENE GLYCOL	J(all detects) UJ(all non-detects)

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE102 **Laboratory: LL**

EDD Filename: DE102_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 8330A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-114-SA5A-SB-4.0-5.0MS (SL-114-SA5A-SB-4.0-5.0)	1,3,5-TRINITROBENZENE	137	-	82.00-126.00	-	1,3,5-TRINITROBENZENE	J(all detects)

Method: 8015M
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-114-SA5A-SB-4.0-5.0MSD (SL-114-SA5A-SB-4.0-5.0)	EFH (C21-C30) EFH (C30-C40)	- -	179 -	49.00-123.00 49.00-123.00	51 (20.00) 45 (20.00)	EFH (C21-C30) EFH (C30-C40)	No Qual Analysis not reported

Method: 8015B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-114-SA5A-SB-4.0-5.0MS **SL-114-SA5A-SB-4.0-5.0MSD** (SL-114-SA5A-SB-4.0-5.0)	m-Terphenyl p-Terphenyl	72 71	- 74	75.00-125.00 75.00-125.00	- -	m-Terphenyl p-Terphenyl	J(all detects) UJ(all non-detects)

Method: 8015M
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-114-SA5A-SB-4.0-5.0MS **SL-114-SA5A-SB-4.0-5.0MSD** (SL-114-SA5A-SB-4.0-5.0)	EFH (C21-C30) EFH (C30-C40)	-28 -485	-37 -518	49.00-123.00 49.00-123.00	- -	EFH (C21-C30) EFH (C30-C40)	J(all detects) R(all non-detects) EFH (C30-40) No Qual, >4x
SL-114-SA5A-SB-4.0-5.0MS **SL-114-SA5A-SB-4.0-5.0MSD** (SL-114-SA5A-SB-4.0-5.0)	EFH (C15-C20)	8	15	49.00-123.00	-	EFH (C15-C20)	J(all detects) UJ(all non-detects)

Method: 8260B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-114-SA5A-SB-4.0-5.0MSD (SL-114-SA5A-SB-4.0-5.0)	BROMOMETHANE CHLOROETHANE N-PROPYLBENZENE	- - -	- - -	42.00-168.00 39.00-152.00 39.00-157.00	32 (30.00) 32 (30.00) 32 (30.00)	BROMOMETHANE CHLOROETHANE N-PROPYLBENZENE	J(all detects)

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE102 **Laboratory: LL**

EDD Filename: DE102_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 6020
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-114-SA5A-SB-4.0-5.0DUP	ANTIMONY	36	20.00	
(DUP09-SA5A-QC-031111	ARSENIC	23	20.00	J (all detects)
SL -112-SA5A-SB-14.0-15.0	BARIUM	23	20.00	UJ (all non-detects)
SL -112-SA5A-SB-8.5-9.5	CADMIUM	49	20.00	
SL -113-SA5A-SB-14.0-15	SELENIUM	62	20.00	Sb, Cd, Se, Ag, Tl
SL -113-SA5A-SB-9.0-10.0	SILVER	25	20.00	No Qual
SL -114-SA5A-SB-4.0-5.0	THALLIUM	25	20.00	OK by difference
SL -114-SA5A-SB-9.0-10.0				
SL -227-SA5B-SB-2.5-3.5)				

Method: 7471A
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-114-SA5A-SB-4.0-5.0DUP	MERCURY	43	20.00	
(DUP09-SA5A-QC-031111				
SL -112-SA5A-SB-14.0-15.0				
SL -112-SA5A-SB-8.5-9.5				No Qual
SL -113-SA5A-SB-14.0-15				OK by difference
SL -113-SA5A-SB-9.0-10.0				
SL -114-SA5A-SB-4.0-5.0				
SL -114-SA5A-SB-9.0-10.0				
SL -227-SA5B-SB-2.5-3.5)				

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE102 **Laboratory: LL**

EDD Filename: DE102_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 8082
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P10754AY240521A (DUP09-SA5A-QC-031111 SL-112-SA5A-SB-14.0-15.0 SL-112-SA5A-SB-8.5-9.5 SL-113-SA5A-SB-14.0-15 SL-113-SA5A-SB-9.0-10.0 SL-114-SA5A-SB-4.0-5.0 SL-114-SA5A-SB-9.0-10.0 SL-227-SA5B-SB-2.5-3.5)	Aroclor 5442	-	74	75.00-125.00	-	Aroclor 5432, 5442, 5460	J (all detects) UJ (all non-detects)

Method: 8015M
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P10813AQ321831A (DUP09-SA5A-QC-031111 SL-112-SA5A-SB-14.0-15.0 SL-113-SA5A-SB-14.0-15 SL-113-SA5A-SB-9.0-10.0 SL-114-SA5A-SB-4.0-5.0 SL-114-SA5A-SB-9.0-10.0 SL-227-SA5B-SB-2.5-3.5)	EFH (C12-C14) EFH (C15-C20) EFH (C21-C30) EFH (C30-C40)	118 121 126 116	- - - -	66.00-113.00 66.00-113.00 66.00-113.00 66.00-113.00	- - - -	EFH (C12-C14) EFH (C15-C20) EFH (C21-C30) EFH (C30-C40)	J(all detects)

Field Duplicate RPD Report

Lab Reporting Batch ID: DE102 **Laboratory: LL**

EDD Filename: DE102_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 160.3M
Matrix: SO

Analyte	Concentration (%) SL-114-SA5A-SB-4.0-5.0	Concentration (%) DUP09-SA5A-QC-031111	Sample RPD	eQAPP RPD	Flag
MOISTURE	22.8	17.7	25		No Qualifiers Applied

Method: 300.0
Matrix: SO

Analyte	Concentration (mg/Kg) SL-114-SA5A-SB-4.0-5.0	Concentration (mg/Kg) DUP09-SA5A-QC-031111	Sample RPD	eQAPP RPD	Flag
FLUORIDE	6.6	5.2	24	50.00	No Qualifiers Applied
Nitrate-NO3	2.2	2.0	10	50.00	

Method: 6010B
Matrix: SO

Analyte	Concentration (mg/Kg) SL-114-SA5A-SB-4.0-5.0	Concentration (mg/Kg) DUP09-SA5A-QC-031111	Sample RPD	eQAPP RPD	Flag
ALUMINUM	37200	35100	6	50.00	No Qualifiers Applied
BORON	13.8	12.4	11	50.00	
IRON	34200	34500	1	50.00	
LITHIUM	33.0	29.6	11	50.00	
MAGNESIUM	8320	8330	0	50.00	
MANGANESE	454	388	16	50.00	
PHOSPHORUS	246	313	24	50.00	
POTASSIUM	3430	3920	13	50.00	
SODIUM	284	211	29	50.00	
STRONTIUM	67.4	56.2	18	50.00	
TIN	3.11	3.01	3	50.00	
TITANIUM	1570	1530	3	50.00	
Zirconium	5.57	5.35	4	50.00	
CALCIUM	35900	18500	64	50.00	J(all detects)

Method: 6020
Matrix: SO

Analyte	Concentration (mg/Kg) SL-114-SA5A-SB-4.0-5.0	Concentration (mg/Kg) DUP09-SA5A-QC-031111	Sample RPD	eQAPP RPD	Flag
ANTIMONY	0.290	0.227	24	50.00	No Qualifiers Applied
ARSENIC	9.31	8.98	4	50.00	
BARIUM	152	160	5	50.00	
BERYLLIUM	1.14	1.08	5	50.00	
CADMIUM	0.445	0.383	15	50.00	
CHROMIUM	44.3	39.2	12	50.00	
COBALT	10.3	12.3	18	50.00	
COPPER	17.7	17.7	0	50.00	
LEAD	13.3	13.2	1	50.00	
MOLYBDENUM	0.350	0.458	27	50.00	
NICKEL	27.7	29.7	7	50.00	
SELENIUM	0.162	0.162	0	50.00	
SILVER	0.0781	0.0505	43	50.00	
THALLIUM	0.419	0.441	5	50.00	
VANADIUM	82.1	75.8	8	50.00	
ZINC	82.1	89.9	9	50.00	

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Field Duplicate RPD Report

Lab Reporting Batch ID: DE102 **Laboratory: LL**

EDD Filename: DE102_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 7199
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-114-SA5A-SB-4.0-5.0	DUP09-SA5A-QC-031111			
HEXAVALENT CHROMIUM	1.3 U	0.29	200	50.00	J(all detects) UJ(all non-detects)

Method: 7471A
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-114-SA5A-SB-4.0-5.0	DUP09-SA5A-QC-031111			
MERCURY	0.0091	0.0083	9	50.00	No Qualifiers Applied

Method: 8015M
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-114-SA5A-SB-4.0-5.0	DUP09-SA5A-QC-031111			
EFH (C15-C20)	2.0	1.4 U	200	50.00	J(all detects) UJ(all non-detects)
EFH (C21-C30)	7.3	1.0	152	50.00	
EFH (C30-C40)	29	2.9	164	50.00	

Method: 8260B
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-114-SA5A-SB-4.0-5.0	DUP09-SA5A-QC-031111			
METHYLENE CHLORIDE	1.0	0.78	25	50.00	No Qualifiers Applied

Method: 9045M
Matrix: SO

Analyte	Concentration (pH unit)		Sample RPD	eQAPP RPD	Flag
	SL-114-SA5A-SB-4.0-5.0	DUP09-SA5A-QC-031111			
PH	8.06	11.5	35	50.00	No Qualifiers Applied

Method: ASTM D1498
Matrix: SO

Analyte	Concentration (mV)		Sample RPD	eQAPP RPD	Flag
	SL-114-SA5A-SB-4.0-5.0	DUP09-SA5A-QC-031111			
Oxidation Reduction Potential	328	388	17		No Qualifiers Applied

Reporting Limit Outliers

Lab Reporting Batch ID: DE102 **Laboratory: LL**

EDD Filename: DE102_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 1625C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-114-SA5A-SB-9.0-10.0	N-NITROSODIMETHYLAMINE	J	351	421	PQL	ng/Kg	J (all detects)

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP09-SA5A-QC-031111	TIN	J	3.01	11.9	PQL	mg/Kg	J (all detects)
	Zirconium	J	5.35	5.96	PQL	mg/Kg	
SL-112-SA5A-SB-14.0-15.0	BORON	J	4.47	5.47	PQL	mg/Kg	J (all detects)
	TIN	J	2.63	10.9	PQL	mg/Kg	
SL-112-SA5A-SB-8.5-9.5	BORON	J	4.79	5.49	PQL	mg/Kg	J (all detects)
	TIN	J	2.79	11.0	PQL	mg/Kg	
	Zirconium	J	1.74	5.49	PQL	mg/Kg	
SL-113-SA5A-SB-14.0-15	BORON	J	2.77	5.29	PQL	mg/Kg	J (all detects)
	TIN	J	2.09	10.6	PQL	mg/Kg	
SL-113-SA5A-SB-9.0-10.0	BORON	J	4.17	5.58	PQL	mg/Kg	J (all detects)
	TIN	J	2.57	11.2	PQL	mg/Kg	
	Zirconium	J	0.941	5.58	PQL	mg/Kg	
SL-114-SA5A-SB-4.0-5.0	TIN	J	3.11	12.5	PQL	mg/Kg	J (all detects)
	Zirconium	J	5.57	6.23	PQL	mg/Kg	
SL-114-SA5A-SB-9.0-10.0	TIN	J	2.95	12.3	PQL	mg/Kg	J (all detects)
	Zirconium	J	5.48	6.13	PQL	mg/Kg	
SL-227-SA5B-SB-2.5-3.5	BORON	J	5.19	5.54	PQL	mg/Kg	J (all detects)
	TIN	J	2.90	11.1	PQL	mg/Kg	
	Zirconium	J	2.06	5.54	PQL	mg/Kg	

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP09-SA5A-QC-031111	ANTIMONY	J	0.227	0.241	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.162	0.481	PQL	mg/Kg	
	SILVER	J	0.0505	0.120	PQL	mg/Kg	
SL-112-SA5A-SB-14.0-15.0	CADMIUM	J	0.0949	0.112	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.119	0.446	PQL	mg/Kg	
	SILVER	J	0.0247	0.112	PQL	mg/Kg	
SL-112-SA5A-SB-8.5-9.5	SELENIUM	J	0.0998	0.426	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0245	0.107	PQL	mg/Kg	
SL-113-SA5A-SB-14.0-15	SILVER	J	0.0263	0.106	PQL	mg/Kg	J (all detects)
SL-113-SA5A-SB-9.0-10.0	SELENIUM	J	0.0866	0.451	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0199	0.113	PQL	mg/Kg	
SL-114-SA5A-SB-4.0-5.0	SELENIUM	J	0.162	0.503	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0781	0.126	PQL	mg/Kg	

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Reporting Limit Outliers

Lab Reporting Batch ID: DE102 **Laboratory: LL**

EDD Filename: DE102_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 6020
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-114-SA5A-SB-9.0-10.0	ANTIMONY	J	0.187	0.248	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.134	0.495	PQL	mg/Kg	
	SILVER	J	0.0375	0.124	PQL	mg/Kg	
SL-227-SA5B-SB-2.5-3.5	ANTIMONY	J	0.0901	0.224	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.145	0.447	PQL	mg/Kg	
	SILVER	J	0.0645	0.112	PQL	mg/Kg	

Method: 7199
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP09-SA5A-QC-031111	HEXAVALENT CHROMIUM	J	0.29	1.2	PQL	mg/Kg	J (all detects)
SL-112-SA5A-SB-8.5-9.5	HEXAVALENT CHROMIUM	J	0.23	1.1	PQL	mg/Kg	J (all detects)
SL-227-SA5B-SB-2.5-3.5	HEXAVALENT CHROMIUM	J	0.65	1.1	PQL	mg/Kg	J (all detects)

Method: 7471A
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP09-SA5A-QC-031111	MERCURY	J	0.0083	0.115	PQL	mg/Kg	J (all detects)
SL-112-SA5A-SB-14.0-15.0	MERCURY	J	0.0162	0.106	PQL	mg/Kg	J (all detects)
SL-112-SA5A-SB-8.5-9.5	MERCURY	J	0.0093	0.107	PQL	mg/Kg	J (all detects)
SL-113-SA5A-SB-14.0-15	MERCURY	J	0.0337	0.105	PQL	mg/Kg	J (all detects)
SL-114-SA5A-SB-4.0-5.0	MERCURY	J	0.0091	0.125	PQL	mg/Kg	J (all detects)
SL-114-SA5A-SB-9.0-10.0	MERCURY	J	0.0079	0.119	PQL	mg/Kg	J (all detects)

Method: 8015M
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP09-SA5A-QC-031111	EFH (C21-C30)	J	1.0	1.4	PQL	mg/Kg	J (all detects)
SL-113-SA5A-SB-14.0-15	EFH (C21-C30)	J	1.2	1.3	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE102 **Laboratory: LL**

EDD Filename: DE102_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-112-SA5A-SB-8.5-9.5	AROCLOR 1260	J	0.59	1.9	PQL	ug/Kg	J (all detects)
SL-113-SA5A-SB-14.0-15	AROCLOR 1260	J	0.69	1.9	PQL	ug/Kg	J (all detects)
SL-113-SA5A-SB-9.0-10.0	AROCLOR 1260 Aroclor 5460	J J	0.71 1.4	1.9 3.7	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-227-SA5B-SB-2.5-3.5	AROCLOR 1260	J	0.45	1.9	PQL	ug/Kg	J (all detects)

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP09-SA5A-QC-031111	METHYLENE CHLORIDE	J	0.78	4.1	PQL	ug/Kg	J (all detects)
SL-112-SA5A-SB-14.0-15.0	METHYLENE CHLORIDE	J	0.72	4.3	PQL	ug/Kg	J (all detects)
SL-112-SA5A-SB-8.5-9.5	METHYLENE CHLORIDE	J	1.8	4.4	PQL	ug/Kg	J (all detects)
SL-113-SA5A-SB-14.0-15	BENZENE METHYLENE CHLORIDE	J J	0.12 2.2	3.7 3.7	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-113-SA5A-SB-9.0-10.0	METHYLENE CHLORIDE	J	1.3	4.0	PQL	ug/Kg	J (all detects)
SL-114-SA5A-SB-4.0-5.0	METHYLENE CHLORIDE	J	1.0	4.9	PQL	ug/Kg	J (all detects)
SL-114-SA5A-SB-9.0-10.0	METHYLENE CHLORIDE	J	0.70	4.4	PQL	ug/Kg	J (all detects)
SL-227-SA5B-SB-2.5-3.5	METHYLENE CHLORIDE	J	0.95	4.4	PQL	ug/Kg	J (all detects)

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-112-SA5A-SB-8.5-9.5	BENZO(A)ANTHRACENE BENZO(A)PYRENE BENZO(B)FLUORANTHENE CHRYSENE FLUORANTHENE PYRENE	J J J J J J	25 20 25 24 20 28	180 180 180 180 180 180	PQL PQL PQL PQL PQL PQL	ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg	J (all detects)

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-112-SA5A-SB-14.0-15.0	CHRYSENE FLUORANTHENE PHENANTHRENE PYRENE	J J J J	0.82 1.0 1.1 1.1	1.9 1.9 1.9 1.9	PQL PQL PQL PQL	ug/Kg ug/Kg ug/Kg ug/Kg	J (all detects)

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Reporting Limit Outliers

Lab Reporting Batch ID: DE102 **Laboratory: LL**

EDD Filename: DE102_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-112-SA5A-SB-8.5-9.5	DIBENZO(A,H)ANTHRACENE	J	0.78	1.8	PQL	ug/Kg	J (all detects)
	INDENO(1,2,3-CD)PYRENE	J	1.5	1.8	PQL	ug/Kg	
	PHENANTHRENE	J	0.88	1.8	PQL	ug/Kg	
SL-113-SA5A-SB-14.0-15	NAPHTHALENE	J	0.81	1.8	PQL	ug/Kg	J (all detects)
SL-113-SA5A-SB-9.0-10.0	BENZO(B)FLUORANTHENE	J	0.88	1.9	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	0.53	1.9	PQL	ug/Kg	
SL-114-SA5A-SB-9.0-10.0	BENZO(A)ANTHRACENE	J	1.2	2.1	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	1.2	2.1	PQL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	1.5	2.1	PQL	ug/Kg	
	CHRYSENE	J	1.5	2.1	PQL	ug/Kg	
	FLUORANTHENE	J	1.3	2.1	PQL	ug/Kg	
	PYRENE	J	1.3	2.1	PQL	ug/Kg	
SL-227-SA5B-SB-2.5-3.5	BENZO(B)FLUORANTHENE	J	0.80	1.9	PQL	ug/Kg	J (all detects)
	BENZO(K)FLUORANTHENE	J	0.94	1.9	PQL	ug/Kg	
	CHRYSENE	J	0.75	1.9	PQL	ug/Kg	
	NAPHTHALENE	J	1.0	1.9	PQL	ug/Kg	

Method: 8315A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-112-SA5A-SB-14.0-15.0	FORMALDEHYDE	J	730	1700	PQL	ug/Kg	J (all detects)
SL-113-SA5A-SB-14.0-15	FORMALDEHYDE	J	840	1600	PQL	ug/Kg	J (all detects)

LDC #: 25786A4 **VALIDATION COMPLETENESS WORKSHEET** Date: 7/8/11
SDG #: DE102 ADR Page: 1 of
Laboratory: Lancaster Laboratories Reviewer: CR
2nd Reviewer:

METHOD: Metals (EPA SW 846 Method 6010B/6020A/7000)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	N	Sampling dates:
II.	ICP/MS Tune	—	
III.	Calibration	—	
IV.	Blanks	A	ICB/CCB hits - No qual
V.	ICP Interference Check Sample (ICS) Analysis	N	
VI.	Matrix Spike Analysis	N	MS/D (Al, Ba, Ca, Fe, Mg, Mn, Ti, V, Zn >4X)
VII.	Duplicate Sample Analysis	N	Dup (Sb, Cd, Hg, Se, Ag, Tl
VIII.	Laboratory Control Samples (LCS)	A	LCS
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	SW	J/UJ/A
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	—	
XV	Field Blanks	—	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: Soil

1	DUP09-SA5A-QC-031111	11	SL-114-SA5A-SB-4.0-5.0DUP	21		31	
2	SL-112-SA5A-SB-8.5-9.5	12		22		32	
3	SL-112-SA5A-SB-14.0-15.0	13		23		33	
4	SL-114-SA5A-SB-4.0-5.0	14		24		34	
5	SL-114-SA5A-SB-9.0-10.0	15		25		35	
6	SL-113-SA5A-SB-9.0-10.0	16		26		36	
7	SL-113-SA5A-SB-14.0-15.0	17		27		37	
8	SL-227-SA5B-SB-2.5-3.5	18		28		38	
9	SL-114-SA5A-SB-4.0-5.0MS	19		29		39	
10	SL-114-SA5A-SB-4.0-5.0MSD	20		30		40	

Notes:

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 9
SERIAL DILUTIONS
SDG No.: DE102
Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: 6228978BKG Serial Dilution Lab Sample ID: 6228978L
Batch ID(s): P07508A, P07526A
Concentration Units: UG/L

Analyte	Mass	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Diff.	Q	M
Aluminum		298373.3200		306656.1500		3		P
Antimony	121	1.1530		1.5000	U	100		MS
Arsenic	75	37.0100		31.2250		16		MS
Barium	137	603.6000		522.0000		14	E	MS
Beryllium	9	4.5460		4.4185		3		MS
Boron		111.0400		132.9500	B	20		P
Cadmium	111	1.7710		1.2755	B	28		MS
Calcium		288486.7800		302765.0000		5		P
Chromium	52	176.3000		173.1000		2		MS
Cobalt	59	41.0300		42.3250		3		MS
Copper	63	70.2900		89.6000		27	E	MS
Iron		54857.5200		54285.6000		1		P
Lead	208	52.8500		44.9200		15	E	MS
Lithium		265.1900		273.5000		3		P
Magnesium		66823.9800		69099.1000		3		P
Manganese		3642.4700		3984.8000		9		P
Molybdenum	98	1.3910		1.3655	B	2		MS
Nickel	60	110.0000		91.4000		17	E	MS
Phosphorus		1977.2600		2040.8000		3		P
Potassium		27559.8600		28020.2500		2		P
Selenium	78	0.6422	B	1.0000	U	100		MS
Silver	107	0.3107	B	0.3684	B	19		MS
Sodium		2279.0800		2325.1000	B	2		P
Strontium		541.0100		571.3500		6		P
Thallium	203	1.6660		1.5315	B	8		MS
Tin		24.9400	B	50.0000	U	100		P
Titanium		12580.4600		13738.4000		9		P
Vanadium	51	326.6000		319.0500		2		MS
Zinc	66	326.4000		261.0500		20	E	MS
Zirconium		44.7000	B	61.3500	B	37		P

NOTE: An E in column Q indicates the presence of a chemical or physical interference in the matrix when the % difference is greater than 10%. This applies only when (I) is greater than or equal to 50x MDL for ICP, 100x MDL for ICP-MS (6020), 50x MDL for ICP-MS (200.8), or 25x MDL for GFAA.

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry

CONCENTRATION QUALIFIERS: DE102 3497
U= Below MDL
B= Below LOQ

FLAGS:
E = Matrix Effects exist as proven by Serial Dilution or Spiked Dilution

SAMPLE DELIVERY GROUP

DE103

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
10-Mar-2011	TB-031011	6229294	TB	5030B	8015M	IV
10-Mar-2011	TB-031011	6229294	TB	5030B	8260B	IV
10-Mar-2011	TB-031011	6229294	TB	5030B	8260B SIM	IV
10-Mar-2011	SL-115-SA5A-SB-6.5-7.5	6229290	N	3050B	6010B	IV
10-Mar-2011	SL-115-SA5A-SB-6.5-7.5	6229290	N	3050B	6020	IV
10-Mar-2011	SL-115-SA5A-SB-6.5-7.5	6229290	N	3060A	7199	IV
10-Mar-2011	SL-115-SA5A-SB-6.5-7.5	6229290	N	3546	1625C	IV
10-Mar-2011	SL-115-SA5A-SB-6.5-7.5	6229290	N	3550B	8015B	IV
10-Mar-2011	SL-115-SA5A-SB-6.5-7.5	6229290	N	3550B	8015M	IV
10-Mar-2011	SL-115-SA5A-SB-6.5-7.5	6229290	N	3550B	8082	IV
10-Mar-2011	SL-115-SA5A-SB-6.5-7.5	6229290	N	3550B	8270C	IV
10-Mar-2011	SL-115-SA5A-SB-6.5-7.5	6229290	N	3550B	8270C SIM	IV
10-Mar-2011	SL-115-SA5A-SB-6.5-7.5	6229290	N	5035	8015M	IV
10-Mar-2011	SL-115-SA5A-SB-6.5-7.5	6229290	N	5035	8260B	IV
10-Mar-2011	SL-115-SA5A-SB-6.5-7.5	6229290	N	5035	8260B SIM	IV
10-Mar-2011	SL-115-SA5A-SB-6.5-7.5	6229290	N	8330	8330A	IV
10-Mar-2011	SL-115-SA5A-SB-6.5-7.5	6229290	N	Gen Prep	9045M	IV
10-Mar-2011	SL-115-SA5A-SB-6.5-7.5	6229290	N	METHOD	300.0	IV
10-Mar-2011	SL-115-SA5A-SB-6.5-7.5	6229290	N	METHOD	314.0	IV
10-Mar-2011	SL-115-SA5A-SB-6.5-7.5	6229290	N	METHOD	7471A	IV
10-Mar-2011	SL-115-SA5A-SB-6.5-7.5	6229290	N	METHOD	8015B	IV
10-Mar-2011	SL-115-SA5A-SB-6.5-7.5	6229290	N	METHOD	8015M	IV
10-Mar-2011	SL-115-SA5A-SB-6.5-7.5	6229290	N	METHOD	8315A	IV
10-Mar-2011	SL-115-SA5A-SB-6.5-7.5	6229290	N	METHOD	9012B	IV
10-Mar-2011	SL-115-SA5A-SB-6.5-7.5DUP	P229290D271047B	DUP	METHOD	300.0	IV
10-Mar-2011	SL-115-SA5A-SB-6.5-7.5MSD	P229290M240823A	MSD	METHOD	8315A	IV

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
10-Mar-2011	SL-115-SA5A-SB-6.5-7.5MSD	P229290M321702A	MSD	3550B	8015M	IV
10-Mar-2011	SL-115-SA5A-SB-6.5-7.5MS	P229290R240813A	MS	METHOD	8315A	IV
10-Mar-2011	SL-115-SA5A-SB-6.5-7.5MS	P229290R271133B	MS	METHOD	300.0	IV
10-Mar-2011	SL-115-SA5A-SB-6.5-7.5MS	P229290R321636A	MS	3550B	8015M	IV
10-Mar-2011	SL-115-SA5A-SB-13.0-14.0	6229291	N	3050B	6010B	IV
10-Mar-2011	SL-115-SA5A-SB-13.0-14.0	6229291	N	3050B	6020	IV
10-Mar-2011	SL-115-SA5A-SB-13.0-14.0	6229291	N	3060A	7199	IV
10-Mar-2011	SL-115-SA5A-SB-13.0-14.0	6229291	N	3546	1625C	IV
10-Mar-2011	SL-115-SA5A-SB-13.0-14.0	6229291	N	3550B	8015B	IV
10-Mar-2011	SL-115-SA5A-SB-13.0-14.0	6229291	N	3550B	8015M	IV
10-Mar-2011	SL-115-SA5A-SB-13.0-14.0	6229291	N	3550B	8082	IV
10-Mar-2011	SL-115-SA5A-SB-13.0-14.0	6229291	N	3550B	8270C	IV
10-Mar-2011	SL-115-SA5A-SB-13.0-14.0	6229291	N	3550B	8270C SIM	IV
10-Mar-2011	SL-115-SA5A-SB-13.0-14.0	6229291	N	5035	8015M	IV
10-Mar-2011	SL-115-SA5A-SB-13.0-14.0	6229291	N	5035	8260B	IV
10-Mar-2011	SL-115-SA5A-SB-13.0-14.0	6229291	N	5035	8260B SIM	IV
10-Mar-2011	SL-115-SA5A-SB-13.0-14.0	6229291	N	8330	8330A	IV
10-Mar-2011	SL-115-SA5A-SB-13.0-14.0	6229291	N	Gen Prep	9045M	IV
10-Mar-2011	SL-115-SA5A-SB-13.0-14.0	6229291	N	METHOD	300.0	IV
10-Mar-2011	SL-115-SA5A-SB-13.0-14.0	6229291	N	METHOD	314.0	IV
10-Mar-2011	SL-115-SA5A-SB-13.0-14.0	6229291	N	METHOD	7471A	IV
10-Mar-2011	SL-115-SA5A-SB-13.0-14.0	6229291	N	METHOD	8015B	IV
10-Mar-2011	SL-115-SA5A-SB-13.0-14.0	6229291	N	METHOD	8015M	IV
10-Mar-2011	SL-115-SA5A-SB-13.0-14.0	6229291	N	METHOD	8315A	IV
10-Mar-2011	SL-115-SA5A-SB-13.0-14.0	6229291	N	METHOD	9012B	IV
10-Mar-2011	SL-116-SA5A-SB-6.0-7.0	6229292	N	3050B	6010B	IV

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
10-Mar-2011	SL-116-SA5A-SB-6.0-7.0	6229292	N	3050B	6020	IV
10-Mar-2011	SL-116-SA5A-SB-6.0-7.0	6229292	N	3060A	7199	IV
10-Mar-2011	SL-116-SA5A-SB-6.0-7.0	6229292	N	3546	1625C	IV
10-Mar-2011	SL-116-SA5A-SB-6.0-7.0	6229292	N	3550B	8015B	IV
10-Mar-2011	SL-116-SA5A-SB-6.0-7.0	6229292	N	3550B	8015M	IV
10-Mar-2011	SL-116-SA5A-SB-6.0-7.0	6229292	N	3550B	8082	IV
10-Mar-2011	SL-116-SA5A-SB-6.0-7.0	6229292	N	3550B	8270C	IV
10-Mar-2011	SL-116-SA5A-SB-6.0-7.0	6229292	N	3550B	8270C SIM	IV
10-Mar-2011	SL-116-SA5A-SB-6.0-7.0	6229292	N	5035	8015M	IV
10-Mar-2011	SL-116-SA5A-SB-6.0-7.0	6229292	N	5035	8260B	IV
10-Mar-2011	SL-116-SA5A-SB-6.0-7.0	6229292	N	5035	8260B SIM	IV
10-Mar-2011	SL-116-SA5A-SB-6.0-7.0	6229292	N	8330	8330A	IV
10-Mar-2011	SL-116-SA5A-SB-6.0-7.0	6229292	N	Gen Prep	9045M	IV
10-Mar-2011	SL-116-SA5A-SB-6.0-7.0	6229292	N	METHOD	300.0	IV
10-Mar-2011	SL-116-SA5A-SB-6.0-7.0	6229292	N	METHOD	314.0	IV
10-Mar-2011	SL-116-SA5A-SB-6.0-7.0	6229292	N	METHOD	6850	IV
10-Mar-2011	SL-116-SA5A-SB-6.0-7.0	6229292	N	METHOD	7471A	IV
10-Mar-2011	SL-116-SA5A-SB-6.0-7.0	6229292	N	METHOD	8015B	IV
10-Mar-2011	SL-116-SA5A-SB-6.0-7.0	6229292	N	METHOD	8015M	IV
10-Mar-2011	SL-116-SA5A-SB-6.0-7.0	6229292	N	METHOD	8315A	IV
10-Mar-2011	SL-116-SA5A-SB-6.0-7.0	6229292	N	METHOD	9012B	IV
10-Mar-2011	SL-116-SA5A-SB-6.0-7.0MSD	P229292M241615A	MSD	METHOD	6850	IV
10-Mar-2011	SL-116-SA5A-SB-6.0-7.0MS	P229292R241609A	MS	METHOD	6850	IV
10-Mar-2011	SL-116-SA5A-SB-14.0-15.0	6229293	N	3050B	6010B	IV
10-Mar-2011	SL-116-SA5A-SB-14.0-15.0	6229293	N	3050B	6020	IV
10-Mar-2011	SL-116-SA5A-SB-14.0-15.0	6229293	N	3060A	7199	IV

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
10-Mar-2011	SL-116-SA5A-SB-14.0-15.0	6229293	N	3546	1625C	IV
10-Mar-2011	SL-116-SA5A-SB-14.0-15.0	6229293	N	3550B	8015B	IV
10-Mar-2011	SL-116-SA5A-SB-14.0-15.0	6229293	N	3550B	8015M	IV
10-Mar-2011	SL-116-SA5A-SB-14.0-15.0	6229293	N	3550B	8082	IV
10-Mar-2011	SL-116-SA5A-SB-14.0-15.0	6229293	N	3550B	8270C	IV
10-Mar-2011	SL-116-SA5A-SB-14.0-15.0	6229293	N	3550B	8270C SIM	IV
10-Mar-2011	SL-116-SA5A-SB-14.0-15.0	6229293	N	5035	8015M	IV
10-Mar-2011	SL-116-SA5A-SB-14.0-15.0	6229293	N	5035	8260B	IV
10-Mar-2011	SL-116-SA5A-SB-14.0-15.0	6229293	N	5035	8260B SIM	IV
10-Mar-2011	SL-116-SA5A-SB-14.0-15.0	6229293	N	8330	8330A	IV
10-Mar-2011	SL-116-SA5A-SB-14.0-15.0	6229293	N	Gen Prep	9045M	IV
10-Mar-2011	SL-116-SA5A-SB-14.0-15.0	6229293	N	METHOD	300.0	IV
10-Mar-2011	SL-116-SA5A-SB-14.0-15.0	6229293	N	METHOD	314.0	IV
10-Mar-2011	SL-116-SA5A-SB-14.0-15.0	6229293	N	METHOD	7471A	IV
10-Mar-2011	SL-116-SA5A-SB-14.0-15.0	6229293	N	METHOD	8015B	IV
10-Mar-2011	SL-116-SA5A-SB-14.0-15.0	6229293	N	METHOD	8015M	IV
10-Mar-2011	SL-116-SA5A-SB-14.0-15.0	6229293	N	METHOD	8315A	IV
10-Mar-2011	SL-116-SA5A-SB-14.0-15.0	6229293	N	METHOD	9012B	IV

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE103 **Laboratory: LL**

EDD Filename: DE103_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B ***Matrix:*** SO

Sample ID: SL-115-SA5A-SB-13.0-14.0 ***Collected:*** 3/10/2011 10:44:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.61	J	1.09	MDL	10.9	PQL	mg/Kg	U	B
Zirconium	1.90	J	0.919	MDL	5.47	PQL	mg/Kg	J	Z

Sample ID: SL-115-SA5A-SB-6.5-7.5 ***Collected:*** 3/10/2011 10:22:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.91	J	0.955	MDL	5.36	PQL	mg/Kg	J	Z
TIN	2.65	J	1.07	MDL	10.7	PQL	mg/Kg	U	B
Zirconium	1.91	J	0.901	MDL	5.36	PQL	mg/Kg	J	Z

Sample ID: SL-116-SA5A-SB-14.0-15.0 ***Collected:*** 3/10/2011 2:10:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	5.42	J	1.01	MDL	5.66	PQL	mg/Kg	J	Z
TIN	2.60	J	1.13	MDL	11.3	PQL	mg/Kg	U	B
Zirconium	2.04	J	0.950	MDL	5.66	PQL	mg/Kg	J	Z

Sample ID: SL-116-SA5A-SB-6.0-7.0 ***Collected:*** 3/10/2011 1:57:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	4.27	J	0.975	MDL	5.48	PQL	mg/Kg	J	Z
TIN	2.71	J	1.10	MDL	11.0	PQL	mg/Kg	U	B
Zirconium	1.26	J	0.920	MDL	5.48	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 6020 ***Matrix:*** SO

Sample ID: SL-115-SA5A-SB-13.0-14.0 ***Collected:*** 3/10/2011 10:44:00 ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0828	J	0.0433	MDL	0.433	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE103 **Laboratory: LL**

EDD Filename: DE103_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 ***Matrix:*** SO

Sample ID: SL-115-SA5A-SB-13.0-14.0 ***Collected:*** 3/10/2011 10:44:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0758	J	0.0650	MDL	0.217	PQL	mg/Kg	J	Z
SILVER	0.0221	J	0.0130	MDL	0.108	PQL	mg/Kg	J	Z

Sample ID: SL-115-SA5A-SB-6.5-7.5 ***Collected:*** 3/10/2011 10:22:00 ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.105	J	0.0425	MDL	0.425	PQL	mg/Kg	J	Z

Sample ID: SL-115-SA5A-SB-6.5-7.5 ***Collected:*** 3/10/2011 10:22:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0273	J	0.0127	MDL	0.106	PQL	mg/Kg	J	Z

Sample ID: SL-116-SA5A-SB-14.0-15.0 ***Collected:*** 3/10/2011 2:10:00 ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.119	J	0.0444	MDL	0.444	PQL	mg/Kg	J	Z

Sample ID: SL-116-SA5A-SB-14.0-15.0 ***Collected:*** 3/10/2011 2:10:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.113	J	0.0666	MDL	0.222	PQL	mg/Kg	J	Z
SILVER	0.0524	J	0.0133	MDL	0.111	PQL	mg/Kg	J	Z

Sample ID: SL-116-SA5A-SB-6.0-7.0 ***Collected:*** 3/10/2011 1:57:00 ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.117	J	0.0434	MDL	0.434	PQL	mg/Kg	J	Z

Sample ID: SL-116-SA5A-SB-6.0-7.0 ***Collected:*** 3/10/2011 1:57:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0949	J	0.0651	MDL	0.217	PQL	mg/Kg	J	Z
CADMIUM	0.0956	J	0.0434	MDL	0.108	PQL	mg/Kg	J	Z
SILVER	0.0250	J	0.0130	MDL	0.108	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE103 **Laboratory: LL**

EDD Filename: DE103_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS
Method: 7199 **Matrix:** SO

Sample ID: SL-116-SA5A-SB-14.0-15.0 *Collected:* 3/10/2011 2:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.26	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Method Category: METALS
Method: 7471A **Matrix:** SO

Sample ID: SL-115-SA5A-SB-13.0-14.0 *Collected:* 3/10/2011 10:44:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0109	J	0.0032	MDL	0.111	PQL	mg/Kg	J	Z

Sample ID: SL-115-SA5A-SB-6.5-7.5 *Collected:* 3/10/2011 10:22:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0074	J	0.0030	MDL	0.106	PQL	mg/Kg	J	Z

Sample ID: SL-116-SA5A-SB-14.0-15.0 *Collected:* 3/10/2011 2:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0412	J	0.0032	MDL	0.111	PQL	mg/Kg	J	Z

Method Category: SVOA
Method: 8015M **Matrix:** SO

Sample ID: SL-115-SA5A-SB-13.0-14.0 *Collected:* 3/10/2011 10:44:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DIETHYLENE GLYCOL	5.6	U	5.6	MDL	14	PQL	mg/Kg	UJ	C
ETHYLENE GLYCOL	5.6	U	5.6	MDL	14	PQL	mg/Kg	UJ	C
Propylene glycol	5.6	U	5.6	MDL	14	PQL	mg/Kg	UJ	C

Sample ID: SL-115-SA5A-SB-6.5-7.5 *Collected:* 3/10/2011 10:22:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DIETHYLENE GLYCOL	8.8	U	8.8	MDL	14	PQL	mg/Kg	UJ	C
ETHYLENE GLYCOL	6.6	U	6.6	MDL	14	PQL	mg/Kg	UJ	C

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE103 **Laboratory: LL**

EDD Filename: DE103_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8015M **Matrix:** SO

Sample ID: SL-115-SA5A-SB-6.5-7.5 *Collected:* 3/10/2011 10:22:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Propylene glycol	5.5	U	5.5	MDL	14	PQL	mg/Kg	UJ	C

Sample ID: SL-115-SA5A-SB-6.5-7.5 *Collected:* 3/10/2011 10:22:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	0.85	J	0.44	MDL	1.3	PQL	mg/Kg	J	Z

Sample ID: SL-116-SA5A-SB-14.0-15.0 *Collected:* 3/10/2011 2:10:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DIETHYLENE GLYCOL	5.7	U	5.7	MDL	14	PQL	mg/Kg	UJ	C
ETHYLENE GLYCOL	5.7	U	5.7	MDL	14	PQL	mg/Kg	UJ	C
Propylene glycol	5.7	U	5.7	MDL	14	PQL	mg/Kg	UJ	C

Sample ID: SL-116-SA5A-SB-6.0-7.0 *Collected:* 3/10/2011 1:57:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DIETHYLENE GLYCOL	5.6	U	5.6	MDL	14	PQL	mg/Kg	UJ	C
ETHYLENE GLYCOL	5.6	U	5.6	MDL	14	PQL	mg/Kg	UJ	C
Propylene glycol	5.6	U	5.6	MDL	14	PQL	mg/Kg	UJ	C

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: SL-115-SA5A-SB-13.0-14.0 *Collected:* 3/10/2011 10:44:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	0.97	J	0.44	MDL	1.9	PQL	ug/Kg	J	Z
Aroclor 5460	2.3	J	1.1	MDL	3.7	PQL	ug/Kg	J	Z

Sample ID: SL-115-SA5A-SB-6.5-7.5 *Collected:* 3/10/2011 10:22:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	0.64	J	0.43	MDL	1.9	PQL	ug/Kg	J	Z, *XIII

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE103 **Laboratory: LL**

EDD Filename: DE103_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: SL-116-SA5A-SB-6.0-7.0 *Collected:* 3/10/2011 1:57:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	0.78	J	0.44	MDL	1.9	PQL	ug/Kg	J	Z
Aroclor 5460	1.9	J	1.1	MDL	3.7	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SL-116-SA5A-SB-14.0-15.0 *Collected:* 3/10/2011 2:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)PYRENE	100	J	19	MDL	190	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	62	J	19	MDL	190	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	57	J	19	MDL	380	PQL	ug/Kg	J	Z
Butylbenzylphthalate	50	J	19	MDL	190	PQL	ug/Kg	J	Z
CHRYSENE	83	J	19	MDL	190	PQL	ug/Kg	J	Z
Di-n-octylphthalate	92	J	19	MDL	190	PQL	ug/Kg	J	Z
PYRENE	21	J	19	MDL	190	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8270C SIM **Matrix:** SO

Sample ID: SL-115-SA5A-SB-13.0-14.0 *Collected:* 3/10/2011 10:44:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)PYRENE	0.79	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	0.97	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z
CHRYSENE	0.64	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z
FLUORANTHENE	0.77	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z
PYRENE	0.79	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-115-SA5A-SB-6.5-7.5 *Collected:* 3/10/2011 10:22:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(K)FLUORANTHENE	1.3	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	1.1	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE103 **Laboratory: LL**

EDD Filename: DE103_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C SIM **Matrix:** SO

Sample ID: SL-116-SA5A-SB-14.0-15.0 *Collected:* 3/10/2011 2:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DIBENZO(A,H)ANTHRACENE	6.1	J	3.8	MDL	9.5	PQL	ug/Kg	J	Z
Di-n-butylphthalate	72	J	34	MDL	100	PQL	ug/Kg	U	B
FLUORANTHENE	6.6	J	3.8	MDL	9.5	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	5.2	J	3.8	MDL	9.5	PQL	ug/Kg	J	Z
PHENANTHRENE	4.7	J	3.8	MDL	9.5	PQL	ug/Kg	J	Z

Sample ID: SL-116-SA5A-SB-6.0-7.0 *Collected:* 3/10/2011 1:57:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	0.58	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	1.4	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z

Method Category: VOA

Method: 8260B **Matrix:** AQ

Sample ID: TB-031011 *Collected:* 3/10/2011 8:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	6	U	6	MDL	20	PQL	ug/L	UJ	C
DICHLORODIFLUOROMETHANE	2	U	2	MDL	5	PQL	ug/L	UJ	C

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: SL-115-SA5A-SB-13.0-14.0 *Collected:* 3/10/2011 10:44:00 *Analysis Type:* RES *Dilution:* 1.07

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-BUTANONE (MEK)	1.5	U	1.5	MDL	9.5	PQL	ug/Kg	UJ	C
2-HEXANONE	1.9	U	1.9	MDL	9.5	PQL	ug/Kg	UJ	C
4-METHYL-2-PENTANONE (MIBK)	0.46	U	0.46	MDL	9.5	PQL	ug/Kg	UJ	C
ACETONE	8.0	U	8.0	MDL	9.5	PQL	ug/Kg	UJ	C
BROMOCHLOROMETHANE	0.39	U	0.39	MDL	4.8	PQL	ug/Kg	UJ	C
METHYLENE CHLORIDE	1.7	J	0.29	MDL	4.8	PQL	ug/Kg	U	B
TOLUENE	0.12	J	0.09	MDL	4.8	PQL	ug/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE103 **Laboratory: LL**

EDD Filename: DE103_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **VOA**

Method: **8260B** ***Matrix:*** **SO**

Sample ID: **SL-115-SA5A-SB-6.5-7.5** ***Collected:*** **3/10/2011 10:22:00** ***Analysis Type:*** **RES** ***Dilution:*** **0.87**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-BUTANONE (MEK)	1.2	U	1.2	MDL	7.6	PQL	ug/Kg	UJ	C
2-HEXANONE	1.5	U	1.5	MDL	7.6	PQL	ug/Kg	UJ	C
4-METHYL-2-PENTANONE (MIBK)	0.37	U	0.37	MDL	7.6	PQL	ug/Kg	UJ	C
ACETONE	6.4	U	6.4	MDL	7.6	PQL	ug/Kg	UJ	C
BROMOCHLOROMETHANE	0.31	U	0.31	MDL	3.8	PQL	ug/Kg	UJ	C
METHYLENE CHLORIDE	1.5	J	0.23	MDL	3.8	PQL	ug/Kg	U	B
TOLUENE	0.11	J	0.08	MDL	3.8	PQL	ug/Kg	U	B

Sample ID: **SL-116-SA5A-SB-14.0-15.0** ***Collected:*** **3/10/2011 2:10:00** ***Analysis Type:*** **RES** ***Dilution:*** **0.93**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-BUTANONE (MEK)	1.3	U	1.3	MDL	8.5	PQL	ug/Kg	UJ	C
2-HEXANONE	1.7	U	1.7	MDL	8.5	PQL	ug/Kg	UJ	C
4-METHYL-2-PENTANONE (MIBK)	0.41	U	0.41	MDL	8.5	PQL	ug/Kg	UJ	C
ACETONE	7.1	U	7.1	MDL	8.5	PQL	ug/Kg	UJ	C
BROMOCHLOROMETHANE	0.35	U	0.35	MDL	4.3	PQL	ug/Kg	UJ	C
ETHYLBENZENE	0.12	J	0.06	MDL	4.3	PQL	ug/Kg	J	Z
m,p-Xylene	0.41	J	0.18	MDL	4.3	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	2.3	J	0.25	MDL	4.3	PQL	ug/Kg	U	B

Sample ID: **SL-116-SA5A-SB-6.0-7.0** ***Collected:*** **3/10/2011 1:57:00** ***Analysis Type:*** **RES** ***Dilution:*** **0.93**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-BUTANONE (MEK)	1.3	U	1.3	MDL	8.4	PQL	ug/Kg	UJ	C
2-HEXANONE	1.7	U	1.7	MDL	8.4	PQL	ug/Kg	UJ	C
4-METHYL-2-PENTANONE (MIBK)	0.41	U	0.41	MDL	8.4	PQL	ug/Kg	UJ	C
ACETONE	11		7.0	MDL	8.4	PQL	ug/Kg	J	C
BROMOCHLOROMETHANE	0.34	U	0.34	MDL	4.2	PQL	ug/Kg	UJ	C
METHYLENE CHLORIDE	1.5	J	0.25	MDL	4.2	PQL	ug/Kg	U	B
TOLUENE	0.09	J	0.08	MDL	4.2	PQL	ug/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE103 **Laboratory: LL**

EDD Filename: DE103_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
*XIII	Compound Quantitation and CRQL
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Verification Correlation Coefficient
C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE103 **Laboratory: LL**

EDD Filename: DE103_v1 **eQAPP Name: CDM_SSFL_110509**

F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation
L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery Lower Estimation

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE103 **Laboratory: LL**

EDD Filename: DE103_v1 **eQAPP Name: CDM_SSFL_110509**

R	Continuing Calibration Verification Percent Recovery Lower Rejection
R	Continuing Calibration Verification Percent Recovery Upper Estimation
R	Continuing Calibration Verification Percent Recovery Upper Rejection
R	Continuing Calibration Verification Relative Response Factor
R	Initial Calibration Relative Response Factor
R	Initial Calibration Verification Percent Recovery Lower Estimation
R	Initial Calibration Verification Percent Recovery Lower Rejection
R	Initial Calibration Verification Percent Recovery Upper Estimation
R	Initial Calibration Verification Percent Recovery Upper Rejection
R	Initial Calibration Verification Relative Response Factor
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control Outlier Reports

DE103

Method Blank Outlier Report

Lab Reporting Batch ID: DE103 **Laboratory: LL**

EDD Filename: DE103_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P07508AB221918	3/17/2011 7:18:00 PM	CALCIUM PHOSPHORUS TIN	8.02 mg/Kg 1.34 mg/Kg 1.44 mg/Kg	SL-115-SA5A-SB-13.0-14.0 SL-115-SA5A-SB-6.5-7.5 SL-116-SA5A-SB-14.0-15.0 SL-116-SA5A-SB-6.0-7.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-115-SA5A-SB-13.0-14.0(RES)	TIN	2.61 mg/Kg	2.61U mg/Kg
SL-115-SA5A-SB-6.5-7.5(RES)	TIN	2.65 mg/Kg	2.65U mg/Kg
SL-116-SA5A-SB-14.0-15.0(RES)	TIN	2.60 mg/Kg	2.60U mg/Kg
SL-116-SA5A-SB-6.0-7.0(RES)	TIN	2.71 mg/Kg	2.71U mg/Kg

Method: 6020
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P07526AB222150A	3/18/2011 9:50:00 PM	LEAD ZINC	0.0105 mg/Kg 0.644 mg/Kg	SL-115-SA5A-SB-13.0-14.0 SL-115-SA5A-SB-6.5-7.5 SL-116-SA5A-SB-14.0-15.0 SL-116-SA5A-SB-6.0-7.0

Method: 8015M
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P78785AB321519A	3/21/2011 3:19:00 PM	EFH (C30-C40)	1.2 mg/Kg	SL-115-SA5A-SB-13.0-14.0 SL-115-SA5A-SB-6.5-7.5 SL-116-SA5A-SB-14.0-15.0 SL-116-SA5A-SB-6.0-7.0

Method: 8260B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB95B211312A	3/15/2011 1:12:00 PM	METHYLENE CHLORIDE TOLUENE	0.67 ug/Kg 0.11 ug/Kg	SL-115-SA5A-SB-13.0-14.0 SL-115-SA5A-SB-6.5-7.5 SL-116-SA5A-SB-14.0-15.0 SL-116-SA5A-SB-6.0-7.0

Method Blank Outlier Report

Lab Reporting Batch ID: DE103 **Laboratory: LL**

EDD Filename: DE103_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8260B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-115-SA5A-SB-13.0-14.0(RES)	METHYLENE CHLORIDE	1.7 ug/Kg	4.8U ug/Kg
SL-115-SA5A-SB-13.0-14.0(RES)	TOLUENE	0.12 ug/Kg	4.8U ug/Kg
SL-115-SA5A-SB-6.5-7.5(RES)	METHYLENE CHLORIDE	1.5 ug/Kg	3.8U ug/Kg
SL-115-SA5A-SB-6.5-7.5(RES)	TOLUENE	0.11 ug/Kg	3.8U ug/Kg
SL-116-SA5A-SB-14.0-15.0(RES)	METHYLENE CHLORIDE	2.3 ug/Kg	4.3U ug/Kg
SL-116-SA5A-SB-6.0-7.0(RES)	METHYLENE CHLORIDE	1.5 ug/Kg	4.2U ug/Kg
SL-116-SA5A-SB-6.0-7.0(RES)	TOLUENE	0.09 ug/Kg	4.2U ug/Kg

Method: **8270C SIM**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKLK07B260657	3/24/2011 6:57:00 AM	Di-n-butylphthalate	11 ug/Kg	SL-115-SA5A-SB-13.0-14.0 SL-115-SA5A-SB-6.5-7.5 SL-116-SA5A-SB-14.0-15.0 SL-116-SA5A-SB-6.0-7.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-116-SA5A-SB-14.0-15.0(RES)	Di-n-butylphthalate	72 ug/Kg	100U ug/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE103 **Laboratory: LL**

EDD Filename: DE103_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8015M**

Matrix: **SO**

QC Sample ID (Associated Samples)	*Compound*	*MS %R*	*MSD %R*	*%R Limits*	*RPD (Limits)*	*Affected Compounds*	*Flag*
SL-115-SA5A-SB-6.5-7.5MS SL-115-SA5A-SB-6.5-7.5MSD (SL-115-SA5A-SB-6.5-7.5)	EFH (C21-C30) EFH (C30-C40)	-418 -611	-326 -438	49.00-123.00 49.00-123.00	- -	EFH (C21-C30) EFH (C30-C40)	No Qual, >4x

Reporting Limit Outliers

Lab Reporting Batch ID: DE103 **Laboratory: LL**

EDD Filename: DE103_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-115-SA5A-SB-13.0-14.0	TIN	J	2.61	10.9	PQL	mg/Kg	J (all detects)
	Zirconium	J	1.90	5.47	PQL	mg/Kg	
SL-115-SA5A-SB-6.5-7.5	BORON	J	3.91	5.36	PQL	mg/Kg	J (all detects)
	TIN	J	2.65	10.7	PQL	mg/Kg	
	Zirconium	J	1.91	5.36	PQL	mg/Kg	
SL-116-SA5A-SB-14.0-15.0	BORON	J	5.42	5.66	PQL	mg/Kg	J (all detects)
	TIN	J	2.60	11.3	PQL	mg/Kg	
	Zirconium	J	2.04	5.66	PQL	mg/Kg	
SL-116-SA5A-SB-6.0-7.0	BORON	J	4.27	5.48	PQL	mg/Kg	J (all detects)
	TIN	J	2.71	11.0	PQL	mg/Kg	
	Zirconium	J	1.26	5.48	PQL	mg/Kg	

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-115-SA5A-SB-13.0-14.0	ANTIMONY	J	0.0758	0.217	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0828	0.433	PQL	mg/Kg	
	SILVER	J	0.0221	0.108	PQL	mg/Kg	
SL-115-SA5A-SB-6.5-7.5	SELENIUM	J	0.105	0.425	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0273	0.106	PQL	mg/Kg	
SL-116-SA5A-SB-14.0-15.0	ANTIMONY	J	0.113	0.222	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.119	0.444	PQL	mg/Kg	
	SILVER	J	0.0524	0.111	PQL	mg/Kg	
SL-116-SA5A-SB-6.0-7.0	ANTIMONY	J	0.0949	0.217	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0956	0.108	PQL	mg/Kg	
	SELENIUM	J	0.117	0.434	PQL	mg/Kg	
	SILVER	J	0.0250	0.108	PQL	mg/Kg	

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-116-SA5A-SB-14.0-15.0	HEXAVALENT CHROMIUM	J	0.26	1.1	PQL	mg/Kg	J (all detects)

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-115-SA5A-SB-13.0-14.0	MERCURY	J	0.0109	0.111	PQL	mg/Kg	J (all detects)
SL-115-SA5A-SB-6.5-7.5	MERCURY	J	0.0074	0.106	PQL	mg/Kg	J (all detects)
SL-116-SA5A-SB-14.0-15.0	MERCURY	J	0.0412	0.111	PQL	mg/Kg	J (all detects)

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Reporting Limit Outliers

Lab Reporting Batch ID: DE103 **Laboratory: LL**

EDD Filename: DE103_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8015M

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-115-SA5A-SB-6.5-7.5	EFH (C15-C20)	J	0.85	1.3	PQL	mg/Kg	J (all detects)

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-115-SA5A-SB-13.0-14.0	AROCLOR 1260	J	0.97	1.9	PQL	ug/Kg	J (all detects)
	Aroclor 5460	J	2.3	3.7	PQL	ug/Kg	
SL-115-SA5A-SB-6.5-7.5	AROCLOR 1260	J	0.64	1.9	PQL	ug/Kg	J (all detects)
SL-116-SA5A-SB-6.0-7.0	AROCLOR 1260	J	0.78	1.9	PQL	ug/Kg	J (all detects)
	Aroclor 5460	J	1.9	3.7	PQL	ug/Kg	

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-115-SA5A-SB-13.0-14.0	METHYLENE CHLORIDE	J	1.7	4.8	PQL	ug/Kg	J (all detects)
	TOLUENE	J	0.12	4.8	PQL	ug/Kg	
SL-115-SA5A-SB-6.5-7.5	METHYLENE CHLORIDE	J	1.5	3.8	PQL	ug/Kg	J (all detects)
	TOLUENE	J	0.11	3.8	PQL	ug/Kg	
SL-116-SA5A-SB-14.0-15.0	ETHYLBENZENE	J	0.12	4.3	PQL	ug/Kg	J (all detects)
	m,p-Xylene	J	0.41	4.3	PQL	ug/Kg	
	METHYLENE CHLORIDE	J	2.3	4.3	PQL	ug/Kg	
SL-116-SA5A-SB-6.0-7.0	METHYLENE CHLORIDE	J	1.5	4.2	PQL	ug/Kg	J (all detects)
	TOLUENE	J	0.09	4.2	PQL	ug/Kg	

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-116-SA5A-SB-14.0-15.0	BENZO(A)PYRENE	J	100	190	PQL	ug/Kg	J (all detects)
	BENZO(G,H,I)PERYLENE	J	62	190	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	57	380	PQL	ug/Kg	
	Butylbenzylphthalate	J	50	190	PQL	ug/Kg	
	CHRYSENE	J	83	190	PQL	ug/Kg	
	Di-n-octylphthalate	J	92	190	PQL	ug/Kg	
	PYRENE	J	21	190	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE103 **Laboratory: LL**

EDD Filename: DE103_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8270C SIM**

Matrix: **SO**

SampleID	*Analyte*	*Lab Qual*	*Result*	*Reporting Limit*	*RL Type*	*Units*	*Flag*
SL-115-SA5A-SB-13.0-14.0	BENZO(A)PYRENE	J	0.79	1.9	PQL	ug/Kg	J (all detects)
	BENZO(B)FLUORANTHENE	J	0.97	1.9	PQL	ug/Kg	
	CHRYSENE	J	0.64	1.9	PQL	ug/Kg	
	FLUORANTHENE	J	0.77	1.9	PQL	ug/Kg	
	PYRENE	J	0.79	1.9	PQL	ug/Kg	
SL-115-SA5A-SB-6.5-7.5	BENZO(K)FLUORANTHENE	J	1.3	1.8	PQL	ug/Kg	J (all detects)
	INDENO(1,2,3-CD)PYRENE	J	1.1	1.8	PQL	ug/Kg	
SL-116-SA5A-SB-14.0-15.0	DIBENZO(A,H)ANTHRACENE	J	6.1	9.5	PQL	ug/Kg	J (all detects)
	Di-n-butylphthalate	J	72	100	PQL	ug/Kg	
	FLUORANTHENE	J	6.6	9.5	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	5.2	9.5	PQL	ug/Kg	
	PHENANTHRENE	J	4.7	9.5	PQL	ug/Kg	
SL-116-SA5A-SB-6.0-7.0	ANTHRACENE	J	0.58	1.9	PQL	ug/Kg	J (all detects)
	DIBENZO(A,H)ANTHRACENE	J	1.4	1.9	PQL	ug/Kg	

Enclosure II

EPA Level IV Validation Reports

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	March 10, 2011
LDC Report Date:	August 18, 2011
Matrix:	Soil/Water
Parameters:	Volatiles
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE103

Sample Identification

SL-115-SA5A-SB-6.5-7.5
SL-115-SA5A-SB-13.0-14.0
SL-116-SA5A-SB-6.0-7.0
SL-116-SA5A-SB-14.0-15.0
TB-031011

Introduction

This data review covers 4 soil samples and one water sample listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8260B for Volatiles.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 30.0% for all compounds.

In the case where the laboratory used a calibration curve to evaluate the compounds, all coefficients of determination (r^2) were greater than or equal to 0.990 .

Average relative response factors (RRF) for all compounds were within method and validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs) and 25.0% for all other compounds with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
3/15/11	Acetone 2-Butanone 4-Methyl-2-pentanone 2-Hexanone	30 34 50 58	All soil samples in SDG DE103	J (all detects) UJ (all non-detects)	A

The percent differences (%D) of the second source calibration standard were less than or equal to 25.0% for all compounds with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
3/1/11	Bromochloromethane	36	All soil samples in SDG DE103	J (all detects) UJ (all non-detects)	A
2/10/11	Dichlorodifluoromethane Acetone	30 28	All water samples in SDG DE103	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A

All of the continuing calibration relative response factors (RRF) were within method and validation criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No volatile contaminants were found in the method blanks with the following exceptions:

Method Blank ID	Analysis Date	Compound TIC (RT in minutes)	Concentration	Associated Samples
VBLKB95	3/15/11	Methylene chloride Toluene	0.67 ug/Kg 0.11 ug/Kg	All soil samples in SDG DE103

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated method blanks with the following exceptions:

Sample	Compound TIC (RT in minutes)	Reported Concentration	Modified Final Concentration
SL-115-SA5A-SB-6.5-7.5	Methylene chloride Toluene	1.5 ug/Kg 0.11 ug/Kg	3.8U ug/Kg 3.8U ug/Kg
SL-115-SA5A-SB-13.0-14.0	Methylene chloride Toluene	1.7 ug/Kg 0.12 ug/Kg	4.8U ug/Kg 4.8U ug/Kg
SL-116-SA5A-SB-6.0-7.0	Methylene chloride Toluene	1.5 ug/Kg 0.09 ug/Kg	4.2U ug/Kg 4.2U ug/Kg
SL-116-SA5A-SB-14.0-15.0	Methylene chloride	2.3 ug/Kg	4.3U ug/Kg

Sample TB-031011 was identified as a trip blank. No volatile contaminants were found.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE103	All compounds reported below the RL.	J (all detects)	A

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was acceptable.

XV. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Volatiles - Data Qualification Summary - SDG DE103

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE103	SL-115-SA5A-SB-6.5-7.5 SL-115-SA5A-SB-13.0-14.0 SL-116-SA5A-SB-6.0-7.0 SL-116-SA5A-SB-14.0-15.0	Acetone 2-Butanone 4-Methyl-2-pentanone 2-Hexanone	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D) (C)
DE103	SL-115-SA5A-SB-6.5-7.5 SL-115-SA5A-SB-13.0-14.0 SL-116-SA5A-SB-6.0-7.0 SL-116-SA5A-SB-14.0-15.0	Bromochloromethane	J (all detects) UJ (all non-detects)	A	Continuing calibration (ICV %D) (C)
DE103	TB-031011	Dichlorodifluoromethane Acetone	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A	Continuing calibration (ICV %D) (C)
DE103	SL-115-SA5A-SB-6.5-7.5 SL-115-SA5A-SB-13.0-14.0 SL-116-SA5A-SB-6.0-7.0 SL-116-SA5A-SB-14.0-15.0 TB-031011	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
Volatiles - Laboratory Blank Data Qualification Summary - SDG DE103

SDG	Sample	Compound TIC (RT in minutes)	Modified Final Concentration	A or P	Code
DE103	SL-115-SA5A-SB-6.5-7.5	Methylene chloride Toluene	3.8U ug/Kg 3.8U ug/Kg	A	B
DE103	SL-115-SA5A-SB-13.0-14.0	Methylene chloride Toluene	4.8U ug/Kg 4.8U ug/Kg	A	B
DE103	SL-116-SA5A-SB-6.0-7.0	Methylene chloride Toluene	4.2U ug/Kg 4.2U ug/Kg	A	B
DE103	SL-116-SA5A-SB-14.0-15.0	Methylene chloride	4.3U ug/Kg	A	B

Santa Susana Field Laboratory
Volatiles - Field Blank Data Qualification Summary - SDG DE103

No Sample Data Qualified in this SDG

LDC #: 25911L1a

SDG #: DE103

Laboratory: Lancaster Laboratories

VALIDATION COMPLETENESS WORKSHEET

Level IV

Date: 8/8/11

Page: 1 of 1

Reviewer:

2nd Reviewer: A

METHOD: GC/MS Volatiles (EPA SW 846 Method 8260B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times A	SW	Sampling dates: 3/10/11
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	A	% RSD ≤ 30, r2
IV.	Continuing calibration/ICV	SW	ICV/CCV ≤ 25
V.	Blanks	SW	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	N	client specified
VIII.	Laboratory control samples	A	res/ID
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A	
XI.	Target compound identification	A	
XII.	Compound quantitation/CRQLs	A	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	A	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	N	
XVII.	Field blanks	ND	TB = 5

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: SOIL + water

1	SL-115-SA5A-SB-6.5-7.5 S	11	VBLKB95	21		31	
2	SL-115-SA5A-SB-13.0-14.0	12	VBLKY51	22		32	
3	SL-115-SA5A-SB-6.0-7.0	13		23		33	
4	SL-115-SA5A-SB-14.0-15.0	14		24		34	
5	TB-031011 W	15		25		35	
6		16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

LDC #: 25911L1a

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer: C

Method: Volatiles (EPA SW 846 Method 8260B)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. GC/MS instrument performance check				
Were the BFB performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
III. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Was a curve fit used for evaluation?	✓			
Did the initial calibration meet the curve fit acceptance criteria of > 0.990?	✓			
Were all percent relative standard deviations (%RSD) ≤ 30% and relative response factors (RRF) > 0.05?	✓			
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓			
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Were all percent differences (%D) ≤ 25% and relative response factors (RRF) ≥ 0.05?		✓		
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed at least once every 12 hours for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.	✓			
VI. Surrogate spikes				
Were all surrogate %R within QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.			✓	
Was a MS/MSD analyzed every 20 samples of each matrix?			✓	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			

LDC #: 25911L1a

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer: C

Validation Area	Yes	No	NA	Findings/Comments
Was an LCS analyzed per analytical batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
X. Internal Standards				
Were internal standard area counts within -50% or +100% of the associated calibration standard?	✓			
Were retention times within ± 30 seconds of the associated calibration standard?	✓			
XI. Target compound identification				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?	✓			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	✓			
Were chromatogram peaks verified and accounted for?				
XII. Compound quantitation/CRQLs				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	✓			
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XIII. Tentatively identified compounds (TICs)				
Were the major ions (> 10 percent relative intensity) in the reference spectrum evaluated in sample spectrum?			✓	
Were relative intensities of the major ions within ± 20% between the sample and the reference spectra?			✓	
Did the raw data indicate that the laboratory performed a library search for all required peaks in the chromatograms (samples and blanks)?			✓	
XIV. System performance				
System performance was found to be acceptable.	✓			
XV. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XVI. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XVII. Field blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

TARGET COMPOUND WORKSHEET

METHOD: VOA (EPA SW 846 Method 8260B)

A. Chloromethane*	U. 1,1,2-Trichloroethane	OO. 2,2-Dichloropropane	III. n-Butylbenzene	CCCC.1-Chlorohexane
B. Bromomethane	V. Benzene	PP. Bromochloromethane	JJJ. 1,2-Dichlorobenzene	DDDD. Isopropyl alcohol
C. Vinyl choride**	W. trans-1,3-Dichloropropene	QQ. 1,1-Dichloropropene	KKK. 1,2,4-Trichlorobenzene	EEEE. Acetonitrile
D. Chloroethane	X. Bromoform*	RR. Dibromomethane	LLL. Hexachlorobutadiene	FFFF. Acrolein
E. Methylene chloride	Y. 4-Methyl-2-pentanone	SS. 1,3-Dichloropropane	MMM. Naphthalene	GGGG. Acrylonitrile
F. Acetone	Z. 2-Hexanone	TT. 1,2-Dibromoethane	NNN. 1,2,3-Trichlorobenzene	HHHH. 1,4-Dioxane
G. Carbon disulfide	AA. Tetrachloroethene	UU. 1,1,1,2-Tetrachloroethane	OOO. 1,3,5-Trichlorobenzene	IIII. Isobutyl alcohol
H. 1,1-Dichloroethene**	BB. 1,1,2,2-Tetrachloroethane*	VV. Isopropylbenzene	PPP. trans-1,2-Dichloroethene	JJJJ. Methacrylonitrile
I. 1,1-Dichloroethane*	CC. Toluene**	WW. Bromobenzene	QQQ. cis-1,2-Dichloroethene	KKKK. Propionitrile
J. 1,2-Dichloroethene, total	DD. Chlorobenzene*	XX. 1,2,3-Trichloropropane	RRR. m,p-Xylenes	LLLL. Ethyl ether
K. Chloroform**	EE. Ethylbenzene**	YY. n-Propylbenzene	SSS. o-Xylene	MMMM. Benzyl chloride
L. 1,2-Dichloroethane	FF. Styrene	ZZ. 2-Chlorotoluene	TTT. 1,1,2-Trichloro-1,2,2-trifluoroethane	NNNN.
M. 2-Butanone	GG. Xylenes, total	AAA. 1,3,5-Trimethylbenzene	UUU. 1,2-Dichlorotetrafluoroethane	OOOO.
N. 1,1,1-Trichloroethane	HH. Vinyl acetate	BBB. 4-Chlorotoluene	VVV. 4-Ethyltoluene	PPPP.
O. Carbon tetrachloride	II. 2-Chloroethylvinyl ether	CCC. tert-Butylbenzene	WWW. Ethanol	QQQQ.
P. Bromodichloromethane	JJ. Dichlorodifluoromethane	DDD. 1,2,4-Trimethylbenzene	XXX. Di-isopropyl ether	RRRR.
Q. 1,2-Dichloropropane**	KK. Trichlorofluoromethane	EEE. sec-Butylbenzene	YYY. tert-Butanol	SSSS.
R. cis-1,3-Dichloropropene	LL. Methyl-tert-butyl ether	FFF. 1,3-Dichlorobenzene	ZZZ. tert-Butyl alcohol	TTTT.
S. Trichloroethene	MM. 1,2-Dibromo-3-chloropropane	GGG. p-Isopropyltoluene	AAAA. Ethyl tert-butyl ether	UUUU.
T. Dibromochloromethane	NN. Methyl ethyl ketone	HHH. 1,4-Dichlorobenzene	BBBB. tert-Amyl methyl ether	VVVV.

* = System performance check compounds (SPCC) for RRF ; ** = Calibration check compounds (CCC) for %RSD.

LDC #: 25911L1a

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Reviewer: FT
2nd Reviewer:

METHOD: GC/MS VOA (EPA SW 846 Method 8260)
Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?
Y N N/A Were percent differences (%D) and relative response factors (RRF) within method criteria for all CCC's and SPCC's ?
Y N N/A Were all %D and RRFs within the validation criteria of ≤25 %D and ≥0.05 RRF ?

#	Date	Standard ID	Compound	Finding %D (Limit: ≤25.0%)	Finding RRF (Limit: ≥0.05)	Associated Samples	Qualifications
	3/15/11	CCV	F	30		All soils	J/UJ/A (C)
	12:00		M	34		↓	↓
			Y	50			
			Z	58			
	3/01/11	ICV	PP	36		↓	↓
	2/10/11	ICV	JJ	30		All water	J/UJ/A (C)
			F	28		↓	↓

LDC #: 25911L/a

VALIDATION FINDINGS WORKSHEET
Blanks

Page: 1 of 1
Reviewer: FT
2nd Reviewer: C

METHOD: GC/MS VOA (EPA SW 846 Method 8260)
Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a method blank associated with every sample in this SDG?
Y N N/A Was a method blank analyzed at least once every 12 hours for each matrix and concentration?
Y N N/A Was there contamination in the method blanks? If yes, please see the qualifications below.

(B)

Blank analysis date: 3/15/11
Conc. units: ug/kg
Associated Samples: All soils

Compound	Blank ID	Sample Identification								
	YBLKB95		~~1~~	1	2	3	4			
E	0.67		~~1.5/4U~~	1.5/3.8U	1.7/4.8U	1.5/4.2U	2.3/4.3U			
cc	0.11		~~0.1~~	0.11/3.8U	0.12/4.8U	0.09/4.2U	–			
CRQL										

Blank analysis date:
Conc. units:
Associated Samples:

Compound	Blank ID	Sample Identification								
CRQL										

All results were qualified using the criteria stated below except those circled.

Note: Common contaminants such as Methylene chloride, Acetone, 2-Butanone, Carbon disulfide and TICs that were detected in samples within ten times the associated method blank concentration were qualified as not detected, "U". Other contaminants within five times the method blank concentration were also qualified as not detected, "U".

LDC #: 25911L/a

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: FT
2nd Reviewer: C

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

$RRF = (A_x)(C_{is})/(A_{is})(C_x)$
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

A_x = Area of compound,
C_x = Concentration of compound,
S = Standard deviation of the RRFs
X = Mean of the RRFs

A_{is} = Area of associated internal standard
C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Reported RRF (50 std)	Recalculated RRF (50 std)	Reported Average RRF (initial)	Recalculated Average RRF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	3/01/11	C (1st internal standard)	0.4158	0.4158	0.4296	0.4296	9	9
			EE (2nd internal standard)	1.6663	1.6663	1.5916	1.5916	10	10
			JJJ (3rd internal standard)	1.4144	1.4144	1.3506	1.3506	9	9
			(4th internal standard)						
2	ICAL	2/10/11	C (1st internal standard)	0.3993	0.3993	0.4001	0.4001	7	7
			EE (2nd internal standard)	1.9698	1.9698	1.9465	1.9465	3	3
			JJJ (3rd internal standard)	1.6823	1.6823	1.6848	1.6848	4	4
			(4th internal standard)						
3			(1st internal standard)						
			(2nd internal standard)						
			(3rd internal standard)						
			(4th internal standard)						
4			(1st internal standard)						
			(2nd internal standard)						
			(3rd internal standard)						
			(4th internal standard)						

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 75911L/a

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: FT
2nd Reviewer: C

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
RRF = $(A_x)(C_{is})/(A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference internal Standard)	Average RRF (initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
1	CCV	3/15/11	C (1st internal standard)	0.4001	0.3654	0.3654	9	9
			EE (2nd internal standard)	1.9465	1.9840	1.9840	2	2
			JJ (3rd internal standard)	1.6848	1.6580	1.6580	2	2
			(4th internal standard)					
2	CCV	3/15/11	C (1st internal standard)	0.4296	0.4282	0.4282	0	0
	12:00		EE (2nd internal standard)	1.5916	1.6506	1.6506	4	4
			JJJ (3rd internal standard)	1.3506	1.4142	1.4142	5	5
			(4th internal standard)					
3			(1st internal standard)					
			(2nd internal standard)					
			(3rd internal standard)					
			(4th internal standard)					
4			(1st internal standard)					
			(2nd internal standard)					
			(3rd internal standard)					
			(4th internal standard)					

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25911L1a

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT
2nd reviewer: A

METHOD: GC/MS VOA (EPA SW 846 Method 8260)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane	50.0	48.587	97	97	0
1,2-Dichloroethane-d4		49.832	100	100	
Toluene-d8		49.114	98	98	
Bromofluorobenzene		47.110	94	94	

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

LDC #: 25 11121R

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample Results Verification

Reviewer: FT
2nd Reviewer: [illegible]

METHOD: GC/MS VOA (EPA SW 846 Method 8260)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratoy control sample and laboratory control sample duplicate (if applicable) were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * SSC/SA Where: SSC = Spiked sample concentration
SA = Spike added

RPD = I LCS - LCSD I * 2/(LCS + LCSD) LCS = Laboraotry control sample percent recovery LCSD = Laboratory control sample duplicate percent recovery

LCS ID: VES SOIL

Compound	Spike Added (ug/kg)		Spiked Sample Concentration (ug/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalculated
1,1-Dichloroethene	20	NA	22.36	NA	112	112				
Trichloroethene			19.36		97	97				
Benzene			20.3		101	101				
Toluene			19.8		99	99				
Chlorobenzene			19.14		96	96	NA			

Comments: Refer to Laboratory Control Sample findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25711 L/c

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: FT
2nd reviewer: [illegible]

METHOD: GC/MS VOA (EPA SW 846 Method 8260)

Y N N/A Were all reported results recalculated and verified for all level IV samples?

Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(DF)}{(A_{is})(RRF)(V_o)(\%S)}$

A_x	=	Area of the characteristic ion (EICP) for the compound to be measured
A_{is}	=	Area of the characteristic ion (EICP) for the specific internal standard
I_s	=	Amount of internal standard added in nanograms (ng)
RRF	=	Relative response factor of the calibration standard.
V_o	=	Volume or weight of sample pruged in milliliters (ml) or grams (g).
Df	=	Dilution factor.
%S	=	Percent solids, applicable to soils and solid matrices only.

Example:

Sample I.D. #1, Toluene

Conc. = $\frac{(1131)(50)(5)}{(599979)(0.8282)(5.78)(0.90)}$ =

0.109 ug/kg

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	March 10, 2011
LDC Report Date:	August 18, 2011
Matrix:	Soil/Water
Parameters:	1,4-Dioxane
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE103

Sample Identification

SL-115-SA5A-SB-6.5-7.5
SL-115-SA5A-SB-13.0-14.0
SL-116-SA5A-SB-6.0-7.0
SL-116-SA5A-SB-14.0-15.0
TB-031011

Introduction

This data review covers 4 soil samples and one water sample listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8260B using Selected Ion Monitoring (SIM) for 1,4-Dioxane.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 30.0% for 1,4-Dioxane.

Average relative response factors (RRF) for all compounds were within method and validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 25.0% for 1,4-Dioxane.

The percent differences (%D) of the second source calibration standard were less than or equal to 25.0% for 1,4-Dioxane.

All of the continuing calibration relative response factors (RRF) were within method and validation criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No 1,4-dioxane was found in the method blanks.

Sample TB-031011 was identified as a trip blank. No 1,4-dioxane was found.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE103	All compounds reported below the RL.	J (all detects)	A

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was acceptable.

XV. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
1,4-Dioxane - Data Qualification Summary - SDG DE103

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE103	SL-115-SA5A-SB-6.5-7.5 SL-115-SA5A-SB-13.0-14.0 SL-116-SA5A-SB-6.0-7.0 SL-116-SA5A-SB-14.0-15.0 TB-031011	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
1,4-Dioxane - Laboratory Blank Data Qualification Summary - SDG DE103

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
1,4-Dioxane - Field Blank Data Qualification Summary - SDG DE103

No Sample Data Qualified in this SDG

LDC #: 25911L1b

VALIDATION COMPLETENESS WORKSHEET

Level IV

SDG #: DE103

Laboratory: Lancaster Laboratories

Date: 8/2/11

Page: 1 of 1

Reviewer: [illegible]

2nd Reviewer: [illegible]

METHOD: GC/MS 1,4-Dioxane (EPA SW 846 Method 8260B-SIM)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	~~SW~~ A	Sampling dates: 3/10/11
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	A	% RSD ≤ 30
IV.	Continuing calibration/ICV	A	ICV/CCV ≤ 25
V.	Blanks	A	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	N	client specified
VIII.	Laboratory control samples	A	LCS ID
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A	
XI.	Target compound identification	A	
XII.	Compound quantitation/CRQLs	A	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	A	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	N	
XVII.	Field blanks	ND	TB = 5

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:

soil + water

1 1	SL-115-SA5A-SB-6.5-7.5 S	11 1	VBLKE57	21		31	
2 1	SL-115-SA5A-SB-13.0-14.0	12 2	VBLKE55	22		32	
3 1	SL-11~~5~~6-SA5A-SB-6.0-7.0	13		23		33	
4 1	SL-11~~5~~6-SA5A-SB-14.0-15.0	14		24		34	
5 2	TB-031011 W	15		25		35	
6		16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

LDC #: 25911L1b

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer: C

Method: Volatiles (EPA SW 846 Method 8260B)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. GC/MS instrument performance check				
Were the BFB performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
III. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?			✓	
Was a curve fit used for evaluation?		✓		
Did the initial calibration meet the curve fit acceptance criteria of > 0.990?		✓		
Were all percent relative standard deviations (%RSD) ≤ 30% and relative response factors (RRF) > 0.05?	✓			
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓			
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓		✓	
Were all percent differences (%D) ≤ 25% and relative response factors (RRF) ≥ 0.05?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed at least once every 12 hours for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.			✓	
Was a MS/MSD analyzed every 20 samples of each matrix?			✓	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			

LDC #: 25 91141b

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer: C

Validation Area	Yes	No	NA	Findings/Comments
Was an LCS analyzed per analytical batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
X. Internal standards				
Were internal standard area counts within -50% or +100% of the associated calibration standard?	✓			
Were retention times within ± 30 seconds of the associated calibration standard?	✓			
XI. Target compound identification				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?			✓	
Did compound spectra meet specified EPA "Functional Guidelines" criteria?			✓	
Were chromatogram peaks verified and accounted for?	✓			
XII. Compound quantitation/CRQLs				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?			✓	
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?		✓		
XIII. Tentatively identified compounds (TICs)				
Were the major ions (> 10 percent relative intensity) in the reference spectrum evaluated in sample spectrum?			✓	
Were relative intensities of the major ions within ± 20% between the sample and the reference spectra?			✓	
Did the raw data indicate that the laboratory performed a library search for all required peaks in the chromatograms (samples and blanks)?			✓	
XIV. System performance				
System performance was found to be acceptable.	✓			
XV. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XVI. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XVII. Field blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

TARGET COMPOUND WORKSHEET

METHOD: VOA (EPA SW 846 Method 8260B)

A. Chloromethane*	U. 1,1,2-Trichloroethane	OO. 2,2-Dichloropropane	III. n-Butylbenzene	CCCC.1-Chlorohexane
B. Bromomethane	V. Benzene	PP. Bromochloromethane	JJJ. 1,2-Dichlorobenzene	DDDD. Isopropyl alcohol
C. Vinyl choride**	W. trans-1,3-Dichloropropene	QQ. 1,1-Dichloropropene	KKK. 1,2,4-Trichlorobenzene	EEEE. Acetonitrile
D. Chloroethane	X. Bromoform*	RR. Dibromomethane	LLL. Hexachlorobutadiene	FFFF. Acrolein
E. Methylene chloride	Y. 4-Methyl-2-pentanone	SS. 1,3-Dichloropropane	MMM. Naphthalene	GGGG. Acrylonitrile
F. Acetone	Z. 2-Hexanone	TT. 1,2-Dibromoethane	NNN. 1,2,3-Trichlorobenzene	HHHH. 1,4-Dioxane
G. Carbon disulfide	AA. Tetrachloroethene	UU. 1,1,1,2-Tetrachloroethane	OOO. 1,3,5-Trichlorobenzene	IIII. Isobutyl alcohol
H. 1,1-Dichloroethene**	BB. 1,1,2,2-Tetrachloroethane*	VV. Isopropylbenzene	PPP. trans-1,2-Dichloroethene	JJJJ. Methacrylonitrile
I. 1,1-Dichloroethane*	CC. Toluene**	WW. Bromobenzene	QQQ. cis-1,2-Dichloroethene	KKKK. Propionitrile
J. 1,2-Dichloroethene, total	DD. Chlorobenzene*	XX. 1,2,3-Trichloropropane	RRR. m,p-Xylenes	LLLL. Ethyl ether
K. Chloroform**	EE. Ethylbenzene**	YY. n-Propylbenzene	SSS. o-Xylene	MMMM. Benzyl chloride
L. 1,2-Dichloroethane	FF. Styrene	ZZ. 2-Chlorotoluene	TTT. 1,1,2-Trichloro-1,2,2-trifluoroethane	NNNN.
M. 2-Butanone	GG. Xylenes, total	AAA. 1,3,5-Trimethylbenzene	UUU. 1,2-Dichlorotetrafluoroethane	OOOO.
N. 1,1,1-Trichloroethane	HH. Vinyl acetate	BBB. 4-Chlorotoluene	VVV. 4-Ethyltoluene	PPPP.
O. Carbon tetrachloride	II. 2-Chloroethylvinyl ether	CCC. tert-Butylbenzene	WWW. Ethanol	QQQQ.
P. Bromodichloromethane	JJ. Dichlorodifluoromethane	DDD. 1,2,4-Trimethylbenzene	XXX. Di-isopropyl ether	RRRR.
Q. 1,2-Dichloropropane**	KK. Trichlorofluoromethane	EEE. sec-Butylbenzene	YYY. tert-Butanol	SSSS.
R. cis-1,3-Dichloropropene	LL. Methyl-tert-butyl ether	FFF. 1,3-Dichlorobenzene	ZZZ. tert-Butyl alcohol	TTTT.
S. Trichloroethene	MM. 1,2-Dibromo-3-chloropropane	GGG. p-Isopropyltoluene	AAAA. Ethyl tert-butyl ether	UUUU.
T. Dibromochloromethane	NN. Methyl ethyl ketone	HHH. 1,4-Dichlorobenzene	BBBB. tert-Amyl methyl ether	VVVV.

* = System performance check compounds (SPCC) for RRF ; ** = Calibration check compounds (CCC) for %RSD.

LDC #: 25911L1b

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: FT
2nd Reviewer: [illegible]

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

$RRF = (A_x)(C_{is})/(A_{is})(C_x)$
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

A_x = Area of compound,
C_x = Concentration of compound,
S = Standard deviation of the RRFs
X = Mean of the RRFs

A_{is} = Area of associated internal standard
C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Reported RRF (5 std)	Recalculated RRF (5 std)	Reported Average RRF (initial)	Recalculated Average RRF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL SOIL	11/7/10	1,4-Dioxane (1st internal standard)	1.3539	1.3537	1.3396	1.3396	2	2
			(2nd internal standard)						
			(3rd internal standard)						
			(4th internal standard)						
2	ICAL water	11/01/10	1,4-Dioxane (1st internal standard)	1.3359	1.3539	1.3219	1.3219	1	1
			(2nd internal standard)						
			(3rd internal standard)						
			(4th internal standard)						
3			(1st internal standard)						
			(2nd internal standard)						
			(3rd internal standard)						
			(4th internal standard)						
4			(1st internal standard)						
			(2nd internal standard)						
			(3rd internal standard)						
			(4th internal standard)						

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 35911L1b

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: FT
2nd Reviewer: C

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
RRF = $(A_x)(C_{is})/(A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference internal Standard)	Average RRF (initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
1	CCV	3/15/11	1,4-Dioxane (1st internal standard)	1.3396	1.4670	1.4670	10	10
	9:44		(2nd internal standard)					
			(3rd internal standard)					
			(4th internal standard)					
2	CCV	3/14/11	↓ (1st internal standard)	1.3219	1.4649	1.4649	11	11
	9:55		(2nd internal standard)					
			(3rd internal standard)					
			(4th internal standard)					
3			(1st internal standard)					
			(2nd internal standard)					
			(3rd internal standard)					
			(4th internal standard)					
4			(1st internal standard)					
			(2nd internal standard)					
			(3rd internal standard)					
			(4th internal standard)					

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25911L1b

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT

2nd reviewer: [illegible]

METHOD: GC/MS VOA (EPA SW 846 Method 8260)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
~~Dibromofluoromethane~~					
1,~~2-Dichloroethane~~-d4					
Toluene-d8	10	9.649	96	96	0
~~Bromofluorobenzene~~					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

LDC #: [illegible]

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample Results Verification

Reviewer: FT
2nd Reviewer: [illegible]

METHOD: GC/MS VOA (EPA SW 846 Method 8260)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratoy control sample and laboratory control sample duplicate (if applicable) were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * SSC/SA Where: SSC = Spiked sample concentration
SA = Spike added

RPD = I LCS - LCSD I * 2/(LCS + LCSD) LCS = Laboraotry control sample percent recovery LCSD = Laboratory control sample duplicate percent recovery

LCS ID: las 10

Compound	Spike Added (ug/kg)		Spiked Sample Concentration (ug/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
1,1-Dichloroethene										
Trichloroethene										
Benzene										
Toluene										
Chlorobenzene										
1,4- Dioxane	125	125	135.79	130.19	109	109	104	104	4	4

Comments: Refer to Laboratory Control Sample findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25911L6

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: FT
2nd reviewer: [illegible]

METHOD: GC/MS VOA (EPA SW 846 Method 8260)

Y N N/A Were all reported results recalculated and verified for all level IV samples?

Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(DF)}{(A_{is})(RRF)(V_o)(\%S)}$

A_x	=	Area of the characteristic ion (EICP) for the compound to be measured
A_{is}	=	Area of the characteristic ion (EICP) for the specific internal standard
I_s	=	Amount of internal standard added in nanograms (ng)
RRF	=	Relative response factor of the calibration standard.
V_o	=	Volume or weight of sample pruged in milliliters (ml) or grams (g).
Df	=	Dilution factor.
%S	=	Percent solids, applicable to soils and solid matrices only.

Example:

Sample I.D. _____, _____:

Conc. = (_____)(_____)(_____) / (_____)(_____)(_____)(_____)

= ND

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	March 10, 2011
LDC Report Date:	August 18, 2011
Matrix:	Soil
Parameters:	Semivolatiles
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE103

Sample Identification

SL-115-SA5A-SB-6.5-7.5
SL-115-SA5A-SB-13.0-14.0
SL-116-SA5A-SB-6.0-7.0
SL-116-SA5A-SB-14.0-15.0

Introduction

This data review covers 4 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8270C for Semivolatiles.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 30.0% for all compounds.

In the case where the laboratory used a calibration curve to evaluate the compounds, all coefficients of determination (r^2) were greater than or equal to 0.990 .

Average relative response factors (RRF) for all compounds were within method and validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs) and 25.0% for all other compounds with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
3/25/11	N-Nitrosodimethylamine	30	SBLKLA082	J (all detects) UJ (all non-detects)	A

The percent differences (%D) of the second source calibration standard were less than or equal to 25.0% for all compounds.

All of the continuing calibration relative response factors (RRF) were within method and validation criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No semivolatile contaminants were found in the method blanks.

No field blanks were identified in this SDG.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE103	All compounds reported below the RL.	J (all detects)	A

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was acceptable.

XV. Overall Assessment

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Semivolatiles - Data Qualification Summary - SDG DE103

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE103	SL-115-SA5A-SB-6.5-7.5 SL-115-SA5A-SB-13.0-14.0 SL-116-SA5A-SB-6.0-7.0 SL-116-SA5A-SB-14.0-15.0	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
Semivolatiles - Laboratory Blank Data Qualification Summary - SDG DE103

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Semivolatiles - Field Blank Data Qualification Summary - SDG DE103

No Sample Data Qualified in this SDG

LDC #: 25911L2a **VALIDATION COMPLETENESS WORKSHEET** Date: 8/4/11
SDG #: DE103 Level IV Page: 1 of 2
Laboratory: Lancaster Laboratories Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC/MS Semivolatiles (EPA SW 846 Method 8270C)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 3/10/11
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	A	% RSD ≤ 30 r^2
IV.	Continuing calibration/ICV	SW	RF/CCV ≤ 25
V.	Blanks	A	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	N	client specified
VIII.	Laboratory control samples	A	LCS
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A	
XI.	Target compound identification	A	
XII.	Compound quantitation/CRQLs	A	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	A	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	N	
XVII.	Field blanks	N	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: SOIL

1	SL-115-SA5A-SB-6.5-7.5	11	SBLKLA082	21		31	11082SLA026
2	SL-115-SA5A-SB-13.0-14.0	12		22		32	
3	SL-115-SA5A-SB-6.0-7.0	13		23		33	
4	SL-115-SA5A-SB-14.0-15.0	14		24		34	
5		15		25		35	
6		16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

LDC #: 25911L2a

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer: [illegible]

Method: Semivolatiles (EPA SW 846 Method 8270C)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. GC/MS instrument performance check				
Were the DFTPP performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
III. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Was a curve fit used for evaluation?	✓			
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?	✓			
Were all percent relative standard deviations (%RSD) ≤ 30% and relative response factors (RRF) > 0.05?	✓			
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓			
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Were all percent differences (%D) ≤ 25% and relative response factors (RRF) ≥ 0.05?		✓		
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogates				
Were all surrogate %R within QC limits?	✓			
If 2 or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R?			✓	
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?			✓	
VII. Matrix spike/matrix spike duplicate				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.			✓	
Was a MS/MSD analyzed every 20 samples of each matrix?			✓	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			

LDC #: 25911L2a

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer: A

Validation Area	Yes	No	NA	Findings/Comments
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
X. Internal Standards				
Were internal standard area counts within -50% or +100% of the associated calibration standard?	✓			
Were retention times within ± 30 seconds from the associated calibration standard?	✓			
XI. Target Compound Identification				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?	✓			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	✓			
Were chromatogram peaks verified and accounted for?	✓			
XII. Compound Quantitation				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	✓			
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XIII. Tentatively Identified Compounds				
Were the major ions (> 10 percent relative intensity) in the reference spectrum evaluated in sample spectrum?			✓	
Were relative intensities of the major ions within ± 20% between the sample and the reference spectra?			✓	
Did the raw data indicate that the laboratory performed a library search for all required peaks in the chromatograms (samples and blanks)?			✓	
XIV. System Performance				
System performance was found to be acceptable.		✓		
XV. Overall Assessment of Data				
Overall assessment of data was found to be acceptable.	✓			
XVI. Field Duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XVII. Field Blanks				
Field blanks were identified in this SDG.		✓	✓	
Target compounds were detected in the field blanks.				

VALIDATION FINDINGS WORKSHEET

METHOD: GC/MS BNA (EPA Method 8270)

A. Phenol	P. Bis(2-chloroethoxy)methane	EE. 2,6-Dinitrotoluene	TT. Pentachlorophenol	III. Benzo(a)pyrene
B. Bis (2-chloroethyl) ether	Q. 2,4-Dichlorophenol	FF. 3-Nitroaniline	UU. Phenanthrene	JJJ. Indeno(1,2,3-cd)pyrene
C. 2-Chlorophenol	R. 1,2,4-Trichlorobenzene	GG. Acenaphthene	VV. Anthracene	KKK. Dibenz(a,h)anthracene
D. 1,3-Dichlorobenzene	S. Naphthalene	HH. 2,4-Dinitrophenol	WW. Carbazole	LLL. Benzo(g,h,i)perylene
E. 1,4-Dichlorobenzene	T. 4-Chloroaniline	II. 4-Nitrophenol	XX. Di-n-butylphthalate	MMM. Bis(2-Chloroisopropyl)ether
F. 1,2-Dichlorobenzene	U. Hexachlorobutadiene	JJ. Dibenzofuran	YY. Fluoranthene	NNN. Aniline
G. 2-Methylphenol	V. 4-Chloro-3-methylphenol	KK. 2,4-Dinitrotoluene	ZZ. Pyrene	OOO. N-Nitrosodimethylamine
H. 2,2'-Oxybis(1-chloropropane)	W. 2-Methylnaphthalene	LL. Diethylphthalate	AAA. Butylbenzylphthalate	PPP. Benzoic Acid
I. 4-Methylphenol	X. Hexachlorocyclopentadiene	MM. 4-Chlorophenyl-phenyl ether	BBB. 3,3'-Dichlorobenzidine	QQQ. Benzyl alcohol
J. N-Nitroso-di-n-propylamine	Y. 2,4,6-Trichlorophenol	NN. Fluorene	CCC. Benzo(a)anthracene	RRR. Pyridine
K. Hexachloroethane	Z. 2,4,5-Trichlorophenol	OO. 4-Nitroaniline	DDD. Chrysene	SSS. Benzidine
L. Nitrobenzene	AA. 2-Chloronaphthalene	PP. 4,6-Dinitro-2-methylphenol	EEE. Bis(2-ethylhexyl)phthalate	TTT. 1-Methylnaphthalene
M. Isophorone	BB. 2-Nitroaniline	QQ. N-Nitrosodiphenylamine (1)	FFF. Di-n-octylphthalate	UUU.
N. 2-Nitrophenol	CC. Dimethylphthalate	RR. 4-Bromophenyl-phenylether	GGG. Benzo(b)fluoranthene	VVV.
O. 2,4-Dimethylphenol	DD. Acenaphthylene	SS. Hexachlorobenzene	HHH. Benzo(k)fluoranthene	WWW.

LDC #: 25911L2a

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Page: 1 of 1
Reviewer: FT
2nd Reviewer: C

METHOD: GC/MS BNA (EPA SW 846 Method 8270)
Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a continuing calibration standard analyzed at least once every 12 hours of sample analysis for each instrument?
Y N N/A Were percent differences (%D) and relative response factors (RRF) within method criteria for all CCC's and SPCC's ?
Y N N/A Were all %D and RRFs within the validation criteria of ≤25 %D and ≥0.05 RRF ?

#	Date	Standard ID	Compound	Finding %D (Limit: ≤25.0%)	Finding RRF (Limit: ≥0.05)	Associated Samples	Qualifications
	3/25/11 12:03	CCV	BBB	30		SBLKLA082	J/UJ/A (C)
	3/25/11 23:03	CCV					

CONCAL.2S

LDC #: 25911L 2S

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: FT
2nd Reviewer: C

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

RRF = $(A_x)(C_{is})/(A_{is})(C_x)$
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

A_x = Area of compound,
C_x = Concentration of compound,
S = Standard deviation of the RRFs,

A_{is} = Area of associated internal standard
C_{is} = Concentration of internal standard
X = Mean of the RRFs

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Reported RRF (50 std)	Recalculated RRF (50 std)	Reported Average RRF (initial)	Recalculated Average RRF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	3/18/11	Phenol (1st internal standard)	3.164	3.164	3.132	3.132	3	3
			Naphthalene (2nd internal standard)	1.175	1.175	1.156	1.156	3	3
			Fluorene (3rd internal standard)	1.508	1.508	1.481	1.481	4	4
			Pentachlorophenol (4th internal standard)	0.140	0.140	0.133	0.133	10	10
			Bis(2-ethylhexyl)phthalate (5th internal standard)	0.823	0.823	0.814	0.814	3	3
			Benzo(a)pyrene (6th internal standard)	1.141	1.141	1.116	1.116	4	4
2			Phenol (1st internal standard)						
			Naphthalene (2nd internal standard)						
			Fluorene (3rd internal standard)						
			Pentachlorophenol (4th internal standard)						
			Bis(2-ethylhexyl)phthalate (5th internal standard)						
			Benzo(a)pyrene (6th internal standard)						
3			Phenol (1st internal standard)						
			Naphthalene (2nd internal standard)						
			Fluorene (3rd internal standard)						
			Pentachlorophenol (4th internal standard)						
			Bis(2-ethylhexyl)phthalate (5th internal standard)						
			Benzo(a)pyrene (6th internal standard)						

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25911L29

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Page: 1 of 1
Reviewer: FT
2nd Reviewer: [illegible]

METHOD: GC/MS BNA (EPA SW 846 Method 8270C)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
RRF = $(A_x)(C_{is})/(A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Average RRF (initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
1	CCV	3/25/11	Phenol (1st internal standard)	3.132	2.772	2.772	11	11.
			Naphthalene (2nd internal standard)	1.156	1.105	1.105	4	4
			Fluorene (3rd internal standard)	1.481	1.421	1.421	4	4
			Pentachlorophenol (4th internal standard)	0.133	0.122	0.122	8	8
			Bis(2-ethylhexyl)phthalate (5th internal standard)	0.814	0.729	0.729	11	11
			Benzo(a)pyrene (6th internal standard)	1.116	1.075	1.075	4	4
2	CCV	3/25/11	Phenol (1st internal standard)		2.862	2.862	9	9
		23:23	Naphthalene (2nd internal standard)		1.140	1.140	1	1
			Fluorene (3rd internal standard)		1.443	1.443	3	3
			Pentachlorophenol (4th internal standard)		0.136	0.136	2	2
			Bis(2-ethylhexyl)phthalate (5th internal standard)		0.807	0.807	1	1
			Benzo(a)pyrene (6th internal standard)		1.119	1.119	0	0
3			Phenol (1st internal standard)					
			Naphthalene (2nd internal standard)					
			Fluorene (3rd internal standard)					
			Pentachlorophenol (4th internal standard)					
			Bis(2-ethylhexyl)phthalate (5th internal standard)					
			Benzo(a)pyrene (6th internal standard)					

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25911L29

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT
2nd reviewer: C

METHOD: GC/MS Semivolatiles (EPA SW 846 Method 8270)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: 1

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5	100	65.472	65	65	0
2-Fluorobiphenyl	↓	88.102	88	88	↓
Terphenyl-d14	↓	88.431	88	88	↓
Phenol-d5	200	159.523	80	80	↓
2-Fluorophenol	↓	166.718	83	83	↓
2,4,6-Tribromophenol	↓	159.596	80	80	↓
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5					
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5					
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

LDC #: 25911L25

VALIDATION FINDINGS WORKSHEET

Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: FT

2nd Reviewer: [illegible]

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SC/SA

Where: SSC = Spike concentration
SA = Spike added

RPD = I LCSC - LCSDC I * 2/(LCSC + LCSDC)

LCSC = Laboraotry control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCS/LCSD samples: LCS

Compound	Spike Added (ug/kg)		Spike Concentration (ug/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
Phenol	1666.67	NA	1335.03	NA	80	80				
N-Nitroso-di-n-propylamine			1160.11		70	70				
4-Chloro-3-methylphenol			1346.88		81	81				
Acenaphthene			1464.47		88	88				
Pentachlorophenol			1385.58		83	83				
Pyrene			1621.77		97	97	NA			

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25911L29

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: FT
2nd reviewer: [illegible]

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(V_t)(DF)(2.0)}{(A_{is})(RRF)(V_o)(V_i)(\%S)}$

A_x	=	Area of the characteristic ion (EICP) for the compound to be measured
A_{is}	=	Area of the characteristic ion (EICP) for the specific internal standard
I_s	=	Amount of internal standard added in nanograms (ng)
V_o	=	Volume or weight of sample extract in milliliters (ml) or grams (g).
V_i	=	Volume of extract injected in microliters (ul)
V_t	=	Volume of the concentrated extract in microliters (ul)
Df	=	Dilution Factor.
%S	=	Percent solids, applicable to soil and solid matrices only.
2.0	=	Factor of 2 to account for GPC cleanup

Example:

Sample I.D. 4, EEE

Conc. = (23275)(40)(1000)( )( ) / (764657)(~~0.729~~ 0.814)(30)(0.88)( ) =

57 ug/kg

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	March 10, 2011
LDC Report Date:	August 18, 2011
Matrix:	Soil
Parameters:	Semivolatiles
Validation Level:	Level IV
Laboratory:	Lancaster laboratories
Sample Delivery Group (SDG):	DE103

Sample Identification

SL-115-SA5A-SB-6.5-7.5
SL-115-SA5A-SB-13.0-14.0
SL-116-SA5A-SB-6.0-7.0
SL-116-SA5A-SB-14.0-15.0

Introduction

This data review covers 4 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Semivolatiles.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 30.0% for all compounds.

In the case where the laboratory used a calibration curve to evaluate the compounds, all coefficients of determination (r^2) were greater than or equal to 0.990 .

Average relative response factors (RRF) for all compounds were within method and validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs) and 25.0% for all other compounds.

The percent differences (%D) of the second source calibration standard were less than or equal to 25.0% for all compounds.

All of the continuing calibration relative response factors (RRF) were within method and validation criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No semivolatile contaminants were found in the method blanks with the following exceptions:

Method Blank ID	Extraction Date	Compound TIC (RT in minutes)	Concentration	Associated Samples
SBLKLK0769	3/18/11	Di-n-butylphthalate	11.23 ug/Kg	All samples in SDG DE103

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated method blanks with the following exceptions:

Sample	Compound TIC (RT in minutes)	Reported Concentration	Modified Final Concentration
SL-116-SA5A-SB-14.0-15.0	Di-n-butylphthalate	71.87 ug/Kg	100U ug/Kg

No field blanks were identified in this SDG.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE103	All compounds reported below the RL.	J (all detects)	A

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was acceptable.

XV. Overall Assessment

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Semivolatiles- Data Qualification Summary - SDG DE103

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE103	SL-115-SA5A-SB-6.5-7.5 SL-115-SA5A-SB-13.0-14.0 SL-116-SA5A-SB-6.0-7.0 SL-116-SA5A-SB-14.0-15.0	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and RLs (Z)

Santa Susana Field Laboratory
Semivolatiles- Laboratory Blank Data Qualification Summary - SDG DE103

SDG	Sample	Compound TIC (RT in minutes)	Modified Final Concentration	A or P	Code
DE103	SL-116-SA5A-SB-14.0-15.0	Di-n-butylphthalate	100U ug/Kg	A	B

Santa Susana Field Laboratory
Semivolatiles- Field Blank Data Qualification Summary - SDG DE103

No Sample Data Qualified in this SDG

LDC #: 25911L2b **VALIDATION COMPLETENESS WORKSHEET** Date: 8/4/11
SDG #: DE103 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC/MS ~~Polynuclear Aromatic Hydrocarbons~~ SVOA (EPA SW 846 Method 8270C-SIM)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 3/10/11
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	A	% RSD ≤ 30, r^2
IV.	Continuing calibration/ICV	A	ICV/CCV ≤ 25
V.	Blanks	SW	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	N	client specified
VIII.	Laboratory control samples	A	LCS
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A	
XI.	Target compound identification	A	
XII.	Compound quantitation/CRQLs	A	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	A	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	N	
XVII.	Field blanks	N	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: Soil

1	SL-115-SA5A-SB-6.5-7.5	11	11076SLK026	21	(SBLKLK0769)	31	
2	SL-115-SA5A-SB-13.0-14.0	12		22		32	
3	SL-116-SA5A-SB-6.0-7.0	13		23		33	
4	SL-116-SA5A-SB-14.0-15.0	14		24		34	
5		15		25		35	
6		16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

LDC #: 25911L2b

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer: A

Method: Semivolatiles (EPA SW 846 Method 8270C)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. GC/MS instrument performance check				
Were the DFTPP performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
III. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Was a curve fit used for evaluation?	✓			
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?	✓			
Were all percent relative standard deviations (%RSD) ≤ 30% and relative response factors (RRF) ≥ 0.05?	✓			
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓			
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Were all percent differences (%D) ≤ 25% and relative response factors (RRF) ≥ 0.05?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.	✓			
VI. Surrogates				
Were all surrogate %R within QC limits?	✓			
If 2 or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R?			✓	
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?			✓	
VII. Matrix spike/matrix spike duplicate				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.			✓	
Was a MS/MSD analyzed every 20 samples of each matrix?			✓	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
VIII. Laboratory control sample				
Was an LCS analyzed for this SDG?	✓			

LDC #: 25911L2b

VALIDATION FINDINGS CHECKLIST

Reviewer: FT

2nd Reviewer: A

Validation Area	Yes	No	NA	Findings/Comments
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
X. Internal standards				
Were internal standard area counts within -50% or +100% of the associated calibration standard?	✓			
Were retention times within ± 30 seconds from the associated calibration standard?	✓			
XI. Target compound identification				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?	✓			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	✓			
Were chromatogram peaks verified and accounted for?	✓			
XII. Compound quantitation				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	✓			
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XIII. Tentatively identified compounds				
Were the major ions (> 10 percent relative intensity) in the reference spectrum evaluated in sample spectrum?			✓	
Were relative intensities of the major ions within ± 20% between the sample and the reference spectra?			✓	
Did the raw data indicate that the laboratory performed a library search for all required peaks in the chromatograms (samples and blanks)?			✓	
XIV. Overall assessment of data				
System performance was found to be acceptable.	✓			
XV. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XVI. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XVII. Field blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

VALIDATION FINDINGS WORKSHEET

METHOD: GC/MS BNA (EPA Method 8270)

A. Phenol	P. Bis(2-chloroethoxy)methane	EE. 2,6-Dinitrotoluene	TT. Pentachlorophenol	III. Benzo(a)pyrene
B. Bis (2-chloroethyl) ether	Q. 2,4-Dichlorophenol	FF. 3-Nitroaniline	UU. Phenanthrene	JJJ. Indeno(1,2,3-cd)pyrene
C. 2-Chlorophenol	R. 1,2,4-Trichlorobenzene	GG. Acenaphthene	VV. Anthracene	KKK. Dibenz(a,h)anthracene
D. 1,3-Dichlorobenzene	S. Naphthalene	HH. 2,4-Dinitrophenol	WW. Carbazole	LLL. Benzo(g,h,i)perylene
E. 1,4-Dichlorobenzene	T. 4-Chloroaniline	II. 4-Nitrophenol	XX. Di-n-butylphthalate	MMM. Bis(2-Chloroisopropyl)ether
F. 1,2-Dichlorobenzene	U. Hexachlorobutadiene	JJ. Dibenzofuran	YY. Fluoranthene	NNN. Aniline
G. 2-Methylphenol	V. 4-Chloro-3-methylphenol	KK. 2,4-Dinitrotoluene	ZZ. Pyrene	OOO. N-Nitrosodimethylamine
H. 2,2'-Oxybis(1-chloropropane)	W. 2-Methylnaphthalene	LL. Diethylphthalate	AAA. Butylbenzylphthalate	PPP. Benzoic Acid
I. 4-Methylphenol	X. Hexachlorocyclopentadiene	MM. 4-Chlorophenyl-phenyl ether	BBB. 3,3'-Dichlorobenzidine	QQQ. Benzyl alcohol
J. N-Nitroso-di-n-propylamine	Y. 2,4,6-Trichlorophenol	NN. Fluorene	CCC. Benzo(a)anthracene	RRR. Pyridine
K. Hexachloroethane	Z. 2,4,5-Trichlorophenol	OO. 4-Nitroaniline	DDD. Chrysene	SSS. Benzidine
L. Nitrobenzene	AA. 2-Chloronaphthalene	PP. 4,6-Dinitro-2-methylphenol	EEE. Bis(2-ethylhexyl)phthalate	TTT. 1-Methylnaphthalene
M. Isophorone	BB. 2-Nitroaniline	QQ. N-Nitrosodiphenylamine (1)	FFF. Di-n-octylphthalate	UUU.
N. 2-Nitrophenol	CC. Dimethylphthalate	RR. 4-Bromophenyl-phenylether	GGG. Benzo(b)fluoranthene	VVV.
O. 2,4-Dimethylphenol	DD. Acenaphthylene	SS. Hexachlorobenzene	HHH. Benzo(k)fluoranthene	WWW.

LDC #: 25911L26

VALIDATION FINDINGS WORKSHEET
Blanks

Page: 1 of 1
Reviewer: FT
2nd Reviewer: C

METHOD: GC/MS BNA (EPA SW 846 Method 8270)
Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a method blank analyzed for each matrix?
Y N N/A Was a method blank analyzed for each concentration preparation level?
Y N N/A Was a method blank associated with every sample?
Y N N/A Was the blank contaminated? If yes, please see qualification below.

(B)

Blank extraction date: 3/18/11 **Blank analysis date:** 3/24/11
Conc. units: ug/kg Associated Samples: All

Compound	Blank ID	Sample Identification							
	SBLKLK	0769	1	2	3 4	3			
XX	11.23		16.71/U	18.92/U	71.87/4000U	17.42/U			
~~FFF~~	~~10.57~~		~~11.07~~/U	~~11.3~~/U	59.51/U	11.33/U			

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
Common contaminants such as the phthalates and TICs noted above that were detected in samples within ten times the associated method blank concentration were qualified as not detected, "U". Other contaminants within five times the method blank concentration were also qualified as not detected, "U".

LDC #: 25911 L2b

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: FT
2nd Reviewer: [illegible]

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

RRF = $(A_x)(C_{is})/(A_{is})(C_x)$
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

A_x = Area of compound,
C_x = Concentration of compound,
S = Standard deviation of the RRFs,

A_{is} = Area of associated internal standard
C_{is} = Concentration of internal standard
X = Mean of the RRFs

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Reported RRF (/ std)	Recalculated RRF (/ std)	Reported Average RRF (initial)	Recalculated Average RRF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	3/18/11	~~Phenol (1st internal standard)~~						
			Naphthalene (2nd internal standard)	1.013	1.013	1.036	1.036	6	6
			Fluorene (3rd internal standard)	1.221	1.221	1.232	1.232	10	10
			~~Pentachlorophenol~~ Anthracene (4th internal standard)	1.059	1.059	1.069	1.069	14	14
			~~Bis(2-ethylhexyl)phthalate~~ Chrysene (5th internal standard)	1.143	1.143	1.166	1.166	6	6
			Benzo(a)pyrene (6th internal standard)	1.342	1.342	1.349	1.349	11	11
2			Phenol (1st internal standard)						
			Naphthalene (2nd internal standard)						
			Fluorene (3rd internal standard)						
			Pentachlorophenol (4th internal standard)						
			Bis(2-ethylhexyl)phthalate (5th internal standard)						
			Benzo(a)pyrene (6th internal standard)						
3			Phenol (1st internal standard)						
			Naphthalene (2nd internal standard)						
			Fluorene (3rd internal standard)						
			Pentachlorophenol (4th internal standard)						
			Bis(2-ethylhexyl)phthalate (5th internal standard)						
			Benzo(a)pyrene (6th internal standard)						

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25911226

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Page: 1 of 1
Reviewer: FT
2nd Reviewer: [illegible]

METHOD: GC/MS BNA (EPA SW 846 Method 8270C)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
RRF = $(A_x)(C_{is})/(A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Average RRF (initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
1	ccv	3/24/11 5:54	~~Phenol (1st internal standard)~~					
			Naphthalene (2nd internal standard)	1.036	1.004	1.004	3	3
			Fluorene (3rd internal standard)	1.232	1.220	1.220	1	1
			~~Pentachlorophenol~~ Anthracene (4th internal standard)	1.069	1.041	1.041	3.0	3.0
			~~Bis(2-ethylhexyl)phthalate~~ Chrysene (5th internal standard)	1.164	1.140	1.140	2	2.
			Benzo(a)pyrene (6th internal standard)	1.349	1.355	1.355	0	0
2			Phenol (1st internal standard)					
			Naphthalene (2nd internal standard)					
			Fluorene (3rd internal standard)					
			Pentachlorophenol (4th internal standard)					
			Bis(2-ethylhexyl)phthalate (5th internal standard)					
			Benzo(a)pyrene (6th internal standard)					
3			Phenol (1st internal standard)					
			Naphthalene (2nd internal standard)					
			Fluorene (3rd internal standard)					
			Pentachlorophenol (4th internal standard)					
			Bis(2-ethylhexyl)phthalate (5th internal standard)					
			Benzo(a)pyrene (6th internal standard)					

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25911L2b

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Page: 1 of 1
Reviewer: FT
2nd reviewer: C

METHOD: GC/MS Semivolatiles (EPA SW 846 Method 8270)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: # 1

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5	1.0	0.905	91	91	0
2-Fluorobiphenyl	↓	0.875	87	87	↓
Terphenyl-d14	↓	0.847	85	85	↓
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5					
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5					
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

LDC #: 25911L2D

VALIDATION FINDINGS WORKSHEET

Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: FT

2nd Reviewer: [illegible]

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SC/SA

Where: SSC = Spike concentration
SA = Spike added

RPD = I LCSC - LCSDC I * 2/(LCSC + LCSDC)

LCSC = Laboraotry control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCS/LCSD samples: LCS

Compound	Spike Added (ug/kg)		Spike Concentration (ug/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
Phenol										
N-Nitroso-di-n-propylamine										
4-Chloro-3-methylphenol										
Acenaphthene	33.33	NA	29.51	NA	89	89				
Pentachlorophenol										
Pyrene	33.33	NA	30.35	NA	91	91	NA			

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25911 2b

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: FT
2nd reviewer: C

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(V_t)(DF)(2.0)}{(A_{is})(RRF)(V_o)(V_i)(\%S)}$

A_x	=	Area of the characteristic ion (EICP) for the compound to be measured
A_{is}	=	Area of the characteristic ion (EICP) for the specific internal standard
I_s	=	Amount of internal standard added in nanograms (ng)
V_o	=	Volume or weight of sample extract in milliliters (ml) or grams (g).
V_i	=	Volume of extract injected in microliters (ul)
V_t	=	Volume of the concentrated extract in microliters (ul)
Df	=	Dilution Factor.
%S	=	Percent solids, applicable to soil and solid matrices only.
2.0	=	Factor of 2 to account for GPC cleanup

Example:

Sample I.D. #1, Benzo(a) pyrene

Conc. = (43420)(1.0)(1000)( )( )
( )( )( )( )( )( )
461176 1.349 30 0.90
=
2.58 ug/kg

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	March 10, 2011
LDC Report Date:	August 18, 2011
Matrix:	Soil
Parameters:	N-Nitrosodimethylamine
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE103

Sample Identification

SL-115-SA5A-SB-6.5-7.5
SL-115-SA5A-SB-13.0-14.0
SL-116-SA5A-SB-6.0-7.0
SL-116-SA5A-SB-14.0-15.0

Introduction

This data review covers 4 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA Method 1625C for N-Nitrosodimethylamine.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance check is not required for by this method.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 30.0% .

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% .

The percent difference (%D) of the second source calibration standard were less than or equal to 30.0% .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No N-nitrosodimethylamine was found in the method blanks.

No field blanks were identified in this SDG.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE103	All compounds reported below the RL.	J (all detects)	A

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was within validation criteria.

XV. Overall Assessment

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
N-Nitrosodimethylamine - Data Qualification Summary - SDG DE103

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE103	SL-115-SA5A-SB-6.5-7.5 SL-115-SA5A-SB-13.0-14.0 SL-116-SA5A-SB-6.0-7.0 SL-116-SA5A-SB-14.0-15.0	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
N-Nitrosodimethylamine - Laboratory Blank Data Qualification Summary - SDG DE103

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
N-Nitrosodimethylamine - Field Blank Data Qualification Summary - SDG DE103

No Sample Data Qualified in this SDG

LDC #: 25911L2c **VALIDATION COMPLETENESS WORKSHEET** Date: 8/8/11
SDG #: DE103 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: EJ
2nd Reviewer: [illegible]

METHOD: GC/MS N-Nitrosodimethylamine (EPA Method 1625C)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 3/10/11
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	A	% RSD ≤ 30%
IV.	Continuing calibration/ICV	A	~~ICV/CCV~~ CCV ≤ 20 ICV ≤ 30
V.	Blanks	A	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	N	client specific
VIII.	Laboratory control samples	A	LCS
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A	
XI.	Target compound identification	A	
XII.	Compound quantitation/CRQLs	A	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	A	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	N	
XVII.	Field blanks	N	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:

SOIL

1	SL-115-SA5A-SB-6.5-7.5	11	SBLKLI076	21		31	
2	SL-115-SA5A-SB-13.0-14.0	12		22		32	
3	SL-116-SA5A-SB-6.0-7.0	13		23		33	
4	SL-116-SA5A-SB-14.0-15.0	14		24		34	
5		15		25		35	
6		16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

LDC #: 25911L2e

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer: A

Method: Semivolatiles (EPA SW 846 Method 8270C)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. GC/MS instrument performance check				
Were the DFTPP performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
III. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Was a curve fit used for evaluation?		✓		
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?			✓	
Were all percent relative standard deviations (%RSD) ≤ 30% and relative response factors (RRF) > 0.05?	✓			
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓			
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Were all percent differences (%D) ≤ 25% and relative response factors (RRF) ≥ 0.05?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogates				
Were all surrogate %R within QC limits?	✓			
If 2 or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R?			✓	
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?			✓	
VII. Matrix Spike/Matrix Spike Duplicate				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.			✓	
Was a MS/MSD analyzed every 20 samples of each matrix?			✓	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			

LDC #: 25911L2C

VALIDATION FINDINGS CHECKLIST

Reviewer: FT

2nd Reviewer: [illegible]

Validation Area	Yes	No	NA	Findings/Comments
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
X. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
XI. Internal Standards				
Were internal standard area counts within -50% or +100% of the associated calibration standard?	✓			
Were retention times within ± 30 seconds from the associated calibration standard?	✓			
XII. Target Compound Identification				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?			✓	
Did compound spectra meet specified EPA "Functional Guidelines" criteria?			✓	
Were chromatogram peaks verified and accounted for?	✓			
XIII. Compound Quantitation and CRQLs				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?			✓	
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XIV. Tentatively Identified Compounds				
Were the major ions (> 10 percent relative intensity) in the reference spectrum evaluated in sample spectrum?			✓	
Were relative intensities of the major ions within ± 20% between the sample and the reference spectra?			✓	
Did the raw data indicate that the laboratory performed a library search for all required peaks in the chromatograms (samples and blanks)?			✓	
XV. System Performance				
System performance was found to be acceptable.	✓			
XVI. Overall Assessment of Data				
Overall assessment of data was found to be acceptable.	✓			
XVII. Field Duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XVIII. Field Blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

LDC #: 25911L2e

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: FT
2nd Reviewer: A

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

RRF = $(A_x)(C_{is})/(A_{is})(C_x)$
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

A_x = Area of compound,
C_x = Concentration of compound,
S = Standard deviation of the RRFs,

A_{is} = Area of associated internal standard
C_{is} = Concentration of internal standard
X = Mean of the RRFs

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Reported RRF (25 std)	Recalculated RRF (25 std)	Reported Average RRF (initial)	Recalculated Average RRF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	3/31/11	N-Nitrosodimethylamine						
			~~Phenol (1st internal standard)~~	1.471	1.471	1.633	1.633	16	16
			~~Naphthalene (2nd internal standard)~~						
			Fluorene (3rd internal standard)						
			Pentachlorophenol (4th internal standard)						
			Bis(2-ethylhexyl)phthalate (5th internal standard)						
			~~Benzo(a)pyrene (6th internal standard)~~						
2			Phenol (1st internal standard)						
			Naphthalene (2nd internal standard)						
			Fluorene (3rd internal standard)						
			Pentachlorophenol (4th internal standard)						
			Bis(2-ethylhexyl)phthalate (5th internal standard)						
			Benzo(a)pyrene (6th internal standard)						
3			Phenol (1st internal standard)						
			Naphthalene (2nd internal standard)						
			Fluorene (3rd internal standard)						
			Pentachlorophenol (4th internal standard)						
			Bis(2-ethylhexyl)phthalate (5th internal standard)						
			Benzo(a)pyrene (6th internal standard)						

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25911L2C

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: FT
2nd Reviewer: [illegible]

METHOD: GC/MS BNA (EPA SW 846 Method 8270C)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
RRF = $(A_x)(C_{is})/(A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Average RRF (initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
1	AC318	4/01/11	~~Phenol~~ NDMA (1st internal standard)	1.63291	1.41471	1.41471	13.36262	13.36262
			Naphthalene (2nd internal standard)					
			Fluorene (3rd internal standard)					
			Pentachlorophenol (4th internal standard)					
			Bis(2-ethylhexyl)phthalate (5th internal standard)					
			Benzo(a)pyrene (6th internal standard)					
2			Phenol (1st internal standard)					
			Naphthalene (2nd internal standard)					
			Fluorene (3rd internal standard)					
			Pentachlorophenol (4th internal standard)					
			Bis(2-ethylhexyl)phthalate (5th internal standard)					
			Benzo(a)pyrene (6th internal standard)					
3			Phenol (1st internal standard)					
			Naphthalene (2nd internal standard)					
			Fluorene (3rd internal standard)					
			Pentachlorophenol (4th internal standard)					
			Bis(2-ethylhexyl)phthalate (5th internal standard)					
			Benzo(a)pyrene (6th internal standard)					

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25911L2C

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT

2nd reviewer: [illegible]

METHOD: GC/MS Semivolatiles (EPA SW 846 Method 8270)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: 1

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
~~Nitrobenzene-d5~~ n-nitrosodimethylamine-d6	25	26.204	105	105	0
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5					
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5					
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

LDC #: 25911L2C

VALIDATION FINDINGS WORKSHEET

Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: FT
2nd Reviewer: A

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SC/SA Where: SSC = Spike concentration
SA = Spike added

RPD = I LCSC - LCSDC I * 2/(LCSC + LCSDC) LCSC = Laboraotry control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCS/LCSD samples: LCS

Compound	Spike Added (ng/kg)		Spike Concentration (ng/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalculated
Phenol										
N-Nitroso-di-n-propylamine										
4-Chloro-3-methylphenol										
Acenaphthene										
Pentachlorophenol										
Pyrene										
N-Nitrosodimethylamine	833.33	NA	740.22	NA	89	89	NA			

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25911L2C

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: FT

2nd reviewer: [illegible]

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Y N N/A Were all reported results recalculated and verified for all level IV samples?

Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(V_t)(DF)(2.0)}{(A_{is})(RRF)(V_o)(V_i)(\%S)}$

A_x	=	Area of the characteristic ion (EICP) for the compound to be measured
A_{is}	=	Area of the characteristic ion (EICP) for the specific internal standard
I_s	=	Amount of internal standard added in nanograms (ng)
V_o	=	Volume or weight of sample extract in milliliters (ml) or grams (g).
V_i	=	Volume of extract injected in microliters (ul)
V_t	=	Volume of the concentrated extract in microliters (ul)
Df	=	Dilution Factor.
%S	=	Percent solids, applicable to soil and solid matrices only.
2.0	=	Factor of 2 to account for GPC cleanup

Example:

Sample I.D. _____ , _____:

Conc. = (_____)(_____)(_____)(_____)(_____) / (_____)(_____)(_____)(_____)(_____)

= ND

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	March 10, 2011
LDC Report Date:	August 18, 2011
Matrix:	Soil
Parameters:	Polychlorinated Biphenyls
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE103

Sample Identification

SL-115-SA5A-SB-6.5-7.5
SL-115-SA5A-SB-13.0-14.0
SL-116-SA5A-SB-6.0-7.0
SL-116-SA5A-SB-14.0-15.0

Introduction

This data review covers 4 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8082 for Polychlorinated Biphenyls.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/ECD Instrument Performance Check

Instrument performance was acceptable unless noted otherwise under initial calibration and continuing calibration sections.

III. Initial Calibration

Initial calibration of multicomponent compounds was performed for the primary (quantitation) column as required by the method.

The percent relative standard deviations (%RSD) were less than or equal to 20.0% for all compounds.

Retention time windows were evaluated and considered technically acceptable.

IV. Continuing Calibration

Continuing calibration was performed at required frequencies.

The percent differences (%D) of calibration factors in continuing standard mixtures were within the 20.0% QC limits with the following exceptions:

Date	Standard	Column	Compound	%D	Associated Samples	Affected Compound	Flag	A or P
3/18/11	6C20069.05R	ZB Multi R1	Aroclor-5460	30.4	PBLK08076	Aroclor-5460	J (all detects) UJ (all non-detects)	A
3/18/11	6C20069.05R	ZB Multi R2	Aroclor-5460	47.7	PBLK08076	Aroclor-5460	J (all detects) UJ (all non-detects)	A

The percent difference (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

Retention times (RT) of all compounds in the calibration standards were within QC limits.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polychlorinated biphenyl contaminants were found in the method blanks.

No field blanks were identified in this SDG.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Florisil Cartridge Check

Florisil cleanup was not required and therefore not performed in this SDG.

XI. GPC Calibration

GPC cleanup was not required and therefore not performed in this SDG.

XII. Target Compound Identification

All target compound identifications were within validation criteria.

XIII. Compound Quantitation and Reported CRQLs

All compound quantitation and CRQLs were within validation criteria.

The sample results for detected compounds from the two columns were within 40% relative percent difference (RPD) with the following exceptions:

Sample	Compound	RPD	Flag	A or P
SL-115-SA5A-SB-6.5-7.5	Aroclor-1260	55	J (all detects)	A

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE103	All compounds reported below the RL.	J (all detects)	A

XIV. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XV. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Polychlorinated Biphenyls - Data Qualification Summary - SDG DE103

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE103	SL-115-SA5A-SB-6.5-7.5	Aroclor-1260	J (all detects)	A	Compound quantitation and CRQLs (RPD) (*XIII)
DE103	SL-115-SA5A-SB-6.5-7.5 SL-115-SA5A-SB-13.0-14.0 SL-116-SA5A-SB-6.0-7.0 SL-116-SA5A-SB-14.0-15.0	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
Polychlorinated Biphenyls - Laboratory Blank Data Qualification Summary - SDG DE103

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Polychlorinated Biphenyls - Field Blank Data Qualification Summary - SDG DE103

No Sample Data Qualified in this SDG

LDC #: 25911L3b

SDG #: DE103

Laboratory: Lancaster Laboratories

VALIDATION COMPLETENESS WORKSHEET

Level IV

Date: 8/8/11

Page: 1 of 1

Reviewer: [illegible]

2nd Reviewer: [illegible]

METHOD: GC Polychlorinated Biphenyls (EPA SW 846 Method 8082)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 3/10/11
II.	GC/ECD Instrument Performance Check	NA	
III.	Initial calibration	A	% RSD ≤ 20
IV.	Continuing calibration/ICV	SW	ICV/CCV ≤ 20
V.	Blanks	A	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	N	client specified
VIII.	Laboratory control samples	A	LCS
IX.	Regional quality assurance and quality control	N	
X.	Florisil cartridge check	N	
XI.	GPC Calibration	N	
XII.	Target compound identification	A	
XIII.	Compound quantitation and reported CRQLs	SW	
XIV.	Overall assessment of data	A	
XV.	Field duplicates	N	
XVI.	Field blanks	N	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:

SOIL

1†	SL-115-SA5A-SB-6.5-7.5	11	PBLK08076	21		31	
2†	SL-115-SA5A-SB-13.0-14.0	12		22		32	
3†	SL-116-SA5A-SB-6.0-7.0	13		23		33	
4	SL-116-SA5A-SB-14.0-15.0	14		24		34	
5		15		25		35	
6		16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

LDC #: 29111L3b
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Page: 1 of 2
Reviewer: [illegible]
2nd Reviewer: [illegible]

Method: ✓ GC ____ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation?		✓		
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?			✓	
Were the RT windows properly established?	✓			
IV. Continuing calibration				
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20%.0 or percent recoveries 80-120%?	✓	✓		
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.			✓	
Was a MS/MSD analyzed every 20 samples of each matrix?			✓	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?				
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	

LDC #: 25911-23b
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Reviewer: FJ
2nd Reviewer: [illegible]

Validation Area	Yes	No	NA	Findings/Comments
X. Target compound identification				
Were the retention times of reported detects within the RT windows?	✓			
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XV. Field blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

LDC #: 25911L3h

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Page: 1 of 1
Reviewer: FT

METHOD: ✓ GC __ HPLC

2nd Reviewer: ⊿

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".
What type of continuing calibration calculation was performed? ___%D or ___RPD

Y N N/A Were continuing calibration standards analyzed at the required frequencies?

Y N N/A Did the continuing calibration standards meet the %D / RPD validation criteria of ≤20.0%?

Level IV Only

Y N N/A Were the retention times for all calibrated compounds within their respective acceptance windows?

#	Date	Standard ID	Detector/ Column	Compound	%D (Limit ≤ 20.0)	RT (limit)	Associated Samples	Qualifications
	3/18/11	GC 20069.05R	ZB Multi R1	5460	30.4	( )	PBLK08076	J/UJ/A (E)
			ZB Multi R2	↓	47.7	( )	↓	qual 5460 only
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
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						( )		

LDC #: 25 91/L3b
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Compound Quantitation and Reported CRQLs

Reviewer: F7
2nd Reviewer: C

METHOD: ✓ GC ___ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".
Level IV/D Only

Y N N/A Were CRQLs adjusted for sample dilutions, dry weight factors, etc.?
Y N N/A Did the reported results for detected target compounds agree within 10.0% of the recalculated results?

#	Compound Name	% RPD Bet 2 col. Finding	Associated Samples	Qualifications
	BB	55	1	J/A det (* XIII)
	BB = Aroclor	1260		

Comments: See sample calculation verification worksheet for recalculations

LDC #: 25911C3b
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC ✓ HPLC ____

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

#	Standard ID	Calibration Date	Compound	Reported CF (200std)	Recalculated CF (200std)	Reported Average CF (initial)	Recalculated Average CF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL ZB Multi R1	3/10/11	Aroclor 1260-1	17.495	17.495	18	18	6.9	6.9
2	ZB Multi R2	3/10/11	↓	237	236.52	236	236	8.7	8.7
3	ZB R1	3/21/11	↓	18	18.455	19	19	6.0	6.0
4	ZB R2	3/21/11	↓	244	244	251	251	10.2	10.2

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: DS 911L3b
SDG #: per cover

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: EJ
2nd Reviewer: A

METHOD: GC ✓ HPLC ____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF - CF)/ave. CF
CF = A/C

Where: ave. CF = Initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(Ical)/ CCV Conc.	Reported CF/Conc. CCV	Recalculated CF/Conc. CCV	Reported %D	Recalculated %D
1	6C20069.04R	3/18/11	Aroclor 1260 ZBR1	200.0	196.45	196.45	1.8	1.8
			ZBR2	200.0	189.89	189.89	5.1	5.1
2	1C2008.29R	3/22/11	↓	200.40	183.60	183.60	8.4	8.4
				200.40	176.81	176.81	11.8	11.8
3								
4								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 45711C SD
SDG #: see cover

METHOD: ✓ GC __ HPLC

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT
2nd reviewer: [illegible]

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID:

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
TCMX	ZB multi R/	1.05	0.9214	88	88	0
DCB	↓	↓	0.7579	73	73	0

Sample ID:

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Sample ID:

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

LDC #: 25911L3b
SDG #: µu cover

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: ✓ GC __ HPLC

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100* (SSC-SC)/SA
RPD = I LCS - LCSD I * 2/(LCS + LCSD)

Where: SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory control sample percent recovery
SC = Concentration
LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: LCS

Compound	Spike Added (ug/kg)		Spiked Sample Concentration (ug/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)										
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)										
2,4,6-Trinitrotoluene (8330)										
PCB-1260	16.67	NA	14.91	NA	89	89	NA			

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25911L3b
SDG #: pu series

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer:
2nd Reviewer:

METHOD: ✓ GC __ HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= (A)(Fv)(Df) / (RF)(Vs or Ws)(%S/100)

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound in the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID. #1 Compound Name Aroclor 1260

Final Concentration = 0.582747 / 0.905

= 0.64 ug/kg

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications
	Aroclor 1260-1 =	4973.804688 (2000) / 251 (60)(100)	= 0.660	1260-1 = 0.660	
				2 = 0.508531	
				3 = 0.513843	
				4 = 0.573526	
				5 = 0.635676	
				6 = 0.604906	
				Ave = 0.582747	

Comments:

SAMPCALow.wpd

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	March 10, 2011
LDC Report Date:	August 18, 2011
Matrix:	Soil
Parameters:	Metals
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE103

Sample Identification

SL-115-SA5A-SB-6.5-7.5
SL-115-SA5A-SB-13.0-14.0
SL-116-SA5A-SB-6.0-7.0
SL-116-SA5A-SB-14.0-15.0

Introduction

This data review covers 4 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Methods 6010B, 6020, and 7000 for Metals. The metals analyzed were Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Phosphorus, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, and Zirconium.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review (January 2010).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. ICPMS Tune

The mass calibration was within 0.1 AMU and the percent relative standard deviation (%RSD) was less than or equal to 5% .

III. Calibration

An initial calibration was performed.

The frequency and analysis criteria of the initial calibration verification (ICV) and continuing calibration verification (CCV) were met.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No metal contaminants were found in the initial, continuing and preparation blanks with the following exceptions:

Method Blank ID	Analyte	Maximum Concentration	Associated Samples
PB (prep blank)	Calcium Lead Phosphorus Tin Zinc	8.017 mg/Kg 0.011 mg/Kg 1.342 mg/Kg 1.444 mg/Kg 0.644 mg/Kg	All samples in SDG DE103
ICB/CCB	Copper Titanium	2.7 ug/L 1.1 ug/L	All samples in SDG DE103

Data qualification by the initial, continuing and preparation blanks (ICB/CCB/PBs) was based on the maximum contaminant concentration in the ICB/CCB/PBs in the analysis of each analyte. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated method blanks with the following exceptions:

Sample	Analyte	Reported Concentration	Modified Final Concentration
SL-115-SA5A-SB-6.5-7.5	Tin	2.6 mg/Kg	2.6U mg/Kg
SL-115-SA5A-SB-13.0-14.0	Tin	2.6 mg/Kg	2.6U mg/Kg

Sample	Analyte	Reported Concentration	Modified Final Concentration
SL-116-SA5A-SB-6.0-7.0	Tin	2.7 mg/Kg	2.7U mg/Kg
SL-116-SA5A-SB-14.0-15.0	Tin	2.6 mg/Kg	2.6U mg/Kg

No field blanks were identified in this SDG.

V. ICP Interference Check Sample (ICS) Analysis

The frequency of analysis was met.

The criteria for analysis were met.

VI. Matrix Spike Analysis

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VII. Duplicate Sample Analysis

The laboratory has indicated that there were no duplicate (DUP) analyses specified for the samples in this SDG, and therefore duplicate analyses were not performed for this SDG.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Internal Standards

All internal standard percent recoveries (%R) were within QC limits.

X. Furnace Atomic Absorption QC

Graphite furnace atomic absorption was not utilized in this SDG.

XI. ICP Serial Dilution

ICP serial dilution was not performed for this SDG.

XII. Sample Result Verification

All sample result verifications were acceptable.

All metals reported below the RL and above the MDL were qualified as follows:

Sample	Analyte	Flag	A or P
All samples in SDG DE103	All analytes reported below the RL and above the MDL.	J (all detects)	A

XIII. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XIV. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Metals - Data Qualification Summary - SDG DE103

SDG	Sample	Analyte	Flag	A or P	Reason (Code)
DE103	SL-115-SA5A-SB-6.5-7.5 SL-115-SA5A-SB-13.0-14.0 SL-116-SA5A-SB-6.0-7.0 SL-116-SA5A-SB-14.0-15.0	All analytes reported below the RL and above the MDL.	J (all detects)	A	Sample result verification (Z)

Santa Susana Field Laboratory
Metals - Laboratory Blank Data Qualification Summary - SDG DE103

SDG	Sample	Analyte	Modified Final Concentration	A or P	Code
DE103	SL-115-SA5A-SB-6.5-7.5	Tin	2.6U mg/Kg	A	B
DE103	SL-115-SA5A-SB-13.0-14.0	Tin	2.6U mg/Kg	A	B
DE103	SL-116-SA5A-SB-6.0-7.0	Tin	2.7U mg/Kg	A	B
DE103	SL-116-SA5A-SB-14.0-15.0	Tin	2.6U mg/Kg	A	B

Santa Susana Field Laboratory
Metals - Field Blank Data Qualification Summary - SDG DE103

No Sample Data Qualified in this SDG

LDC #: 25911L4

SDG #: DE103

Laboratory: Lancaster Laboratories

VALIDATION COMPLETENESS WORKSHEET

Level IV

Date: 8-2-11

Page: 1 of 1

Reviewer: CR

2nd Reviewer: [illegible]

METHOD: Metals (EPA SW 846 Method 6010B/6020A/7000)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 3/10/11
II.	ICP/MS Tune	A	
III.	Calibration	A	
IV.	Blanks	SW	
V.	ICP Interference Check Sample (ICS) Analysis	SW	
VI.	Matrix Spike Analysis	N	Client specified
VII.	Duplicate Sample Analysis	N	↓
VIII.	Laboratory Control Samples (LCS)	A	LCS
IX.	Internal Standard (ICP-MS)	A	
X.	Furnace Atomic Absorption QC	N	Not utilized
XI.	ICP Serial Dilution	N	Not performed
XII.	Sample Result Verification	A	
XIII.	Overall Assessment of Data	A	
XIV.	Field Duplicates	N	
XV	Field Blanks	N	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: Soil

1	SL-115-SA5A-SB-6.5-7.5	11	PQ55	21		31	
2	SL-115-SA5A-SB-13.0-14.0	12		22		32	
3	SL-116-SA5A-SB-6.0-7.0	13		23		33	
4	SL-116-SA5A-SB-14.0-15.0	14		24		34	
5		15		25		35	
6		16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

LDC #: 2S9114

VALIDATION FINDINGS CHECKLIST

Reviewer: CR
2nd Reviewer: [illegible]

Method: Metals (EPA SW 846 Method 6010B/7000/6020)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. ICP/MS Tune				
Were all isotopes in the tuning solution mass resolution within 0.1 amu?	✓			
Were %RSD of isotopes in the tuning solution ≤5%?	✓			
III. Calibration				
Were all instruments calibrated daily, each set-up time?	✓			
Were the proper number of standards used?	✓			
Were all initial and continuing calibration verification %Rs within the 90-110% (80-120% for mercury) QC limits?	✓			
Were all initial calibration correlation coefficients > 0.995?	✓			
IV. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.	✓			
V. ICP Interference Check Sample				
Were ICP interference check samples performed daily?	✓			
Were the AB solution percent recoveries (%R) with the 80-120% QC limits?	✓			
VI. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and duplicate (DUP) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD or MS/DUP. Soil / Water.		✓		
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the 75-125 QC limits? If the sample concentration exceeded the spike concentration by a factor of 4 or more, no action was taken.			✓	
Were the MS/MSD or duplicate relative percent differences (RPD) ≤ 20% for waters and ≤ 35% for soil samples? A control limit of +/- RL(+/-2X RL for soil) was used for samples that were ≤ 5X the RL, including when only one of the duplicate sample values were ≤ 5X the RL.			✓	
VII. Laboratory control samples				
Was an LCS anaylzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the 80-120% QC limits for water samples and laboratory established QC limits for soils?	✓			

DC #: 2591114

VALIDATION FINDINGS CHECKLIST

Reviewer: [illegible]
2nd Reviewer: [illegible]

Validation Area	Yes	No	NA	Findings/Comments
VIII. Furnace Atomic Absorption QC				
If MSA was performed, was the correlation coefficients > 0.995?			✓	
Do all applicable analysies have duplicate injections? (Level IV only)			✓	
For sample concentrations > RL, are applicable duplicate injection RSD values < 20%? (Level IV only)			✓	
Were analytical spike recoveries within the 85-115% QC limits?			✓	
IX. ICP Serial Dilution				
Was an ICP serial dilution analyzed if analyte concentrations were > 50X the MDL (ICP)/>100X the MDL(ICP/MS)?		✓		
Were all percent differences (%Ds) < 10%?			✓	
Was there evidence of negative interference? If yes, professional judgement will be used to qualify the data.			✓	
X. Internal Standards (EPA SW 846 Method 6020/EPA 200.8)				
Were all the percent recoveries (%R) within the 30-120% (6020)/60-125% (200.8) of the intensity of the internal standard in the associated initial calibration?	✓			
If the %Rs were outside the criteria, was a reanalysis performed?	✓			
XI. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?		✓		
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
XII. Sample Result Verification				
Were RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target analytes were detected in the field duplicates.			✓	
XV. Field blanks				
Field blanks were identified in this SDG.		✓	✓	
Target analytes were detected in the field blanks.				

LDC #: 25911 4

VALIDATION FINDINGS WORKSHEET
Sample Specific Element Reference

Reviewer: CR
2nd reviewer: [illegible]

All circled elements are applicable to each sample.

Sample ID	Matrix	Target Analyte List (TAL)
1-4		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
Analysis Method		
ICP		Al, B, Ca, Fe, Li, Mg, Mn, P, K, Na, Sr, Sn, Ti, Zr
ICP-MS		Sb, As, Ba, Be, Cd, Cr, Co, Cu, Pb, Mo, Ni, Se, Ag, Tl, V, Zn

Comments: Mercury by CVAA if performed

LDC #: 25911L4

VALIDATION FINDINGS WORKSHEET
PB/ICB/CCB QUALIFIED SAMPLES

Reviewer: CR
2nd Reviewer: [illegible]

METHOD: Trace metals (EPA SW 864 Method 6010B/6020/7000)
Soil preparation factor applied: 100x x (MS: 2xdil)
Sample Concentration units, unless otherwise noted: mg/Kg
Associated Samples: All

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit	1	2	3	4						
Ca	8.017			40.09										
Cu			2.7	2.7										
Pb	0.011			0.06										
P	1.342			6.71										
Sn	1.444			7.22	2.6	2.6	2.7	2.6						
Ti			1.1	1.35										
Zn	0.644			3.22										

Samples with analyte concentrations within five times the associated ICB, CCB or PB concentration are listed above with the identifications from the Validation Completeness Worksheet. These sample results were qualified as not detected, "U".
Note : a - The listed analyte concentration is the highest ICB, CCB, or PB detected in the analysis of each element.

LDC #: 25911L4

VALIDATION FINDINGS WORKSHEET
ICP Interference Check Sample

Reviewer: CR
2nd Reviewer: [illegible]

METHOD: Trace Metals (EPA SW 846 Method 6010/6020/7000)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were ICP interference check samples performed as required?
Y N N/A Were the AB solution percent recoveries (%R) within the control limits of 80-120% ?

LEVEL IV ONLY:

Y N N/A Were recalculated results acceptable? See Level IV Recalculation Worksheet for recalculations.

#	Date	ICS Identification	Analyte	Concentration (ug/L)	Limit (<MDL)	Associated Samples	Qualifications
	3/17/11	ICSA (19:02)	Mn	4	0.78	All	No Qual (>10x)
	3/17/11	ICSA (21:26	Mn	4	0.78	All	✓

Comments:

ICSA.wpd

LDC #: 25111L4

VALIDATION FINDINGS WORKSHEET
Initial and Continuing Calibration Calculation Verification

Page: 1 of 1
Reviewer: CS
2nd Reviewer: [illegible]

METHOD: Trace Metals (EPA SW 846 Method 6010/6020/7000)

An initial and continuing calibration verification percent recovery (%R) was recalculated for each type of analysis using the following formula:

%R = Found / True x 100

Where, Found = concentration (in ug/L) of each analyte measured in the analysis of the ICV or CCV solution
True = concentration (in ug/L) of each analyte in the ICV or CCV source

Standard ID	Type of Analysis	Element	Found (ug/L)	True (ug/L)	Recalculated %R	Reported %R	Acceptable (Y/N)
ICV	ICP (Initial calibration)	Ti	617.46	600	102.9	102.9	Y
ICV	ICP/MS (Initial calibration)	Cd	50.82	50	101.6	101.6	
ICV	CVAA (Initial calibration)	Hg	2.47	2.5	98.8	98.8	
CCV (20:47)	ICP (Continuing calibration)	Al	23953.31	25000	95.8	95.8	
CCV (22:58)	ICP/MS (Continuing calibration)	Se	26.74	25	107.0	107.0	
CCV (05:48)	CVAA (Continuing calibration)	Hg	1.09	1	109.0	109.0	
	GFAA (Initial calibration)						
	GFAA (Continuing calibation)						

Comments: Refer to Calibration Verification findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

CALCLC.4SW

LDC #: 28911L4

VALIDATION FINDINGS WORKSHEET
Level IV Recalculation Worksheet

Page: 1 of 1
Reviewer: CB
2nd Reviewer: [illegible]

METHOD: Trace Metals (EPA SW 846 Method 6010/6020/7000)

Percent recoveries (%R) for an ICP interference check sample, a laboratory control sample and a matrix spike sample were recalculated using the following formula:

$\%R = \frac{Found}{True} \times 100$

Where, Found = Concentration of each analyte measured in the analysis of the sample. For the matrix spike calculation, Found = SSR (spiked sample result) - SR (sample result).
True = Concentration of each analyte in the source.

A sample and duplicate relative percent difference (RPD) was recalculated using the following formula:

$RPD = \frac{|S-D|}{(S+D)/2} \times 100$

Where, S = Original sample concentration
D = Duplicate sample concentration

An ICP serial dilution percent difference (%D) was recalculated using the following formula:

$\%D = \frac{|I-SDR|}{I} \times 100$

Where, I = Initial Sample Result (mg/L)
SDR = Serial Dilution Result (mg/L) (Instrument Reading x 5)

Sample ID	Type of Analysis	Element	Found / S / I (units)	True / D / SDR (units)	Recalculated %R / RPD / %D	Reported %R / RPD / %D	Acceptable (Y/N)
ICSAB	ICP interference check	As	19.7	20	98.5	98.5	Y
LCS	Laboratory control sample	P	1049.6	1000	105	105	Y
N	Matrix spike		(SSR-SR)				
N	Duplicate						
N	ICP serial dilution						

Comments: Refer to appropriate worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

TOTCLC.4SW

LDC #: 25911L4

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: CR
2nd reviewer: [illegible]

METHOD: Trace Metals (EPA SW 846 Method 6010/6020/7000)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Have results been reported and calculated correctly?
Y N N/A Are results within the calibrated range of the instruments and within the linear range of the ICP?
Y N N/A Are all detection limits below the CRDL?

Detected analyte results for Zl were recalculated and verified using the following equation:

Concentration = (RD)(FV)(Dil) / (In. Vol.)

RD = Raw data concentration
FV = Final volume (ml)
In. Vol. = Initial volume (ml) or weight (G)
Dil = Dilution factor

Recalculation:

$$\frac{100mL(0.01783mg/L)}{0.905(1.03)} = 1.9 mg/kg$$

#	Sample ID	Analyte	Reported Concentration (mg/kg)	Calculated Concentration (mg/kg)	Acceptable (Y/N)
	1	Al	11500	11500	Y
		Sb	0.25	0.25	
		As	5.9	5.9	
		Ba	101	101	
		Be	0.50	0.50	
		B	3.9	3.9	
		Cd	0.16	0.16	
		Ca	3210	3210	
		Cr	25.3	25.3	
		Co	6.3	6.3	
		Cu	21.8	21.8	
		Fe	17600	17600	
		Pb	7.7	7.7	
		Li	22.1	22.1	
		Mg	3900	3900	
		Mn	264	264	
		Hg	0.0074	0.0074	
		Mo	5.4	5.4	
		Ni	18.9	18.9	
		P	366	366	

Note:

LDC #: 25911L4

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: CL
2nd reviewer: [illegible]

METHOD: Trace Metals (EPA SW 846 Method 6010/6020/7000)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Have results been reported and calculated correctly?
Y N N/A Are results within the calibrated range of the instruments and within the linear range of the ICP?
Y N N/A Are all detection limits below the CRDL?

Detected analyte results for _____ were recalculated and verified using the following equation:

Concentration = (RD)(FV)(Dil) / (In. Vol.)

RD = Raw data concentration
FV = Final volume (ml)
In. Vol. = Initial volume (ml) or weight (G)
Dil = Dilution factor

Recalculation: See Previous Page

#	Sample ID	Analyte	Reported Concentration (mg/kg)	Calculated Concentration (mg/kg)	Acceptable (Y/N)
	1	K	2610	2610	Y
		Se	0.11	0.11	
		As	0.027	0.027	
		Na	123	123	
		Sr	17.5	17.5	
		Tl	0.24	0.24	
		Sn	2.6	2.6	
		Ti	104.0	104.0	
		V	37.4	37.4	
		Zn	73.4	73.4	
		Zr	1.9	1.9	✓

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	March 10, 2011
LDC Report Date:	August 18, 2011
Matrix:	Soil
Parameters:	Wet Chemistry
Validation Level:	Level IV
Laboratory, Area IV:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE103

Sample Identification

SL-115-SA5A-SB-6.5-7.5
SL-115-SA5A-SB-13.0-14.0
SL-116-SA5A-SB-6.0-7.0
SL-116-SA5A-SB-14.0-15.0
SL-115-SA5A-SB-6.5-7.5MS
SL-115-SA5A-SB-6.5-7.5DUP

Introduction

This data review covers 6 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 9012B for Cyanide, EPA Method 300.0 for Nitrate and Fluoride, EPA SW 846 Method 7199 for Hexavalent Chromium, EPA SW 846 Method 9045C for pH, and EPA Method 314.0 for Perchlorate.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review (January 2010).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

All criteria for the initial calibration of each method were met.

III. Calibration Verification

Calibration verification frequency and analysis criteria were met for each method when applicable.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No contaminant concentrations were found in the initial, continuing and preparation blanks.

No field blanks were identified in this SDG.

V. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) analyses were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

VI. Duplicates

Duplicate (DUP) sample analyses were reviewed for each matrix as applicable. Results were within QC limits.

VII. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Sample Result Verification

All sample result verifications were acceptable

All analytes reported below the RL were qualified as follows:

Sample	Analyte	Flag	A or P
All samples in SDG DE103	All analytes reported below the RL and above the MDL.	J (all detects)	A

IX. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

X. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Wet Chemistry - Data Qualification Summary - SDG DE103

SDG	Sample	Analyte	Flag	A or P	Reason (Code)
DE103	SL-115-SA5A-SB-6.5-7.5 SL-115-SA5A-SB-13.0-14.0 SL-116-SA5A-SB-6.0-7.0 SL-116-SA5A-SB-14.0-15.0	All analytes reported below the RL and above the MDL.	J (all detects)	A	Sample result verification (Z)

Santa Susana Field Laboratory
Wet Chemistry – Laboratory Blank Data Qualification Summary - SDG DE103

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Wet Chemistry - Field Blank Data Qualification Summary - SDG DE103

No Sample Data Qualified in this SDG

LDC #: 25911L6

SDG #: DE103

Laboratory: Lancaster Laboratories

VALIDATION COMPLETENESS WORKSHEET

Level IV

Date: 8-2-11

Page: 1 of 1

Reviewer: CL

2nd Reviewer: W

METHOD: (Analyte) Cyanide (EPA SW846 Method 9012B), Nitrate-N, Fluoride (EPA Method 300.0), Hexavalent Chromium (EPA SW846 Method 7199), pH (~~EPA Method 150.1~~/EPA SW846 Method 9045C), Perchlorate (EPA Method 314.0)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 3/10/11
IIa.	Initial calibration	A	
IIb.	Calibration verification	A	
III.	Blanks	A	
IV	Matrix Spike/Matrix Spike Duplicates	A	MS
V	Duplicates	A	DUP
VI.	Laboratory control samples	A	LCS/D
VII.	Sample result verification	A	
VIII.	Overall assessment of data	A	
IX.	Field duplicates	N	
X	Field blanks	N	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: Soil

1	SL-115-SA5A-SB-6.5-7.5	11	PMS	21		31	
2	SL-115-SA5A-SB-13.0-14.0	12		22		32	
3	SL-115-SA5A-SB-6.0-7.0	13		23		33	
4	SL-115-SA5A-SB-14.0-15.0	14		24		34	
5	(MS) MS	15		25		35	
6	DUP	16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

LDC #: 259116

VALIDATION FINDINGS CHECKLIST

Reviewer: [illegible]
2nd Reviewer: [illegible]

Method: Inorganics (EPA Method See cover)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Calibration				
Were all instruments calibrated daily, each set-up time?	✓			
Were the proper number of standards used?	✓			
Were all initial calibration correlation coefficients > 0.995?	✓			
Were all initial and continuing calibration verification %Rs within the 90-110% QC limits?	✓			
Were titrant checks performed as required? (Level IV only)			✓	
Were balance checks performed as required? (Level IV only)			✓	
III. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
IV. Matrix spike/Matrix spike duplicates and Duplicates				
Were a matrix spike (MS) and duplicate (DUP) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD or MS/DUP. Soil / Water.	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the 75-125 QC limits? If the sample concentration exceeded the spike concentration by a factor of 4 or more, no action was taken.	✓			
Were the MS/MSD or duplicate relative percent differences (RPD) ≤ 20% for waters and ≤ 35% for soil samples? A control limit of ≤ CRDL(≤ 2X CRDL for soil) was used for samples that were ≤ 5X the CRDL, including when only one of the duplicate sample values were < 5X the CRDL.	✓			
V. Laboratory control samples				
Was an LCS anaylzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the 80-120% (85-115% for Method 300.0) QC limits?	✓			
VI. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?		✓		
Were the performance evaluation (PE) samples within the acceptance limits?			✓	

LDC #: 259166

VALIDATION FINDINGS CHECKLIST

Reviewer: CR
2nd Reviewer: W

Validation Area	Yes	No	NA	Findings/Comments
VII. Sample Result Verification				
Were RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
Were detection limits < RL?	✓			
VIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
IX. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target analytes were detected in the field duplicates.			✓	
X. Field blanks				
Field blanks were identified in this SDG.		✓		
Target analytes were detected in the field blanks.			✓	

LDC #: 25911A6

VALIDATION FINDINGS WORKSHEET
Sample Specific Analysis Reference

Reviewer: CR
2nd reviewer: W

All circled methods are applicable to each sample.

Sample ID	Matrix	Parameter
1-4		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
QC 5, 6		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4

Comments:

LDC #: 25911L6

Validation Findings Worksheet
Initial and Continuing Calibration Calculation Verification

Page: 1 of 1
Reviewer: CR
2nd Reviewer:

Method: Inorganics, Method See Cover

The correlation coefficient (r) for the calibration of 3/16/11 was recalculated.Calibration date: ClO4

An initial or continuing calibration verification percent recovery (%R) was recalculated for each type of analysis using the following formula:

%R = Found X 100 / True

Where, Found = concentration of each analyte measured in the analysis of the ICV or CCV solution
True = concentration of each analyte in the ICV or CCV source

Type of analysis	Analyte	Standard	Conc. (ug/L)	Response	Recalculated r or r^2	Reported r or r^2	Acceptable (Y/N)
Initial calibration	ClO4	s1	2	0.005	0.9997	0.9996	Y
		s2	4.00	0.009			
		s3	10.00	0.024			
		s4	25.00	0.062			
		s5	100.00	0.267			
Calibration verification	NO3	CCV	1.5	1.4492	97	97	
Calibration verification	F	↓	1.5	1.3829	92	92	
Calibration verification	CN	↓	0.15	0.16030	107	107	↓

Comments: Refer to Calibration Verification findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 05111L8

VALIDATION FINDINGS WORKSHEET
Level IV Recalculation Worksheet

Page: 1 of 1
Reviewer: QR
2nd Reviewer: [illegible]

METHOD: Inorganics, Method See cover

Percent recoveries (%R) for a laboratory control sample and a matrix spike sample were recalculated using the following formula:

$$\%R = \frac{Found}{True} \times 100$$

Where, Found = concentration of each analyte measured in the analysis of the sample. For the matrix spike calculation, Found = SSR (spiked sample result) - SR (sample result).
True = concentration of each analyte in the source.

A sample and duplicate relative percent difference (RPD) was recalculated using the following formula:

$$RPD = \frac{|S-D|}{(S+D)/2} \times 100$$

Where, S = Original sample concentration
D = Duplicate sample concentration

Sample ID	Type of Analysis	Element	Found / S (units)	True / D (units)	Recalculated %R / RPD	Reported %R / RPD	Acceptable (Y/N)
LCS	Laboratory control sample	Cl04	560	500	112	—	Y
5	Matrix spike sample	F	(SSR-SR) 9.3	10.1010	92	92	↓
6	Duplicate sample	NO3	1.7	1.8	3	3	↓

Comments: Refer to appropriate worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

TOTCLC.6

LDC #: 25911L6

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: CR
2nd reviewer: [illegible]

METHOD: Inorganics, Method See cover

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Have results been reported and calculated correctly?
Y N N/A Are results within the calibrated range of the instruments?
Y N N/A Are all detection limits below the CRQL?

Compound (analyte) results for F reported with a positive detect were recalculated and verified using the following equation:

Concentration =

$y = 0.1827x - 0.0131$

Recalculation:

$$\frac{\frac{0.035 + 0.0131}{0.1827} \times 50\,mL}{4.93g\,(0.905)} = 2.95\,mg/kg$$

#	Sample ID	Analyte	Reported Concentration (mg/kg)	Calculated Concentration (mg/kg)	Acceptable (Y/N)
	1	F	2.9	3.0	Y
		NO_3	1.9	1.9	↓
		Alt	8.35	8.35	↓

Note:

RECALC.6

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	March 10, 2011
LDC Report Date:	August 18, 2011
Matrix:	Soil/Water
Parameters:	Total Petroleum Hydrocarbons as Gasoline
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE103

Sample Identification

SL-115-SA5A-SB-6.5-7.5
SL-115-SA5A-SB-13.0-14.0
SL-116-SA5A-SB-6.0-7.0
SL-116-SA5A-SB-14.0-15.0
TB-031011

Introduction

This data review covers 4 soil samples and one water sample listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8015B for Total Petroleum Hydrocarbons (TPH) as Gasoline.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0% .

III. Calibration Verification

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 20.0% QC limits.

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No total petroleum hydrocarbons as gasoline contaminants were found in the method blanks.

Sample TB-031011 was identified as a trip blank. No total petroleum hydrocarbons as gasoline contaminants were found.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VI. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VII. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE103	All compounds reported below the RL.	J (all detects)	A

X. System Performance

The system performance was acceptable.

XI. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XII. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Total Petroleum Hydrocarbons as Gasoline - Data Qualification Summary - SDG DE103

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE103	SL-115-SA5A-SB-6.5-7.5 SL-115-SA5A-SB-13.0-14.0 SL-116-SA5A-SB-6.0-7.0 SL-116-SA5A-SB-14.0-15.0 TB-031011	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
Total Petroleum Hydrocarbons as Gasoline - Laboratory Blank Data Qualification Summary - SDG DE103

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Total Petroleum Hydrocarbons as Gasoline - Field Blank Data Qualification Summary - SDG DE103

No Sample Data Qualified in this SDG

LDC #: 25911L7

VALIDATION COMPLETENESS WORKSHEET

Level IV

SDG #: DE103

Laboratory: Lancaster Laboratories

Date: 8/4/11

Page: 1 of 1

Reviewer: FI

2nd Reviewer: C

METHOD: GC TPH as Gasoline (EPA SW 846 Method 8015B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A ~~STAT~~	Sampling dates: 3/10/11
II	Initial calibration	A	% RSD ≤ 20
III.	Calibration verification/ICV	A	ICV/CCV ≤ 20
IV.	Blanks	A	
V	Surrogate recovery	A	
VI.	Matrix spike/Matrix spike duplicates	N	client specified
VII.	Laboratory control samples	A	LCS/D
VIII.	Target compound identification	A	
IX.	Compound Quantitation and CRQLs	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	N	
XIII.	Field blanks	ND	TB = 5

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:

SOIL + water

1	SL-115-SA5A-SB-6.5-7.5 S	11	11073A34A	21		31	
2	SL-115-SA5A-SB-13.0-14.0	12	11075B20A	22		32	
3	SL-115-SA5A-SB-6.0-7.0	13		23		33	
4	SL-115-SA5A-SB-14.0-15.0	14		24		34	
5	TB-031011 W	15		25		35	
6		16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

LDC #: 25911L7
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Page: 1 of 2
Reviewer: [illegible]
2nd Reviewer: [illegible]

Method: ✓ GC ____ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation?		✓		
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?			✓	
Were the RT windows properly established?	✓			
IV. Continuing calibration				
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20%.0 or percent recoveries 80-120%?	✓			
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.			✓	
Was a MS/MSD analyzed every 20 samples of each matrix?			✓	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	

LDC #: 25911L7
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Page: 2 of 2
Reviewer: FJ
2nd Reviewer: A

Validation Area	Yes	No	NA	Findings/Comments
X. Target compound identification				
Were the retention times of reported detects within the RT windows?	✓			
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?			✓	
XII. System performance				
System performance was found to be acceptable.			✓	
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XV. Field blanks				
Field blanks were identified in this SDG.	✓			
Target compounds were detected in the field blanks.		✓		

LDC #: 25911L7
SDG #: per cover

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: FJ
2nd Reviewer: A

METHOD: GC ✓ HPLC ____

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

#	Standard ID	Calibration Date	Compound	Reported CF (550 std)	Recalculated CF (550 std)	Reported Average CF (initial)	Recalculated Average CF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL 110022P	5/14/10	GRO	8420	8420	8050	8050	5.2	5.2
2	05398F	11/29/10	GRO	34175	34175	37329	37329	12.7	12.7
3									
4									

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 35 9117
SDG #: per cover

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC ✓ HPLC_____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF - CF)/ave. CF
CF = A/C

Where: ave. CF = initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(ical)/ CCV Conc.	Reported CF/Conc. CCV	Recalculated CF/Conc. CCV	Reported %D	Recalculated %D
1	ccv	3/17/11 10:32	GRO	550.0	569.66	569.66	3.6	3.6
2	ccv	3/14/11 10:54	↓	220.0	195.34	195.34	11.2	11.2
3								
4								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25 71/L /
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT
2nd reviewer: [illegible]

METHOD: ✓ GC ___ HPLC

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
TFT	NS	635	504.73	79	79	0

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

LDC #: 25911L7
SDG #: pu cover

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: ✓ GC __ HPLC

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100* (SSC-SC)/SA
RPD = I LCS - LCSD I * 2/(LCS + LCSD)

Where: SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory control sample percent recovery
SC = Concentration
LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: 1cs

Compound	Spike Added (mg/kg)		Spiked Sample Concentration (mg/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)	11	NA	7.9	NA	72	72	NA			
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)										
2,4,6-Trinitrotoluene (8330)										

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 29117L7
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: ✓ GC ___ HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= $\frac{(A)(Fv)(Df)}{(RF)(Vs \text{ or } Ws)(\%S/100)}$

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound in the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID._____ Compound Name _____

Concentration = _____

ND

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications

Comments: _____

SAMPCALew.wpd

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	March 10, 2011
LDC Report Date:	August 18, 2011
Matrix:	Soil
Parameters:	Total Petroleum Hydrocarbons as Extractables
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE103

Sample Identification

SL-115-SA5A-SB-6.5-7.5
SL-115-SA5A-SB-13.0-14.0
SL-116-SA5A-SB-6.0-7.0
SL-116-SA5A-SB-14.0-15.0
SL-115-SA5A-SB-6.5-7.5MS
SL-115-SA5A-SB-6.5-7.5MSD

Introduction

This data review covers 6 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8015B for Total Petroleum Hydrocarbons (TPH) as Extractables.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0% .

III. Calibration Verification

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 20.0% QC limits.

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No total petroleum hydrocarbons as extractable contaminants were found in the method blanks with the following exceptions:

Method Blank ID	Extraction Date	Compound	Concentration	Associated Samples
PBLK15078	3/21/11	EFH (C30-C40)	1.2 mg/Kg	All samples in SDG DE103

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated method blanks.

No field blanks were identified in this SDG.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. Surrogate recoveries (%R) were not within QC limits for sample SL-116-SA5A-SB-14.0-15.0. Since the sample was diluted out, no data were qualified.

VI. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) were not within QC limits. Since the sample concentration was greater than the spiked concentration, no data were qualified.

VII. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE103	All compounds reported below the RL.	J (all detects)	A

X. System Performance

The system performance was acceptable.

XI. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XII. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Total Petroleum Hydrocarbons as Extractables - Data Qualification Summary - SDG DE103

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE103	SL-115-SA5A-SB-6.5-7.5 SL-115-SA5A-SB-13.0-14.0 SL-116-SA5A-SB-6.0-7.0 SL-116-SA5A-SB-14.0-15.0	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
Total Petroleum Hydrocarbons as Extractables - Laboratory Blank Data Qualification Summary - SDG DE103

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Total Petroleum Hydrocarbons as Extractables - Field Blank Data Qualification Summary - SDG DE103

No Sample Data Qualified in this SDG

LDC #: 25911L8 **VALIDATION COMPLETENESS WORKSHEET** Date: 8/8/11
SDG #: DE103 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC TPH as Extractables (EPA SW 846 Method 8015B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 3/10/11
II	Initial calibration	A	% RSD ≤ 20
III.	Calibration verification/ICV	A	ICV/CCV ≤ 20
IV.	Blanks	SW	
V	Surrogate recovery	SW	
VI.	Matrix spike/Matrix spike duplicates	SW	
VII.	Laboratory control samples	A	LCS
VIII.	Target compound identification	A	
IX.	Compound Quantitation and CRQLs	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	N	
XIII.	Field blanks	N	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: SOIL

1	SL-115-SA5A-SB-6.5-7.5	11	PBLK15078	21		31	
2	SL-115-SA5A-SB-13.0-14.0	12		22		32	
3	SL-115-SA5A-SB-6.0-7.0	13		23		33	
4	SL-115-SA5A-SB-14.0-15.0	14		24		34	
5	#1 MS	15		25		35	
6	#1 MSD	16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

LDC #: 59118

SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Page: 1 of 2

Reviewer: [illegible]

2nd Reviewer: [illegible]

Method: ✓ GC ____ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation?		✓		
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?			✓	
Were the RT windows properly established?	✓			
IV. Continuing calibration				
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20%.0 or percent recoveries 80-120%?	✓			
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?		✓		
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	

LDC #: 25911L8
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Reviewer: FJ
2nd Reviewer: A

Validation Area	Yes	No	NA	Findings/Comments
X. Target compound identification				
Were the retention times of reported detects within the RT windows?	✓			
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XV. Field blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

LDC #: 25911L8

VALIDATION FINDINGS WORKSHEET
Blanks

Page: 1 of 1
Reviewer: FT
2nd Reviewer: A

METHOD: ✓ GC ___ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were all samples associated with a given method blank?
Y N N/A Was a method blank performed for each matrix and whenever a sample extraction procedure was performed?
Y N N/A Was a method blank performed with each extraction batch?
Y N N/A Were any contaminants found in the method blanks? If yes, please see findings below.

Level IV/D Only

Y N N/A (Gasoline and aromatics only)Was a method blank analyzed with each 24 hour batch?
Y N N/A Was a method blank analyzed for each analytical / extraction batch of ≤20 samples?

Blank extraction date: 3/21/11 **Blank analysis date:** 3/21/11 **Associated samples:** All (7 5x) (B)
Conc. units: mg/kg

Compound	Blank ID	Sample Identification						
	PBLK15078	5X						
EFH (C30-C40)	1.2	6						

Blank extraction date: ___ **Blank analysis date:** ___ **Associated samples:** ___
Conc. units: ___

Compound	Blank ID	Sample Identification						

ALL CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
All contaminants within five times the method blank concentration were qualified as not detected, "U".

LDC #: 25911L8

VALIDATION FINDINDS WORKSHEET
Surrogate Recovery

Page: 1 of 1
Reviewer: FT
2nd Reviewer: C

METHOD: ✓ GC __ HPLC

Are surrogates required by the method? Yes____ or No____.

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were surrogates spiked into all samples and blanks?

Y N N/A Did all surrogate recoveries (%R) meet the QC limits?

B (S)

#	Sample ID	Detector/ Column	Surrogate Compound	%R (Limits)	Qualifications
	4	NS	A	220 (37-125)	~~LP det~~ (All TCL
			H	245 (47-145)	✓
				( )	NO qual 75% R
				( )	
				( )	
				( )

LDC #: 259/128

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Page: 1 of 1
Reviewer: FT
2nd Reviewer: C

METHOD: ___ GC ___ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG?
Y N N/A Was an MS/MSD analyzed every 20 samples for each matrix or whenever a sample extraction was performed?
Y N N/A Were the MS/MSD percent recoveries (%R) and relative percent differences (RPD) within QC limits?

#	MS/MSD ID	Compound	MS %R (Limits)	MSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
	5+6	EFH (C21-C30)	-418 (49-123)	-326 (49-123)	( )	1	no qual parent
		EFH (C30-C40)	-611 (49-123)	-438 (49-123)	( )		74% spk Amt
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
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			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		

LDC #: 25911L8
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC ✓ HPLC ____

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

#	Standard ID	Calibration Date	Compound	Reported CF (~~25~~ 288 std)	Recalculated CF (~~25~~ 288 std)	Reported Average CF (initial)	Recalculated Average CF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	3/16/11	Cx-Cyl	19955	19955	20453	20453	4.7	4.7
2									
3									
4									

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 759112B
SDG #: per cover

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: EJ
2nd Reviewer: A

METHOD: GC ✓ HPLC ____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF - CF)/ave. CF
CF = A/C

Where: ave. CF = Initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(ical)/ CCV Conc.	Reported CF/Conc. CCV	Recalculated CF/Conc. CCV	Reported %D	Recalculated %D
1	J080.02R	3/21/11	C8-C40	143.99	154.18	154.18	7.1	7.1
2								
3								
4								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25711L8
SDG #: see cover

METHOD: ✓ GC ___ HPLC

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT
2nd reviewer: C

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
chlorobenzene	NS	1.0	0.8925	89	89	0
ortho terphenyl	↓	1.0	1.019	102	102	0

Sample ID:

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Sample ID:

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

LDC #: 25 7140

SDG #: per cover

VALIDATION FINDINGS WORKSHEET

Matrix Spike/Matrix Spike Duplicates Results Verification

Reviewer: FT

2nd Reviewer: [illegible]

METHOD: ✓ GC __HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

%Recovery = 100 * (SSC - SC)/SA

Where SSC = Spiked sample concentration; SA = Spike added; SC = Sample concentration

RPD =(((SSCMS - SSCMSD) * 2) / (SSCMS + SSCMSD))*100

MS = Matrix spike; MSD = Matrix spike duplicate

MS/MSD samples: # 5 + 6

Compound	Spike Added (mg/kg)		Sample Conc. (mg/kg)	Spike Sample Concentration (mg/kg)		Matrix spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	---	MS	MSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)											
Diesel (8015)											
Benzene (8021B)											
Methane (RSK-175)											
2,4-D (8151)											
Dinoseb (8151)											
Naphthalene (8310)											
Anthracene (8310)											
HMX (8330)											
2,4,6-Trinitrotoluene (8330)											
EPH (C8-C11)	0.83	0.83	ND	0.66	0.65	80	80	78	78	2	2

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25911/28
SDG #: µu cones

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: ✓ GC __HPLC

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100* (SSC-SC)/SA
RPD = | LCS - LCSD | * 2/(LCS + LCSD)

Where: SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory control sample percent recovery
SC = Concentration
LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: ucs

Compound	Spike Added (mg/kg)		Spiked Sample Concentration (mg/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)										
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)										
2,4,6-Trinitrotoluene (8330)										
EPH (C8-C11)	0.84	NA	0.72	NA	86	86	NA			

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25911L8
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: ✓ GC ___ HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= (A)(Fv)(Df) / (RF)(Vs or Ws)(%S/100)

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound in the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID._____ Compound Name _____

Concentration = $\frac{28694235\ (1000)}{(20453)(60.1)(1000)}$

= 25.79 mg/kg

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications

Comments: _____

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Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	March 10, 2011
LDC Report Date:	August 18, 2011
Matrix:	Soil
Parameters:	Explosives
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE103

Sample Identification

SL-115-SA5A-SB-6.5-7.5
SL-115-SA5A-SB-13.0-14.0
SL-116-SA5A-SB-6.0-7.0
SL-116-SA5A-SB-14.0-15.0

Introduction

This data review covers 4 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8330A for Explosives.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration of compounds was performed for the primary (quantitation) column and confirmation column as required by the method.

The percent relative standard deviations (%RSD) were less than or equal to 20.0% for all compounds.

In the case where the laboratory used a calibration curve to evaluate the compounds, all coefficients of determination (r^2) were greater than or equal to 0.990 .

Retention time windows were evaluated and considered technically acceptable.

III. Calibration Verification

Calibration verification was performed at the required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 20.0% QC limits.

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

Retention times (RT) of all compounds in the calibration standards were within QC limits.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No explosive contaminants were found in the method blanks.

No field blanks were identified in this SDG.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VI. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VII. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE103	All compounds reported below the RL.	J (all detects)	A

X. System Performance

The system performance was acceptable.

XI. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XII. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Explosives - Data Qualification Summary - SDG DE103

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE103	SL-115-SA5A-SB-6.5-7.5 SL-115-SA5A-SB-13.0-14.0 SL-116-SA5A-SB-6.0-7.0 SL-116-SA5A-SB-14.0-15.0	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
Explosives - Laboratory Blank Data Qualification Summary - SDG DE103

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Explosives - Field Blank Data Qualification Summary - SDG DE103

No Sample Data Qualified in this SDG

LDC #: 25911L40

VALIDATION COMPLETENESS WORKSHEET

Level IV

Date: 8/8/11

SDG #: DE103

Page: 1 of 1

Laboratory: Lancaster Laboratories

Reviewer:

2nd Reviewer:

METHOD: HPLC Explosives (EPA SW 846 Method 8330A)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 3/10/11
II	Initial calibration	A	% RSD ≤ 20, r²
III.	Calibration verification/ICV	A	ICV/CCV ≤ 20
IV.	Blanks	A	
V	Surrogate recovery	A	
VI.	Matrix spike/Matrix spike duplicates	N	client specified
VII.	Laboratory control samples	A	LCS
VIII.	Target compound identification	A	
IX.	Compound Quantitation and CRQLs	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	N	
XIII.	Field blanks	N	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:

SOIL

1	SL-115-SA5A-SB-6.5-7.5	11	PBLK02075	21		31	
2	SL-115-SA5A-SB-13.0-14.0	12		22		32	
3	SL-116-SA5A-SB-6.0-7.0	13		23		33	
4	SL-116-SA5A-SB-14.0-15.0	14		24		34	
5		15		25		35	
6		16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

LDC #: 25911L40
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Page: 1 of 2
Reviewer: [illegible]
2nd Reviewer: [illegible]

Method: ____ GC ✓ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation?	✓			
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?	✓			
Were the RT windows properly established?	✓			
IV. Continuing calibration				
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20%.0 or percent recoveries 80-120%?	✓			
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.			✓	
Was a MS/MSD analyzed every 20 samples of each matrix?			✓	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	

LDC #: 25911L4U
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Reviewer: FJ
2nd Reviewer: [illegible]

Validation Area	Yes	No	NA	Findings/Comments
X. Target compound identification				
Were the retention times of reported detects within the RT windows?			✓	
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XV. Field blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

LDC #: 25 911L4U
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: FJ
2nd Reviewer: CA

METHOD: GC ✓ HPLC ____

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

level 3

#	Standard ID	Calibration Date	Compound	Reported CF (std)	Recalculated CF (std)	Reported Average CF (initial)	Recalculated Average CF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL chromopack	3/8/11	RDX (col. 1)	8.64×10^1	8.64×10^1	9.52×10^1	9.52×10^1	16.1	16.1
			1,3,5-TNB	1.95×10^2	1.95×10^2	1.96×10^2	1.96×10^2	0.9	0.9
2	ICAL capcell CN	3/8/11	~~RDX~~ HMX (col. 3)	8.92×10^1	8.92×10^1	9.72×10^1	9.72×10^1	17.2	17.2
			Nitrobenzene	1.64×10^2	1.64×10^2	1.76×10^2	1.76×10^2	13.8	13.8
3									
4									

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25911L40
SDG #: per cover

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: EJ
2nd Reviewer: [illegible]

METHOD: GC_____ HPLC ✓

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF - CF)/ave. CF
CF = A/C

Where: ave. CF = Initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(Ical)/ CCV Conc.	Reported CF/Conc. CCV	Recalculated CF/Conc. CCV	Reported %D	Recalculated %D
1	3E12067.	3/18/11	RDX col. (1)	493.50	458.19	458.19	7.2	7.2
	06R		1,3,5-TNB ↓	500.50	499.78	499.78	0.1	0.1
	chromp acl							
2	3E12067.	3/18/11	↓	987.00	910.63	910.63	7.7	7.7
	18R		↓	1001.00	1008.81	1008.81	0.8	0.8
	chrom pacl							
3	3E12067.06R		HMX (col 3)	500.00	453.98	453.98	9.2	9.2
	•		nitrobenzene ↓	499.50	468.53	468.53	6.2	6.2
4								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 2591L4U
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Page: 1 of 1
Reviewer: FT
2nd reviewer: A

METHOD: ___ GC ✓ HPLC

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
2-Nitro-m-xylene	col. B	2100	2268	108	108	0

Sample ID:

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Sample ID:

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

LDC #: 25911L4U
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: ___ GC ✓ HPLC

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100* (SSC-SC)/SA
RPD = I LCS - LCSD I * 2/(LCS + LCSD)

Where: SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory control sample percent recovery
SC = Concentration
LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: LCS

Compound	Spike Added (ug/Kg)		Spiked Sample Concentration (ug/Kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)										
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)	2000.25	NA	2066.28	NA	103	103				
2,4,6-Trinitrotoluene (8330)	1999.2	↓	2308.09	↓	115	115	NA			

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25911L4U
SDG #: µ [illegible]

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: ___ GC ✓ HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= $\frac{(A)(Fv)(Df)}{(RF)(Vs \text{ or } Ws)(\%S/100)}$

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound in the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID._____ Compound Name _____

Concentration =_____

ND

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications

Comments: _____

SAMPCALew.wpd

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	March 10, 2011
LDC Report Date:	August 18, 2011
Matrix:	Soil
Parameters:	Terphenyls
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE103

Sample Identification

SL-115-SA5A-SB-6.5-7.5
SL-115-SA5A-SB-13.0-14.0
SL-116-SA5A-SB-6.0-7.0
SL-116-SA5A-SB-14.0-15.0

Introduction

This data review covers 4 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8015B for Terphenyls.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0% .

III. Calibration Verification

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 20.0% QC limits.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No terphenyl contaminants were found in the method blanks.

No field blanks were identified in this SDG.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits with the following exceptions:

Sample	Surrogate	%R (Limits)	Compound	Flag	A or P
SL-116-SA5A-SB-14.0-15.0	n-Triacontane-d62	192 (50-150)	All TCL compounds	J (all detects)	P

VI. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VII. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) within QC limits.

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE103	All compounds reported below the RL.	J (all detects)	A

X. System Performance

The system performance was acceptable.

XI. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XII. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Terphenyls - Data Qualification Summary - SDG DE103

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE103	SL-116-SA5A-SB-14.0-15.0	All TCL compounds	J (all detects)	P	Surrogate spikes (%R) (S)
DE103	SL-115-SA5A-SB-6.5-7.5 SL-115-SA5A-SB-13.0-14.0 SL-116-SA5A-SB-6.0-7.0 SL-116-SA5A-SB-14.0-15.0	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
Terphenyls - Laboratory Blank Data Qualification Summary - SDG DE103

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Terphenyls - Field Blank Data Qualification Summary - SDG DE103

No Sample Data Qualified in this SDG

LDC #: 25911L41

VALIDATION COMPLETENESS WORKSHEET

Level IV

Date: 8/8/11

SDG #: DE103

Page: 1 of 1

Laboratory: Lancaster Laboratories

Reviewer:

2nd Reviewer:

METHOD: GC Terphenyls (EPA SW 846 Method 8015B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 3/10/11
II	Initial calibration	A	% RSD ≤ 20
III.	Calibration verification/~~ICV~~	A	CCV ≤ 20
IV.	Blanks	A	
V	Surrogate recovery	SW	
VI.	Matrix spike/Matrix spike duplicates	N	client specified
VII.	Laboratory control samples	A	LCS
VIII.	Target compound identification	A	
IX.	Compound Quantitation and CRQLs	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	N	
XIII.	Field blanks	N	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:

SOIL

1	SL-115-SA5A-SB-6.5-7.5	11	PBLK37076	21		31	
2	SL-115-SA5A-SB-13.0-14.0	12		22		32	
3	SL-116-SA5A-SB-6.0-7.0	13		23		33	
4	SL-116-SA5A-SB-14.0-15.0	14		24		34	
5		15		25		35	
6		16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

LDC #: 59114

SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Reviewer: FM

2nd Reviewer: A

Method: ✓ GC _____ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation?		✓		
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?			✓	
Were the RT windows properly established?	✓			
IV. Continuing calibration				
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20%.0 or percent recoveries 80-120%?	✓			
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?	✓	✓		
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?		✓		
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.			✓	
Was a MS/MSD analyzed every 20 samples of each matrix?			✓	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	

LDC #: 259 1|L4|
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Reviewer: FJ
2nd Reviewer: C

Validation Area	Yes	No	NA	Findings/Comments
X. Target compound identification				
Were the retention times of reported detects within the RT windows?			✓	
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?		✓		
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XV. Field blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.		✓		

LDC #: 25911641

VALIDATION FINDINDS WORKSHEET
Surrogate Recovery

Page: 1 of 1
Reviewer: FT
2nd Reviewer: A

METHOD: __ GC ✓ HPLC

Are surrogates required by the method? Yes____ or No____.

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were surrogates spiked into all samples and blanks?

Y N N/A Did all surrogate recoveries (%R) meet the QC limits?

#	Sample ID	Detector/ Column	Surrogate Compound	%R (Limits)	Qualifications
	4	NS	*	192 (50-150)	J/P det (S)
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
		*	n-Triacontane-d62	( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	

	Surrogate Compound		Surrogate Compound		Surrogate Compound		Surrogate Compound		
A	Chlorobenzene (CBZ)	G	Octacosane	M	Benzo(e)Pyrene	S	1-Chloro-3-Nitrobenzene	Y	Tetrachloro-m- xylene
B	4-Bromofluorobenzene (BFB)	H	Ortho-Terphenyl	N	Terphenyl-D14	T	3,4-Dinitrotoluene		
C	a,a,a-Trifluorotoluene	I	Fluorobenzene (FBZ)	O	Decachlorobiphenyl (DCB)	U	Tripentyltin		
D	Bromochlorobenene	J	n-Triacontane	P	1-methylnaphthalene	V	Tri-n-propyltin		
E	1,4-Dichlorobutane	K	Hexacosane	Q	Dichlorophenyl Acetic Acid (DCAA)	W	Tributyl Phosphate		
F	1,4-Difluorobenzene (DFB)	L	Bromobenzene	R	4-Nitrophenol	X	Triphenyl Phosphate		

LDC #: 25911L41
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC ✓ HPLC _____

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

level 3

#	Standard ID	Calibration Date	Compound	Reported CF (17.74/std)	Recalculated CF (17.74/std)	Reported Average CF (initial)	Recalculated Average CF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	3/16/11	o-Terphenyl	2.59×10^4	2.59×10^4	2.54×10^4	2.54×10^4	2.1	2.1
2									
3									
4									

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 59 11L41
SDG #: per cover

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: EJ
2nd Reviewer: A

METHOD: GC ✓ HPLC ____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF - CF)/ave. CF
CF = A/C

Where: ave. CF = initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(Ical)/ CCV Conc.	Reported CF/Conc. CCV	Recalculated CF/Conc. CCV	Reported %D	Recalculated %D
1	R078.03	3/19/11	o-Terphenyl	35.48	35.70	35.70	0.6	0.6
2	R078.14R	3/20/11	↓	35.48	34.75	34.75	2.1	2.1
3								
4								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25711-47
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT
2nd reviewer: [illegible]

METHOD: ✓ GC __ HPLC

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
n- Triacontane - d62	NS	0.3338	0.360586	108	108	0

Sample ID:

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Sample ID:

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

LDC #: 25911L41
SDG #: µ covers

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

Reviewer: F
2nd Reviewer: [illegible]

METHOD: ✓ GC __HPLC

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100* (SSC-SC)/SA
RPD = I LCS - LCSD I * 2/(LCS + LCSD)

Where: SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory control sample percent recovery
SC = Concentration
LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: LCS

Compound	Spike Added (mg/kg)		Spiked Sample Concentration (mg/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)										
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)										
2,4,6-Trinitrotoluene (8330)										
m-Terphenyl	1.68	NA	1.31	NA	78	78	NA	—		

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25 9/1241
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: ✓ GC __ HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

$$\text{Concentration} = \frac{(A)(Fv)(Df)}{(RF)(Vs \text{ or } Ws)(\%S/100)}$$

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound in the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID._____ Compound Name _____

Concentration =_____

NP

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications

Comments: _____

SAMPCALew.wpd

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	March 10, 2011
LDC Report Date:	August 18, 2011
Matrix:	Soil
Parameters:	Alcohols
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE103

Sample Identification

SL-115-SA5A-SB-6.5-7.5
SL-115-SA5A-SB-13.0-14.0
SL-116-SA5A-SB-6.0-7.0
SL-116-SA5A-SB-14.0-15.0

Introduction

This data review covers 4 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8015B for Alcohols.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0% .

Retention time windows were evaluated and considered technically acceptable.

III. Calibration Verification

Calibration verification was performed at required frequencies.

The percent differences (%D) of calibration factors in continuing standard mixtures were within the 20.0% QC limits.

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

Retention times (RT) of all compounds in the calibration standards were within QC limits.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No alcohol contaminants were found in the method blanks.

No field blanks were identified in this SDG.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VI. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VII. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE103	All compounds reported below the RL.	J (all detects)	A

X. System Performance

The system performance was acceptable.

XI. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XII. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Alcohols - Data Qualification Summary - SDG DE103

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE103	SL-115-SA5A-SB-6.5-7.5 SL-115-SA5A-SB-13.0-14.0 SL-116-SA5A-SB-6.0-7.0 SL-116-SA5A-SB-14.0-15.0	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
Alcohols - Laboratory Blank Data Qualification Summary - SDG DE103

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Alcohols - Field Blank Data Qualification Summary - SDG DE103

No Sample Data Qualified in this SDG

LDC #: 25911L43 **VALIDATION COMPLETENESS WORKSHEET** Date: 8/8/11
SDG #: DE103 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer:
2nd Reviewer:

METHOD: GC Alcohols (EPA SW 846 Method 8015B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 3/14/11
II	Initial calibration	A	% RSD ≤ 20
III.	Calibration verification/ICV	A	ICV/CCV ≤ 20
IV.	Blanks	A	
V	Surrogate recovery	A	
VI.	Matrix spike/Matrix spike duplicates	N	client specified
VII.	Laboratory control samples	A	LCS
VIII.	Target compound identification	A	
IX.	Compound Quantitation and CRQLs	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	N	
XIII.	Field blanks	N	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: SOIL

1	SL-115-SA5A-SB-6.5-7.5	11	PBLK 260TS	21		31	
2	SL-115-SA5A-SB-13.0-14.0	12		22		32	
3	SL-115-SA5A-SB-6.0-7.0	13		23		33	
4	SL-115-SA5A-SB-14.0-15.0	14		24		34	
5		15		25		35	
6		16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

LDC #: 25911L43
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Page: 1 of 2
Reviewer: FT
2nd Reviewer: A

Method: ✓ GC _____ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation?		✓		
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?			✓	
Were the RT windows properly established?	✓			
IV. Continuing calibration				
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20%.0 or percent recoveries 80-120%?	✓			
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.			✓	
Was a MS/MSD analyzed every 20 samples of each matrix?			✓	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	

LDC #: 25911L43
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Reviewer: FJ
2nd Reviewer: C

Validation Area	Yes	No	NA	Findings/Comments
X. Target compound identification				
Were the retention times of reported detects within the RT windows?	✓			
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XV. Field blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

LDC #: 25911L43
SDG #: per cover

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: FJ
2nd Reviewer: CP

METHOD: GC ✓ HPLC ____

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

DOS

#	Standard ID	Calibration Date	Compound	Reported CF (500 std)	Recalculated CF (500 std)	Reported Average CF (initial)	Recalculated Average CF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	3/4/11	methanol	6.07	6.07	6.11	6.11	6.1	6.1
2	ICAL	2/23/11	methanol	8.63	8.63	8.50	8.50	3.0	3.0
3									
4									

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 95 911L43
SDG #: w conn

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: EJ
2nd Reviewer: C

METHOD: GC ✓ HPLC ____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF - CF)/ave. CF
CF = A/C

Where: ave. CF = Initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(Ical)/ CCV Conc.	Reported CF/Conc. CCV	Recalculated CF/Conc. CCV	Reported %D	Recalculated %D
1	CCV	3/16/11	Methanol	2500.0	2382.57	2382.57	4.7	4.7
	16:08							
2	CCV	3/16/11	↓	↓	2371.57	2371.57	5.1	5.1
	20:06							
3								
4								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25711477
SDG #: see cover
METHOD: ✓ GC __ HPLC

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT
2nd reviewer: [illegible]

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
Acetone	NS	2500	2302.02	92	92	0

Sample ID:

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Sample ID:

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

LDC #: 25911L43
SDG #: µL cover

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

Reviewer: B
2nd Reviewer: C

METHOD: ✓ GC __HPLC

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100* (SSC-SC)/SA
RPD = | LCS - LCSD | * 2/(LCS + LCSD)

Where: SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory control sample percent recovery
SC = Concentration
LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: LCS

Compound	Spike Added (ug/kg)		Spiked Sample Concentration (ug/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)										
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)										
2,4,6-Trinitrotoluene (8330)										
Methanol	2500	NA	2271.61	NA	91	91	NA			

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25911L43
SDG #: pu [illegible]

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: ✓ GC __ HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= $\frac{(A)(Fv)(Df)}{(RF)(Vs \text{ or } Ws)(\%S/100)}$

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound in the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID._____ Compound Name _____

Concentration =_____

~~NA~~ ND

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications

Comments: _____

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Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	March 10, 2011
LDC Report Date:	August 18, 2011
Matrix:	Soil
Parameters:	Glycols
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE103

Sample Identification

SL-115-SA5A-SB-6.5-7.5
SL-115-SA5A-SB-13.0-14.0
SL-116-SA5A-SB-6.0-7.0
SL-116-SA5A-SB-14.0-15.0

Introduction

This data review covers 4 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8015B for Glycols.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0%.

Retention time windows were evaluated and considered technically acceptable.

III. Calibration Verification

Calibration verification was performed at required frequencies.

The percent differences (%D) of calibration factors in continuing standard mixtures were within the 20.0% QC limits with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
3/16/11 (F075.0034)	Propylene glycol Ethylene glycol Diethylene glycol	27.8 29.8 63.3	SL-115-SA5A-SB-6.5-7.5 SL-115-SA5A-SB-13.0-14.0 SL-116-SA5A-SB-6.0-7.0 SL-116-SA5A-SB-14.0-15.0	J (all detects) UJ (all non-detects)	A

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

Retention times (RT) of all compounds in the calibration standards were within QC limits.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No glycol contaminants were found in the method blanks.

No field blanks were identified in this SDG.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VI. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VII. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE103	All compounds reported below the RL.	J (all detects)	A

X. System Performance

The system performance was acceptable.

XI. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XII. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Glycols - Data Qualification Summary - SDG DE103

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE103	SL-115-SA5A-SB-6.5-7.5 SL-115-SA5A-SB-13.0-14.0 SL-116-SA5A-SB-6.0-7.0 SL-116-SA5A-SB-14.0-15.0	Propylene glycol Ethylene glycol Diethylene glycol	J (all detects) UJ (all non-detects)	A	Calibration verification (%D) (C)
DE103	SL-115-SA5A-SB-6.5-7.5 SL-115-SA5A-SB-13.0-14.0 SL-116-SA5A-SB-6.0-7.0 SL-116-SA5A-SB-14.0-15.0	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
Glycols - Laboratory Blank Data Qualification Summary - SDG DE103

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Glycols - Field Blank Data Qualification Summary - SDG DE103

No Sample Data Qualified in this SDG

LDC #: 25911L45 **VALIDATION COMPLETENESS WORKSHEET** Date: 8/8/11

SDG #: DE103 Level IV Page: 1 of 1

Laboratory: Lancaster Laboratories Reviewer: EJ

2nd Reviewer: AL

METHOD: GC Glycols (EPA SW 846 Method 8015B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 3/10/11
II	Initial calibration	A	% RSD ≤ 20
III.	Calibration verification/ICV	SW	ICV/CCV ≤ 20
IV.	Blanks	A	
V	Surrogate recovery	A	
VI.	Matrix spike/Matrix spike duplicates	N	client specified
VII.	Laboratory control samples	A	LCS
VIII.	Target compound identification	A	
IX.	Compound Quantitation and CRQLs	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	N	
XIII.	Field blanks	N	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: SOIL

1	SL-115-SA5A-SB-6.5-7.5	11	PBLK0707 3	21		31	
2	SL-115-SA5A-SB-13.0-14.0	12		22		32	
3	SL-115-SA5A-SB-6.0-7.0	13		23		33	
4	SL-115-SA5A-SB-14.0-15.0	14		24		34	
5		15		25		35	
6		16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

LDC #: 25911L45
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Page: 1 of 2
Reviewer: [illegible]
2nd Reviewer: [illegible]

Method: ✓ GC ____ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation?		✓		
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?			✓	
Were the RT windows properly established?	✓			
IV. Continuing calibration				
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20%.0 or percent recoveries 80-120%?	A	✓		
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.			✓	
Was a MS/MSD analyzed every 20 samples of each matrix?			✓	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	

LDC #: 25911L45
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Reviewer: FJ
2nd Reviewer: C

Validation Area	Yes	No	NA	Findings/Comments
X. Target compound identification				
Were the retention times of reported detects within the RT windows?			✓	
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XV. Field blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

LDC #: 25911L45

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Page: 1 of 1
Reviewer: FT

METHOD: ✓ **GC** __ **HPLC**

2nd Reviewer: C

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".
What type of continuing calibration calculation was performed? __%D or __RPD
Y N N/A Were continuing calibration standards analyzed at the required frequencies?
Y N N/A Did the continuing calibration standards meet the %D / RPD validation criteria of ≤20.0%?
Level IV Only
Y N N/A Were the retention times for all calibrated compounds within their respective acceptance windows?

(C)

#	Date	Standard ID	Detector/ Column	Compound	%D (Limit ≤ 20.0)	RT (limit)	Associated Samples	Qualifications
–	3/16/11	F075.0034	NS	propylene glycol	27.8	( )	1-4	J/UJ/A
–				ethylene glycol	29.8	( )	↓	↓
–				Diethylene glycol	63.3	( )		
						( )		
						( )		
						( )		
						( )		
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LDC #: 25911L45
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC ✓ HPLC ____

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

lw 4

#	Standard ID	Calibration Date	Compound	Reported 200.5164 CF (std)	Recalculated 200.5164 CF (std)	Reported Average CF (Initial)	Recalculated Average CF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL	3/16/11	Propylene glycol	2.12×10^2	2.12×10^2	2.2×10^2 (218.26)	2.2×10^2	11.3	11.29
2									
3									
4									

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 75911L45
SDG #: per cover

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: EJ
2nd Reviewer: C

METHOD: GC ✓ HPLC_____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF - CF)/ave. CF
CF = A/C

Where: ave. CF = Initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(Ical)/ CCV Conc.	Reported CF/Conc. CCV	Recalculated CF/Conc. CCV	Reported %D	Recalculated %D
1	F075.0012	3/16/11	Propylene Glycol	320.07	318.20	318.20	0.6	0.6
2	F075.0034	3/16/11	↓	100.26	72.38	72.38	27.8	27.8
3								
4								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25911L43
SDG #: see cover

METHOD: ✓ GC __ HPLC

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT
2nd reviewer: A

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
Tetramethylene glycol	NS	~~[illegible]~~ 197	108.589	55	55	0

Sample ID:

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Sample ID:

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

LDC #: 25911L4J
SDG #: pu cover

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: ✓ GC __HPLC

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100* (SSC-SC)/SA
RPD = | LCS - LCSD | * 2/(LCS + LCSD)

Where: SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory control sample percent recovery
SC = Concentration
LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: LCS

Compound	Spike Added (mg/kg)		Spiked Sample Concentration (mg/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)										
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)										
2,4,6-Trinitrotoluene (8330)										
Ethylene glycol	205.03	NA	173.35	NA	85	85	NA			

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25911L45
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: ✓ GC ___ HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= $\frac{(A)(Fv)(Df)}{(RF)(Vs \text{ or } Ws)(\%S/100)}$

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound in the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID._____ Compound Name _____

Concentration = _____

ND

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications

Comments: _____

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Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	March 10, 2011
LDC Report Date:	August 18, 2011
Matrix:	Soil
Parameters:	Formaldehyde
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE103

Sample Identification

SL-115-SA5A-SB-6.5-7.5
SL-115-SA5A-SB-13.0-14.0
SL-116-SA5A-SB-6.0-7.0
SL-116-SA5A-SB-14.0-15.0
SL-115-SA5A-SB-6.5-7.5MS
SL-115-SA5A-SB-6.5-7.5MSD

Introduction

This data review covers 6 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8315A for Formaldehyde.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0% .

III. Calibration Verification

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 20.0% QC limits.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No formaldehyde was found in the method blanks.

No field blanks were identified in this SDG.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VI. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VII. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE103	All compounds reported below the RL.	J (all detects)	A

X. System Performance

The system performance was acceptable.

XI. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XII. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Formaldehyde - Data Qualification Summary - SDG DE103

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE103	SL-115-SA5A-SB-6.5-7.5 SL-115-SA5A-SB-13.0-14.0 SL-116-SA5A-SB-6.0-7.0 SL-116-SA5A-SB-14.0-15.0	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
Formaldehyde - Laboratory Blank Data Qualification Summary - SDG DE103

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Formaldehyde - Field Blank Data Qualification Summary - SDG DE103

No Sample Data Qualified in this SDG

LDC #: 25911L71 **VALIDATION COMPLETENESS WORKSHEET** Date: 8/8/11
SDG #: DE103 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: HPLC Formaldehyde (EPA SW 846 Method 8315A)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 3/10/11
II	Initial calibration	A	% RSD ≤ 20
III.	Calibration verification/~~ICV~~	A	CCV ≤ 20
IV.	Blanks	A	
V	Surrogate recovery	A	
VI.	Matrix spike/Matrix spike duplicates	~~A~~	
VII.	Laboratory control samples	A	LCS
VIII.	Target compound identification	A	
IX.	Compound Quantitation and CRQLs	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	N	
XIII.	Field blanks	N	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:
SOIL

1	SL-115-SA5A-SB-6.5-7.5	11	PB LK 01075	21		31	
2	SL-115-SA5A-SB-13.0-14.0	12		22		32	
3	SL-116-SA5A-SB-6.0-7.0	13		23		33	
4	SL-116-SA5A-SB-14.0-15.0	14		24		34	
5	#1 MS	15		25		35	
6	#1 MSD	16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

LDC #: 25911L71
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Page: 1 of 2
Reviewer: [illegible]
2nd Reviewer: [illegible]

Method: ✓ GC ____ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation?		✓		
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?			✓	
Were the RT windows properly established?	✓			
IV. Continuing calibration				
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20%.0 or percent recoveries 80-120%?	✓			
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?	✓			
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	

LDC #: 25911L71
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Reviewer: FJ
2nd Reviewer: [illegible]

Validation Area	Yes	No	NA	Findings/Comments
X. Target compound identification				
Were the retention times of reported detects within the RT windows?			✓	
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?		✓		
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XV. Field blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

LDC #: 25911L7 /
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC ✓ HPLC ____

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

#	Standard ID	Calibration Date	Compound	Reported CF (100/ std)	Recalculated CF (100/ std)	Reported Average CF (initial)	Recalculated Average CF (initial)	Reported %RSD	Recalculated %RSD
1	ICA L	3/9/11	Formaldehyde	4.13×10^{1}	4.13×10^{1}	5.45×10^{1}	5.45×10^{1}	18.0	18.0
2									
3									
4									

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 75911L71
SDG #: per cover

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: FT
2nd Reviewer: A

METHOD: GC ✓ HPLC_____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF - CF)/ave. CF
CF = A/C

Where: ave. CF = initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(Ical)/ CCV Conc.	Reported CF/Conc. CCV	Recalculated CF/Conc. CCV	Reported %D	Recalculated %D
1	IF4078.20R	3/19/11	Formaldehyde	2002.00	1906.95	1906.95	4.7	4.7
2								
3								
4								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25711L11
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Page: 1 of 1
Reviewer: FT
2nd reviewer: C

METHOD: ✓ GC ___ HPLC

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
Butyraldehyde	N/S	4000	5031.232	126	126	0

Sample ID: ___

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Sample ID: ___

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

LDC #: 25 1116 11
SDG #: pu cover

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Reviewer: FZ
2nd Reviewer: [illegible]

METHOD: ✓ GC __HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

%Recovery = 100 * (SSC - SC)/SA Where SSC = Spiked sample concentration SC = Sample concentration
SA = Spike added
RPD =(((SSCMS - SSCMSD} * 2) / (SSCMS + SSCMSD))*100 MS = Matrix spike MSD = Matrix spike duplicate

MS/MSD samples: 5 + 6

Compound	Spike Added (ug/kg)		Sample Conc. (ug/kg)	Spike Sample Concentration (ug/kg)		Matrix spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	---	MS	MSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)											
Diesel (8015)											
Benzene (8021B)											
Methane (RSK-175)											
2,4-D (8151)											
Dinoseb (8151)											
Naphthalene (8310)											
Anthracene (8310)											
HMX (8330)											
2,4,6-Trinitrotoluene (8330)											
Formaldehyde	5010	5010	ND	532784	5296.77	106	106	106	106	1	1

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25911L71
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

Reviewer: F
2nd Reviewer: C

METHOD: ✓ GC __ HPLC

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100* (SSC-SC)/SA
RPD = I LCS - LCSD I * 2/(LCS + LCSD)

Where: SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory control sample percent recovery
SC = Concentration
LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: LCS

Compound	Spike Added (ug/kg)		Spiked Sample Concentration (ug/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)										
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)										
2,4,6-Trinitrotoluene (8330)										
Formaldehyde	5010	NA	5244.32	NA	105	105	NA			

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25911L71
SDG #: pu gamer

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: ✓ GC ___ HPLC

Y N ~~N/A~~ Were all reported results recalculated and verified for all level IV samples?
Y N ~~N/A~~ Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= $\frac{(A)(Fv)(Df)}{(RF)(Vs \text{ or } Ws)(\%S/100)}$

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound in the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID._____ Compound Name _____

Concentration = _____

ND

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications

Comments: _____

SAMPCALew.wpd

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	March 10, 2011
LDC Report Date:	August 11, 2011
Matrix:	Soil
Parameters:	Perchlorate
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE103

Sample Identification

SL-115-SA5A-SB-6.0-7.0
SL-115-SA5A-SB-6.0-7.0MS
SL-115-SA5A-SB-6.0-7.0MSD

Introduction

This data review covers 3 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 6850 for Perchlorate.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance check is not required by the method.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

A curve fit, based on the initial calibration, was established for quantitation. The coefficient of determination (r^2) was greater than or equal to 0.990 .

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

All of the continuing calibration percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were less than or equal to 15.0% for unlabeled compounds and less than or equal to 50.0% for labeled compounds.

The percent differences (%D) of the second source calibration standard were less than or equal to 15.0% for unlabeled compounds and less than or equal to 50.0% for labeled compounds.

The percent differences (%D) of the limit of detection verification (LODV) calibration standard were less than or equal to 30.0% for perchlorate.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No perchlorate was found in the method blanks.

No field blanks were identified in this SDG.

VI. Surrogate Spikes

Surrogate spikes were not required by the method.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE103	All compounds reported below the RL.	J (all detects)	A

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was acceptable.

XV. Overall Assessment

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Perchlorate - Data Qualification Summary - SDG DE103

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE103	SL-115-SA5A-SB-6.0-7.0	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
Perchlorate - Laboratory Blank Data Qualification Summary - SDG DE103

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Perchlorate - Field Blank Data Qualification Summary - SDG DE103

No Sample Data Qualified in this SDG

LDC #: 25911L87 **VALIDATION COMPLETENESS WORKSHEET** Date: 8/8/11
SDG #: DE103 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer:
2nd Reviewer:

METHOD: LC/MS Perchlorate (EPA SW846 Method 6850)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 3/10/11
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	A	r^2
IV.	Continuing calibration/ICV	A	ICV/CCV ≤15/30 LODV ≤30
V.	Blanks	A	
VI.	Surrogate spikes	N	
VII.	Matrix spike/Matrix spike duplicates	A	
VIII.	Laboratory control samples	A	LCS
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A	
XI.	Target compound identification	A	
XII.	Compound quantitation/CRQLs	A	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	A	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	N	
XVII.	Field blanks	N	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:

	SOIL						
1	SL-115-SA5A-SB-6.0-7.0	11	PBLK23080	21		31	
2	#1M	12		22		32	
3	#1MSD	13		23		33	
4		14		24		34	
5		15		25		35	
6		16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

LDC #: 25911L87

VALIDATION FINDINGS CHECKLIST

Page: 6 of 7
Reviewer: FT
2nd Reviewer: C

Method: ~~Semivolatiles (EPA SW 846 Method 8270C)~~ 6850

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. GC/MS instrument performance check				
Were the DFTPP performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
III. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?			✓	
Was a curve fit used for evaluation?	✓			
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?	✓			
Were all percent relative standard deviations (%RSD) ≤ 30% and relative response factors (RRF) > 0.05?			✓	
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓			
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?			✓	
Were all percent differences (%D) ≤ ~~25~~% 15/50 and relative response factors (RRF) ≥ 0.05?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate recoveries				
Were all surrogate %R within QC limits?			✓	
If 2 or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R?			✓	
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?			✓	
VII. Matrix spike/matrix spike duplicate				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?	✓			
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			

LDC #: 29 11L87

VALIDATION FINDINGS CHECKLIST

Reviewer: FT

2nd Reviewer: [illegible]

Validation Area	Yes	No	NA	Findings/Comments
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
X. Internal Standards				
Were internal standard area counts within -50% or +100% of the associated calibration standard?	✓			
Were retention times within ± 30 seconds from the associated calibration standard?	✓			
XI. Target Compound Identification				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?			✓	
Did compound spectra meet specified EPA "Functional Guidelines" criteria?			✓	
Were chromatogram peaks verified and accounted for?	✓			
XII. Compound Quantitation				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?			✓	
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XIII. Tentatively Identified Compounds				
Were the major ions (> 10 percent relative intensity) in the reference spectrum evaluated in sample spectrum?			✓	
Were relative intensities of the major ions within ± 20% between the sample and the reference spectra?			✓	
Did the raw data indicate that the laboratory performed a library search for all required peaks in the chromatograms (samples and blanks)?			✓	
XIV. System Performance				
System performance was found to be acceptable.	✓			
XV. Overall Assessment of Data				
Overall assessment of data was found to be acceptable.	✓			
XVI. Field Duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XVII. Field Blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

VALIDATION FINDINGS WORKSHEET

METHOD: GC/MS BNA (EPA Method 8270)

A. Phenol	P. Bis(2-chloroethoxy)methane	EE. 2,6-Dinitrotoluene	TT. Pentachlorophenol	III. Benzo(a)pyrene
B. Bis (2-chloroethyl) ether	Q. 2,4-Dichlorophenol	FF. 3-Nitroaniline	UU. Phenanthrene	JJJ. Indeno(1,2,3-cd)pyrene
C. 2-Chlorophenol	R. 1,2,4-Trichlorobenzene	GG. Acenaphthene	VV. Anthracene	KKK. Dibenz(a,h)anthracene
D. 1,3-Dichlorobenzene	S. Naphthalene	HH. 2,4-Dinitrophenol	WW. Carbazole	LLL. Benzo(g,h,i)perylene
E. 1,4-Dichlorobenzene	T. 4-Chloroaniline	II. 4-Nitrophenol	XX. Di-n-butylphthalate	MMM. Bis(2-Chloroisopropyl)ether
F. 1,2-Dichlorobenzene	U. Hexachlorobutadiene	JJ. Dibenzofuran	YY. Fluoranthene	NNN. Aniline
G. 2-Methylphenol	V. 4-Chloro-3-methylphenol	KK. 2,4-Dinitrotoluene	ZZ. Pyrene	OOO. N-Nitrosodimethylamine
H. 2,2'-Oxybis(1-chloropropane)	W. 2-Methylnaphthalene	LL. Diethylphthalate	AAA. Butylbenzylphthalate	PPP. Benzoic Acid
I. 4-Methylphenol	X. Hexachlorocyclopentadiene	MM. 4-Chlorophenyl-phenyl ether	BBB. 3,3'-Dichlorobenzidine	QQQ. Benzyl alcohol
J. N-Nitroso-di-n-propylamine	Y. 2,4,6-Trichlorophenol	NN. Fluorene	CCC. Benzo(a)anthracene	RRR. Pyridine
K. Hexachloroethane	Z. 2,4,5-Trichlorophenol	OO. 4-Nitroaniline	DDD. Chrysene	SSS. Benzidine
L. Nitrobenzene	AA. 2-Chloronaphthalene	PP. 4,6-Dinitro-2-methylphenol	EEE. Bis(2-ethylhexyl)phthalate	TTT. 1-Methylnaphthalene
M. Isophorone	BB. 2-Nitroaniline	QQ. N-Nitrosodiphenylamine (1)	FFF. Di-n-octylphthalate	UUU.
N. 2-Nitrophenol	CC. Dimethylphthalate	RR. 4-Bromophenyl-phenylether	GGG. Benzo(b)fluoranthene	VVV.
O. 2,4-Dimethylphenol	DD. Acenaphthylene	SS. Hexachlorobenzene	HHH. Benzo(k)fluoranthene	WWW.

LDC # 25911L87
SDG# see comm

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: B
2nd Reviewer: C

METHOD: Method 6850

Parameter: perchlorate

Date	Column	Compound	y	x	
03/22/2011	LCMS	perchlorate	0.0282	0.020	
			0.0448	0.040	
			0.1060	0.100	
			0.2088	0.200	
			0.4177	0.400	
			1.0595	1.000	
			2.7232	2.500	

Regression Output:		Regression Output:	Reported	
Constant		-0.00653		-6.6000E-003
Std Err of Y Est		0.01376		
R Squared		0.99984		0.99900
No. of Observations		7.00000		
Degrees of Freedom		5.00000		
X Coefficient(s)	1.088E+000		0.10880	
Std Err of Coef.	0.006235	0.04		

LDC #: 25911L87

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Page: 1 of 1
Reviewer: FT
2nd Reviewer: [illegible]

METHOD: ~~GC/MS BNA (EPA SW 846 Method 8270C)~~ 6850

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
RRF = $(A_x)(C_{is})/(A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Average RRF (initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
1	CCV	3/22/11	~~Phenol (1st internal standard)~~ Perchlorate	4	4.21	4.21	5	5
			~~Naphthalene (2nd internal standard)~~					
			Fluorene (3rd internal standard)					
			Pentachlorophenol (4th internal standard)					
			Bis(2-ethylhexyl)phthalate (5th internal standard)					
			~~Benzo(a)pyrene (6th internal standard)~~					
2			Phenol (1st internal standard)					
			Naphthalene (2nd internal standard)					
			Fluorene (3rd internal standard)					
			Pentachlorophenol (4th internal standard)					
			Bis(2-ethylhexyl)phthalate (5th internal standard)					
			Benzo(a)pyrene (6th internal standard)					
3			Phenol (1st internal standard)					
			Naphthalene (2nd internal standard)					
			Fluorene (3rd internal standard)					
			Pentachlorophenol (4th internal standard)					
			Bis(2-ethylhexyl)phthalate (5th internal standard)					
			Benzo(a)pyrene (6th internal standard)					

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25911487

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Reviewer: FT
2nd Reviewer:

METHOD: ~~GC/MS BNA (EPA SW 846 Method 8270)~~ 6850

The percent recoveries (%R) and Relative Percent Difference (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SSC - SC)/SA Where: SSC = Spiked sample concentration, SA = Spike added, SC = Sample concentation

RPD = | MSC - MSC | * 2/(MSC + MSDC) MSC = Matrix spike concentration MSDC = Matrix spike duplicate concentration

MS/MSD samples: 2 + 3

Compound	Spike Added (ug/kg)		Sample Concentration (ug/kg)	Spiked Sample Concentration (ug/kg)		Matrix Spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	----	MS	MSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
Perchlorate ~~Phenol~~	100	100	ND	98	103	98	98	103	103	5	5
~~N-Nitroso-di-n-propylamine~~											
4-Chloro-3-methylphenol											
Acenaphthene											
Pentachlorophenol											
Pyrene											

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25911481

VALIDATION FINDINGS WORKSHEET

Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: FT

2nd Reviewer: [illegible]

METHOD: ~~GC/MS BNA (EPA SW 846~~ Method 8270) 6852

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SC/SA

Where: SSC = Spike concentration
SA = Spike added

RPD = I LCSC - LCSDC I * 2/(LCSC + LCSDC)

LCSC = Laboraotry control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCS/LCSD samples: LCS

Compound	Spike Added (ug/kg)		Spike Concentration (ug/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
Phenol										
N-Nitroso-di-n-propylamine										
4-Chloro-3-methylphenol										
Acenaphthene										
Pentachlorophenol										
Pyrene										
Perchlorate	100	NA	10U	NA	100	10U	NA			

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25911187

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: FT
2nd reviewer: A

METHOD: ~~GC/MS BNA (EPA SW 846 Method 8270)~~ G&S 2

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(V_t)(DF)(2.0)}{(A_{is})(RRF)(V_o)(V_i)(\%S)}$

A_x	=	Area of the characteristic ion (EICP) for the compound to be measured
A_{is}	=	Area of the characteristic ion (EICP) for the specific internal standard
I_s	=	Amount of internal standard added in nanograms (ng)
V_o	=	Volume or weight of sample extract in milliliters (ml) or grams (g).
V_i	=	Volume of extract injected in microliters (ul)
V_t	=	Volume of the concentrated extract in microliters (ul)
Df	=	Dilution Factor.
%S	=	Percent solids, applicable to soil and solid matrices only.
2.0	=	Factor of 2 to account for GPC cleanup

Example:

Sample I.D. _____, _____:

Conc. = (_____)(_____)(_____)(_____)(_____) / (_____)(_____)(_____)(_____)(_____)

=

ND

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification

SAMPLE DELIVERY GROUP

DE104

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
14-Mar-2011	TB-031411	6230065	TB	5030B	8015M	III
14-Mar-2011	TB-031411	6230065	TB	5030B	8260B	III
14-Mar-2011	TB-031411	6230065	TB	5030B	8260B SIM	III
14-Mar-2011	SL-117-SA5A-SB-5.0-6.0	6230063	N	3050B	6010B	III
14-Mar-2011	SL-117-SA5A-SB-5.0-6.0	6230063	N	3050B	6020	III
14-Mar-2011	SL-117-SA5A-SB-5.0-6.0	6230063	N	3060A	7199	III
14-Mar-2011	SL-117-SA5A-SB-5.0-6.0	6230063	N	3546	1625C	III
14-Mar-2011	SL-117-SA5A-SB-5.0-6.0	6230063	N	3550B	8015B	III
14-Mar-2011	SL-117-SA5A-SB-5.0-6.0	6230063	N	3550B	8015M	III
14-Mar-2011	SL-117-SA5A-SB-5.0-6.0	6230063	N	3550B	8082	III
14-Mar-2011	SL-117-SA5A-SB-5.0-6.0	6230063	N	3550B	8270C	III
14-Mar-2011	SL-117-SA5A-SB-5.0-6.0	6230063	N	3550B	8270C SIM	III
14-Mar-2011	SL-117-SA5A-SB-5.0-6.0	6230063	N	5035	8015M	III
14-Mar-2011	SL-117-SA5A-SB-5.0-6.0	6230063	N	5035	8260B	III
14-Mar-2011	SL-117-SA5A-SB-5.0-6.0	6230063	N	5035	8260B SIM	III
14-Mar-2011	SL-117-SA5A-SB-5.0-6.0	6230063	N	8330	8330A	III
14-Mar-2011	SL-117-SA5A-SB-5.0-6.0	6230063	N	Gen Prep	9045M	III
14-Mar-2011	SL-117-SA5A-SB-5.0-6.0	6230063	N	METHOD	300.0	III
14-Mar-2011	SL-117-SA5A-SB-5.0-6.0	6230063	N	METHOD	314.0	III
14-Mar-2011	SL-117-SA5A-SB-5.0-6.0	6230063	N	METHOD	7471A	III
14-Mar-2011	SL-117-SA5A-SB-5.0-6.0	6230063	N	METHOD	8015B	III
14-Mar-2011	SL-117-SA5A-SB-5.0-6.0	6230063	N	METHOD	8015M	III
14-Mar-2011	SL-117-SA5A-SB-5.0-6.0	6230063	N	METHOD	8315A	III
14-Mar-2011	SL-117-SA5A-SB-5.0-6.0	6230063	N	METHOD	9012B	III
14-Mar-2011	SL-118-SA5A-SB-2.5-3.5	6230062	N	3050B	6010B	III
14-Mar-2011	SL-118-SA5A-SB-2.5-3.5	6230062	N	3050B	6020	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
14-Mar-2011	SL-118-SA5A-SB-2.5-3.5	6230062	N	3060A	7199	III
14-Mar-2011	SL-118-SA5A-SB-2.5-3.5	6230062	N	3546	1625C	III
14-Mar-2011	SL-118-SA5A-SB-2.5-3.5	6230062	N	3550B	8015B	III
14-Mar-2011	SL-118-SA5A-SB-2.5-3.5	6230062	N	3550B	8015M	III
14-Mar-2011	SL-118-SA5A-SB-2.5-3.5	6230062	N	3550B	8082	III
14-Mar-2011	SL-118-SA5A-SB-2.5-3.5	6230062	N	3550B	8270C	III
14-Mar-2011	SL-118-SA5A-SB-2.5-3.5	6230062	N	3550B	8270C SIM	III
14-Mar-2011	SL-118-SA5A-SB-2.5-3.5	6230062	N	5035	8015M	III
14-Mar-2011	SL-118-SA5A-SB-2.5-3.5	6230062	N	5035	8260B	III
14-Mar-2011	SL-118-SA5A-SB-2.5-3.5	6230062	N	5035	8260B SIM	III
14-Mar-2011	SL-118-SA5A-SB-2.5-3.5	6230062	N	8330	8330A	III
14-Mar-2011	SL-118-SA5A-SB-2.5-3.5	6230062	N	Gen Prep	9045M	III
14-Mar-2011	SL-118-SA5A-SB-2.5-3.5	6230062	N	METHOD	300.0	III
14-Mar-2011	SL-118-SA5A-SB-2.5-3.5	6230062	N	METHOD	314.0	III
14-Mar-2011	SL-118-SA5A-SB-2.5-3.5	6230062	N	METHOD	7471A	III
14-Mar-2011	SL-118-SA5A-SB-2.5-3.5	6230062	N	METHOD	8015B	III
14-Mar-2011	SL-118-SA5A-SB-2.5-3.5	6230062	N	METHOD	8015M	III
14-Mar-2011	SL-118-SA5A-SB-2.5-3.5	6230062	N	METHOD	8315A	III
14-Mar-2011	SL-118-SA5A-SB-2.5-3.5	6230062	N	METHOD	9012B	III
14-Mar-2011	SL-118-SA5A-SB-2.5-3.5MSD	P230062M321041A	MSD	3550B	8015B	III
14-Mar-2011	SL-118-SA5A-SB-2.5-3.5MSD	P230062M321949A	MSD	METHOD	8015M	III
14-Mar-2011	SL-118-SA5A-SB-2.5-3.5MS	P230062R320956A	MS	3550B	8015B	III
14-Mar-2011	SL-118-SA5A-SB-2.5-3.5MS	P230062R321932A	MS	METHOD	8015M	III
14-Mar-2011	SL-121-SA5A-SB-2.0-3.0	6230061	N	3050B	6010B	III
14-Mar-2011	SL-121-SA5A-SB-2.0-3.0	6230061	N	3050B	6020	III
14-Mar-2011	SL-121-SA5A-SB-2.0-3.0	6230061	N	3060A	7199	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
14-Mar-2011	SL-121-SA5A-SB-2.0-3.0	6230061	N	3550B	8082	III
14-Mar-2011	SL-121-SA5A-SB-2.0-3.0	6230061	N	3550B	8270C	III
14-Mar-2011	SL-121-SA5A-SB-2.0-3.0	6230061	N	3550B	8270C SIM	III
14-Mar-2011	SL-121-SA5A-SB-2.0-3.0	6230061	N	5035	8260B	III
14-Mar-2011	SL-121-SA5A-SB-2.0-3.0	6230061	N	5035	8260B SIM	III
14-Mar-2011	SL-121-SA5A-SB-2.0-3.0	6230061	N	Gen Prep	9045M	III
14-Mar-2011	SL-121-SA5A-SB-2.0-3.0	6230061	N	METHOD	300.0	III
14-Mar-2011	SL-121-SA5A-SB-2.0-3.0	6230061	N	METHOD	314.0	III
14-Mar-2011	SL-121-SA5A-SB-2.0-3.0	6230061	N	METHOD	6850	III
14-Mar-2011	SL-121-SA5A-SB-2.0-3.0	6230061	N	METHOD	7471A	III
14-Mar-2011	SL-121-SA5A-SB-2.0-3.0DUP	P230061D271735A	DUP	3060A	7199	III
14-Mar-2011	SL-121-SA5A-SB-2.0-3.0DUP	P230061D272013A	DUP	METHOD	314.0	III
14-Mar-2011	SL-121-SA5A-SB-2.0-3.0DUP	P230061D272046B	DUP	METHOD	300.0	III
14-Mar-2011	SL-121-SA5A-SB-2.0-3.0DUP	P230061D290930A	DUP	Gen Prep	9045M	III
14-Mar-2011	SL-121-SA5A-SB-2.0-3.0MSD	P230061M241328A	MSD	3550B	8082	III
14-Mar-2011	SL-121-SA5A-SB-2.0-3.0MSD	P230061M260929	MSD	3550B	8270C	III
14-Mar-2011	SL-121-SA5A-SB-2.0-3.0MSD	P230061M260931	MSD	3550B	8270C SIM	III
14-Mar-2011	SL-121-SA5A-SB-2.0-3.0MS	P230061R241310A	MS	3550B	8082	III
14-Mar-2011	SL-121-SA5A-SB-2.0-3.0MS	P230061R260900	MS	3550B	8270C SIM	III
14-Mar-2011	SL-121-SA5A-SB-2.0-3.0MS	P230061R260904	MS	3550B	8270C	III
14-Mar-2011	SL-121-SA5A-SB-2.0-3.0MS	P230061R271701A	MS	3060A	7199	III
14-Mar-2011	SL-121-SA5A-SB-2.0-3.0MS	P230061R272037A	MS	METHOD	314.0	III
14-Mar-2011	SL-121-SA5A-SB-2.0-3.0MS	P230061R272102B	MS	METHOD	300.0	III
14-Mar-2011	SL-001-SA5A-SB-4.0-5.0	6230064	N	3050B	6010B	III
14-Mar-2011	SL-001-SA5A-SB-4.0-5.0	6230064	N	3050B	6020	III
14-Mar-2011	SL-001-SA5A-SB-4.0-5.0	6230064	N	3060A	7199	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
14-Mar-2011	SL-001-SA5A-SB-4.0-5.0	6230064	N	3546	1625C	III
14-Mar-2011	SL-001-SA5A-SB-4.0-5.0	6230064	N	3550B	8015B	III
14-Mar-2011	SL-001-SA5A-SB-4.0-5.0	6230064	N	3550B	8015M	III
14-Mar-2011	SL-001-SA5A-SB-4.0-5.0	6230064	N	3550B	8082	III
14-Mar-2011	SL-001-SA5A-SB-4.0-5.0	6230064	N	3550B	8270C	III
14-Mar-2011	SL-001-SA5A-SB-4.0-5.0	6230064	N	3550B	8270C SIM	III
14-Mar-2011	SL-001-SA5A-SB-4.0-5.0	6230064	N	5035	8015M	III
14-Mar-2011	SL-001-SA5A-SB-4.0-5.0	6230064	N	5035	8260B	III
14-Mar-2011	SL-001-SA5A-SB-4.0-5.0	6230064	N	5035	8260B SIM	III
14-Mar-2011	SL-001-SA5A-SB-4.0-5.0	6230064	N	8330	8330A	III
14-Mar-2011	SL-001-SA5A-SB-4.0-5.0	6230064	N	Gen Prep	9045M	III
14-Mar-2011	SL-001-SA5A-SB-4.0-5.0	6230064	N	METHOD	300.0	III
14-Mar-2011	SL-001-SA5A-SB-4.0-5.0	6230064	N	METHOD	314.0	III
14-Mar-2011	SL-001-SA5A-SB-4.0-5.0	6230064	N	METHOD	7471A	III
14-Mar-2011	SL-001-SA5A-SB-4.0-5.0	6230064	N	METHOD	8015B	III
14-Mar-2011	SL-001-SA5A-SB-4.0-5.0	6230064	N	METHOD	8015M	III
14-Mar-2011	SL-001-SA5A-SB-4.0-5.0	6230064	N	METHOD	8315A	III
14-Mar-2011	SL-001-SA5A-SB-4.0-5.0	6230064	N	METHOD	9012B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE104 **Laboratory: LL**

EDD Filename: DE104_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-001-SA5A-SB-4.0-5.0 *Collected:* 3/14/2011 2:57:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.32	J	1.01	MDL	5.66	PQL	mg/Kg	J	Z
TIN	2.75	J	1.13	MDL	11.3	PQL	mg/Kg	U	B
Zirconium	1.42	J	0.951	MDL	5.66	PQL	mg/Kg	J	Z

Sample ID: SL-117-SA5A-SB-5.0-6.0 *Collected:* 3/14/2011 9:14:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.30	J	0.971	MDL	5.45	PQL	mg/Kg	J	Z
TIN	2.76	J	1.09	MDL	10.9	PQL	mg/Kg	U	B
Zirconium	1.27	J	0.916	MDL	5.45	PQL	mg/Kg	J	Z

Sample ID: SL-118-SA5A-SB-2.5-3.5 *Collected:* 3/14/2011 10:33:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.53	J	1.06	MDL	10.6	PQL	mg/Kg	U	B
Zirconium	1.93	J	0.891	MDL	5.30	PQL	mg/Kg	J	Z

Sample ID: SL-121-SA5A-SB-2.0-3.0 *Collected:* 3/14/2011 12:02:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.29	J	0.933	MDL	5.24	PQL	mg/Kg	J	Z
TIN	2.67	J	1.05	MDL	10.5	PQL	mg/Kg	U	B

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-001-SA5A-SB-4.0-5.0 *Collected:* 3/14/2011 2:57:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.113	J	0.0440	MDL	0.440	PQL	mg/Kg	J	Z

Sample ID: SL-001-SA5A-SB-4.0-5.0 *Collected:* 3/14/2011 2:57:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.0451	J	0.0440	MDL	0.110	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE104 **Laboratory: LL**

EDD Filename: DE104_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6020** ***Matrix:*** **SO**

Sample ID: **SL-001-SA5A-SB-4.0-5.0** ***Collected:*** **3/14/2011 2:57:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0508	J	0.0132	MDL	0.110	PQL	mg/Kg	J	Z

Sample ID: **SL-117-SA5A-SB-5.0-6.0** ***Collected:*** **3/14/2011 9:14:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.120	J	0.0436	MDL	0.436	PQL	mg/Kg	J	Z

Sample ID: **SL-117-SA5A-SB-5.0-6.0** ***Collected:*** **3/14/2011 9:14:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0250	J	0.0131	MDL	0.109	PQL	mg/Kg	J	Z

Sample ID: **SL-118-SA5A-SB-2.5-3.5** ***Collected:*** **3/14/2011 10:33:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.143	J	0.0428	MDL	0.428	PQL	mg/Kg	J	Z

Sample ID: **SL-118-SA5A-SB-2.5-3.5** ***Collected:*** **3/14/2011 10:33:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0332	J	0.0128	MDL	0.107	PQL	mg/Kg	J	Z

Sample ID: **SL-121-SA5A-SB-2.0-3.0** ***Collected:*** **3/14/2011 12:02:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.142	J	0.0428	MDL	0.428	PQL	mg/Kg	J	Z

Sample ID: **SL-121-SA5A-SB-2.0-3.0** ***Collected:*** **3/14/2011 12:02:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0327	J	0.0128	MDL	0.107	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE104 **Laboratory: LL**

EDD Filename: DE104_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS
Method: 7199 **Matrix:** SO

Sample ID: SL-121-SA5A-SB-2.0-3.0 *Collected:* 3/14/2011 12:02:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.30	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Method Category: METALS
Method: 7471A **Matrix:** SO

Sample ID: SL-118-SA5A-SB-2.5-3.5 *Collected:* 3/14/2011 10:33:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0123	J	0.0030	MDL	0.105	PQL	mg/Kg	J	Z

Method Category: SVOA
Method: 8015M **Matrix:** SO

Sample ID: SL-001-SA5A-SB-4.0-5.0 *Collected:* 3/14/2011 2:57:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C21-C30)	0.93	J	0.45	MDL	1.4	PQL	mg/Kg	J	Z, L
EFH (C30-C40)	3.9		0.45	MDL	1.4	PQL	mg/Kg	J	L

Sample ID: SL-117-SA5A-SB-5.0-6.0 *Collected:* 3/14/2011 9:14:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	0.92	J	0.90	MDL	2.7	PQL	mg/Kg	J	Z, L
EFH (C21-C30)	29		0.90	MDL	2.7	PQL	mg/Kg	J	L
EFH (C30-C40)	64		0.90	MDL	2.7	PQL	mg/Kg	J	L

Sample ID: SL-118-SA5A-SB-2.5-3.5 *Collected:* 3/14/2011 10:33:00 *Analysis Type:* REA2 *Dilution:* 50

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C21-C30)	520		22	MDL	66	PQL	mg/Kg	J	L
EFH (C30-C40)	1200		22	MDL	66	PQL	mg/Kg	J	L

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE104 **Laboratory: LL**

EDD Filename: DE104_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SL-118-SA5A-SB-2.5-3.5 *Collected:* 3/14/2011 10:33:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	20	J	18	MDL	370	PQL	ug/Kg	J	Z

Sample ID: SL-121-SA5A-SB-2.0-3.0 *Collected:* 3/14/2011 12:02:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DIMETHYLPHENOL	36	U	36	MDL	180	PQL	ug/Kg	UJ	Q
2,4-DINITROPHENOL	360	U	360	MDL	1100	PQL	ug/Kg	UJ	Q
2,4-DINITROTOLUENE	36	U	36	MDL	180	PQL	ug/Kg	UJ	Q
4-CHLORO-3-METHYLPHENOL	36	U	36	MDL	180	PQL	ug/Kg	UJ	Q

Method Category: SVOA

Method: 8270C SIM **Matrix:** SO

Sample ID: SL-117-SA5A-SB-5.0-6.0 *Collected:* 3/14/2011 9:14:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHRYSENE	0.62	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-118-SA5A-SB-2.5-3.5 *Collected:* 3/14/2011 10:33:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)PYRENE	6.5	J	3.7	MDL	9.2	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	4.4	J	3.7	MDL	9.2	PQL	ug/Kg	J	Z
CHRYSENE	6.1	J	1.8	MDL	9.2	PQL	ug/Kg	J	Z
Di-n-butylphthalate	58	J	33	MDL	99	PQL	ug/Kg	U	B

Sample ID: SL-121-SA5A-SB-2.0-3.0 *Collected:* 3/14/2011 12:02:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DIBENZO(A,H)ANTHRACENE	0.78	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
FLUORENE	0.87	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	2.2		0.72	MDL	1.8	PQL	ug/Kg	J	L
NAPHTHALENE	0.80	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE104 **Laboratory: LL**

EDD Filename: DE104_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **VOA**

Method: **8015B** ***Matrix:*** **SO**

Sample ID: **SL-118-SA5A-SB-2.5-3.5** ***Collected:*** **3/14/2011 10:33:00** ***Analysis Type:*** **REA3** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
m-Terphenyl	1.7	U	1.7	MDL	3.9	PQL	mg/Kg	UJ	Q
p-Terphenyl	1.7	U	1.7	MDL	3.9	PQL	mg/Kg	UJ	Q

Method Category: **VOA**

Method: **8260B** ***Matrix:*** **SO**

Sample ID: **SL-001-SA5A-SB-4.0-5.0** ***Collected:*** **3/14/2011 2:57:00** ***Analysis Type:*** **RES** ***Dilution:*** **0.83**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	2.9	J	0.22	MDL	3.7	PQL	ug/Kg	U	B

Sample ID: **SL-117-SA5A-SB-5.0-6.0** ***Collected:*** **3/14/2011 9:14:00** ***Analysis Type:*** **RES** ***Dilution:*** **0.95**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	1.0	J	0.26	MDL	4.2	PQL	ug/Kg	U	B

Sample ID: **SL-118-SA5A-SB-2.5-3.5** ***Collected:*** **3/14/2011 10:33:00** ***Analysis Type:*** **RES** ***Dilution:*** **0.95**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.96	J	0.25	MDL	4.2	PQL	ug/Kg	U	B
TOLUENE	2.3	J	0.08	MDL	4.2	PQL	ug/Kg	J	Z

Sample ID: **SL-121-SA5A-SB-2.0-3.0** ***Collected:*** **3/14/2011 12:02:00** ***Analysis Type:*** **RES** ***Dilution:*** **0.98**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	1.4	J	0.25	MDL	4.2	PQL	ug/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE104 **Laboratory: LL**

EDD Filename: DE104_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
*#	Professional Judgment
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Verification Correlation Coefficient
C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE104 **Laboratory: LL**

EDD Filename: DE104_v1 **eQAPP Name: CDM_SSFL_110509**

F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation
L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery Lower Estimation

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE104 **Laboratory: LL**

EDD Filename: DE104_v1 **eQAPP Name: CDM_SSFL_110509**

R	Continuing Calibration Verification Percent Recovery Lower Rejection
R	Continuing Calibration Verification Percent Recovery Upper Estimation
R	Continuing Calibration Verification Percent Recovery Upper Rejection
R	Continuing Calibration Verification Relative Response Factor
R	Initial Calibration Relative Response Factor
R	Initial Calibration Verification Percent Recovery Lower Estimation
R	Initial Calibration Verification Percent Recovery Lower Rejection
R	Initial Calibration Verification Percent Recovery Upper Estimation
R	Initial Calibration Verification Percent Recovery Upper Rejection
R	Initial Calibration Verification Relative Response Factor
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control Outlier Reports

DE104

Method Blank Outlier Report

Lab Reporting Batch ID: DE104 **Laboratory: LL**

EDD Filename: DE104_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **6010B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P07508AB221918	3/17/2011 7:18:00 PM	CALCIUM PHOSPHORUS TIN	8.02 mg/Kg 1.34 mg/Kg 1.44 mg/Kg	SL-001-SA5A-SB-4.0-5.0 SL-117-SA5A-SB-5.0-6.0 SL-118-SA5A-SB-2.5-3.5 SL-121-SA5A-SB-2.0-3.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-001-SA5A-SB-4.0-5.0(RES)	TIN	2.75 mg/Kg	2.75U mg/Kg
SL-117-SA5A-SB-5.0-6.0(RES)	TIN	2.78 mg/Kg	2.76U mg/Kg
SL-118-SA5A-SB-2.5-3.5(RES)	TIN	2.53 mg/Kg	2.53U mg/Kg
SL-121-SA5A-SB-2.0-3.0(RES)	TIN	2.67 mg/Kg	2.67U mg/Kg

Method: **6020**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P07526AB222150A	3/18/2011 9:50:00 PM	LEAD ZINC	0.0105 mg/Kg 0.644 mg/Kg	SL-001-SA5A-SB-4.0-5.0 SL-117-SA5A-SB-5.0-6.0 SL-118-SA5A-SB-2.5-3.5 SL-121-SA5A-SB-2.0-3.0

Method: **8015M**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P76765AB321804A	3/18/2011 6:04:00 PM	ETHYLENE GLYCOL	8.8 mg/Kg	SL-001-SA5A-SB-4.0-5.0 SL-118-SA5A-SB-2.5-3.5
P81813AB321805A	3/24/2011 6:05:00 PM	EFH (C30-C40)	0.54 mg/Kg	SL-001-SA5A-SB-4.0-5.0 SL-117-SA5A-SB-5.0-6.0 SL-118-SA5A-SB-2.5-3.5

Method: **8260B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB95B211312A	3/15/2011 1:12:00 PM	METHYLENE CHLORIDE TOLUENE	0.67 ug/Kg 0.11 ug/Kg	SL-001-SA5A-SB-4.0-5.0 SL-117-SA5A-SB-5.0-6.0 SL-118-SA5A-SB-2.5-3.5 SL-121-SA5A-SB-2.0-3.0

Method Blank Outlier Report

Lab Reporting Batch ID: DE104 **Laboratory: LL**

EDD Filename: DE104_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8260B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-001-SA5A-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	2.9 ug/Kg	3.7U ug/Kg
SL-117-SA5A-SB-5.0-6.0(RES)	METHYLENE CHLORIDE	1.0 ug/Kg	4.2U ug/Kg
SL-118-SA5A-SB-2.5-3.5(RES)	METHYLENE CHLORIDE	0.96 ug/Kg	4.2U ug/Kg
SL-121-SA5A-SB-2.0-3.0(RES)	METHYLENE CHLORIDE	1.4 ug/Kg	4.2U ug/Kg

Method: **8270C SIM**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKLB08B260727	3/25/2011 7:27:00 AM	Di-n-butylphthalate	11 ug/Kg	SL-001-SA5A-SB-4.0-5.0 SL-117-SA5A-SB-5.0-6.0 SL-118-SA5A-SB-2.5-3.5 SL-121-SA5A-SB-2.0-3.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-118-SA5A-SB-2.5-3.5(RES)	Di-n-butylphthalate	58 ug/Kg	99U ug/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE104 **Laboratory: LL**

EDD Filename: DE104_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-121-SA5A-SB-2.0-3.0MS	2,4-DIMETHYLPHENOL	77	-	78.00-110.00	-	2,4-DIMETHYLPHENOL	
SL-121-SA5A-SB-2.0-3.0MSD	2,4-DINITROPHENOL	-	16	20.00-143.00	-	2,4-DINITROPHENOL	J (all detects)
(SL-121-SA5A-SB-2.0-3.0)	2,4-DINITROTOLUENE	72	72	73.00-113.00	-	2,4-DINITROTOLUENE	UJ (all non-detects)
	4-CHLORO-3-METHYLPHENOL	71	73	76.00-110.00	-	4-CHLORO-3-METHYLPHENOL	

Method: 8015M
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-118-SA5A-SB-2.5-3.5MS	DIETHYLENE GLYCOL	129	140	59.00-109.00	-	DIETHYLENE GLYCOL	
SL-118-SA5A-SB-2.5-3.5MSD	ETHYLENE GLYCOL	132	145	63.00-107.00	-	ETHYLENE GLYCOL	J(all detects)
(SL-118-SA5A-SB-2.5-3.5)	Propylene glycol	132	140	63.00-107.00	-	Propylene glycol	

Method: 8015B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-118-SA5A-SB-2.5-3.5MS	m-Terphenyl	72	72	75.00-125.00	-	m-Terphenyl	J(all detects)
SL-118-SA5A-SB-2.5-3.5MSD	p-Terphenyl	72	69	75.00-125.00	-	p-Terphenyl	UJ(all non-detects)
(SL-118-SA5A-SB-2.5-3.5)							

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE104 **Laboratory: LL**

EDD Filename: DE104_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 300.0
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-121-SA5A-SB-2.0-3.0DUP (SL-001-SA5A-SB-4.0-5.0 SL -117-SA5A-SB-5.0-6.0 SL -118-SA5A-SB-2.5-3.5 SL -121-SA5A-SB-2.0-3.0)	Nitrate-NO3	200	20.00	No Qual OK by difference

Method: 7199
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-121-SA5A-SB-2.0-3.0DUP (SL-001-SA5A-SB-4.0-5.0 SL -117-SA5A-SB-5.0-6.0 SL -118-SA5A-SB-2.5-3.5 SL -121-SA5A-SB-2.0-3.0)	HEXAVALENT CHROMIUM	200	20.00	No Qual OK by difference

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE104 **Laboratory: LL**

EDD Filename: DE104_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C SIM
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P1LBLCSQ260758 (SL-001-SA5A-SB-4.0-5.0 SL-117-SA5A-SB-5.0-6.0 SL-118-SA5A-SB-2.5-3.5 SL-121-SA5A-SB-2.0-3.0)	INDENO(1,2,3-CD)PYRENE	135	-	56.00-134.00	-	INDENO(1,2,3-CD)PYRENE	J (all detects)

Method: 8015M
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P10813AQ321831A (SL-001-SA5A-SB-4.0-5.0 SL-117-SA5A-SB-5.0-6.0 SL-118-SA5A-SB-2.5-3.5)	EFH (C12-C14)	118	-	66.00-113.00	-	EFH (C12-C14)	J(all detects)
	EFH (C15-C20)	121	-	66.00-113.00	-	EFH (C15-C20)	
	EFH (C21-C30)	126	-	66.00-113.00	-	EFH (C21-C30)	
	EFH (C30-C40)	116	-	66.00-113.00	-	EFH (C30-C40)	

Reporting Limit Outliers

Lab Reporting Batch ID: DE104 **Laboratory: LL**

EDD Filename: DE104_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-001-SA5A-SB-4.0-5.0	BORON	J	3.32	5.66	PQL	mg/Kg	J (all detects)
	TIN	J	2.75	11.3	PQL	mg/Kg	
	Zirconium	J	1.42	5.66	PQL	mg/Kg	
SL-117-SA5A-SB-5.0-6.0	BORON	J	3.30	5.45	PQL	mg/Kg	J (all detects)
	TIN	J	2.76	10.9	PQL	mg/Kg	
	Zirconium	J	1.27	5.45	PQL	mg/Kg	
SL-118-SA5A-SB-2.5-3.5	TIN	J	2.53	10.6	PQL	mg/Kg	J (all detects)
	Zirconium	J	1.93	5.30	PQL	mg/Kg	
SL-121-SA5A-SB-2.0-3.0	BORON	J	3.29	5.24	PQL	mg/Kg	J (all detects)
	TIN	J	2.67	10.5	PQL	mg/Kg	

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-001-SA5A-SB-4.0-5.0	CADMIUM	J	0.0451	0.110	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.113	0.440	PQL	mg/Kg	
	SILVER	J	0.0508	0.110	PQL	mg/Kg	
SL-117-SA5A-SB-5.0-6.0	SELENIUM	J	0.120	0.436	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0250	0.109	PQL	mg/Kg	
SL-118-SA5A-SB-2.5-3.5	SELENIUM	J	0.143	0.428	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0332	0.107	PQL	mg/Kg	
SL-121-SA5A-SB-2.0-3.0	SELENIUM	J	0.142	0.428	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0327	0.107	PQL	mg/Kg	

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-121-SA5A-SB-2.0-3.0	HEXAVALENT CHROMIUM	J	0.30	1.1	PQL	mg/Kg	J (all detects)

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-118-SA5A-SB-2.5-3.5	MERCURY	J	0.0123	0.105	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE104 **Laboratory: LL**

EDD Filename: DE104_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8015M

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-001-SA5A-SB-4.0-5.0	EFH (C21-C30)	J	0.93	1.4	PQL	mg/Kg	J (all detects)
SL-117-SA5A-SB-5.0-6.0	EFH (C15-C20)	J	0.92	2.7	PQL	mg/Kg	J (all detects)

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-001-SA5A-SB-4.0-5.0	METHYLENE CHLORIDE	J	2.9	3.7	PQL	ug/Kg	J (all detects)
SL-117-SA5A-SB-5.0-6.0	METHYLENE CHLORIDE	J	1.0	4.2	PQL	ug/Kg	J (all detects)
SL-118-SA5A-SB-2.5-3.5	METHYLENE CHLORIDE TOLUENE	J J	0.96 2.3	4.2 4.2	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-121-SA5A-SB-2.0-3.0	METHYLENE CHLORIDE	J	1.4	4.2	PQL	ug/Kg	J (all detects)

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-118-SA5A-SB-2.5-3.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	20	370	PQL	ug/Kg	J (all detects)

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-117-SA5A-SB-5.0-6.0	CHRYSENE	J	0.62	1.9	PQL	ug/Kg	J (all detects)
SL-118-SA5A-SB-2.5-3.5	BENZO(A)PYRENE BENZO(G,H,I)PERYLENE CHRYSENE Di-n-butylphthalate	J J J J	6.5 4.4 6.1 58	9.2 9.2 9.2 99	PQL PQL PQL PQL	ug/Kg ug/Kg ug/Kg ug/Kg	J (all detects)
SL-121-SA5A-SB-2.0-3.0	DIBENZO(A,H)ANTHRACENE FLUORENE NAPHTHALENE	J J J	0.78 0.87 0.80	1.8 1.8 1.8	PQL PQL PQL	ug/Kg ug/Kg ug/Kg	J (all detects)

LDC #: 25911M4 **VALIDATION COMPLETENESS WORKSHEET** Date: 8-3-11

SDG #: DE104 ADR

Laboratory: Lancaster Laboratories

Reviewer: CR

2nd Reviewer: C

METHOD: Metals (EPA SW 846 Method 6010B/6020A/7000)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	N	Sampling dates:
II.	ICP/MS Tune	—	
III.	Calibration	—	
IV.	Blanks	A	No Quals
V.	ICP Interference Check Sample (ICS) Analysis	N	
VI.	Matrix Spike Analysis	N	CS
VII.	Duplicate Sample Analysis	N	↓
VIII.	Laboratory Control Samples (LCS)	A	LCS
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	N	Not performed
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	—	
XV	Field Blanks	—	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:

1	SL-121-SA5A-SB-2.0-3.0	11		21		31	
2	SL-118-SA5A-SB-2.5-3.5	12		22		32	
3	SL-117-SA5A-SB-5.0-3.0	13		23		33	
4	SL-001-SA5A-SB-4.0-5.0	14		24		34	
5		15		25		35	
6		16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

SAMPLE DELIVERY GROUP

DE105

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
15-Mar-2011	TB-031511	6230975	TB	5030B	8015M	III
15-Mar-2011	TB-031511	6230975	TB	5030B	8260B	III
15-Mar-2011	TB-031511	6230975	TB	5030B	8260B SIM	III
15-Mar-2011	EB07-SA5A-031511	6230974	EB	3005A	6010B	III
15-Mar-2011	EB07-SA5A-031511	6230974	EB	3020A	6020	III
15-Mar-2011	EB07-SA5A-031511	6230974	EB	3510C	8015B	III
15-Mar-2011	EB07-SA5A-031511	6230974	EB	3510C	8015M	III
15-Mar-2011	EB07-SA5A-031511	6230974	EB	3510C	8082	III
15-Mar-2011	EB07-SA5A-031511	6230974	EB	3510C	8270C	III
15-Mar-2011	EB07-SA5A-031511	6230974	EB	3510C	8270C SIM	III
15-Mar-2011	EB07-SA5A-031511	6230974	EB	3520C	1625C	III
15-Mar-2011	EB07-SA5A-031511	6230974	EB	5030B	8015M	III
15-Mar-2011	EB07-SA5A-031511	6230974	EB	5030B	8260B	III
15-Mar-2011	EB07-SA5A-031511	6230974	EB	5030B	8260B SIM	III
15-Mar-2011	EB07-SA5A-031511	6230974	EB	8330	8330A	III
15-Mar-2011	EB07-SA5A-031511	6230974	EB	Gen Prep	300.0	III
15-Mar-2011	EB07-SA5A-031511	6230974	EB	Gen Prep	314.0	III
15-Mar-2011	EB07-SA5A-031511	6230974	EB	Gen Prep	7199	III
15-Mar-2011	EB07-SA5A-031511	6230974	EB	Gen Prep	8015B	III
15-Mar-2011	EB07-SA5A-031511	6230974	EB	Gen Prep	8015M	III
15-Mar-2011	EB07-SA5A-031511	6230974	EB	Gen Prep	9040B	III
15-Mar-2011	EB07-SA5A-031511	6230974	EB	METHOD	7470A	III
15-Mar-2011	EB07-SA5A-031511	6230974	EB	METHOD	8315A	III
15-Mar-2011	EB07-SA5A-031511	6230974	EB	METHOD	9012B	III
15-Mar-2011	EB07-SA5A-031511MSD	P230974M322237A	MSD	Gen Prep	8015M	III
15-Mar-2011	EB07-SA5A-031511MS	P230974R322219A	MS	Gen Prep	8015M	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
15-Mar-2011	SL-137-SA5A-SB-4.0-5.0	6230971	N	3050B	6010B	III
15-Mar-2011	SL-137-SA5A-SB-4.0-5.0	6230971	N	3050B	6020	III
15-Mar-2011	SL-137-SA5A-SB-4.0-5.0	6230971	N	3060A	7199	III
15-Mar-2011	SL-137-SA5A-SB-4.0-5.0	6230971	N	3546	1625C	III
15-Mar-2011	SL-137-SA5A-SB-4.0-5.0	6230971	N	3550B	8015B	III
15-Mar-2011	SL-137-SA5A-SB-4.0-5.0	6230971	N	3550B	8015M	III
15-Mar-2011	SL-137-SA5A-SB-4.0-5.0	6230971	N	3550B	8082	III
15-Mar-2011	SL-137-SA5A-SB-4.0-5.0	6230971	N	3550B	8270C	III
15-Mar-2011	SL-137-SA5A-SB-4.0-5.0	6230971	N	3550B	8270C SIM	III
15-Mar-2011	SL-137-SA5A-SB-4.0-5.0	6230971	N	5035	8015M	III
15-Mar-2011	SL-137-SA5A-SB-4.0-5.0	6230971	N	5035	8260B	III
15-Mar-2011	SL-137-SA5A-SB-4.0-5.0	6230971	N	5035	8260B SIM	III
15-Mar-2011	SL-137-SA5A-SB-4.0-5.0	6230971	N	8330	8330A	III
15-Mar-2011	SL-137-SA5A-SB-4.0-5.0	6230971	N	Gen Prep	9045M	III
15-Mar-2011	SL-137-SA5A-SB-4.0-5.0	6230971	N	METHOD	300.0	III
15-Mar-2011	SL-137-SA5A-SB-4.0-5.0	6230971	N	METHOD	314.0	III
15-Mar-2011	SL-137-SA5A-SB-4.0-5.0	6230971	N	METHOD	7471A	III
15-Mar-2011	SL-137-SA5A-SB-4.0-5.0	6230971	N	METHOD	8015B	III
15-Mar-2011	SL-137-SA5A-SB-4.0-5.0	6230971	N	METHOD	8015M	III
15-Mar-2011	SL-137-SA5A-SB-4.0-5.0	6230971	N	METHOD	8315A	III
15-Mar-2011	SL-137-SA5A-SB-4.0-5.0	6230971	N	METHOD	9012B	III
15-Mar-2011	SL-137-SA5A-SB-4.0-5.0DUP	P230971D220752	DUP	METHOD	7471A	III
15-Mar-2011	SL-137-SA5A-SB-4.0-5.0DUP	P230971D221126A	DUP	3050B	6020	III
15-Mar-2011	SL-137-SA5A-SB-4.0-5.0DUP	P230971D221126B	DUP	3050B	6020	III
15-Mar-2011	SL-137-SA5A-SB-4.0-5.0DUP	P230971D221126C	DUP	3050B	6020	III
15-Mar-2011	SL-137-SA5A-SB-4.0-5.0DUP	P230971D221126D	DUP	3050B	6020	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
15-Mar-2011	SL-137-SA5A-SB-4.0-5.0DUP	P230971D222005	DUP	3050B	6010B	III
15-Mar-2011	SL-137-SA5A-SB-4.0-5.0MSD	P230971M220754	MSD	METHOD	7471A	III
15-Mar-2011	SL-137-SA5A-SB-4.0-5.0MSD	P230971M221133A	MSD	3050B	6020	III
15-Mar-2011	SL-137-SA5A-SB-4.0-5.0MSD	P230971M221133B	MSD	3050B	6020	III
15-Mar-2011	SL-137-SA5A-SB-4.0-5.0MSD	P230971M221133C	MSD	3050B	6020	III
15-Mar-2011	SL-137-SA5A-SB-4.0-5.0MSD	P230971M221133D	MSD	3050B	6020	III
15-Mar-2011	SL-137-SA5A-SB-4.0-5.0MSD	P230971M222013	MSD	3050B	6010B	III
15-Mar-2011	SL-137-SA5A-SB-4.0-5.0MSD	P230971M241908A	MSD	8330	8330A	III
15-Mar-2011	SL-137-SA5A-SB-4.0-5.0MSD	P230971M242140A	MSD	METHOD	8315A	III
15-Mar-2011	SL-137-SA5A-SB-4.0-5.0MSD	P230971M261001	MSD	3546	1625C	III
15-Mar-2011	SL-137-SA5A-SB-4.0-5.0MSD	P230971M321430A	MSD	3550B	8015M	III
15-Mar-2011	SL-137-SA5A-SB-4.0-5.0MS	P230971R220753	MS	METHOD	7471A	III
15-Mar-2011	SL-137-SA5A-SB-4.0-5.0MS	P230971R221130A	MS	3050B	6020	III
15-Mar-2011	SL-137-SA5A-SB-4.0-5.0MS	P230971R221130B	MS	3050B	6020	III
15-Mar-2011	SL-137-SA5A-SB-4.0-5.0MS	P230971R221130C	MS	3050B	6020	III
15-Mar-2011	SL-137-SA5A-SB-4.0-5.0MS	P230971R221130D	MS	3050B	6020	III
15-Mar-2011	SL-137-SA5A-SB-4.0-5.0MS	P230971R222009	MS	3050B	6010B	III
15-Mar-2011	SL-137-SA5A-SB-4.0-5.0MS	P230971R241826A	MS	8330	8330A	III
15-Mar-2011	SL-137-SA5A-SB-4.0-5.0MS	P230971R242130A	MS	METHOD	8315A	III
15-Mar-2011	SL-137-SA5A-SB-4.0-5.0MS	P230971R260944	MS	3546	1625C	III
15-Mar-2011	SL-137-SA5A-SB-4.0-5.0MS	P230971R321404A	MS	3550B	8015M	III
15-Mar-2011	SL-138-SA5A-SB-4.0-5.0	6230973	N	3050B	6010B	III
15-Mar-2011	SL-138-SA5A-SB-4.0-5.0	6230973	N	3050B	6020	III
15-Mar-2011	SL-138-SA5A-SB-4.0-5.0	6230973	N	3060A	7199	III
15-Mar-2011	SL-138-SA5A-SB-4.0-5.0	6230973	N	3546	1625C	III
15-Mar-2011	SL-138-SA5A-SB-4.0-5.0	6230973	N	3550B	8015B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
15-Mar-2011	SL-138-SA5A-SB-4.0-5.0	6230973	N	3550B	8015M	III
15-Mar-2011	SL-138-SA5A-SB-4.0-5.0	6230973	N	3550B	8082	III
15-Mar-2011	SL-138-SA5A-SB-4.0-5.0	6230973	N	3550B	8270C	III
15-Mar-2011	SL-138-SA5A-SB-4.0-5.0	6230973	N	3550B	8270C SIM	III
15-Mar-2011	SL-138-SA5A-SB-4.0-5.0	6230973	N	5035	8015M	III
15-Mar-2011	SL-138-SA5A-SB-4.0-5.0	6230973	N	5035	8260B	III
15-Mar-2011	SL-138-SA5A-SB-4.0-5.0	6230973	N	5035	8260B SIM	III
15-Mar-2011	SL-138-SA5A-SB-4.0-5.0	6230973	N	8330	8330A	III
15-Mar-2011	SL-138-SA5A-SB-4.0-5.0	6230973	N	Gen Prep	9045M	III
15-Mar-2011	SL-138-SA5A-SB-4.0-5.0	6230973	N	METHOD	300.0	III
15-Mar-2011	SL-138-SA5A-SB-4.0-5.0	6230973	N	METHOD	314.0	III
15-Mar-2011	SL-138-SA5A-SB-4.0-5.0	6230973	N	METHOD	7471A	III
15-Mar-2011	SL-138-SA5A-SB-4.0-5.0	6230973	N	METHOD	8015B	III
15-Mar-2011	SL-138-SA5A-SB-4.0-5.0	6230973	N	METHOD	8015M	III
15-Mar-2011	SL-138-SA5A-SB-4.0-5.0	6230973	N	METHOD	8315A	III
15-Mar-2011	SL-138-SA5A-SB-4.0-5.0	6230973	N	METHOD	9012B	III
15-Mar-2011	SL-132-SA5A-SB-2.0-3.0	6230972	N	3050B	6010B	III
15-Mar-2011	SL-132-SA5A-SB-2.0-3.0	6230972	N	3050B	6020	III
15-Mar-2011	SL-132-SA5A-SB-2.0-3.0	6230972	N	3060A	7199	III
15-Mar-2011	SL-132-SA5A-SB-2.0-3.0	6230972	N	3546	1625C	III
15-Mar-2011	SL-132-SA5A-SB-2.0-3.0	6230972	N	3550B	8015B	III
15-Mar-2011	SL-132-SA5A-SB-2.0-3.0	6230972	N	3550B	8015M	III
15-Mar-2011	SL-132-SA5A-SB-2.0-3.0	6230972	N	3550B	8082	III
15-Mar-2011	SL-132-SA5A-SB-2.0-3.0	6230972	N	3550B	8270C	III
15-Mar-2011	SL-132-SA5A-SB-2.0-3.0	6230972	N	3550B	8270C SIM	III
15-Mar-2011	SL-132-SA5A-SB-2.0-3.0	6230972	N	5035	8015M	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
15-Mar-2011	SL-132-SA5A-SB-2.0-3.0	6230972	N	5035	8260B	III
15-Mar-2011	SL-132-SA5A-SB-2.0-3.0	6230972	N	5035	8260B SIM	III
15-Mar-2011	SL-132-SA5A-SB-2.0-3.0	6230972	N	8330	8330A	III
15-Mar-2011	SL-132-SA5A-SB-2.0-3.0	6230972	N	Gen Prep	9045M	III
15-Mar-2011	SL-132-SA5A-SB-2.0-3.0	6230972	N	METHOD	300.0	III
15-Mar-2011	SL-132-SA5A-SB-2.0-3.0	6230972	N	METHOD	314.0	III
15-Mar-2011	SL-132-SA5A-SB-2.0-3.0	6230972	N	METHOD	7471A	III
15-Mar-2011	SL-132-SA5A-SB-2.0-3.0	6230972	N	METHOD	8015B	III
15-Mar-2011	SL-132-SA5A-SB-2.0-3.0	6230972	N	METHOD	8015M	III
15-Mar-2011	SL-132-SA5A-SB-2.0-3.0	6230972	N	METHOD	8315A	III
15-Mar-2011	SL-132-SA5A-SB-2.0-3.0	6230972	N	METHOD	9012B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE105 **Laboratory: LL**

EDD Filename: DE105_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B ***Matrix:*** AQ

Sample ID: EB07-SA5A-031511 ***Collected:*** 3/15/2011 10:00:00 ***Analysis Type:*** REA ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MAGNESIUM	0.0202	J	0.0172	MDL	0.100	PQL	mg/L	U	B

Method Category: METALS

Method: 6010B ***Matrix:*** SO

Sample ID: SL-132-SA5A-SB-2.0-3.0 ***Collected:*** 3/15/2011 3:37:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.20	J	0.971	MDL	5.45	PQL	mg/Kg	J	Z
MANGANESE	304		0.0851	MDL	0.545	PQL	mg/Kg	J	E, E
TIN	3.30	J	1.09	MDL	10.9	PQL	mg/Kg	U	B
Zirconium	2.32	J	0.916	MDL	5.45	PQL	mg/Kg	J	Z

Sample ID: SL-137-SA5A-SB-4.0-5.0 ***Collected:*** 3/15/2011 10:19:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.16	J	1.01	MDL	5.67	PQL	mg/Kg	J	Z
MANGANESE	283		0.0884	MDL	0.567	PQL	mg/Kg	J	E, E
TIN	3.19	J	1.13	MDL	11.3	PQL	mg/Kg	U	B
Zirconium	2.48	J	0.952	MDL	5.67	PQL	mg/Kg	J	Z

Sample ID: SL-138-SA5A-SB-4.0-5.0 ***Collected:*** 3/15/2011 2:36:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.45	J	0.981	MDL	5.51	PQL	mg/Kg	J	Z
MANGANESE	243		0.0860	MDL	0.551	PQL	mg/Kg	J	E, E
TIN	3.00	J	1.10	MDL	11.0	PQL	mg/Kg	U	B
Zirconium	1.57	J	0.926	MDL	5.51	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE105 **Laboratory: LL**

EDD Filename: DE105_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6020** ***Matrix:*** **SO**

Sample ID: **SL-132-SA5A-SB-2.0-3.0** ***Collected:*** **3/15/2011 3:37:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.182	J	0.0432	MDL	0.432	PQL	mg/Kg	J	Z

Sample ID: **SL-132-SA5A-SB-2.0-3.0** ***Collected:*** **3/15/2011 3:37:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	128		0.117	MDL	0.432	PQL	mg/Kg	J	Q, E

Sample ID: **SL-132-SA5A-SB-2.0-3.0** ***Collected:*** **3/15/2011 3:37:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.179	J	0.0648	MDL	0.216	PQL	mg/Kg	J	Z, Q, E
ARSENIC	8.83		0.0864	MDL	0.432	PQL	mg/Kg	J	Q
BERYLLIUM	1.42		0.0173	MDL	0.108	PQL	mg/Kg	J	Q, E
CADMIUM	0.0617	J	0.0432	MDL	0.108	PQL	mg/Kg	J	Z, Q
CHROMIUM	26.7		0.130	MDL	0.432	PQL	mg/Kg	J	Q
COBALT	6.73		0.0216	MDL	0.108	PQL	mg/Kg	J	Q, E, A
COPPER	8.47		0.0713	MDL	0.432	PQL	mg/Kg	J	Q, E
LEAD	8.81		0.0112	MDL	0.216	PQL	mg/Kg	J	Q, E, E
NICKEL	16.4		0.108	MDL	0.432	PQL	mg/Kg	J	Q, E
SILVER	0.0821	J	0.0130	MDL	0.108	PQL	mg/Kg	J	Z, Q
THALLIUM	0.399		0.0324	MDL	0.108	PQL	mg/Kg	J	Q
VANADIUM	52.8		0.0238	MDL	0.108	PQL	mg/Kg	J	Q, A
ZINC	72.9		0.605	MDL	3.24	PQL	mg/Kg	J	Q, E

Sample ID: **SL-137-SA5A-SB-4.0-5.0** ***Collected:*** **3/15/2011 10:19:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.119	J	0.0458	MDL	0.458	PQL	mg/Kg	J	Z

Sample ID: **SL-137-SA5A-SB-4.0-5.0** ***Collected:*** **3/15/2011 10:19:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	45.1		0.124	MDL	0.458	PQL	mg/Kg	J	Q, E

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE105 **Laboratory: LL**

EDD Filename: DE105_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6020** ***Matrix:*** **SO**

Sample ID: **SL-137-SA5A-SB-4.0-5.0** ***Collected:*** **3/15/2011 10:19:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.127	J	0.0687	MDL	0.229	PQL	mg/Kg	J	Z, Q, E
ARSENIC	7.78		0.0916	MDL	0.458	PQL	mg/Kg	J	Q
BERYLLIUM	0.727		0.0183	MDL	0.114	PQL	mg/Kg	J	Q, E
CHROMIUM	18.1		0.137	MDL	0.458	PQL	mg/Kg	J	Q
COBALT	3.02		0.0229	MDL	0.114	PQL	mg/Kg	J	Q, E, A
COPPER	5.91		0.0755	MDL	0.458	PQL	mg/Kg	J	Q, E
LEAD	5.45		0.0119	MDL	0.229	PQL	mg/Kg	J	Q, E, E
NICKEL	7.77		0.114	MDL	0.458	PQL	mg/Kg	J	Q, E
SILVER	0.0256	J	0.0137	MDL	0.114	PQL	mg/Kg	J	Z, Q
THALLIUM	0.294		0.0343	MDL	0.114	PQL	mg/Kg	J	Q
VANADIUM	40.1		0.0252	MDL	0.114	PQL	mg/Kg	J	Q, A
ZINC	39.7		0.641	MDL	3.43	PQL	mg/Kg	J	Q, E

Sample ID: **SL-138-SA5A-SB-4.0-5.0** ***Collected:*** **3/15/2011 2:36:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.117	J	0.0445	MDL	0.445	PQL	mg/Kg	J	Z

Sample ID: **SL-138-SA5A-SB-4.0-5.0** ***Collected:*** **3/15/2011 2:36:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	52.8		0.120	MDL	0.445	PQL	mg/Kg	J	Q, E

Sample ID: **SL-138-SA5A-SB-4.0-5.0** ***Collected:*** **3/15/2011 2:36:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.154	J	0.0668	MDL	0.223	PQL	mg/Kg	J	Z, Q, E
ARSENIC	6.14		0.0891	MDL	0.445	PQL	mg/Kg	J	Q
BERYLLIUM	0.792		0.0178	MDL	0.111	PQL	mg/Kg	J	Q, E
CADMIUM	0.0454	J	0.0445	MDL	0.111	PQL	mg/Kg	J	Z, Q
CHROMIUM	18.5		0.134	MDL	0.445	PQL	mg/Kg	J	Q
COBALT	6.96		0.0223	MDL	0.111	PQL	mg/Kg	J	Q, E, A
COPPER	5.49		0.0735	MDL	0.445	PQL	mg/Kg	J	Q, E
LEAD	5.96		0.0116	MDL	0.223	PQL	mg/Kg	J	Q, E, E
NICKEL	8.55		0.111	MDL	0.445	PQL	mg/Kg	J	Q, E

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE105 **Laboratory: LL**

EDD Filename: DE105_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS
Method: 6020 **Matrix:** SO

Sample ID: SL-138-SA5A-SB-4.0-5.0 *Collected:* 3/15/2011 2:36:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0341	J	0.0134	MDL	0.111	PQL	mg/Kg	J	Z, Q
THALLIUM	0.257		0.0334	MDL	0.111	PQL	mg/Kg	J	Q
VANADIUM	36.9		0.0245	MDL	0.111	PQL	mg/Kg	J	Q, A
ZINC	44.1		0.624	MDL	3.34	PQL	mg/Kg	J	Q, E

Method Category: METALS
Method: 7199 **Matrix:** AQ

Sample ID: EB07-SA5A-031511 *Collected:* 3/15/2011 10:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	5.0	U	5.0	MDL	10.0	PQL	ug/L	UJ	H

Method Category: METALS
Method: 7199 **Matrix:** SO

Sample ID: SL-137-SA5A-SB-4.0-5.0 *Collected:* 3/15/2011 10:19:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.36	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-138-SA5A-SB-4.0-5.0 *Collected:* 3/15/2011 2:36:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.91	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Method Category: METALS
Method: 7471A **Matrix:** SO

Sample ID: SL-132-SA5A-SB-2.0-3.0 *Collected:* 3/15/2011 3:37:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0088	J	0.0031	MDL	0.108	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE105 | Laboratory: LL

EDD Filename: DE105_v1 | eQAPP Name: CDM_SSFL_110509

Method Category: METALS
Method: 7471A **Matrix:** SO

Sample ID: SL-137-SA5A-SB-4.0-5.0 *Collected:* 3/15/2011 10:19:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0088	J	0.0032	MDL	0.113	PQL	mg/Kg	J	Z

Sample ID: SL-138-SA5A-SB-4.0-5.0 *Collected:* 3/15/2011 2:36:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0108	J	0.0031	MDL	0.110	PQL	mg/Kg	J	Z

Method Category: SVOA
Method: 1625C **Matrix:** AQ

Sample ID: EB07-SA5A-031511 *Collected:* 3/15/2011 10:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	1.14		0.491	MDL	0.982	PQL	ng/L	U	B

Method Category: SVOA
Method: 1625C **Matrix:** SO

Sample ID: SL-138-SA5A-SB-4.0-5.0 *Collected:* 3/15/2011 2:36:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	30.3	J	18.8	MDL	37.5	PQL	ng/Kg	J	Z

Method Category: SVOA
Method: 8015M **Matrix:** AQ

Sample ID: EB07-SA5A-031511 *Collected:* 3/15/2011 10:00:00 *Analysis Type:* REA3 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DIETHYLENE GLYCOL	10	U	10	MDL	100	PQL	mg/L	UJ	Q
ETHYLENE GLYCOL	10	U	10	MDL	100	PQL	mg/L	UJ	Q

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE105 **Laboratory: LL**

EDD Filename: DE105_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA
Method: 8270C **Matrix:** AQ

Sample ID: EB07-SA5A-031511 *Collected:* 3/15/2011 10:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROTOLUENE	1	U	1	MDL	5	PQL	ug/L	UJ	L
2,6-DINITROTOLUENE	1	U	1	MDL	5	PQL	ug/L	UJ	L
2-NITROANILINE	1	U	1	MDL	5	PQL	ug/L	UJ	L
2-NITROPHENOL	1	U	1	MDL	5	PQL	ug/L	UJ	L
4,6-DINITRO-2-METHYLPHENOL	5	U	5	MDL	15	PQL	ug/L	UJ	L
BENZYL ALCOHOL	5	U	5	MDL	15	PQL	ug/L	UJ	L
NITROBENZENE	1	U	1	MDL	5	PQL	ug/L	UJ	L

Method Category: SVOA
Method: 8270C SIM **Matrix:** AQ

Sample ID: EB07-SA5A-031511 *Collected:* 3/15/2011 10:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	0.075	J	0.048	MDL	0.96	PQL	ug/L	U	B
Diethylphthalate	0.067	J	0.048	MDL	0.96	PQL	ug/L	J	Z
Di-n-butylphthalate	0.44	J	0.048	MDL	0.96	PQL	ug/L	J	Z
NAPHTHALENE	0.029	J	0.029	MDL	0.048	PQL	ug/L	J	Z

Method Category: SVOA
Method: 8270C SIM **Matrix:** SO

Sample ID: SL-138-SA5A-SB-4.0-5.0 *Collected:* 3/15/2011 2:36:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	7.5	J	6.7	MDL	20	PQL	ug/Kg	J	Z

Method Category: VOA
Method: 8015B **Matrix:** AQ

Sample ID: EB07-SA5A-031511 *Collected:* 3/15/2011 10:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
m-Terphenyl	0.079	U	0.079	MDL	0.25	PQL	mg/L	UJ	S

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE105 **Laboratory: LL**

EDD Filename: DE105_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: VOA

Method: 8015B **Matrix:** AQ

Sample ID: EB07-SA5A-031511 *Collected:* 3/15/2011 10:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
O-TERPHENYL	0.079	U	0.079	MDL	0.25	PQL	mg/L	UJ	S
p-Terphenyl	0.079	U	0.079	MDL	0.25	PQL	mg/L	UJ	L, S

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: SL-132-SA5A-SB-2.0-3.0 *Collected:* 3/15/2011 3:37:00 *Analysis Type:* RES *Dilution:* 0.89

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	1.1	J	0.24	MDL	4.0	PQL	ug/Kg	U	B

Sample ID: SL-137-SA5A-SB-4.0-5.0 *Collected:* 3/15/2011 10:19:00 *Analysis Type:* RES *Dilution:* 0.9

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ETHYLBENZENE	0.14	J	0.06	MDL	4.2	PQL	ug/Kg	J	Z
m,p-Xylene	0.49	J	0.18	MDL	4.2	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	3.4	J	0.25	MDL	4.2	PQL	ug/Kg	U	B

Sample ID: SL-138-SA5A-SB-4.0-5.0 *Collected:* 3/15/2011 2:36:00 *Analysis Type:* RES *Dilution:* 1.03

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ETHYLBENZENE	0.10	J	0.07	MDL	4.6	PQL	ug/Kg	J	Z
m,p-Xylene	0.31	J	0.20	MDL	4.6	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	2.0	J	0.28	MDL	4.6	PQL	ug/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE105 **Laboratory: LL**

EDD Filename: DE105_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
*#	Professional Judgment
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Verification Correlation Coefficient
C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE105 **Laboratory: LL**

EDD Filename: DE105_v1 **eQAPP Name: CDM_SSFL_110509**

F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation
L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery Lower Estimation

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE105 **Laboratory: LL**

EDD Filename: DE105_v1 **eQAPP Name: CDM_SSFL_110509**

R	Continuing Calibration Verification Percent Recovery Lower Rejection
R	Continuing Calibration Verification Percent Recovery Upper Estimation
R	Continuing Calibration Verification Percent Recovery Upper Rejection
R	Continuing Calibration Verification Relative Response Factor
R	Initial Calibration Relative Response Factor
R	Initial Calibration Verification Percent Recovery Lower Estimation
R	Initial Calibration Verification Percent Recovery Lower Rejection
R	Initial Calibration Verification Percent Recovery Upper Estimation
R	Initial Calibration Verification Percent Recovery Upper Rejection
R	Initial Calibration Verification Relative Response Factor
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control Outlier Reports

DE105

QC Outlier Report: HoldingTimes

Lab Reporting Batch ID: DE105 **Laboratory: LL**
EDD Filename: DE105_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7199 **Preparation Method: Gen Prep**
Matrix: AQ

Sample ID	*Type*	*Actual*	*Criteria*	*Units*	*Flag*
EB07-SA5A-031511 (RES)	Sampling To Analysis	25.00	24.00	HOURS	J (all detects) UJ (all non-detects)

Method Blank Outlier Report

Lab Reporting Batch ID: DE105 **Laboratory: LL**

EDD Filename: DE105_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1625C
Matrix: AQ

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKWA07B261124	3/18/2011 11:24:00 AM	N-NITROSODIMETHYLAMINE	0.908 ng/L	EB07-SA5A-031511

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
EB07-SA5A-031511(RES)	N-NITROSODIMETHYLAMINE	1.14 ng/L	1.14U ng/L

Method: 6010B
Matrix: AQ

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P07748BB222039	3/21/2011 8:39:00 PM	MAGNESIUM	0.0362 mg/L	EB07-SA5A-031511

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
EB07-SA5A-031511(REA)	MAGNESIUM	0.0202 mg/L	0.0202U mg/L

Method: 6010B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P07608BB221945	3/19/2011 7:45:00 PM	ALUMINUM IRON PHOSPHORUS TIN	22.6 mg/Kg 11.7 mg/Kg 1.05 mg/Kg 1.37 mg/Kg	SL-132-SA5A-SB-2.0-3.0 SL-137-SA5A-SB-4.0-5.0 SL-138-SA5A-SB-4.0-5.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-132-SA5A-SB-2.0-3.0(RES)	TIN	3.30 mg/Kg	3.30U mg/Kg
SL-137-SA5A-SB-4.0-5.0(RES)	TIN	3.19 mg/Kg	3.19U mg/Kg
SL-138-SA5A-SB-4.0-5.0(RES)	TIN	3.00 mg/Kg	3.00U mg/Kg

Method: 8015M
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P76765AB321804A	3/18/2011 6:04:00 PM	ETHYLENE GLYCOL	8.8 mg/Kg	SL-132-SA5A-SB-2.0-3.0 SL-137-SA5A-SB-4.0-5.0 SL-138-SA5A-SB-4.0-5.0

Method Blank Outlier Report

Lab Reporting Batch ID: DE105 | Laboratory: LL

EDD Filename: DE105_v1 | eQAPP Name: CDM_SSFL_110509

Method: 8260B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB96B211227A	3/17/2011 12:27:00 PM	METHYLENE CHLORIDE TOLUENE	0.59 ug/Kg 0.15 ug/Kg	SL-132-SA5A-SB-2.0-3.0 SL-137-SA5A-SB-4.0-5.0 SL-138-SA5A-SB-4.0-5.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-132-SA5A-SB-2.0-3.0(RES)	METHYLENE CHLORIDE	1.1 ug/Kg	4.0U ug/Kg
SL-137-SA5A-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	3.4 ug/Kg	4.2U ug/Kg
SL-138-SA5A-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	2.0 ug/Kg	4.6U ug/Kg

Method: 8270C SIM
Matrix: AQ

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKWB07B260818	3/23/2011 8:18:00 AM	BIS(2-ETHYLHEXYL)PHTHALATE	0.092 ug/L	EB07-SA5A-031511

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
EB07-SA5A-031511(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	0.075 ug/L	0.96U ug/L

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE105 **Laboratory: LL**

EDD Filename: DE105_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8015M
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
EB07-SA5A-031511MS EB07-SA5A-031511MSD (EB07-SA5A-031511)	DIETHYLENE GLYCOL ETHYLENE GLYCOL	75 85	- -	83.00-130.00 89.00-125.00	33 (20.00) -	DIETHYLENE GLYCOL ETHYLENE GLYCOL	J(all detects) UJ(all non-detects)

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-137-SA5A-SB-4.0-5.0MS SL-137-SA5A-SB-4.0-5.0MSD (SL-132-SA5A-SB-2.0-3.0 SL-137-SA5A-SB-4.0-5.0 SL-138-SA5A-SB-4.0-5.0)	ARSENIC BERYLLIUM CADMIUM CHROMIUM COBALT COPPER NICKEL SILVER THALLIUM VANADIUM ZINC	162 146 140 157 - 128 134 128 - 145 209	217 160 146 169 127 142 143 136 140 186 248	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	- - - - - - - - - - -	ARSENIC BERYLLIUM CADMIUM CHROMIUM COBALT COPPER NICKEL SILVER THALLIUM VANADIUM ZINC	J (all detects)
SL-137-SA5A-SB-4.0-5.0MS SL-137-SA5A-SB-4.0-5.0MSD (SL-132-SA5A-SB-2.0-3.0 SL-137-SA5A-SB-4.0-5.0 SL-138-SA5A-SB-4.0-5.0)	ANTIMONY LEAD	55 176	- 289	75.00-125.00 75.00-125.00	28 (20.00) 29 (20.00)	ANTIMONY LEAD	J(all detects) UJ(all non-detects)
SL-137-SA5A-SB-4.0-5.0MS SL-137-SA5A-SB-4.0-5.0MSD (SL-132-SA5A-SB-2.0-3.0 SL-137-SA5A-SB-4.0-5.0 SL-138-SA5A-SB-4.0-5.0)	BARIUM	244	264	75.00-125.00	-	BARIUM	J(all detects)

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-137-SA5A-SB-4.0-5.0MS SL-137-SA5A-SB-4.0-5.0MSD (SL-132-SA5A-SB-2.0-3.0 SL-137-SA5A-SB-4.0-5.0 SL-138-SA5A-SB-4.0-5.0)	ALUMINUM CALCIUM IRON MAGNESIUM TITANIUM	1917 149 243 184 265	1979 156 168 282 266	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	- - - - -	ALUMINUM CALCIUM IRON MAGNESIUM TITANIUM	No Qual, >4x
SL-137-SA5A-SB-4.0-5.0MS SL-137-SA5A-SB-4.0-5.0MSD (SL-132-SA5A-SB-2.0-3.0 SL-137-SA5A-SB-4.0-5.0 SL-138-SA5A-SB-4.0-5.0)	MANGANESE	-92	-	75.00-125.00	40 (20.00)	MANGANESE	J(all detects) UJ(all non-detects) No Qual %R, >4x

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE105 **Laboratory: LL**

EDD Filename: DE105_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-137-SA5A-SB-4.0-5.0DUP (SL-132-SA5A-SB-2.0-3.0 SL -137-SA5A-SB-4.0-5.0 SL -138-SA5A-SB-4.0-5.0)	MANGANESE	32	20.00	J (all detects) UJ (all non-detects)

Method: 6020
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-137-SA5A-SB-4.0-5.0DUP (SL-132-SA5A-SB-2.0-3.0 SL -137-SA5A-SB-4.0-5.0 SL -138-SA5A-SB-4.0-5.0)	ANTIMONY	34	20.00	
	BARIUM	38	20.00	
	BERYLLIUM	22	20.00	
	COBALT	140	20.00	
	COPPER	26	20.00	J(all detects)
	LEAD	55	20.00	UJ(all non-detects)
	NICKEL	29	20.00	
	SELENIUM	46	20.00	Sb, Se, Ag No Qual
	SILVER	67	20.00	OK by difference
	ZINC	37	20.00	

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE105 **Laboratory: LL**

EDD Filename: DE105_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P6WJLCSQ260305 P6WJLCSY260330 (EB07-SA5A-031511)	2,4-DINITROTOLUENE	80	-	81.00-115.00	-	2,4-DINITROTOLUENE	J (all detects) UJ (all non-detects)
	2,6-DINITROTOLUENE	82	-	85.00-115.00	-	2,6-DINITROTOLUENE	
	2-NITROANILINE	79	-	83.00-116.00	-	2-NITROANILINE	
	2-NITROPHENOL	81	84	86.00-120.00	-	2-NITROPHENOL	
	4,6-DINITRO-2-METHYLPHENOL	73	73	78.00-119.00	-	4,6-DINITRO-2-METHYLPHEN	
	BENZYL ALCOHOL	62	-	66.00-97.00	-	BENZYL ALCOHOL	
	NITROBENZENE	72	-	75.00-109.00	-	NITROBENZENE	

Method: 8015B
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P10764AY322220A (EB07-SA5A-031511)	p-Terphenyl	-	67	75.00-125.00	-	p-Terphenyl	J(all detects) UJ(all non-detects)

Method: 8330A
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P10804AQ242342A P10804AY240024A (EB07-SA5A-031511)	2,4,6-TRINITROTOLUENE	110	110	76.00-109.00	-	2,4,6-TRINITROTOLUENE	J(all detects)

Method: 8270C SIM
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P1LBLCSQ260758 (SL-132-SA5A-SB-2.0-3.0 SL-137-SA5A-SB-4.0-5.0 SL-138-SA5A-SB-4.0-5.0)	INDENO(1,2,3-CD)PYRENE	135	-	56.00-134.00	-	INDENO(1,2,3-CD)PYRENE	J(all detects)

Surrogate Outlier Report

Lab Reporting Batch ID: DE105 **Laboratory: LL**

EDD Filename: DE105_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8015B
Matrix: AQ

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
EB07-SA5A-031511	n-Triacontane-d62	17	50.00-150.00	All Target Analytes	J (all detects) UJ (all non-detects)

Method: 8270C
Matrix: AQ

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
EB07-SA5A-031511	PHENOL-D6	19	20.00-120.00	No Affected Compounds	No Qualifiers

Reporting Limit Outliers

Lab Reporting Batch ID: DE105 **Laboratory: LL**

EDD Filename: DE105_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB07-SA5A-031511	MAGNESIUM	J	0.0202	0.100	PQL	mg/L	J (all detects)

Method: 8270C SIM

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB07-SA5A-031511	BIS(2-ETHYLHEXYL)PHTHALATE	J	0.075	0.96	PQL	ug/L	J (all detects)
	Diethylphthalate	J	0.067	0.96	PQL	ug/L	
	Di-n-butylphthalate	J	0.44	0.96	PQL	ug/L	
	NAPHTHALENE	J	0.029	0.048	PQL	ug/L	

Method: 1625C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-138-SA5A-SB-4.0-5.0	N-NITROSODIMETHYLAMINE	J	30.3	37.5	PQL	ng/Kg	J (all detects)

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-132-SA5A-SB-2.0-3.0	BORON	J	3.20	5.45	PQL	mg/Kg	J (all detects)
	TIN	J	3.30	10.9	PQL	mg/Kg	
	Zirconium	J	2.32	5.45	PQL	mg/Kg	
SL-137-SA5A-SB-4.0-5.0	BORON	J	2.16	5.67	PQL	mg/Kg	J (all detects)
	TIN	J	3.19	11.3	PQL	mg/Kg	
	Zirconium	J	2.48	5.67	PQL	mg/Kg	
SL-138-SA5A-SB-4.0-5.0	BORON	J	2.45	5.51	PQL	mg/Kg	J (all detects)
	TIN	J	3.00	11.0	PQL	mg/Kg	
	Zirconium	J	1.57	5.51	PQL	mg/Kg	

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-132-SA5A-SB-2.0-3.0	ANTIMONY	J	0.179	0.216	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0617	0.108	PQL	mg/Kg	
	SELENIUM	J	0.182	0.432	PQL	mg/Kg	
	SILVER	J	0.0821	0.108	PQL	mg/Kg	
SL-137-SA5A-SB-4.0-5.0	ANTIMONY	J	0.127	0.229	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.119	0.458	PQL	mg/Kg	
	SILVER	J	0.0256	0.114	PQL	mg/Kg	

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Reporting Limit Outliers

Lab Reporting Batch ID: DE105 **Laboratory: LL**

EDD Filename: DE105_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-138-SA5A-SB-4.0-5.0	ANTIMONY	J	0.154	0.223	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0454	0.111	PQL	mg/Kg	
	SELENIUM	J	0.117	0.445	PQL	mg/Kg	
	SILVER	J	0.0341	0.111	PQL	mg/Kg	

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-137-SA5A-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.36	1.2	PQL	mg/Kg	J (all detects)
SL-138-SA5A-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.91	1.1	PQL	mg/Kg	J (all detects)

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-132-SA5A-SB-2.0-3.0	MERCURY	J	0.0088	0.108	PQL	mg/Kg	J (all detects)
SL-137-SA5A-SB-4.0-5.0	MERCURY	J	0.0088	0.113	PQL	mg/Kg	J (all detects)
SL-138-SA5A-SB-4.0-5.0	MERCURY	J	0.0108	0.110	PQL	mg/Kg	J (all detects)

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-132-SA5A-SB-2.0-3.0	METHYLENE CHLORIDE	J	1.1	4.0	PQL	ug/Kg	J (all detects)
SL-137-SA5A-SB-4.0-5.0	ETHYLBENZENE	J	0.14	4.2	PQL	ug/Kg	J (all detects)
	m,p-Xylene	J	0.49	4.2	PQL	ug/Kg	
	METHYLENE CHLORIDE	J	3.4	4.2	PQL	ug/Kg	
SL-138-SA5A-SB-4.0-5.0	ETHYLBENZENE	J	0.10	4.6	PQL	ug/Kg	J (all detects)
	m,p-Xylene	J	0.31	4.6	PQL	ug/Kg	
	METHYLENE CHLORIDE	J	2.0	4.6	PQL	ug/Kg	

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-138-SA5A-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	7.5	20	PQL	ug/Kg	J (all detects)

LDC #: 25911N4

VALIDATION COMPLETENESS WORKSHEET

Date: 8/3/11

SDG #: DE105

ADR

Laboratory: Lancaster Laboratories

Reviewer: CR

2nd Reviewer: A

METHOD: Metals (EPA SW 846 Method 6010B/6020A/7000)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	N	Sampling dates:
II.	ICP/MS Tune	—	
III.	Calibration	—	
IV.	Blanks	SW	
V.	ICP Interference Check Sample (ICS) Analysis	N	
VI.	Matrix Spike Analysis	N	MS/D(Al, Ca, Fe, Mg, Mn, Ti > 4x)
VII.	Duplicate Sample Analysis	N	Dup(Sb, Se, Ag, Zr <5x RL)
VIII.	Laboratory Control Samples (LCS)	N A	LCS
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	SW	Co: 23%, V: 12% J/UJ
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	—	
XV	Field Blanks	SW	EB=4

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:

1	SL-137-SA5A-SB-4.0-5.0	11		21		31	
2	SL-132-SA5A-SB-2.0-3.0	12		22		32	
3	SL-138-SA5A-SB-4.0-5.0	13		23		33	
4	EB07-SA5A-031511	14		24		34	
5	(XI) MS	15		25		35	
6	MSD	16		26		36	
7	DUP	17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

LDC #: 25911N4

VALIDATION FINDINGS WORKSHEET
PB/ICB/CCB QUALIFIED SAMPLES

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: Trace metals (EPA SW 864 Method 6010B/6020/7000)
Soil preparation factor applied: 100x x MS: 2xdil
Sample Concentration units, unless otherwise noted: ug/L
Associated Samples: All Water

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit	4											
Mg			89.7	448.5	20.2											

Sample Concentration units, unless otherwise noted: ug/L
Associated Samples: All Soil

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit	No Quals											
Tl			0.098	0.098												
Sn			2.3	1.15												

Samples with analyte concentrations within five times the associated ICB, CCB or PB concentration are listed above with the identifications from the Validation Completeness Worksheet. These sample results were qualified as not detected, "U".

Note : a - The listed analyte concentration is the highest ICB, CCB, or PB detected in the analysis of each element.

LDC #: 25911N4

VALIDATION FINDINGS WORKSHEET
Field Blanks

Page: 1 of 1
Reviewer: AL
2nd Reviewer:

METHOD: Trace Metals (EPA SW846 6010B/7000)
Y N N/A Were field blanks identified in this SDG?
Y N N/A Were target analytes detected in the field blanks?
Blank units: ug/L **Associated sample units:** mg/Kg
Sampling date: 3/15/11 Soil factor applied 100x
Field blank type: (circle one) Field Blank / Rinsate / Other: Associated Samples: All Soil

Analyte	Blank ID	Sample Identification										
	4	Action Level	No Qualifiers									
Mg	20.2	10.1										

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
Samples with analyte concentrations within five times the associated field blank concentration are listed above, these sample results were qualified as not detected, "U".

SAMPLE DELIVERY GROUP

DE106

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
16-Mar-2011	TB-031611	6232224	TB	5030B	8015M	III
16-Mar-2011	TB-031611	6232224	TB	5030B	8260B	III
16-Mar-2011	TB-031611	6232224	TB	5030B	8260B SIM	III
16-Mar-2011	SL-146-SA5A-SB-3.0-4.0	6232220	N	3050B	6010B	III
16-Mar-2011	SL-146-SA5A-SB-3.0-4.0	6232220	N	3050B	6020	III
16-Mar-2011	SL-146-SA5A-SB-3.0-4.0	6232220	N	3060A	7199	III
16-Mar-2011	SL-146-SA5A-SB-3.0-4.0	6232220	N	3546	1625C	III
16-Mar-2011	SL-146-SA5A-SB-3.0-4.0	6232220	N	3550B	8015B	III
16-Mar-2011	SL-146-SA5A-SB-3.0-4.0	6232220	N	3550B	8015M	III
16-Mar-2011	SL-146-SA5A-SB-3.0-4.0	6232220	N	3550B	8082	III
16-Mar-2011	SL-146-SA5A-SB-3.0-4.0	6232220	N	3550B	8270C	III
16-Mar-2011	SL-146-SA5A-SB-3.0-4.0	6232220	N	3550B	8270C SIM	III
16-Mar-2011	SL-146-SA5A-SB-3.0-4.0	6232220	N	5035	8015M	III
16-Mar-2011	SL-146-SA5A-SB-3.0-4.0	6232220	N	5035	8260B	III
16-Mar-2011	SL-146-SA5A-SB-3.0-4.0	6232220	N	5035	8260B SIM	III
16-Mar-2011	SL-146-SA5A-SB-3.0-4.0	6232220	N	8330	8330A	III
16-Mar-2011	SL-146-SA5A-SB-3.0-4.0	6232220	N	Gen Prep	9045M	III
16-Mar-2011	SL-146-SA5A-SB-3.0-4.0	6232220	N	METHOD	300.0	III
16-Mar-2011	SL-146-SA5A-SB-3.0-4.0	6232220	N	METHOD	314.0	III
16-Mar-2011	SL-146-SA5A-SB-3.0-4.0	6232220	N	METHOD	7471A	III
16-Mar-2011	SL-146-SA5A-SB-3.0-4.0	6232220	N	METHOD	8015B	III
16-Mar-2011	SL-146-SA5A-SB-3.0-4.0	6232220	N	METHOD	8015M	III
16-Mar-2011	SL-146-SA5A-SB-3.0-4.0	6232220	N	METHOD	8315A	III
16-Mar-2011	SL-146-SA5A-SB-3.0-4.0	6232220	N	METHOD	9012B	III
16-Mar-2011	SL-146-SA5A-SB-3.0-4.0DUP	P232220D270030A	DUP	METHOD	300.0	III
16-Mar-2011	SL-146-SA5A-SB-3.0-4.0DUP	P232220D270302A	DUP	METHOD	314.0	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
16-Mar-2011	SL-146-SA5A-SB-3.0-4.0DUP	P232220D271618A	DUP	METHOD	9012B	III
16-Mar-2011	SL-146-SA5A-SB-3.0-4.0MSD	P232220M321609A	MSD	3550B	8015B	III
16-Mar-2011	SL-146-SA5A-SB-3.0-4.0MS	P232220R270045A	MS	METHOD	300.0	III
16-Mar-2011	SL-146-SA5A-SB-3.0-4.0MS	P232220R270326A	MS	METHOD	314.0	III
16-Mar-2011	SL-146-SA5A-SB-3.0-4.0MS	P232220R271619A	MS	METHOD	9012B	III
16-Mar-2011	SL-146-SA5A-SB-3.0-4.0MS	P232220R321524A	MS	3550B	8015B	III
16-Mar-2011	SL-128-SA5A-SB-4.0-5.0	6232221	N	3050B	6010B	III
16-Mar-2011	SL-128-SA5A-SB-4.0-5.0	6232221	N	3050B	6020	III
16-Mar-2011	SL-128-SA5A-SB-4.0-5.0	6232221	N	3060A	7199	III
16-Mar-2011	SL-128-SA5A-SB-4.0-5.0	6232221	N	3546	1625C	III
16-Mar-2011	SL-128-SA5A-SB-4.0-5.0	6232221	N	3550B	8015B	III
16-Mar-2011	SL-128-SA5A-SB-4.0-5.0	6232221	N	3550B	8015M	III
16-Mar-2011	SL-128-SA5A-SB-4.0-5.0	6232221	N	3550B	8082	III
16-Mar-2011	SL-128-SA5A-SB-4.0-5.0	6232221	N	3550B	8270C	III
16-Mar-2011	SL-128-SA5A-SB-4.0-5.0	6232221	N	3550B	8270C SIM	III
16-Mar-2011	SL-128-SA5A-SB-4.0-5.0	6232221	N	5035	8015M	III
16-Mar-2011	SL-128-SA5A-SB-4.0-5.0	6232221	N	5035	8260B	III
16-Mar-2011	SL-128-SA5A-SB-4.0-5.0	6232221	N	5035	8260B SIM	III
16-Mar-2011	SL-128-SA5A-SB-4.0-5.0	6232221	N	8330	8330A	III
16-Mar-2011	SL-128-SA5A-SB-4.0-5.0	6232221	N	Gen Prep	9045M	III
16-Mar-2011	SL-128-SA5A-SB-4.0-5.0	6232221	N	METHOD	300.0	III
16-Mar-2011	SL-128-SA5A-SB-4.0-5.0	6232221	N	METHOD	314.0	III
16-Mar-2011	SL-128-SA5A-SB-4.0-5.0	6232221	N	METHOD	7471A	III
16-Mar-2011	SL-128-SA5A-SB-4.0-5.0	6232221	N	METHOD	8015B	III
16-Mar-2011	SL-128-SA5A-SB-4.0-5.0	6232221	N	METHOD	8015M	III
16-Mar-2011	SL-128-SA5A-SB-4.0-5.0	6232221	N	METHOD	8315A	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
16-Mar-2011	SL-128-SA5A-SB-4.0-5.0	6232221	N	METHOD	9012B	III
16-Mar-2011	SL-128-SA5A-SB-9.0-10.0	6232222	N	3050B	6010B	III
16-Mar-2011	SL-128-SA5A-SB-9.0-10.0	6232222	N	3050B	6020	III
16-Mar-2011	SL-128-SA5A-SB-9.0-10.0	6232222	N	3060A	7199	III
16-Mar-2011	SL-128-SA5A-SB-9.0-10.0	6232222	N	3546	1625C	III
16-Mar-2011	SL-128-SA5A-SB-9.0-10.0	6232222	N	3550B	8015B	III
16-Mar-2011	SL-128-SA5A-SB-9.0-10.0	6232222	N	3550B	8015M	III
16-Mar-2011	SL-128-SA5A-SB-9.0-10.0	6232222	N	3550B	8082	III
16-Mar-2011	SL-128-SA5A-SB-9.0-10.0	6232222	N	3550B	8270C	III
16-Mar-2011	SL-128-SA5A-SB-9.0-10.0	6232222	N	3550B	8270C SIM	III
16-Mar-2011	SL-128-SA5A-SB-9.0-10.0	6232222	N	5035	8015M	III
16-Mar-2011	SL-128-SA5A-SB-9.0-10.0	6232222	N	5035	8260B	III
16-Mar-2011	SL-128-SA5A-SB-9.0-10.0	6232222	N	5035	8260B SIM	III
16-Mar-2011	SL-128-SA5A-SB-9.0-10.0	6232222	N	8330	8330A	III
16-Mar-2011	SL-128-SA5A-SB-9.0-10.0	6232222	N	Gen Prep	9045M	III
16-Mar-2011	SL-128-SA5A-SB-9.0-10.0	6232222	N	METHOD	300.0	III
16-Mar-2011	SL-128-SA5A-SB-9.0-10.0	6232222	N	METHOD	314.0	III
16-Mar-2011	SL-128-SA5A-SB-9.0-10.0	6232222	N	METHOD	7471A	III
16-Mar-2011	SL-128-SA5A-SB-9.0-10.0	6232222	N	METHOD	8015B	III
16-Mar-2011	SL-128-SA5A-SB-9.0-10.0	6232222	N	METHOD	8015M	III
16-Mar-2011	SL-128-SA5A-SB-9.0-10.0	6232222	N	METHOD	8315A	III
16-Mar-2011	SL-128-SA5A-SB-9.0-10.0	6232222	N	METHOD	9012B	III
16-Mar-2011	SL-128-SA5A-SB-9.0-10DUP	P232222D290930B	DUP	Gen Prep	9045M	III
16-Mar-2011	SL-133-SA5A-SB-4.0-5.0	6232223	N	3050B	6010B	III
16-Mar-2011	SL-133-SA5A-SB-4.0-5.0	6232223	N	3050B	6020	III
16-Mar-2011	SL-133-SA5A-SB-4.0-5.0	6232223	N	3060A	7199	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
16-Mar-2011	SL-133-SA5A-SB-4.0-5.0	6232223	N	3546	1625C	III
16-Mar-2011	SL-133-SA5A-SB-4.0-5.0	6232223	N	3550B	8015B	III
16-Mar-2011	SL-133-SA5A-SB-4.0-5.0	6232223	N	3550B	8015M	III
16-Mar-2011	SL-133-SA5A-SB-4.0-5.0	6232223	N	3550B	8082	III
16-Mar-2011	SL-133-SA5A-SB-4.0-5.0	6232223	N	3550B	8270C	III
16-Mar-2011	SL-133-SA5A-SB-4.0-5.0	6232223	N	3550B	8270C SIM	III
16-Mar-2011	SL-133-SA5A-SB-4.0-5.0	6232223	N	5035	8015M	III
16-Mar-2011	SL-133-SA5A-SB-4.0-5.0	6232223	N	5035	8260B	III
16-Mar-2011	SL-133-SA5A-SB-4.0-5.0	6232223	N	5035	8260B SIM	III
16-Mar-2011	SL-133-SA5A-SB-4.0-5.0	6232223	N	8330	8330A	III
16-Mar-2011	SL-133-SA5A-SB-4.0-5.0	6232223	N	Gen Prep	9045M	III
16-Mar-2011	SL-133-SA5A-SB-4.0-5.0	6232223	N	METHOD	300.0	III
16-Mar-2011	SL-133-SA5A-SB-4.0-5.0	6232223	N	METHOD	314.0	III
16-Mar-2011	SL-133-SA5A-SB-4.0-5.0	6232223	N	METHOD	7471A	III
16-Mar-2011	SL-133-SA5A-SB-4.0-5.0	6232223	N	METHOD	8015B	III
16-Mar-2011	SL-133-SA5A-SB-4.0-5.0	6232223	N	METHOD	8015M	III
16-Mar-2011	SL-133-SA5A-SB-4.0-5.0	6232223	N	METHOD	8315A	III
16-Mar-2011	SL-133-SA5A-SB-4.0-5.0	6232223	N	METHOD	9012B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE106 **Laboratory: LL**

EDD Filename: DE106_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: GENCHEM

Method: 300.0 **Matrix: SO**

Sample ID: SL-128-SA5A-SB-4.0-5.0 *Collected:* 3/16/2011 12:49:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	3.0		0.90	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-128-SA5A-SB-9.0-10.0 *Collected:* 3/16/2011 12:58:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	3.8		0.85	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-133-SA5A-SB-4.0-5.0 *Collected:* 3/16/2011 3:18:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.7		0.90	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-146-SA5A-SB-3.0-4.0 *Collected:* 3/16/2011 10:16:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.3		0.92	MDL	1.2	PQL	mg/Kg	J	Q

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-128-SA5A-SB-4.0-5.0 *Collected:* 3/16/2011 12:49:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.08	J	0.962	MDL	5.40	PQL	mg/Kg	J	Z
MANGANESE	280		0.0843	MDL	0.540	PQL	mg/Kg	J	Q, E
SODIUM	88.0	J	40.3	MDL	108	PQL	mg/Kg	J	Z
TIN	2.85	J	1.08	MDL	10.8	PQL	mg/Kg	U	B
Zirconium	1.52	J	0.908	MDL	5.40	PQL	mg/Kg	J	Z

Sample ID: SL-128-SA5A-SB-9.0-10.0 *Collected:* 3/16/2011 12:58:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.01	J	0.922	MDL	5.18	PQL	mg/Kg	J	Z
MANGANESE	283		0.0808	MDL	0.518	PQL	mg/Kg	J	Q, E
TIN	2.73	J	1.04	MDL	10.4	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE106 **Laboratory: LL**

EDD Filename: DE106_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6010B** ***Matrix:*** **SO**

Sample ID: SL-128-SA5A-SB-9.0-10.0 ***Collected:*** 3/16/2011 12:58:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	1.51	J	0.871	MDL	5.18	PQL	mg/Kg	J	Z

Sample ID: SL-133-SA5A-SB-4.0-5.0 ***Collected:*** 3/16/2011 3:18:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.37	J	0.983	MDL	5.52	PQL	mg/Kg	J	Z
MANGANESE	284		0.0861	MDL	0.552	PQL	mg/Kg	J	Q, E
TIN	2.74	J	1.10	MDL	11.0	PQL	mg/Kg	U	B
Zirconium	1.57	J	0.927	MDL	5.52	PQL	mg/Kg	J	Z

Sample ID: SL-146-SA5A-SB-3.0-4.0 ***Collected:*** 3/16/2011 10:16:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.36	J	1.01	MDL	5.70	PQL	mg/Kg	J	Z
MANGANESE	293		0.0889	MDL	0.570	PQL	mg/Kg	J	Q, E
SODIUM	92.8	J	42.5	MDL	114	PQL	mg/Kg	J	Z
TIN	3.32	J	1.14	MDL	11.4	PQL	mg/Kg	U	B
Zirconium	2.32	J	0.957	MDL	5.70	PQL	mg/Kg	J	Z

Method Category: **METALS**

Method: **6020** ***Matrix:*** **SO**

Sample ID: SL-128-SA5A-SB-4.0-5.0 ***Collected:*** 3/16/2011 12:49:00 ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.211	J	0.0441	MDL	0.441	PQL	mg/Kg	J	Z

Sample ID: SL-128-SA5A-SB-4.0-5.0 ***Collected:*** 3/16/2011 12:49:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.630		0.0551	MDL	0.110	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE106 **Laboratory: LL**

EDD Filename: DE106_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6020** ***Matrix:*** **SO**

Sample ID: **SL-128-SA5A-SB-4.0-5.0** ***Collected:*** **3/16/2011 12:49:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	110		0.119	MDL	0.441	PQL	mg/Kg	J	A

Sample ID: **SL-128-SA5A-SB-4.0-5.0** ***Collected:*** **3/16/2011 12:49:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	11.3		0.0713	MDL	0.432	PQL	mg/Kg	J	E

Sample ID: **SL-128-SA5A-SB-4.0-5.0** ***Collected:*** **3/16/2011 12:49:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.231		0.0661	MDL	0.220	PQL	mg/Kg	J	Q, E
ARSENIC	6.10		0.0881	MDL	0.441	PQL	mg/Kg	J	Q
BERYLLIUM	0.798		0.0176	MDL	0.110	PQL	mg/Kg	J	Q
CADMIUM	0.317		0.0441	MDL	0.110	PQL	mg/Kg	J	Q
CHROMIUM	21.8		0.132	MDL	0.441	PQL	mg/Kg	J	Q, A
LEAD	11.3		0.0115	MDL	0.220	PQL	mg/Kg	J	Q, A
NICKEL	14.2		0.110	MDL	0.441	PQL	mg/Kg	J	Q
SILVER	0.0321	J	0.0132	MDL	0.110	PQL	mg/Kg	J	Z, Q
VANADIUM	43.7		0.0242	MDL	0.110	PQL	mg/Kg	J	A
ZINC	89.5		0.617	MDL	3.30	PQL	mg/Kg	J	A

Sample ID: **SL-128-SA5A-SB-9.0-10.0** ***Collected:*** **3/16/2011 12:58:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.176	J	0.0415	MDL	0.415	PQL	mg/Kg	J	Z

Sample ID: **SL-128-SA5A-SB-9.0-10.0** ***Collected:*** **3/16/2011 12:58:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.749		0.0518	MDL	0.104	PQL	mg/Kg	J	Q

Sample ID: **SL-128-SA5A-SB-9.0-10.0** ***Collected:*** **3/16/2011 12:58:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	112		0.112	MDL	0.415	PQL	mg/Kg	J	A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE106 **Laboratory: LL**

EDD Filename: DE106_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6020** ***Matrix:*** **SO**

Sample ID: **SL-128-SA5A-SB-9.0-10.0** ***Collected:*** **3/16/2011 12:58:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	10.9		0.0671	MDL	0.407	PQL	mg/Kg	J	E

Sample ID: **SL-128-SA5A-SB-9.0-10.0** ***Collected:*** **3/16/2011 12:58:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.174	J	0.0622	MDL	0.207	PQL	mg/Kg	J	Z, Q, E
ARSENIC	5.98		0.0829	MDL	0.415	PQL	mg/Kg	J	Q
BERYLLIUM	0.745		0.0166	MDL	0.104	PQL	mg/Kg	J	Q
CADMIUM	0.264		0.0415	MDL	0.104	PQL	mg/Kg	J	Q
CHROMIUM	20.8		0.124	MDL	0.415	PQL	mg/Kg	J	Q, A
LEAD	13.2		0.0108	MDL	0.207	PQL	mg/Kg	J	Q, A
NICKEL	13.2		0.104	MDL	0.415	PQL	mg/Kg	J	Q
SILVER	0.0326	J	0.0124	MDL	0.104	PQL	mg/Kg	J	Z, Q
VANADIUM	41.8		0.0228	MDL	0.104	PQL	mg/Kg	J	A
ZINC	134		0.580	MDL	3.11	PQL	mg/Kg	J	A

Sample ID: **SL-133-SA5A-SB-4.0-5.0** ***Collected:*** **3/16/2011 3:18:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.140	J	0.0433	MDL	0.433	PQL	mg/Kg	J	Z

Sample ID: **SL-133-SA5A-SB-4.0-5.0** ***Collected:*** **3/16/2011 3:18:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.647		0.0541	MDL	0.108	PQL	mg/Kg	J	Q

Sample ID: **SL-133-SA5A-SB-4.0-5.0** ***Collected:*** **3/16/2011 3:18:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	105		0.117	MDL	0.433	PQL	mg/Kg	J	A

Sample ID: **SL-133-SA5A-SB-4.0-5.0** ***Collected:*** **3/16/2011 3:18:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	9.32		0.0729	MDL	0.442	PQL	mg/Kg	J	E

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE106 **Laboratory: LL**

EDD Filename: DE106_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6020** ***Matrix:*** **SO**

Sample ID: **SL-133-SA5A-SB-4.0-5.0** ***Collected:*** **3/16/2011 3:18:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.101	J	0.0650	MDL	0.217	PQL	mg/Kg	J	Z, Q, E
ARSENIC	5.23		0.0866	MDL	0.433	PQL	mg/Kg	J	Q
BERYLLIUM	0.725		0.0173	MDL	0.108	PQL	mg/Kg	J	Q
CADMIUM	0.162		0.0433	MDL	0.108	PQL	mg/Kg	J	Q
CHROMIUM	19.8		0.130	MDL	0.433	PQL	mg/Kg	J	Q, A
LEAD	6.77		0.0113	MDL	0.217	PQL	mg/Kg	J	Q, A
NICKEL	12.4		0.108	MDL	0.433	PQL	mg/Kg	J	Q
SILVER	0.0304	J	0.0130	MDL	0.108	PQL	mg/Kg	J	Z, Q
VANADIUM	39.2		0.0238	MDL	0.108	PQL	mg/Kg	J	A
ZINC	72.8		0.606	MDL	3.25	PQL	mg/Kg	J	A

Sample ID: **SL-146-SA5A-SB-3.0-4.0** ***Collected:*** **3/16/2011 10:16:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.201	J	0.0456	MDL	0.456	PQL	mg/Kg	J	Z

Sample ID: **SL-146-SA5A-SB-3.0-4.0** ***Collected:*** **3/16/2011 10:16:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.00		0.0570	MDL	0.114	PQL	mg/Kg	J	Q

Sample ID: **SL-146-SA5A-SB-3.0-4.0** ***Collected:*** **3/16/2011 10:16:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	134		0.123	MDL	0.456	PQL	mg/Kg	J	A

Sample ID: **SL-146-SA5A-SB-3.0-4.0** ***Collected:*** **3/16/2011 10:16:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	9.05		0.0745	MDL	0.451	PQL	mg/Kg	J	E

Sample ID: **SL-146-SA5A-SB-3.0-4.0** ***Collected:*** **3/16/2011 10:16:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.142	J	0.0684	MDL	0.228	PQL	mg/Kg	J	Z, Q, E

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE106 **Laboratory: LL**

EDD Filename: DE106_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 ***Matrix:*** SO

Sample ID: SL-146-SA5A-SB-3.0-4.0 ***Collected:*** 3/16/2011 10:16:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	9.94		0.0911	MDL	0.456	PQL	mg/Kg	J	Q
BERYLLIUM	1.39		0.0182	MDL	0.114	PQL	mg/Kg	J	Q
CADMIUM	0.0763	J	0.0456	MDL	0.114	PQL	mg/Kg	J	Z, Q
CHROMIUM	32.0		0.137	MDL	0.456	PQL	mg/Kg	J	Q, A
LEAD	11.0		0.0118	MDL	0.228	PQL	mg/Kg	J	Q, A
NICKEL	15.5		0.114	MDL	0.456	PQL	mg/Kg	J	Q
SILVER	0.0909	J	0.0137	MDL	0.114	PQL	mg/Kg	J	Z, Q
VANADIUM	60.6		0.0251	MDL	0.114	PQL	mg/Kg	J	A
ZINC	73.2		0.638	MDL	3.42	PQL	mg/Kg	J	A

Method Category: METALS

Method: 7199 ***Matrix:*** SO

Sample ID: SL-128-SA5A-SB-9.0-10.0 ***Collected:*** 3/16/2011 12:58:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.29	J	0.21	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-133-SA5A-SB-4.0-5.0 ***Collected:*** 3/16/2011 3:18:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.31	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-146-SA5A-SB-3.0-4.0 ***Collected:*** 3/16/2011 10:16:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.47	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 7471A ***Matrix:*** SO

Sample ID: SL-128-SA5A-SB-4.0-5.0 ***Collected:*** 3/16/2011 12:49:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0736	J	0.0032	MDL	0.111	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE106 **Laboratory: LL**

EDD Filename: DE106_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS
Method: 7471A **Matrix:** SO

Method Category: SVOA
Method: 8082 **Matrix:** SO

Sample ID: SL-128-SA5A-SB-4.0-5.0 *Collected:* 3/16/2011 12:49:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	0.48	J	0.44	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-128-SA5A-SB-9.0-10.0 *Collected:* 3/16/2011 12:58:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	0.53	J	0.41	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-133-SA5A-SB-4.0-5.0 *Collected:* 3/16/2011 3:18:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	0.87	J	0.44	MDL	1.9	PQL	ug/Kg	J	Z

Method Category: SVOA
Method: 8270C SIM **Matrix:** SO

Sample ID: SL-128-SA5A-SB-4.0-5.0 *Collected:* 3/16/2011 12:49:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	5.7	J	3.7	MDL	9.3	PQL	ug/Kg	J	Z
Di-n-butylphthalate	57	J	33	MDL	100	PQL	ug/Kg	U	B

Sample ID: SL-128-SA5A-SB-9.0-10.0 *Collected:* 3/16/2011 12:58:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(G,H,I)PERYLENE	4.9	J	3.5	MDL	8.8	PQL	ug/Kg	J	Z
CHRYSENE	4.9	J	1.8	MDL	8.8	PQL	ug/Kg	J	Z
Di-n-butylphthalate	56	J	32	MDL	95	PQL	ug/Kg	U	B
Di-n-octylphthalate	52	J	32	MDL	95	PQL	ug/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE106 **Laboratory: LL**

EDD Filename: DE106_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C SIM **Matrix:** SO

Sample ID: SL-133-SA5A-SB-4.0-5.0 *Collected:* 3/16/2011 3:18:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)PYRENE	4.5	J	3.7	MDL	9.2	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	6.9	J	3.7	MDL	9.2	PQL	ug/Kg	J	Z
Di-n-butylphthalate	57	J	33	MDL	100	PQL	ug/Kg	U	B

Sample ID: SL-146-SA5A-SB-3.0-4.0 *Collected:* 3/16/2011 10:16:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	0.92	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
CHRYSENE	1.3	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z
FLUORANTHENE	1.8	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
PYRENE	1.2	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z

Method Category: VOA

Method: 8015B **Matrix:** SO

Sample ID: SL-146-SA5A-SB-3.0-4.0 *Collected:* 3/16/2011 10:16:00 *Analysis Type:* REA3 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
m-Terphenyl	1.7	U	1.7	MDL	4.0	PQL	mg/Kg	UJ	Q
p-Terphenyl	1.7	U	1.7	MDL	4.0	PQL	mg/Kg	UJ	Q

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: SL-128-SA5A-SB-4.0-5.0 *Collected:* 3/16/2011 12:49:00 *Analysis Type:* RES *Dilution:* 0.92

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ETHYLBENZENE	0.07	J	0.06	MDL	4.1	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	0.80	J	0.25	MDL	4.1	PQL	ug/Kg	U	B

Sample ID: SL-128-SA5A-SB-9.0-10.0 *Collected:* 3/16/2011 12:58:00 *Analysis Type:* RES *Dilution:* 1.04

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.73	J	0.27	MDL	4.4	PQL	ug/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE106 **Laboratory: LL**

EDD Filename: DE106_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **VOA**

Method: **8260B** ***Matrix:*** **SO**

Sample ID: **SL-133-SA5A-SB-4.0-5.0** ***Collected:*** **3/16/2011 3:18:00** ***Analysis Type:*** **RES** ***Dilution:*** **0.83**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.64	J	0.22	MDL	3.7	PQL	ug/Kg	U	B

Sample ID: **SL-146-SA5A-SB-3.0-4.0** ***Collected:*** **3/16/2011 10:16:00** ***Analysis Type:*** **RES** ***Dilution:*** **0.9**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.67	J	0.25	MDL	4.1	PQL	ug/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE106 **Laboratory: LL**

EDD Filename: DE106_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
*#	Professional Judgment
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Verification Correlation Coefficient
C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE106 **Laboratory: LL**

EDD Filename: DE106_v1 **eQAPP Name: CDM_SSFL_110509**

F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation
L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery Lower Estimation

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE106 **Laboratory: LL**

EDD Filename: DE106_v1 **eQAPP Name: CDM_SSFL_110509**

R	Continuing Calibration Verification Percent Recovery Lower Rejection
R	Continuing Calibration Verification Percent Recovery Upper Estimation
R	Continuing Calibration Verification Percent Recovery Upper Rejection
R	Continuing Calibration Verification Relative Response Factor
R	Initial Calibration Relative Response Factor
R	Initial Calibration Verification Percent Recovery Lower Estimation
R	Initial Calibration Verification Percent Recovery Lower Rejection
R	Initial Calibration Verification Percent Recovery Upper Estimation
R	Initial Calibration Verification Percent Recovery Upper Rejection
R	Initial Calibration Verification Relative Response Factor
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control Outlier Reports

DE106

Method Blank Outlier Report

Lab Reporting Batch ID: DE106 **Laboratory: LL**

EDD Filename: DE106_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **6010B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P08008BB222027	3/22/2011 8:27:00 PM	PHOSPHORUS TIN	1.33 mg/Kg 1.57 mg/Kg	SL-128-SA5A-SB-4.0-5.0 SL-128-SA5A-SB-9.0-10.0 SL-133-SA5A-SB-4.0-5.0 SL-146-SA5A-SB-3.0-4.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-128-SA5A-SB-4.0-5.0(RES)	TIN	2.85 mg/Kg	2.85U mg/Kg
SL-128-SA5A-SB-9.0-10.0(RES)	TIN	2.73 mg/Kg	2.73U mg/Kg
SL-133-SA5A-SB-4.0-5.0(RES)	TIN	2.74 mg/Kg	2.74U mg/Kg
SL-146-SA5A-SB-3.0-4.0(RES)	TIN	3.32 mg/Kg	3.32U mg/Kg

Method: **6020**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P08726AB220813A	3/29/2011 8:13:00 AM	COPPER	0.139 mg/Kg	SL-128-SA5A-SB-4.0-5.0 SL-128-SA5A-SB-9.0-10.0 SL-133-SA5A-SB-4.0-5.0 SL-146-SA5A-SB-3.0-4.0

Method: **8015M**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P76765AB321804A	3/18/2011 6:04:00 PM	ETHYLENE GLYCOL	8.8 mg/Kg	SL-128-SA5A-SB-4.0-5.0 SL-133-SA5A-SB-4.0-5.0 SL-146-SA5A-SB-3.0-4.0

Method: **8260B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB96B211227A	3/17/2011 12:27:00 PM	METHYLENE CHLORIDE TOLUENE	0.59 ug/Kg 0.15 ug/Kg	SL-128-SA5A-SB-4.0-5.0 SL-128-SA5A-SB-9.0-10.0 SL-133-SA5A-SB-4.0-5.0 SL-146-SA5A-SB-3.0-4.0

Method Blank Outlier Report

Lab Reporting Batch ID: DE106 **Laboratory: LL**

EDD Filename: DE106_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8260B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-128-SA5A-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.80 ug/Kg	4.1U ug/Kg
SL-128-SA5A-SB-9.0-10.0(RES)	METHYLENE CHLORIDE	0.73 ug/Kg	4.4U ug/Kg
SL-133-SA5A-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.64 ug/Kg	3.7U ug/Kg
SL-146-SA5A-SB-3.0-4.0(RES)	METHYLENE CHLORIDE	0.67 ug/Kg	4.1U ug/Kg

Method: **8270C SIM**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKLB08B260727	3/25/2011 7:27:00 AM	Di-n-butylphthalate Di-n-octylphthalate	11 ug/Kg 11 ug/Kg	SL-128-SA5A-SB-4.0-5.0 SL-128-SA5A-SB-9.0-10.0 SL-133-SA5A-SB-4.0-5.0 SL-146-SA5A-SB-3.0-4.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-128-SA5A-SB-4.0-5.0(RES)	Di-n-butylphthalate	57 ug/Kg	100U ug/Kg
SL-128-SA5A-SB-9.0-10.0(RES)	Di-n-butylphthalate	56 ug/Kg	95U ug/Kg
SL-128-SA5A-SB-9.0-10.0(RES)	Di-n-octylphthalate	52 ug/Kg	95U ug/Kg
SL-133-SA5A-SB-4.0-5.0(RES)	Di-n-butylphthalate	57 ug/Kg	100U ug/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE106 **Laboratory: LL**

EDD Filename: DE106_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 300.0
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-146-SA5A-SB-3.0-4.0MS (SL-128-SA5A-SB-4.0-5.0 SL-128-SA5A-SB-9.0-10.0 SL-133-SA5A-SB-4.0-5.0 SL-146-SA5A-SB-3.0-4.0)	FLUORIDE	41	-	80.00-120.00	-	FLUORIDE	J (all detects) UJ (all non-detects)

Method: 8015B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-146-SA5A-SB-3.0-4.0MSD (SL-146-SA5A-SB-3.0-4.0)	m-Terphenyl	-	73	75.00-125.00	-	m-Terphenyl	J(all detects)
	p-Terphenyl	-	72	75.00-125.00	-	p-Terphenyl	UJ(all non-detects)

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE106 **Laboratory: LL**

EDD Filename: DE106_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8270C SIM**

Matrix: **SO**

QC Sample ID (Associated Samples)	*Compound*	*LCS %R*	*LCSD %R*	*%R Limits*	*RPD (Limits)*	*Affected Compounds*	*Flag*
P1LBLCSQ260758 (SL-128-SA5A-SB-4.0-5.0 SL-128-SA5A-SB-9.0-10.0 SL-133-SA5A-SB-4.0-5.0 SL-146-SA5A-SB-3.0-4.0)	INDENO(1,2,3-CD)PYRENE	135	-	56.00-134.00	-	INDENO(1,2,3-CD)PYRENE	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE106 **Laboratory: LL**

EDD Filename: PrepDE106_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-128-SA5A-SB-4.0-5.0	BORON	J	2.08	5.40	PQL	mg/Kg	J (all detects)
	SODIUM	J	88.0	108	PQL	mg/Kg	
	TIN	J	2.85	10.8	PQL	mg/Kg	
	Zirconium	J	1.52	5.40	PQL	mg/Kg	
SL-128-SA5A-SB-9.0-10.0	BORON	J	2.01	5.18	PQL	mg/Kg	J (all detects)
	TIN	J	2.73	10.4	PQL	mg/Kg	
	Zirconium	J	1.51	5.18	PQL	mg/Kg	
SL-133-SA5A-SB-4.0-5.0	BORON	J	2.37	5.52	PQL	mg/Kg	J (all detects)
	TIN	J	2.74	11.0	PQL	mg/Kg	
	Zirconium	J	1.57	5.52	PQL	mg/Kg	
SL-146-SA5A-SB-3.0-4.0	BORON	J	2.36	5.70	PQL	mg/Kg	J (all detects)
	SODIUM	J	92.8	114	PQL	mg/Kg	
	TIN	J	3.32	11.4	PQL	mg/Kg	
	Zirconium	J	2.32	5.70	PQL	mg/Kg	

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-128-SA5A-SB-4.0-5.0	SELENIUM	J	0.211	0.441	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0321	0.110	PQL	mg/Kg	
SL-128-SA5A-SB-9.0-10.0	ANTIMONY	J	0.174	0.207	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.176	0.415	PQL	mg/Kg	
	SILVER	J	0.0326	0.104	PQL	mg/Kg	
SL-133-SA5A-SB-4.0-5.0	ANTIMONY	J	0.101	0.217	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.140	0.433	PQL	mg/Kg	
	SILVER	J	0.0304	0.108	PQL	mg/Kg	
SL-146-SA5A-SB-3.0-4.0	ANTIMONY	J	0.142	0.228	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0763	0.114	PQL	mg/Kg	
	SELENIUM	J	0.201	0.456	PQL	mg/Kg	
	SILVER	J	0.0909	0.114	PQL	mg/Kg	

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-128-SA5A-SB-9.0-10.0	HEXAVALENT CHROMIUM	J	0.29	1.1	PQL	mg/Kg	J (all detects)
SL-133-SA5A-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.31	1.1	PQL	mg/Kg	J (all detects)
SL-146-SA5A-SB-3.0-4.0	HEXAVALENT CHROMIUM	J	0.47	1.2	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE106 | Laboratory: LL

EDD Filename: PrepDE106_v1 | eQAPP Name: CDM_SSFL_110509

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-128-SA5A-SB-4.0-5.0	MERCURY	J	0.0736	0.111	PQL	mg/Kg	J (all detects)

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-128-SA5A-SB-4.0-5.0	AROCLOR 1260	J	0.48	1.9	PQL	ug/Kg	J (all detects)
SL-128-SA5A-SB-9.0-10.0	AROCLOR 1260	J	0.53	1.8	PQL	ug/Kg	J (all detects)
SL-133-SA5A-SB-4.0-5.0	AROCLOR 1260	J	0.87	1.9	PQL	ug/Kg	J (all detects)

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-128-SA5A-SB-4.0-5.0	ETHYLBENZENE	J	0.07	4.1	PQL	ug/Kg	J (all detects)
	METHYLENE CHLORIDE	J	0.80	4.1	PQL	ug/Kg	
SL-128-SA5A-SB-9.0-10.0	METHYLENE CHLORIDE	J	0.73	4.4	PQL	ug/Kg	J (all detects)
SL-133-SA5A-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.64	3.7	PQL	ug/Kg	J (all detects)
SL-146-SA5A-SB-3.0-4.0	METHYLENE CHLORIDE	J	0.67	4.1	PQL	ug/Kg	J (all detects)

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-128-SA5A-SB-4.0-5.0	BENZO(B)FLUORANTHENE	J	5.7	9.3	PQL	ug/Kg	J (all detects)
	Di-n-butylphthalate	J	57	100	PQL	ug/Kg	
SL-128-SA5A-SB-9.0-10.0	BENZO(G,H,I)PERYLENE	J	4.9	8.8	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	4.9	8.8	PQL	ug/Kg	
	Di-n-butylphthalate	J	56	95	PQL	ug/Kg	
	Di-n-octylphthalate	J	52	95	PQL	ug/Kg	
SL-133-SA5A-SB-4.0-5.0	BENZO(A)PYRENE	J	4.5	9.2	PQL	ug/Kg	J (all detects)
	BENZO(B)FLUORANTHENE	J	6.9	9.2	PQL	ug/Kg	
	Di-n-butylphthalate	J	57	100	PQL	ug/Kg	
SL-146-SA5A-SB-3.0-4.0	BENZO(B)FLUORANTHENE	J	0.92	1.9	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	1.3	1.9	PQL	ug/Kg	
	FLUORANTHENE	J	1.8	1.9	PQL	ug/Kg	
	PYRENE	J	1.2	1.9	PQL	ug/Kg	

LDC #: 25911O4 **VALIDATION COMPLETENESS WORKSHEET** Date: 8-3-11

SDG #: DE106 ADR

Laboratory: Lancaster Laboratories

Reviewer: CR

2nd Reviewer: [illegible]

METHOD: Metals (EPA SW 846 Method 6010B/6020A/7000)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets. .

	Validation Area		Comments
I.	Technical holding times	N	Sampling dates:
II.	ICP/MS Tune	—	
III.	Calibration	—	
IV.	Blanks	A	No Qual
V.	ICP Interference Check Sample (ICS) Analysis	N	
VI.	Matrix Spike Analysis	N	MS/D (SDG: DE108)
VII.	Duplicate Sample Analysis	N	Dup ↓
VIII.	Laboratory Control Samples (LCS)	A	LCS
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	—	(DE108)
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	—	
XV	Field Blanks	—	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:

1	SL-146-SA5A-SB-3.0-4.0	11		21		31	
2	SL-128-SA5A-SB-4.0-5.0	12		22		32	
3	SL-128-SA5A-SB-9.0-10.0	13		23		33	
4	SL-133-SA5A-SB-4.0-5.0	14		24		34	
5		15		25		35	
6		16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

SAMPLE DELIVERY GROUP

DE107

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
17-Mar-2011	TB-031711	6233380	TB	5030B	8015M	III
17-Mar-2011	TB-031711	6233380	TB	5030B	8260B	III
17-Mar-2011	TB-031711	6233380	TB	5030B	8260B SIM	III
17-Mar-2011	SL-139-SA5A-SB-2.5-3.5	6233378	N	3050B	6010B	III
17-Mar-2011	SL-139-SA5A-SB-2.5-3.5	6233378	N	3050B	6020	III
17-Mar-2011	SL-139-SA5A-SB-2.5-3.5	6233378	N	3060A	7199	III
17-Mar-2011	SL-139-SA5A-SB-2.5-3.5	6233378	N	3546	1625C	III
17-Mar-2011	SL-139-SA5A-SB-2.5-3.5	6233378	N	3550B	8015B	III
17-Mar-2011	SL-139-SA5A-SB-2.5-3.5	6233378	N	3550B	8015M	III
17-Mar-2011	SL-139-SA5A-SB-2.5-3.5	6233378	N	3550B	8082	III
17-Mar-2011	SL-139-SA5A-SB-2.5-3.5	6233378	N	3550B	8270C	III
17-Mar-2011	SL-139-SA5A-SB-2.5-3.5	6233378	N	3550B	8270C SIM	III
17-Mar-2011	SL-139-SA5A-SB-2.5-3.5	6233378	N	5035	8015M	III
17-Mar-2011	SL-139-SA5A-SB-2.5-3.5	6233378	N	5035	8260B	III
17-Mar-2011	SL-139-SA5A-SB-2.5-3.5	6233378	N	5035	8260B SIM	III
17-Mar-2011	SL-139-SA5A-SB-2.5-3.5	6233378	N	8330	8330A	III
17-Mar-2011	SL-139-SA5A-SB-2.5-3.5	6233378	N	Gen Prep	9045M	III
17-Mar-2011	SL-139-SA5A-SB-2.5-3.5	6233378	N	METHOD	300.0	III
17-Mar-2011	SL-139-SA5A-SB-2.5-3.5	6233378	N	METHOD	314.0	III
17-Mar-2011	SL-139-SA5A-SB-2.5-3.5	6233378	N	METHOD	7471A	III
17-Mar-2011	SL-139-SA5A-SB-2.5-3.5	6233378	N	METHOD	8015B	III
17-Mar-2011	SL-139-SA5A-SB-2.5-3.5	6233378	N	METHOD	8015M	III
17-Mar-2011	SL-139-SA5A-SB-2.5-3.5	6233378	N	METHOD	8315A	III
17-Mar-2011	SL-139-SA5A-SB-2.5-3.5	6233378	N	METHOD	9012B	III
17-Mar-2011	SL-139-SA5A-SB-2.5-3.5MSD	P233378M321942A	MSD	METHOD	8015B	III
17-Mar-2011	SL-139-SA5A-SB-2.5-3.5MS	P233378R321927A	MS	METHOD	8015B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
17-Mar-2011	SL-136-SA5A-SB-4.0-5.0	6233377	N	3050B	6010B	III
17-Mar-2011	SL-136-SA5A-SB-4.0-5.0	6233377	N	3050B	6020	III
17-Mar-2011	SL-136-SA5A-SB-4.0-5.0	6233377	N	3060A	7199	III
17-Mar-2011	SL-136-SA5A-SB-4.0-5.0	6233377	N	3546	1625C	III
17-Mar-2011	SL-136-SA5A-SB-4.0-5.0	6233377	N	3550B	8015B	III
17-Mar-2011	SL-136-SA5A-SB-4.0-5.0	6233377	N	3550B	8015M	III
17-Mar-2011	SL-136-SA5A-SB-4.0-5.0	6233377	N	3550B	8082	III
17-Mar-2011	SL-136-SA5A-SB-4.0-5.0	6233377	N	3550B	8270C	III
17-Mar-2011	SL-136-SA5A-SB-4.0-5.0	6233377	N	3550B	8270C SIM	III
17-Mar-2011	SL-136-SA5A-SB-4.0-5.0	6233377	N	5035	8015M	III
17-Mar-2011	SL-136-SA5A-SB-4.0-5.0	6233377	N	5035	8260B	III
17-Mar-2011	SL-136-SA5A-SB-4.0-5.0	6233377	N	5035	8260B SIM	III
17-Mar-2011	SL-136-SA5A-SB-4.0-5.0	6233377	N	8330	8330A	III
17-Mar-2011	SL-136-SA5A-SB-4.0-5.0	6233377	N	Gen Prep	9045M	III
17-Mar-2011	SL-136-SA5A-SB-4.0-5.0	6233377	N	METHOD	300.0	III
17-Mar-2011	SL-136-SA5A-SB-4.0-5.0	6233377	N	METHOD	314.0	III
17-Mar-2011	SL-136-SA5A-SB-4.0-5.0	6233377	N	METHOD	7471A	III
17-Mar-2011	SL-136-SA5A-SB-4.0-5.0	6233377	N	METHOD	8015B	III
17-Mar-2011	SL-136-SA5A-SB-4.0-5.0	6233377	N	METHOD	8015M	III
17-Mar-2011	SL-136-SA5A-SB-4.0-5.0	6233377	N	METHOD	8315A	III
17-Mar-2011	SL-136-SA5A-SB-4.0-5.0	6233377	N	METHOD	9012B	III
17-Mar-2011	SL-136-SA5A-SB-4.0-5.0MSD	P233377M321949A	MSD	METHOD	8015M	III
17-Mar-2011	SL-136-SA5A-SB-4.0-5.0MS	P233377R321931A	MS	METHOD	8015M	III
17-Mar-2011	SL-158-SA5A-SB-4.0-5.0	6233379	N	3050B	6010B	III
17-Mar-2011	SL-158-SA5A-SB-4.0-5.0	6233379	N	3050B	6020	III
17-Mar-2011	SL-158-SA5A-SB-4.0-5.0	6233379	N	3060A	7199	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
17-Mar-2011	SL-158-SA5A-SB-4.0-5.0	6233379	N	3546	1625C	III
17-Mar-2011	SL-158-SA5A-SB-4.0-5.0	6233379	N	3550B	8015B	III
17-Mar-2011	SL-158-SA5A-SB-4.0-5.0	6233379	N	3550B	8015M	III
17-Mar-2011	SL-158-SA5A-SB-4.0-5.0	6233379	N	3550B	8082	III
17-Mar-2011	SL-158-SA5A-SB-4.0-5.0	6233379	N	3550B	8270C	III
17-Mar-2011	SL-158-SA5A-SB-4.0-5.0	6233379	N	3550B	8270C SIM	III
17-Mar-2011	SL-158-SA5A-SB-4.0-5.0	6233379	N	5035	8015M	III
17-Mar-2011	SL-158-SA5A-SB-4.0-5.0	6233379	N	5035	8260B	III
17-Mar-2011	SL-158-SA5A-SB-4.0-5.0	6233379	N	5035	8260B SIM	III
17-Mar-2011	SL-158-SA5A-SB-4.0-5.0	6233379	N	8330	8330A	III
17-Mar-2011	SL-158-SA5A-SB-4.0-5.0	6233379	N	Gen Prep	9045M	III
17-Mar-2011	SL-158-SA5A-SB-4.0-5.0	6233379	N	METHOD	300.0	III
17-Mar-2011	SL-158-SA5A-SB-4.0-5.0	6233379	N	METHOD	314.0	III
17-Mar-2011	SL-158-SA5A-SB-4.0-5.0	6233379	N	METHOD	6850	III
17-Mar-2011	SL-158-SA5A-SB-4.0-5.0	6233379	N	METHOD	7471A	III
17-Mar-2011	SL-158-SA5A-SB-4.0-5.0	6233379	N	METHOD	8015B	III
17-Mar-2011	SL-158-SA5A-SB-4.0-5.0	6233379	N	METHOD	8015M	III
17-Mar-2011	SL-158-SA5A-SB-4.0-5.0	6233379	N	METHOD	8315A	III
17-Mar-2011	SL-158-SA5A-SB-4.0-5.0	6233379	N	METHOD	9012B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE107 **Laboratory: LL**

EDD Filename: DE107_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-136-SA5A-SB-4.0-5.0 *Collected:* 3/17/2011 11:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.05	J	0.926	MDL	5.20	PQL	mg/Kg	J	Z
MANGANESE	216		0.0812	MDL	0.520	PQL	mg/Kg	J	Q, E
TIN	2.95	J	1.04	MDL	10.4	PQL	mg/Kg	U	B
Zirconium	1.43	J	0.874	MDL	5.20	PQL	mg/Kg	J	Z

Sample ID: SL-139-SA5A-SB-2.5-3.5 *Collected:* 3/17/2011 8:58:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.29	J	0.954	MDL	5.36	PQL	mg/Kg	J	Z
MANGANESE	239		0.0836	MDL	0.536	PQL	mg/Kg	J	Q, E
TIN	2.89	J	1.07	MDL	10.7	PQL	mg/Kg	U	B
Zirconium	0.917	J	0.900	MDL	5.36	PQL	mg/Kg	J	Z

Sample ID: SL-158-SA5A-SB-4.0-5.0 *Collected:* 3/17/2011 3:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.91	J	0.989	MDL	5.56	PQL	mg/Kg	J	Z
MANGANESE	172		0.0867	MDL	0.556	PQL	mg/Kg	J	Q, E
TIN	2.95	J	1.11	MDL	11.1	PQL	mg/Kg	U	B
Zirconium	1.90	J	0.933	MDL	5.56	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-136-SA5A-SB-4.0-5.0 *Collected:* 3/17/2011 11:35:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.138	J	0.0416	MDL	0.416	PQL	mg/Kg	J	Z

Sample ID: SL-136-SA5A-SB-4.0-5.0 *Collected:* 3/17/2011 11:35:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.847		0.0520	MDL	0.104	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE107 **Laboratory: LL**

EDD Filename: DE107_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6020** ***Matrix:*** **SO**

Sample ID: **SL-136-SA5A-SB-4.0-5.0** ***Collected:*** **3/17/2011 11:35:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	81.1		0.112	MDL	0.416	PQL	mg/Kg	J	A

Sample ID: **SL-136-SA5A-SB-4.0-5.0** ***Collected:*** **3/17/2011 11:35:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	6.05		0.0694	MDL	0.420	PQL	mg/Kg	J	E

Sample ID: **SL-136-SA5A-SB-4.0-5.0** ***Collected:*** **3/17/2011 11:35:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.126	J	0.0624	MDL	0.208	PQL	mg/Kg	J	Z, Q, E
ARSENIC	6.66		0.0833	MDL	0.416	PQL	mg/Kg	J	Q
BERYLLIUM	0.869		0.0167	MDL	0.104	PQL	mg/Kg	J	Q
CADMIUM	0.0647	J	0.0416	MDL	0.104	PQL	mg/Kg	J	Z, Q
CHROMIUM	22.6		0.125	MDL	0.416	PQL	mg/Kg	J	Q, A
LEAD	6.80		0.0108	MDL	0.208	PQL	mg/Kg	J	Q, A
NICKEL	11.9		0.104	MDL	0.416	PQL	mg/Kg	J	Q
SILVER	0.0395	J	0.0125	MDL	0.104	PQL	mg/Kg	J	Z, Q
VANADIUM	43.4		0.0229	MDL	0.104	PQL	mg/Kg	J	A
ZINC	59.4		0.583	MDL	3.12	PQL	mg/Kg	J	A

Sample ID: **SL-139-SA5A-SB-2.5-3.5** ***Collected:*** **3/17/2011 8:58:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.136	J	0.0433	MDL	0.433	PQL	mg/Kg	J	Z

Sample ID: **SL-139-SA5A-SB-2.5-3.5** ***Collected:*** **3/17/2011 8:58:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.500		0.0541	MDL	0.108	PQL	mg/Kg	J	Q

Sample ID: **SL-139-SA5A-SB-2.5-3.5** ***Collected:*** **3/17/2011 8:58:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	61.5		0.117	MDL	0.433	PQL	mg/Kg	J	A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE107 **Laboratory: LL**

EDD Filename: DE107_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6020** ***Matrix:*** **SO**

Sample ID: **SL-139-SA5A-SB-2.5-3.5** ***Collected:*** **3/17/2011 8:58:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	8.34		0.0700	MDL	0.424	PQL	mg/Kg	J	E

Sample ID: **SL-139-SA5A-SB-2.5-3.5** ***Collected:*** **3/17/2011 8:58:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0784	J	0.0649	MDL	0.216	PQL	mg/Kg	J	Z, Q, E
ARSENIC	5.93		0.0866	MDL	0.433	PQL	mg/Kg	J	Q
BERYLLIUM	0.569		0.0173	MDL	0.108	PQL	mg/Kg	J	Q
CADMIUM	0.0665	J	0.0433	MDL	0.108	PQL	mg/Kg	J	Z, Q
CHROMIUM	17.9		0.130	MDL	0.433	PQL	mg/Kg	J	Q, A
LEAD	4.97		0.0113	MDL	0.216	PQL	mg/Kg	J	Q, A
NICKEL	10.3		0.108	MDL	0.433	PQL	mg/Kg	J	Q
VANADIUM	36.1		0.0238	MDL	0.108	PQL	mg/Kg	J	A
ZINC	54.8		0.606	MDL	3.25	PQL	mg/Kg	J	A

Sample ID: **SL-158-SA5A-SB-4.0-5.0** ***Collected:*** **3/17/2011 3:40:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.162	J	0.0440	MDL	0.440	PQL	mg/Kg	J	Z

Sample ID: **SL-158-SA5A-SB-4.0-5.0** ***Collected:*** **3/17/2011 3:40:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.679		0.0550	MDL	0.110	PQL	mg/Kg	J	Q

Sample ID: **SL-158-SA5A-SB-4.0-5.0** ***Collected:*** **3/17/2011 3:40:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	67.8		0.119	MDL	0.440	PQL	mg/Kg	J	A

Sample ID: **SL-158-SA5A-SB-4.0-5.0** ***Collected:*** **3/17/2011 3:40:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	8.87		0.0726	MDL	0.440	PQL	mg/Kg	J	E

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE107 **Laboratory: LL**

EDD Filename: DE107_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-158-SA5A-SB-4.0-5.0 *Collected:* 3/17/2011 3:40:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0829	J	0.0660	MDL	0.220	PQL	mg/Kg	J	Z, Q, E
ARSENIC	6.32		0.0880	MDL	0.440	PQL	mg/Kg	J	Q
BERYLLIUM	0.822		0.0176	MDL	0.110	PQL	mg/Kg	J	Q
CADMIUM	0.0790	J	0.0440	MDL	0.110	PQL	mg/Kg	J	Z, Q
CHROMIUM	20.3		0.132	MDL	0.440	PQL	mg/Kg	J	Q, A
LEAD	6.04		0.0114	MDL	0.220	PQL	mg/Kg	J	Q, A
NICKEL	9.20		0.110	MDL	0.440	PQL	mg/Kg	J	Q
SILVER	0.0551	J	0.0132	MDL	0.110	PQL	mg/Kg	J	Z, Q
VANADIUM	41.8		0.0242	MDL	0.110	PQL	mg/Kg	J	A
ZINC	53.8		0.616	MDL	3.30	PQL	mg/Kg	J	A

Method Category: METALS

Method: 7199 **Matrix:** SO

Sample ID: SL-158-SA5A-SB-4.0-5.0 *Collected:* 3/17/2011 3:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.36	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 7471A **Matrix:** SO

Sample ID: SL-136-SA5A-SB-4.0-5.0 *Collected:* 3/17/2011 11:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0765	J	0.0030	MDL	0.104	PQL	mg/Kg	J	Z

Sample ID: SL-139-SA5A-SB-2.5-3.5 *Collected:* 3/17/2011 8:58:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0182	J	0.0030	MDL	0.104	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE107 **Laboratory: LL**

EDD Filename: DE107_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA
Method: 1625C **Matrix:** SO

Sample ID: SL-158-SA5A-SB-4.0-5.0 *Collected:* 3/17/2011 3:40:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	35.1	J	18.7	MDL	37.4	PQL	ng/Kg	J	Z

Method Category: SVOA
Method: 8015M **Matrix:** SO

Sample ID: SL-136-SA5A-SB-4.0-5.0 *Collected:* 3/17/2011 11:35:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DIETHYLENE GLYCOL	6.4	U	6.4	MDL	13	PQL	mg/Kg	UJ	Q

Sample ID: SL-136-SA5A-SB-4.0-5.0 *Collected:* 3/17/2011 11:35:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	1.1	J	0.42	MDL	1.3	PQL	mg/Kg	J	Z

Sample ID: SL-158-SA5A-SB-4.0-5.0 *Collected:* 3/17/2011 3:40:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	0.91	J	0.45	MDL	1.3	PQL	mg/Kg	J	Z

Method Category: SVOA
Method: 8270C SIM **Matrix:** SO

Sample ID: SL-158-SA5A-SB-4.0-5.0 *Collected:* 3/17/2011 3:40:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHRYSENE	0.47	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z
FLUORANTHENE	1.3	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
PHENANTHRENE	0.83	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE107 **Laboratory: LL**

EDD Filename: DE107_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **VOA**

Method: **8260B** ***Matrix:*** **SO**

Sample ID: **SL-136-SA5A-SB-4.0-5.0** ***Collected:*** **3/17/2011 11:35:00** ***Analysis Type:*** **RES** ***Dilution:*** **1.03**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.80	J	0.26	MDL	4.4	PQL	ug/Kg	U	B

Sample ID: **SL-139-SA5A-SB-2.5-3.5** ***Collected:*** **3/17/2011 8:58:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.87	J	0.26	MDL	4.4	PQL	ug/Kg	U	B

Sample ID: **SL-158-SA5A-SB-4.0-5.0** ***Collected:*** **3/17/2011 3:40:00** ***Analysis Type:*** **RES** ***Dilution:*** **0.87**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ETHYLBENZENE	0.07	J	0.06	MDL	3.9	PQL	ug/Kg	J	Z
m,p-Xylene	0.24	J	0.17	MDL	3.9	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	1.8	J	0.23	MDL	3.9	PQL	ug/Kg	U	B
TRICHLOROETHENE	0.16	J	0.15	MDL	3.9	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE107 **Laboratory: LL**

EDD Filename: DE107_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
*#	Professional Judgment
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Verification Correlation Coefficient
C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE107 **Laboratory: LL**

EDD Filename: DE107_v1 **eQAPP Name: CDM_SSFL_110509**

F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation
L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery Lower Estimation

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE107 **Laboratory: LL**

EDD Filename: DE107_v1 **eQAPP Name: CDM_SSFL_110509**

R	Continuing Calibration Verification Percent Recovery Lower Rejection
R	Continuing Calibration Verification Percent Recovery Upper Estimation
R	Continuing Calibration Verification Percent Recovery Upper Rejection
R	Continuing Calibration Verification Relative Response Factor
R	Initial Calibration Relative Response Factor
R	Initial Calibration Verification Percent Recovery Lower Estimation
R	Initial Calibration Verification Percent Recovery Lower Rejection
R	Initial Calibration Verification Percent Recovery Upper Estimation
R	Initial Calibration Verification Percent Recovery Upper Rejection
R	Initial Calibration Verification Relative Response Factor
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control Outlier Reports

DE107

Method Blank Outlier Report

Lab Reporting Batch ID: DE107 **Laboratory: LL**

EDD Filename: DE107_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P08008BB222027	3/22/2011 8:27:00 PM	PHOSPHORUS TIN	1.33 mg/Kg 1.57 mg/Kg	SL-136-SA5A-SB-4.0-5.0 SL-139-SA5A-SB-2.5-3.5 SL-158-SA5A-SB-4.0-5.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-136-SA5A-SB-4.0-5.0(RES)	TIN	2.95 mg/Kg	2.95U mg/Kg
SL-139-SA5A-SB-2.5-3.5(RES)	TIN	2.89 mg/Kg	2.89U mg/Kg
SL-158-SA5A-SB-4.0-5.0(RES)	TIN	2.95 mg/Kg	2.95U mg/Kg

Method: 6020
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P08726AB220813A	3/29/2011 8:13:00 AM	COPPER	0.139 mg/Kg	SL-136-SA5A-SB-4.0-5.0 SL-139-SA5A-SB-2.5-3.5 SL-158-SA5A-SB-4.0-5.0

Method: 8260B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB00B211218A	3/22/2011 12:18:00 PM	METHYLENE CHLORIDE TOLUENE	1.2 ug/Kg 0.20 ug/Kg	SL-136-SA5A-SB-4.0-5.0 SL-139-SA5A-SB-2.5-3.5 SL-158-SA5A-SB-4.0-5.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-136-SA5A-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.80 ug/Kg	4.4U ug/Kg
SL-139-SA5A-SB-2.5-3.5(RES)	METHYLENE CHLORIDE	0.87 ug/Kg	4.4U ug/Kg
SL-158-SA5A-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.8 ug/Kg	3.9U ug/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE107 **Laboratory: LL**

EDD Filename: DE107_v1 **eQAPP Name: CDM_SSFL_110509**

***Method:* 8015M**

***Matrix:* SO**

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-136-SA5A-SB-4.0-5.0MS SL-136-SA5A-SB-4.0-5.0MSD (SL-136-SA5A-SB-4.0-5.0)	DIETHYLENE GLYCOL	54	-	59.00-109.00	39 (20.00)	DIETHYLENE GLYCOL	J (all detects) UJ (all non-detects)

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE107 | Laboratory: LL

EDD Filename: DE107_v1 | eQAPP Name: CDM_SSFL_110509

Method: 8270C SIM
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P1LBLCSQ260758 (SL-136-SA5A-SB-4.0-5.0 SL-139-SA5A-SB-2.5-3.5 SL-158-SA5A-SB-4.0-5.0)	INDENO(1,2,3-CD)PYRENE	135	-	56.00-134.00	-	INDENO(1,2,3-CD)PYRENE	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE107 | Laboratory: LL

EDD Filename: DE107_v1 | eQAPP Name: CDM_SSFL_110509

Method: 1625C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-158-SA5A-SB-4.0-5.0	N-NITROSODIMETHYLAMINE	J	35.1	37.4	PQL	ng/Kg	J (all detects)

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-136-SA5A-SB-4.0-5.0	BORON	J	2.05	5.20	PQL	mg/Kg	J (all detects)
	TIN	J	2.95	10.4	PQL	mg/Kg	
	Zirconium	J	1.43	5.20	PQL	mg/Kg	
SL-139-SA5A-SB-2.5-3.5	BORON	J	1.29	5.36	PQL	mg/Kg	J (all detects)
	TIN	J	2.89	10.7	PQL	mg/Kg	
	Zirconium	J	0.917	5.36	PQL	mg/Kg	
SL-158-SA5A-SB-4.0-5.0	BORON	J	1.91	5.56	PQL	mg/Kg	J (all detects)
	TIN	J	2.95	11.1	PQL	mg/Kg	
	Zirconium	J	1.90	5.56	PQL	mg/Kg	

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-136-SA5A-SB-4.0-5.0	ANTIMONY	J	0.126	0.208	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0647	0.104	PQL	mg/Kg	
	SELENIUM	J	0.138	0.416	PQL	mg/Kg	
	SILVER	J	0.0395	0.104	PQL	mg/Kg	
SL-139-SA5A-SB-2.5-3.5	ANTIMONY	J	0.0784	0.216	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0665	0.108	PQL	mg/Kg	
	SELENIUM	J	0.136	0.433	PQL	mg/Kg	
SL-158-SA5A-SB-4.0-5.0	ANTIMONY	J	0.0829	0.220	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0790	0.110	PQL	mg/Kg	
	SELENIUM	J	0.162	0.440	PQL	mg/Kg	
	SILVER	J	0.0551	0.110	PQL	mg/Kg	

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-158-SA5A-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.36	1.1	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE107 **Laboratory: LL**

EDD Filename: DE107_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-136-SA5A-SB-4.0-5.0	MERCURY	J	0.0765	0.104	PQL	mg/Kg	J (all detects)
SL-139-SA5A-SB-2.5-3.5	MERCURY	J	0.0182	0.104	PQL	mg/Kg	J (all detects)

Method: 8015M

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-136-SA5A-SB-4.0-5.0	EFH (C30-C40)	J	1.1	1.3	PQL	mg/Kg	J (all detects)
SL-158-SA5A-SB-4.0-5.0	EFH (C30-C40)	J	0.91	1.3	PQL	mg/Kg	J (all detects)

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-136-SA5A-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.80	4.4	PQL	ug/Kg	J (all detects)
SL-139-SA5A-SB-2.5-3.5	METHYLENE CHLORIDE	J	0.87	4.4	PQL	ug/Kg	J (all detects)
SL-158-SA5A-SB-4.0-5.0	ETHYLBENZENE	J	0.07	3.9	PQL	ug/Kg	J (all detects)
	m,p-Xylene	J	0.24	3.9	PQL	ug/Kg	
	METHYLENE CHLORIDE	J	1.8	3.9	PQL	ug/Kg	
	TRICHLOROETHENE	J	0.16	3.9	PQL	ug/Kg	

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-158-SA5A-SB-4.0-5.0	CHRYSENE	J	0.47	1.9	PQL	ug/Kg	J (all detects)
	FLUORANTHENE	J	1.3	1.9	PQL	ug/Kg	
	PHENANTHRENE	J	0.83	1.9	PQL	ug/Kg	

LDC #: 25911P4 **VALIDATION COMPLETENESS WORKSHEET** Date 8-3-11

SDG #: DE107 ADR

Laboratory: Lancaster Laboratories

Reviewer: CR

2nd Reviewer: A

METHOD: Metals (EPA SW 846 Method 6010B/6020A/7000)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	N	Sampling dates:
II.	ICP/MS Tune	—	
III.	Calibration	—	
IV.	Blanks	A	No Quals
V.	ICP Interference Check Sample (ICS) Analysis	N	
VI.	Matrix Spike Analysis	N	MSD (SDG DE108)
VII.	Duplicate Sample Analysis	N	Dup ✓
VIII.	Laboratory Control Samples (LCS)	A	LCS
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	—	(DE108)
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	—	
XV	Field Blanks	—	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:

1	SL-136-SA5A-SB-4.0-5.0	11		21		31	
2	SL-139-SA5A-SB-2.5-3.5	12		22		32	
3	SL-158-SA5A-SB-4.0-5.0	13		23		33	
4		14		24		34	
5		15		25		35	
6		16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

SAMPLE DELIVERY GROUP

DE108

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
18-Mar-2011	TB-031811	6234511	TB	5030B	8015M	III
18-Mar-2011	TB-031811	6234511	TB	5030B	8260B	III
18-Mar-2011	TB-031811	6234511	TB	5030B	8260B SIM	III
18-Mar-2011	SL-159-SA5A-SB-4.0-5.0	6234506	N	3050B	6010B	III
18-Mar-2011	SL-159-SA5A-SB-4.0-5.0	6234506	N	3050B	6020	III
18-Mar-2011	SL-159-SA5A-SB-4.0-5.0	6234506	N	3060A	7199	III
18-Mar-2011	SL-159-SA5A-SB-4.0-5.0	6234506	N	3546	1625C	III
18-Mar-2011	SL-159-SA5A-SB-4.0-5.0	6234506	N	3550B	8015B	III
18-Mar-2011	SL-159-SA5A-SB-4.0-5.0	6234506	N	3550B	8015M	III
18-Mar-2011	SL-159-SA5A-SB-4.0-5.0	6234506	N	3550B	8082	III
18-Mar-2011	SL-159-SA5A-SB-4.0-5.0	6234506	N	3550B	8270C	III
18-Mar-2011	SL-159-SA5A-SB-4.0-5.0	6234506	N	3550B	8270C SIM	III
18-Mar-2011	SL-159-SA5A-SB-4.0-5.0	6234506	N	5035	8015M	III
18-Mar-2011	SL-159-SA5A-SB-4.0-5.0	6234506	N	5035	8260B	III
18-Mar-2011	SL-159-SA5A-SB-4.0-5.0	6234506	N	5035	8260B SIM	III
18-Mar-2011	SL-159-SA5A-SB-4.0-5.0	6234506	N	8330	8330A	III
18-Mar-2011	SL-159-SA5A-SB-4.0-5.0	6234506	N	Gen Prep	9045M	III
18-Mar-2011	SL-159-SA5A-SB-4.0-5.0	6234506	N	METHOD	300.0	III
18-Mar-2011	SL-159-SA5A-SB-4.0-5.0	6234506	N	METHOD	314.0	III
18-Mar-2011	SL-159-SA5A-SB-4.0-5.0	6234506	N	METHOD	7471A	III
18-Mar-2011	SL-159-SA5A-SB-4.0-5.0	6234506	N	METHOD	8015B	III
18-Mar-2011	SL-159-SA5A-SB-4.0-5.0	6234506	N	METHOD	8015M	III
18-Mar-2011	SL-159-SA5A-SB-4.0-5.0	6234506	N	METHOD	8315A	III
18-Mar-2011	SL-159-SA5A-SB-4.0-5.0	6234506	N	METHOD	9012B	III
18-Mar-2011	SL-159-SA5A-SB-4.0-5.0DUP	P234506D270317B	DUP	METHOD	300.0	III
18-Mar-2011	SL-159-SA5A-SB-4.0-5.0DUP	P234506D270702B	DUP	METHOD	314.0	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
18-Mar-2011	SL-159-SA5A-SB-4.0-5.0DUP	P234506D271726A	DUP	METHOD	9012B	III
18-Mar-2011	SL-159-SA5A-SB-4.0-5.0MSD	P234506M260442	MSD	3550B	8270C	III
18-Mar-2011	SL-159-SA5A-SB-4.0-5.0MSD	P234506M261209	MSD	3546	1625C	III
18-Mar-2011	SL-159-SA5A-SB-4.0-5.0MSD	P234506M321959A	MSD	METHOD	8015M	III
18-Mar-2011	SL-159-SA5A-SB-4.0-5.0MS	P234506R260416	MS	3550B	8270C	III
18-Mar-2011	SL-159-SA5A-SB-4.0-5.0MS	P234506R261152	MS	3546	1625C	III
18-Mar-2011	SL-159-SA5A-SB-4.0-5.0MS	P234506R270333B	MS	METHOD	300.0	III
18-Mar-2011	SL-159-SA5A-SB-4.0-5.0MS	P234506R270726B	MS	METHOD	314.0	III
18-Mar-2011	SL-159-SA5A-SB-4.0-5.0MS	P234506R271727A	MS	METHOD	9012B	III
18-Mar-2011	SL-159-SA5A-SB-4.0-5.0MS	P234506R321924A	MS	METHOD	8015M	III
18-Mar-2011	SL-169-SA5A-SB-4.0-5.0	6234507	N	3050B	6010B	III
18-Mar-2011	SL-169-SA5A-SB-4.0-5.0	6234507	N	3050B	6020	III
18-Mar-2011	SL-169-SA5A-SB-4.0-5.0	6234507	N	3060A	7199	III
18-Mar-2011	SL-169-SA5A-SB-4.0-5.0	6234507	N	3546	1625C	III
18-Mar-2011	SL-169-SA5A-SB-4.0-5.0	6234507	N	3550B	8015B	III
18-Mar-2011	SL-169-SA5A-SB-4.0-5.0	6234507	N	3550B	8015M	III
18-Mar-2011	SL-169-SA5A-SB-4.0-5.0	6234507	N	3550B	8082	III
18-Mar-2011	SL-169-SA5A-SB-4.0-5.0	6234507	N	3550B	8270C	III
18-Mar-2011	SL-169-SA5A-SB-4.0-5.0	6234507	N	3550B	8270C SIM	III
18-Mar-2011	SL-169-SA5A-SB-4.0-5.0	6234507	N	5035	8015M	III
18-Mar-2011	SL-169-SA5A-SB-4.0-5.0	6234507	N	5035	8260B	III
18-Mar-2011	SL-169-SA5A-SB-4.0-5.0	6234507	N	5035	8260B SIM	III
18-Mar-2011	SL-169-SA5A-SB-4.0-5.0	6234507	N	8330	8330A	III
18-Mar-2011	SL-169-SA5A-SB-4.0-5.0	6234507	N	Gen Prep	9045M	III
18-Mar-2011	SL-169-SA5A-SB-4.0-5.0	6234507	N	METHOD	300.0	III
18-Mar-2011	SL-169-SA5A-SB-4.0-5.0	6234507	N	METHOD	314.0	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
18-Mar-2011	SL-169-SA5A-SB-4.0-5.0	6234507	N	METHOD	7471A	III
18-Mar-2011	SL-169-SA5A-SB-4.0-5.0	6234507	N	METHOD	8015B	III
18-Mar-2011	SL-169-SA5A-SB-4.0-5.0	6234507	N	METHOD	8015M	III
18-Mar-2011	SL-169-SA5A-SB-4.0-5.0	6234507	N	METHOD	8315A	III
18-Mar-2011	SL-169-SA5A-SB-4.0-5.0	6234507	N	METHOD	9012B	III
18-Mar-2011	SL-168-SA5A-SB-4.0-5.0	6234508	N	3050B	6010B	III
18-Mar-2011	SL-168-SA5A-SB-4.0-5.0	6234508	N	3050B	6020	III
18-Mar-2011	SL-168-SA5A-SB-4.0-5.0	6234508	N	3060A	7199	III
18-Mar-2011	SL-168-SA5A-SB-4.0-5.0	6234508	N	3546	1625C	III
18-Mar-2011	SL-168-SA5A-SB-4.0-5.0	6234508	N	3550B	8015B	III
18-Mar-2011	SL-168-SA5A-SB-4.0-5.0	6234508	N	3550B	8015M	III
18-Mar-2011	SL-168-SA5A-SB-4.0-5.0	6234508	N	3550B	8082	III
18-Mar-2011	SL-168-SA5A-SB-4.0-5.0	6234508	N	3550B	8270C	III
18-Mar-2011	SL-168-SA5A-SB-4.0-5.0	6234508	N	3550B	8270C SIM	III
18-Mar-2011	SL-168-SA5A-SB-4.0-5.0	6234508	N	5035	8015M	III
18-Mar-2011	SL-168-SA5A-SB-4.0-5.0	6234508	N	5035	8260B	III
18-Mar-2011	SL-168-SA5A-SB-4.0-5.0	6234508	N	5035	8260B SIM	III
18-Mar-2011	SL-168-SA5A-SB-4.0-5.0	6234508	N	8330	8330A	III
18-Mar-2011	SL-168-SA5A-SB-4.0-5.0	6234508	N	Gen Prep	9045M	III
18-Mar-2011	SL-168-SA5A-SB-4.0-5.0	6234508	N	METHOD	300.0	III
18-Mar-2011	SL-168-SA5A-SB-4.0-5.0	6234508	N	METHOD	314.0	III
18-Mar-2011	SL-168-SA5A-SB-4.0-5.0	6234508	N	METHOD	6850	III
18-Mar-2011	SL-168-SA5A-SB-4.0-5.0	6234508	N	METHOD	7471A	III
18-Mar-2011	SL-168-SA5A-SB-4.0-5.0	6234508	N	METHOD	8015B	III
18-Mar-2011	SL-168-SA5A-SB-4.0-5.0	6234508	N	METHOD	8015M	III
18-Mar-2011	SL-168-SA5A-SB-4.0-5.0	6234508	N	METHOD	8315A	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
18-Mar-2011	SL-168-SA5A-SB-4.0-5.0	6234508	N	METHOD	9012B	III
18-Mar-2011	SL-160-SA5A-SB-4.0-5.0	6234509	N	3050B	6010B	III
18-Mar-2011	SL-160-SA5A-SB-4.0-5.0	6234509	N	3050B	6020	III
18-Mar-2011	SL-160-SA5A-SB-4.0-5.0	6234509	N	3060A	7199	III
18-Mar-2011	SL-160-SA5A-SB-4.0-5.0	6234509	N	3546	1625C	III
18-Mar-2011	SL-160-SA5A-SB-4.0-5.0	6234509	N	3550B	8015B	III
18-Mar-2011	SL-160-SA5A-SB-4.0-5.0	6234509	N	3550B	8015M	III
18-Mar-2011	SL-160-SA5A-SB-4.0-5.0	6234509	N	3550B	8082	III
18-Mar-2011	SL-160-SA5A-SB-4.0-5.0	6234509	N	3550B	8270C	III
18-Mar-2011	SL-160-SA5A-SB-4.0-5.0	6234509	N	3550B	8270C SIM	III
18-Mar-2011	SL-160-SA5A-SB-4.0-5.0	6234509	N	5035	8015M	III
18-Mar-2011	SL-160-SA5A-SB-4.0-5.0	6234509	N	5035	8260B	III
18-Mar-2011	SL-160-SA5A-SB-4.0-5.0	6234509	N	5035	8260B SIM	III
18-Mar-2011	SL-160-SA5A-SB-4.0-5.0	6234509	N	8330	8330A	III
18-Mar-2011	SL-160-SA5A-SB-4.0-5.0	6234509	N	Gen Prep	9045M	III
18-Mar-2011	SL-160-SA5A-SB-4.0-5.0	6234509	N	METHOD	300.0	III
18-Mar-2011	SL-160-SA5A-SB-4.0-5.0	6234509	N	METHOD	314.0	III
18-Mar-2011	SL-160-SA5A-SB-4.0-5.0	6234509	N	METHOD	7471A	III
18-Mar-2011	SL-160-SA5A-SB-4.0-5.0	6234509	N	METHOD	8015B	III
18-Mar-2011	SL-160-SA5A-SB-4.0-5.0	6234509	N	METHOD	8015M	III
18-Mar-2011	SL-160-SA5A-SB-4.0-5.0	6234509	N	METHOD	8315A	III
18-Mar-2011	SL-160-SA5A-SB-4.0-5.0	6234509	N	METHOD	9012B	III
18-Mar-2011	SL-160-SA5A-SB-9.0-10	6234510	N	3050B	6010B	III
18-Mar-2011	SL-160-SA5A-SB-9.0-10	6234510	N	3050B	6020	III
18-Mar-2011	SL-160-SA5A-SB-9.0-10	6234510	N	3060A	7199	III
18-Mar-2011	SL-160-SA5A-SB-9.0-10	6234510	N	3546	1625C	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
18-Mar-2011	SL-160-SA5A-SB-9.0-10	6234510	N	3550B	8015B	III
18-Mar-2011	SL-160-SA5A-SB-9.0-10	6234510	N	3550B	8015M	III
18-Mar-2011	SL-160-SA5A-SB-9.0-10	6234510	N	3550B	8082	III
18-Mar-2011	SL-160-SA5A-SB-9.0-10	6234510	N	3550B	8270C	III
18-Mar-2011	SL-160-SA5A-SB-9.0-10	6234510	N	3550B	8270C SIM	III
18-Mar-2011	SL-160-SA5A-SB-9.0-10	6234510	N	5035	8015M	III
18-Mar-2011	SL-160-SA5A-SB-9.0-10	6234510	N	5035	8260B	III
18-Mar-2011	SL-160-SA5A-SB-9.0-10	6234510	N	5035	8260B SIM	III
18-Mar-2011	SL-160-SA5A-SB-9.0-10	6234510	N	8330	8330A	III
18-Mar-2011	SL-160-SA5A-SB-9.0-10	6234510	N	Gen Prep	9045M	III
18-Mar-2011	SL-160-SA5A-SB-9.0-10	6234510	N	METHOD	300.0	III
18-Mar-2011	SL-160-SA5A-SB-9.0-10	6234510	N	METHOD	314.0	III
18-Mar-2011	SL-160-SA5A-SB-9.0-10	6234510	N	METHOD	7471A	III
18-Mar-2011	SL-160-SA5A-SB-9.0-10	6234510	N	METHOD	8015B	III
18-Mar-2011	SL-160-SA5A-SB-9.0-10	6234510	N	METHOD	8015M	III
18-Mar-2011	SL-160-SA5A-SB-9.0-10	6234510	N	METHOD	8315A	III
18-Mar-2011	SL-160-SA5A-SB-9.0-10	6234510	N	METHOD	9012B	III
18-Mar-2011	SL-160-SA5A-SB-9.0-10DUP	P234510D220803	DUP	METHOD	7471A	III
18-Mar-2011	SL-160-SA5A-SB-9.0-10DUP	P234510D220821A	DUP	3050B	6020	III
18-Mar-2011	SL-160-SA5A-SB-9.0-10DUP	P234510D221309A	DUP	3050B	6020	III
18-Mar-2011	SL-160-SA5A-SB-9.0-10DUP	P234510D221309B	DUP	3050B	6020	III
18-Mar-2011	SL-160-SA5A-SB-9.0-10DUP	P234510D221309C	DUP	3050B	6020	III
18-Mar-2011	SL-160-SA5A-SB-9.0-10DUP	P234510D221309D	DUP	3050B	6020	III
18-Mar-2011	SL-160-SA5A-SB-9.0-10DUP	P234510D222047	DUP	3050B	6010B	III
18-Mar-2011	SL-160-SA5A-SB-9.0-10MSD	P234510M220808	MSD	METHOD	7471A	III
18-Mar-2011	SL-160-SA5A-SB-9.0-10MSD	P234510M220824A	MSD	3050B	6020	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
18-Mar-2011	SL-160-SA5A-SB-9.0-10MSD	P234510M221315A	MSD	3050B	6020	III
18-Mar-2011	SL-160-SA5A-SB-9.0-10MSD	P234510M221315B	MSD	3050B	6020	III
18-Mar-2011	SL-160-SA5A-SB-9.0-10MSD	P234510M221315C	MSD	3050B	6020	III
18-Mar-2011	SL-160-SA5A-SB-9.0-10MSD	P234510M221315D	MSD	3050B	6020	III
18-Mar-2011	SL-160-SA5A-SB-9.0-10MSD	P234510M221503A	MSD	3050B	6020	III
18-Mar-2011	SL-160-SA5A-SB-9.0-10MSD	P234510M222055	MSD	3050B	6010B	III
18-Mar-2011	SL-160-SA5A-SB-9.0-10MS	P234510R220806	MS	METHOD	7471A	III
18-Mar-2011	SL-160-SA5A-SB-9.0-10MS	P234510R220823A	MS	3050B	6020	III
18-Mar-2011	SL-160-SA5A-SB-9.0-10MS	P234510R221312A	MS	3050B	6020	III
18-Mar-2011	SL-160-SA5A-SB-9.0-10MS	P234510R221312B	MS	3050B	6020	III
18-Mar-2011	SL-160-SA5A-SB-9.0-10MS	P234510R221312C	MS	3050B	6020	III
18-Mar-2011	SL-160-SA5A-SB-9.0-10MS	P234510R221312D	MS	3050B	6020	III
18-Mar-2011	SL-160-SA5A-SB-9.0-10MS	P234510R222051	MS	3050B	6010B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE108 | Laboratory: LL

EDD Filename: PrepDE108_v1 | eQAPP Name: CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: SL-159-SA5A-SB-4.0-5.0 *Collected:* 3/18/2011 9:24:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.0		0.87	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-160-SA5A-SB-4.0-5.0 *Collected:* 3/18/2011 3:14:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.1		0.91	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-160-SA5A-SB-9.0-10 *Collected:* 3/18/2011 3:24:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.6		0.86	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-168-SA5A-SB-4.0-5.0 *Collected:* 3/18/2011 12:49:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.9		0.90	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-169-SA5A-SB-4.0-5.0 *Collected:* 3/18/2011 10:47:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.5		0.93	MDL	1.2	PQL	mg/Kg	J	Q

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-159-SA5A-SB-4.0-5.0 *Collected:* 3/18/2011 9:24:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.63	J	0.950	MDL	5.34	PQL	mg/Kg	J	Z
MANGANESE	209		0.0833	MDL	0.534	PQL	mg/Kg	J	Q, E
TIN	3.11	J	1.07	MDL	10.7	PQL	mg/Kg	U	B
Zirconium	2.11	J	0.897	MDL	5.34	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE108 **Laboratory: LL**

EDD Filename: PrepDE108_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6010B** ***Matrix:*** **SO**

Sample ID: **SL-160-SA5A-SB-4.0-5.0** ***Collected:*** **3/18/2011 3:14:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.71	J	0.969	MDL	5.44	PQL	mg/Kg	J	Z
MANGANESE	254		0.0849	MDL	0.544	PQL	mg/Kg	J	Q, E
SODIUM	90.7	J	40.6	MDL	109	PQL	mg/Kg	J	Z
TIN	2.82	J	1.09	MDL	10.9	PQL	mg/Kg	U	B
Zirconium	2.14	J	0.915	MDL	5.44	PQL	mg/Kg	J	Z

Sample ID: **SL-160-SA5A-SB-9.0-10** ***Collected:*** **3/18/2011 3:24:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.28	J	0.929	MDL	5.22	PQL	mg/Kg	J	Z
MANGANESE	194		0.0814	MDL	0.522	PQL	mg/Kg	J	Q, E
TIN	2.98	J	1.04	MDL	10.4	PQL	mg/Kg	U	B
Zirconium	1.91	J	0.877	MDL	5.22	PQL	mg/Kg	J	Z

Sample ID: **SL-168-SA5A-SB-4.0-5.0** ***Collected:*** **3/18/2011 12:49:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.80	J	0.989	MDL	5.56	PQL	mg/Kg	J	Z
MANGANESE	179		0.0867	MDL	0.556	PQL	mg/Kg	J	Q, E
TIN	2.98	J	1.11	MDL	11.1	PQL	mg/Kg	U	B
Zirconium	1.45	J	0.933	MDL	5.56	PQL	mg/Kg	J	Z

Sample ID: **SL-169-SA5A-SB-4.0-5.0** ***Collected:*** **3/18/2011 10:47:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.99	J	1.00	MDL	5.63	PQL	mg/Kg	J	Z
MANGANESE	195		0.0879	MDL	0.563	PQL	mg/Kg	J	Q, E
SODIUM	96.2	J	42.0	MDL	113	PQL	mg/Kg	J	Z
TIN	3.11	J	1.13	MDL	11.3	PQL	mg/Kg	U	B
Zirconium	1.19	J	0.946	MDL	5.63	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE108 **Laboratory: LL**

EDD Filename: PrepDE108_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6020** ***Matrix:*** **SO**

Sample ID: **SL-159-SA5A-SB-4.0-5.0** ***Collected:*** **3/18/2011 9:24:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.165	J	0.0431	MDL	0.431	PQL	mg/Kg	J	Z

Sample ID: **SL-159-SA5A-SB-4.0-5.0** ***Collected:*** **3/18/2011 9:24:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.11		0.0539	MDL	0.108	PQL	mg/Kg	J	Q

Sample ID: **SL-159-SA5A-SB-4.0-5.0** ***Collected:*** **3/18/2011 9:24:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	135		0.116	MDL	0.431	PQL	mg/Kg	J	A

Sample ID: **SL-159-SA5A-SB-4.0-5.0** ***Collected:*** **3/18/2011 9:24:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	6.47		0.0698	MDL	0.423	PQL	mg/Kg	J	E

Sample ID: **SL-159-SA5A-SB-4.0-5.0** ***Collected:*** **3/18/2011 9:24:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.129	J	0.0647	MDL	0.216	PQL	mg/Kg	J	Z, Q, E
ARSENIC	7.97		0.0863	MDL	0.431	PQL	mg/Kg	J	Q
BERYLLIUM	1.26		0.0173	MDL	0.108	PQL	mg/Kg	J	Q
CADMIUM	0.0854	J	0.0431	MDL	0.108	PQL	mg/Kg	J	Z, Q
CHROMIUM	26.5		0.129	MDL	0.431	PQL	mg/Kg	J	Q, A
LEAD	9.14		0.0112	MDL	0.216	PQL	mg/Kg	J	Q, A
NICKEL	14.5		0.108	MDL	0.431	PQL	mg/Kg	J	Q
SILVER	0.0778	J	0.0129	MDL	0.108	PQL	mg/Kg	J	Z, Q
VANADIUM	56.1		0.0237	MDL	0.108	PQL	mg/Kg	J	A
ZINC	62.3		0.604	MDL	3.24	PQL	mg/Kg	J	A

Sample ID: **SL-160-SA5A-SB-4.0-5.0** ***Collected:*** **3/18/2011 3:14:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.141	J	0.0449	MDL	0.449	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE108 **Laboratory: LL**

EDD Filename: PrepDE108_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 ***Matrix:*** SO

Sample ID: SL-160-SA5A-SB-4.0-5.0 ***Collected:*** 3/18/2011 3:14:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.792		0.0561	MDL	0.112	PQL	mg/Kg	J	Q

Sample ID: SL-160-SA5A-SB-4.0-5.0 ***Collected:*** 3/18/2011 3:14:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	116		0.121	MDL	0.449	PQL	mg/Kg	J	A

Sample ID: SL-160-SA5A-SB-4.0-5.0 ***Collected:*** 3/18/2011 3:14:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	8.58		0.0740	MDL	0.449	PQL	mg/Kg	J	E

Sample ID: SL-160-SA5A-SB-4.0-5.0 ***Collected:*** 3/18/2011 3:14:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.153	J	0.0673	MDL	0.224	PQL	mg/Kg	J	Z, Q, E
ARSENIC	5.66		0.0897	MDL	0.449	PQL	mg/Kg	J	Q
BERYLLIUM	0.924		0.0179	MDL	0.112	PQL	mg/Kg	J	Q
CADMIUM	0.0708	J	0.0449	MDL	0.112	PQL	mg/Kg	J	Z, Q
CHROMIUM	21.8		0.135	MDL	0.449	PQL	mg/Kg	J	Q, A
LEAD	6.79		0.0117	MDL	0.224	PQL	mg/Kg	J	Q, A
NICKEL	13.2		0.112	MDL	0.449	PQL	mg/Kg	J	Q
SILVER	0.0612	J	0.0135	MDL	0.112	PQL	mg/Kg	J	Z, Q
VANADIUM	44.2		0.0247	MDL	0.112	PQL	mg/Kg	J	A
ZINC	55.8		0.628	MDL	3.36	PQL	mg/Kg	J	A

Sample ID: SL-160-SA5A-SB-9.0-10 ***Collected:*** 3/18/2011 3:24:00 ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.160	J	0.0426	MDL	0.426	PQL	mg/Kg	J	Z

Sample ID: SL-160-SA5A-SB-9.0-10 ***Collected:*** 3/18/2011 3:24:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.949		0.0532	MDL	0.106	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE108 **Laboratory: LL**

EDD Filename: PrepDE108_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 ***Matrix:*** SO

Sample ID: SL-160-SA5A-SB-9.0-10 ***Collected:*** 3/18/2011 3:24:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	88.4		0.115	MDL	0.426	PQL	mg/Kg	J	A

Sample ID: SL-160-SA5A-SB-9.0-10 ***Collected:*** 3/18/2011 3:24:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	7.45		0.0696	MDL	0.422	PQL	mg/Kg	J	E

Sample ID: SL-160-SA5A-SB-9.0-10 ***Collected:*** 3/18/2011 3:24:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0741	J	0.0639	MDL	0.213	PQL	mg/Kg	J	Z, Q, E
ARSENIC	6.40		0.0852	MDL	0.426	PQL	mg/Kg	J	Q
BERYLLIUM	0.991		0.0170	MDL	0.106	PQL	mg/Kg	J	Q
CADMIUM	0.0527	J	0.0426	MDL	0.106	PQL	mg/Kg	J	Z, Q
CHROMIUM	22.9		0.128	MDL	0.426	PQL	mg/Kg	J	Q, A
LEAD	7.69		0.0111	MDL	0.213	PQL	mg/Kg	J	Q, A
NICKEL	11.2		0.106	MDL	0.426	PQL	mg/Kg	J	Q
SILVER	0.0839	J	0.0128	MDL	0.106	PQL	mg/Kg	J	Z, Q
VANADIUM	48.8		0.0234	MDL	0.106	PQL	mg/Kg	J	A
ZINC	59.8		0.596	MDL	3.19	PQL	mg/Kg	J	A

Sample ID: SL-168-SA5A-SB-4.0-5.0 ***Collected:*** 3/18/2011 12:49:00 ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.128	J	0.0440	MDL	0.440	PQL	mg/Kg	J	Z

Sample ID: SL-168-SA5A-SB-4.0-5.0 ***Collected:*** 3/18/2011 12:49:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.570		0.0550	MDL	0.110	PQL	mg/Kg	J	Q

Sample ID: SL-168-SA5A-SB-4.0-5.0 ***Collected:*** 3/18/2011 12:49:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	81.8		0.119	MDL	0.440	PQL	mg/Kg	J	A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE108 **Laboratory: LL**

EDD Filename: PrepDE108_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 ***Matrix:*** SO

Sample ID: SL-168-SA5A-SB-4.0-5.0 ***Collected:*** 3/18/2011 12:49:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	7.15		0.0726	MDL	0.440	PQL	mg/Kg	J	E

Sample ID: SL-168-SA5A-SB-4.0-5.0 ***Collected:*** 3/18/2011 12:49:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0905	J	0.0660	MDL	0.220	PQL	mg/Kg	J	Z, Q, E
ARSENIC	9.19		0.0880	MDL	0.440	PQL	mg/Kg	J	Q
BERYLLIUM	0.922		0.0176	MDL	0.110	PQL	mg/Kg	J	Q
CADMIUM	0.0615	J	0.0440	MDL	0.110	PQL	mg/Kg	J	Z, Q
CHROMIUM	22.8		0.132	MDL	0.440	PQL	mg/Kg	J	Q, A
LEAD	8.20		0.0114	MDL	0.220	PQL	mg/Kg	J	Q, A
NICKEL	8.90		0.110	MDL	0.440	PQL	mg/Kg	J	Q
SILVER	0.490		0.0132	MDL	0.110	PQL	mg/Kg	J	Q
VANADIUM	45.6		0.0242	MDL	0.110	PQL	mg/Kg	J	A
ZINC	56.2		0.616	MDL	3.30	PQL	mg/Kg	J	A

Sample ID: SL-169-SA5A-SB-4.0-5.0 ***Collected:*** 3/18/2011 10:47:00 ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.222	J	0.0451	MDL	0.451	PQL	mg/Kg	J	Z

Sample ID: SL-169-SA5A-SB-4.0-5.0 ***Collected:*** 3/18/2011 10:47:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.521		0.0563	MDL	0.113	PQL	mg/Kg	J	Q

Sample ID: SL-169-SA5A-SB-4.0-5.0 ***Collected:*** 3/18/2011 10:47:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	136		0.122	MDL	0.451	PQL	mg/Kg	J	A

Sample ID: SL-169-SA5A-SB-4.0-5.0 ***Collected:*** 3/18/2011 10:47:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	8.56		0.0743	MDL	0.451	PQL	mg/Kg	J	E

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE108 **Laboratory: LL**

EDD Filename: PrepDE108_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 ***Matrix:*** SO

Sample ID: SL-169-SA5A-SB-4.0-5.0 ***Collected:*** 3/18/2011 10:47:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.199	J	0.0676	MDL	0.225	PQL	mg/Kg	J	Z, Q, E
ARSENIC	7.15		0.0901	MDL	0.451	PQL	mg/Kg	J	Q
BERYLLIUM	0.955		0.0180	MDL	0.113	PQL	mg/Kg	J	Q
CADMIUM	0.0752	J	0.0451	MDL	0.113	PQL	mg/Kg	J	Z, Q
CHROMIUM	27.4		0.135	MDL	0.451	PQL	mg/Kg	J	Q, A
LEAD	8.10		0.0117	MDL	0.225	PQL	mg/Kg	J	Q, A
NICKEL	14.7		0.113	MDL	0.451	PQL	mg/Kg	J	Q
SILVER	0.0484	J	0.0135	MDL	0.113	PQL	mg/Kg	J	Z, Q
VANADIUM	51.7		0.0248	MDL	0.113	PQL	mg/Kg	J	A
ZINC	64.0		0.631	MDL	3.38	PQL	mg/Kg	J	A

Method Category: METALS

Method: 7199 ***Matrix:*** SO

Sample ID: SL-160-SA5A-SB-4.0-5.0 ***Collected:*** 3/18/2011 3:14:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.35	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 7471A ***Matrix:*** SO

Sample ID: SL-159-SA5A-SB-4.0-5.0 ***Collected:*** 3/18/2011 9:24:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0054	J	0.0031	MDL	0.108	PQL	mg/Kg	J	Z

Sample ID: SL-160-SA5A-SB-9.0-10 ***Collected:*** 3/18/2011 3:24:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0105	J	0.0030	MDL	0.105	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE108 **Laboratory: LL**

EDD Filename: PrepDE108_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 7471A **Matrix:** SO

Sample ID: SL-169-SA5A-SB-4.0-5.0 *Collected:* 3/18/2011 10:47:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0116	J	0.0033	MDL	0.114	PQL	mg/Kg	J	Z

Method Category: SVOA

Method: 8015M **Matrix:** SO

Sample ID: SL-159-SA5A-SB-4.0-5.0 *Collected:* 3/18/2011 9:24:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	0.73	J	0.44	MDL	1.3	PQL	mg/Kg	J	Z

Sample ID: SL-160-SA5A-SB-4.0-5.0 *Collected:* 3/18/2011 3:14:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C21-C30)	0.58	J	0.45	MDL	1.4	PQL	mg/Kg	J	Z

Sample ID: SL-160-SA5A-SB-9.0-10 *Collected:* 3/18/2011 3:24:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	0.84	J	0.43	MDL	1.3	PQL	mg/Kg	J	Z

Sample ID: SL-168-SA5A-SB-4.0-5.0 *Collected:* 3/18/2011 12:49:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	0.70	J	0.45	MDL	1.3	PQL	mg/Kg	J	Z

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SL-159-SA5A-SB-4.0-5.0 *Collected:* 3/18/2011 9:24:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DIMETHYLPHENOL	36	U	36	MDL	180	PQL	ug/Kg	UJ	Q
4-CHLORO-3-METHYLPHENOL	36	U	36	MDL	180	PQL	ug/Kg	UJ	Q
BENZIDINE	1300	U	1300	MDL	3600	PQL	ug/Kg	UJ	Q
BIS(2-CHLOROETHOXY)METHANE	18	U	18	MDL	180	PQL	ug/Kg	UJ	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE108 **Laboratory: LL**

EDD Filename: PrepDE108_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SL-159-SA5A-SB-4.0-5.0 *Collected:* 3/18/2011 9:24:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-CHLOROISOPROPYL) ETHER	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
ISOPHORONE	18	U	18	MDL	180	PQL	ug/Kg	UJ	Q
NITROBENZENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	Q, L

Sample ID: SL-160-SA5A-SB-4.0-5.0 *Collected:* 3/18/2011 3:14:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-CHLOROISOPROPYL) ETHER	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
NITROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L

Sample ID: SL-160-SA5A-SB-9.0-10 *Collected:* 3/18/2011 3:24:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-CHLOROISOPROPYL) ETHER	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
NITROBENZENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L

Sample ID: SL-168-SA5A-SB-4.0-5.0 *Collected:* 3/18/2011 12:49:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-CHLOROISOPROPYL) ETHER	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
NITROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L

Sample ID: SL-169-SA5A-SB-4.0-5.0 *Collected:* 3/18/2011 10:47:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-CHLOROISOPROPYL) ETHER	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
NITROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L

Method Category: SVOA

Method: 8270C SIM **Matrix:** SO

Sample ID: SL-159-SA5A-SB-4.0-5.0 *Collected:* 3/18/2011 9:24:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	0.69	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE108 **Laboratory: LL**

EDD Filename: PrepDE108_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **8270C SIM** ***Matrix:*** **SO**

Sample ID: **SL-159-SA5A-SB-4.0-5.0** ***Collected:*** **3/18/2011 9:24:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	1.1	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.0	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	1.3	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	0.81	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	0.95	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
CHRYSENE	1.1	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	0.72	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
FLUORANTHENE	1.4	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	0.84	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z, L
PHENANTHRENE	1.2	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
PYRENE	1.2	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: **SL-160-SA5A-SB-4.0-5.0** ***Collected:*** **3/18/2011 3:14:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	7.9	J	6.8	MDL	20	PQL	ug/Kg	J	Z

Sample ID: **SL-160-SA5A-SB-9.0-10** ***Collected:*** **3/18/2011 3:24:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHENANTHRENE	0.90	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: **SL-168-SA5A-SB-4.0-5.0** ***Collected:*** **3/18/2011 12:49:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	0.89	J	0.37	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	1.5	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.3	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	1.6	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	0.88	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.1	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
CHRYSENE	1.4	J	0.37	MDL	1.8	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	0.88	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z, L
PHENANTHRENE	1.6	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
PYRENE	1.7	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE108 **Laboratory: LL**

EDD Filename: PrepDE108_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **8270C SIM** ***Matrix:*** **SO**

Method Category: **VOA**

Method: **8260B** ***Matrix:*** **SO**

Sample ID: **SL-159-SA5A-SB-4.0-5.0** ***Collected:*** **3/18/2011 9:24:00** ***Analysis Type:*** **RES** ***Dilution:*** **0.86**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.71	J	0.22	MDL	3.7	PQL	ug/Kg	U	B

Sample ID: **SL-160-SA5A-SB-4.0-5.0** ***Collected:*** **3/18/2011 3:14:00** ***Analysis Type:*** **RES** ***Dilution:*** **0.88**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.80	J	0.24	MDL	4.0	PQL	ug/Kg	U	B

Sample ID: **SL-160-SA5A-SB-9.0-10** ***Collected:*** **3/18/2011 3:24:00** ***Analysis Type:*** **RES** ***Dilution:*** **0.99**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	1.4	J	0.26	MDL	4.3	PQL	ug/Kg	U	B

Sample ID: **SL-168-SA5A-SB-4.0-5.0** ***Collected:*** **3/18/2011 12:49:00** ***Analysis Type:*** **RES** ***Dilution:*** **0.88**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ETHYLBENZENE	0.06	J	0.06	MDL	4.0	PQL	ug/Kg	J	Z
m,p-Xylene	0.18	J	0.17	MDL	4.0	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	0.77	J	0.24	MDL	4.0	PQL	ug/Kg	U	B

Sample ID: **SL-169-SA5A-SB-4.0-5.0** ***Collected:*** **3/18/2011 10:47:00** ***Analysis Type:*** **RES** ***Dilution:*** **0.97**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	1.0	J	0.27	MDL	4.5	PQL	ug/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE108 **Laboratory: LL**

EDD Filename: PrepDE108_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
*#	Professional Judgment
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Verification Correlation Coefficient
C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE108 **Laboratory: LL**

EDD Filename: PrepDE108_v1 **eQAPP Name: CDM_SSFL_110509**

F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation
L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery Lower Estimation

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE108 **Laboratory: LL**

EDD Filename: PrepDE108_v1 **eQAPP Name: CDM_SSFL_110509**

R	Continuing Calibration Verification Percent Recovery Lower Rejection
R	Continuing Calibration Verification Percent Recovery Upper Estimation
R	Continuing Calibration Verification Percent Recovery Upper Rejection
R	Continuing Calibration Verification Relative Response Factor
R	Initial Calibration Relative Response Factor
R	Initial Calibration Verification Percent Recovery Lower Estimation
R	Initial Calibration Verification Percent Recovery Lower Rejection
R	Initial Calibration Verification Percent Recovery Upper Estimation
R	Initial Calibration Verification Percent Recovery Upper Rejection
R	Initial Calibration Verification Relative Response Factor
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control Outlier Reports

DE108

Method Blank Outlier Report

Lab Reporting Batch ID: DE108 | Laboratory: LL

EDD Filename: DE108_v1 | eQAPP Name: CDM_SSFL_110509

Method: 6010B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P08008BB222027	3/22/2011 8:27:00 PM	PHOSPHORUS TIN	1.33 mg/Kg 1.57 mg/Kg	SL-159-SA5A-SB-4.0-5.0 SL-160-SA5A-SB-4.0-5.0 SL-160-SA5A-SB-9.0-10 SL-168-SA5A-SB-4.0-5.0 SL-169-SA5A-SB-4.0-5.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-159-SA5A-SB-4.0-5.0(RES)	TIN	3.11 mg/Kg	3.11U mg/Kg
SL-160-SA5A-SB-4.0-5.0(RES)	TIN	2.82 mg/Kg	2.82U mg/Kg
SL-160-SA5A-SB-9.0-10(RES)	TIN	2.98 mg/Kg	2.98U mg/Kg
SL-168-SA5A-SB-4.0-5.0(RES)	TIN	2.98 mg/Kg	2.98U mg/Kg
SL-169-SA5A-SB-4.0-5.0(RES)	TIN	3.11 mg/Kg	3.11U mg/Kg

Method: 6020
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P08726AB220813A	3/29/2011 8:13:00 AM	COPPER	0.139 mg/Kg	SL-159-SA5A-SB-4.0-5.0 SL-160-SA5A-SB-4.0-5.0 SL-160-SA5A-SB-9.0-10 SL-168-SA5A-SB-4.0-5.0 SL-169-SA5A-SB-4.0-5.0

Method: 8015M
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P80800AB321720A	3/22/2011 5:20:00 PM	ETHYLENE GLYCOL	7.5 mg/Kg	SL-159-SA5A-SB-4.0-5.0 SL-160-SA5A-SB-4.0-5.0 SL-160-SA5A-SB-9.0-10 SL-168-SA5A-SB-4.0-5.0

Method: 8260B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB00B211218A	3/22/2011 12:18:00 PM	METHYLENE CHLORIDE TOLUENE	1.2 ug/Kg 0.20 ug/Kg	SL-159-SA5A-SB-4.0-5.0 SL-160-SA5A-SB-4.0-5.0 SL-160-SA5A-SB-9.0-10 SL-168-SA5A-SB-4.0-5.0 SL-169-SA5A-SB-4.0-5.0

Method Blank Outlier Report

Lab Reporting Batch ID: DE108 **Laboratory: LL**

EDD Filename: DE108_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8260B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-159-SA5A-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.71 ug/Kg	3.7U ug/Kg
SL-160-SA5A-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.80 ug/Kg	4.0U ug/Kg
SL-160-SA5A-SB-9.0-10(RES)	METHYLENE CHLORIDE	1.4 ug/Kg	4.3U ug/Kg
SL-168-SA5A-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.77 ug/Kg	4.0U ug/Kg
SL-169-SA5A-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.0 ug/Kg	4.5U ug/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE108 **Laboratory: LL**

EDD Filename: DE108_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 300.0
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-159-SA5A-SB-4.0-5.0MS (SL-159-SA5A-SB-4.0-5.0 SL -160-SA5A-SB-4.0-5.0 SL -160-SA5A-SB-9.0-10 SL -168-SA5A-SB-4.0-5.0 SL -169-SA5A-SB-4.0-5.0)	FLUORIDE	54	-	80.00-120.00	-	FLUORIDE	J (all detects) UJ (all non-detects)

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-160-SA5A-SB-9.0-10MS SL-160-SA5A-SB-9.0-10MSD (SL-159-SA5A-SB-4.0-5.0 SL -160-SA5A-SB-4.0-5.0 SL -160-SA5A-SB-9.0-10 SL -168-SA5A-SB-4.0-5.0 SL -169-SA5A-SB-4.0-5.0)	ARSENIC	-	168	75.00-125.00	-	ARSENIC	
	BERYLLIUM	127	145	75.00-125.00	-	BERYLLIUM	
	CADMIUM	131	139	75.00-125.00	-	CADMIUM	J(all detects)
	CHROMIUM	130	145	75.00-125.00	-	CHROMIUM	
	LEAD	142	153	75.00-125.00	-	LEAD	V, Zn
	NICKEL	-	129	75.00-125.00	-	NICKEL	No Qual, >4x
	SILVER	129	137	75.00-125.00	-	SILVER	
	VANADIUM	-	160	75.00-125.00	-	VANADIUM	
	ZINC	-	129	75.00-125.00	-	ZINC	
SL-160-SA5A-SB-9.0-10MS SL-160-SA5A-SB-9.0-10MSD (SL-159-SA5A-SB-4.0-5.0 SL -160-SA5A-SB-4.0-5.0 SL -160-SA5A-SB-9.0-10 SL -168-SA5A-SB-4.0-5.0 SL -169-SA5A-SB-4.0-5.0)	ANTIMONY	49	30	75.00-125.00	44 (20.00)	ANTIMONY	J(all detects) UJ(all non-detects)
SL-160-SA5A-SB-9.0-10MSD (SL-159-SA5A-SB-4.0-5.0 SL -160-SA5A-SB-4.0-5.0 SL -160-SA5A-SB-9.0-10 SL -168-SA5A-SB-4.0-5.0 SL -169-SA5A-SB-4.0-5.0)	MOLYBDENUM	-	135	75.00-125.00	-	MOLYBDENUM	J(all detects)
SL-160-SA5A-SB-9.0-10MSD (SL-159-SA5A-SB-4.0-5.0 SL -160-SA5A-SB-4.0-5.0 SL -160-SA5A-SB-9.0-10 SL -168-SA5A-SB-4.0-5.0 SL -169-SA5A-SB-4.0-5.0)	BARIUM	-	165	75.00-125.00	-	BARIUM	No Qual, >4x

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-160-SA5A-SB-9.0-10MS SL-160-SA5A-SB-9.0-10MSD (SL-159-SA5A-SB-4.0-5.0 SL -160-SA5A-SB-4.0-5.0 SL -160-SA5A-SB-9.0-10 SL -168-SA5A-SB-4.0-5.0 SL -169-SA5A-SB-4.0-5.0)	ALUMINUM	1500	1202	75.00-125.00	-	ALUMINUM	
	MAGNESIUM	129	-	75.00-125.00	-	MAGNESIUM	
	TITANIUM	266	266	75.00-125.00	-	TITANIUM	No Qual, >4x

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE108 **Laboratory: LL**

EDD Filename: DE108_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-160-SA5A-SB-9.0-10MS SL-160-SA5A-SB-9.0-10MSD (SL-159-SA5A-SB-4.0-5.0 SL -160-SA5A-SB-4.0-5.0 SL -160-SA5A-SB-9.0-10 SL -168-SA5A-SB-4.0-5.0 SL -169-SA5A-SB-4.0-5.0)	IRON MANGANESE	-1069 9	-1156 11	75.00-125.00 75.00-125.00	- -	IRON MANGANESE	J(all detects) R(all non-detects) Fe No Qual, >4x

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-159-SA5A-SB-4.0-5.0MS SL-159-SA5A-SB-4.0-5.0MSD (SL-159-SA5A-SB-4.0-5.0)	2,4-DIMETHYLPHENOL 4-CHLORO-3-METHYLPHENOL BENZIDINE BIS(2-CHLOROETHOXY)METHA ISOPHORONE NITROBENZENE	- - 23 - 71 67	76 75 20 73 69 64	78.00-110.00 76.00-110.00 35.00-141.00 75.00-104.00 73.00-102.00 72.00-106.00	- - - - - -	2,4-DIMETHYLPHENOL 4-CHLORO-3-METHYLPHENOL BENZIDINE BIS(2-CHLOROETHOXY)METH ISOPHORONE NITROBENZENE	J(all detects) UJ(all non-detects)

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE108 | Laboratory: LL

EDD Filename: DE108_v1 | eQAPP Name: CDM_SSFL_110509

Method: 6010B
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-160-SA5A-SB-9.0-10DUP (SL-159-SA5A-SB-4.0-5.0 SL -160-SA5A-SB-4.0-5.0 SL -160-SA5A-SB-9.0-10 SL -168-SA5A-SB-4.0-5.0 SL -169-SA5A-SB-4.0-5.0)	MANGANESE Zirconium	25 35	20.00 20.00	J (all detects) UJ (all non-detects) Zr No Qual OK by difference

Method: 6020
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-160-SA5A-SB-9.0-10DUP (SL-159-SA5A-SB-4.0-5.0 SL -160-SA5A-SB-4.0-5.0 SL -160-SA5A-SB-9.0-10 SL -168-SA5A-SB-4.0-5.0 SL -169-SA5A-SB-4.0-5.0)	CADMIUM COPPER	26 25	20.00 20.00	J(all detects) UJ(all non-detects) Cd No Qual OK by difference

Method: 7471A
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-160-SA5A-SB-9.0-10DUP (SL-159-SA5A-SB-4.0-5.0 SL -160-SA5A-SB-4.0-5.0 SL -160-SA5A-SB-9.0-10 SL -168-SA5A-SB-4.0-5.0 SL -169-SA5A-SB-4.0-5.0)	MERCURY	65	20.00	No Qual OK by difference

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE108 **Laboratory: LL**

EDD Filename: DE108_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C SIM
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P1LBLCSQ260758 (SL-159-SA5A-SB-4.0-5.0 SL-160-SA5A-SB-4.0-5.0 SL-160-SA5A-SB-9.0-10 SL-168-SA5A-SB-4.0-5.0 SL-169-SA5A-SB-4.0-5.0)	INDENO(1,2,3-CD)PYRENE	135	-	56.00-134.00	-	INDENO(1,2,3-CD)PYRENE	J (all detects)

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P7LCLCSQ262223 (SL-159-SA5A-SB-4.0-5.0 SL-160-SA5A-SB-4.0-5.0 SL-160-SA5A-SB-9.0-10 SL-168-SA5A-SB-4.0-5.0 SL-169-SA5A-SB-4.0-5.0)	BIS(2-CHLOROISOPROPYL) ET NITROBENZENE	63 70	- -	68.00-131.00 71.00-104.00	- -	BIS(2-CHLOROISOPROPYL) E NITROBENZENE	J(all detects) UJ(all non-detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE108 **Laboratory: LL**

EDD Filename: DE108_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-159-SA5A-SB-4.0-5.0	BORON	J	2.63	5.34	PQL	mg/Kg	J (all detects)
	TIN	J	3.11	10.7	PQL	mg/Kg	
	Zirconium	J	2.11	5.34	PQL	mg/Kg	
SL-160-SA5A-SB-4.0-5.0	BORON	J	2.71	5.44	PQL	mg/Kg	J (all detects)
	SODIUM	J	90.7	109	PQL	mg/Kg	
	TIN	J	2.82	10.9	PQL	mg/Kg	
	Zirconium	J	2.14	5.44	PQL	mg/Kg	
SL-160-SA5A-SB-9.0-10	BORON	J	2.28	5.22	PQL	mg/Kg	J (all detects)
	TIN	J	2.98	10.4	PQL	mg/Kg	
	Zirconium	J	1.91	5.22	PQL	mg/Kg	
SL-168-SA5A-SB-4.0-5.0	BORON	J	1.80	5.56	PQL	mg/Kg	J (all detects)
	TIN	J	2.98	11.1	PQL	mg/Kg	
	Zirconium	J	1.45	5.56	PQL	mg/Kg	
SL-169-SA5A-SB-4.0-5.0	BORON	J	1.99	5.63	PQL	mg/Kg	J (all detects)
	SODIUM	J	96.2	113	PQL	mg/Kg	
	TIN	J	3.11	11.3	PQL	mg/Kg	
	Zirconium	J	1.19	5.63	PQL	mg/Kg	

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-159-SA5A-SB-4.0-5.0	ANTIMONY	J	0.129	0.216	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0854	0.108	PQL	mg/Kg	
	SELENIUM	J	0.165	0.431	PQL	mg/Kg	
	SILVER	J	0.0778	0.108	PQL	mg/Kg	
SL-160-SA5A-SB-4.0-5.0	ANTIMONY	J	0.153	0.224	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0708	0.112	PQL	mg/Kg	
	SELENIUM	J	0.141	0.449	PQL	mg/Kg	
	SILVER	J	0.0612	0.112	PQL	mg/Kg	
SL-160-SA5A-SB-9.0-10	ANTIMONY	J	0.0741	0.213	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0527	0.106	PQL	mg/Kg	
	SELENIUM	J	0.160	0.426	PQL	mg/Kg	
	SILVER	J	0.0839	0.106	PQL	mg/Kg	
SL-168-SA5A-SB-4.0-5.0	ANTIMONY	J	0.0905	0.220	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0615	0.110	PQL	mg/Kg	
	SELENIUM	J	0.128	0.440	PQL	mg/Kg	
SL-169-SA5A-SB-4.0-5.0	ANTIMONY	J	0.199	0.225	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0752	0.113	PQL	mg/Kg	
	SELENIUM	J	0.222	0.451	PQL	mg/Kg	
	SILVER	J	0.0484	0.113	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE108 **Laboratory: LL**

EDD Filename: DE108_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-160-SA5A-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.35	1.1	PQL	mg/Kg	J (all detects)

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-159-SA5A-SB-4.0-5.0	MERCURY	J	0.0054	0.108	PQL	mg/Kg	J (all detects)
SL-160-SA5A-SB-9.0-10	MERCURY	J	0.0105	0.105	PQL	mg/Kg	J (all detects)
SL-169-SA5A-SB-4.0-5.0	MERCURY	J	0.0116	0.114	PQL	mg/Kg	J (all detects)

Method: 8015M

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-159-SA5A-SB-4.0-5.0	EFH (C30-C40)	J	0.73	1.3	PQL	mg/Kg	J (all detects)
SL-160-SA5A-SB-4.0-5.0	EFH (C21-C30)	J	0.58	1.4	PQL	mg/Kg	J (all detects)
SL-160-SA5A-SB-9.0-10	EFH (C30-C40)	J	0.84	1.3	PQL	mg/Kg	J (all detects)
SL-168-SA5A-SB-4.0-5.0	EFH (C30-C40)	J	0.70	1.3	PQL	mg/Kg	J (all detects)

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-159-SA5A-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.71	3.7	PQL	ug/Kg	J (all detects)
SL-160-SA5A-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.80	4.0	PQL	ug/Kg	J (all detects)
SL-160-SA5A-SB-9.0-10	METHYLENE CHLORIDE	J	1.4	4.3	PQL	ug/Kg	J (all detects)
SL-168-SA5A-SB-4.0-5.0	ETHYLBENZENE m,p-Xylene METHYLENE CHLORIDE	J J J	0.06 0.18 0.77	4.0 4.0 4.0	PQL PQL PQL	ug/Kg ug/Kg ug/Kg	J (all detects)
SL-169-SA5A-SB-4.0-5.0	METHYLENE CHLORIDE	J	1.0	4.5	PQL	ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE108 **Laboratory: LL**

EDD Filename: DE108_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8270C SIM**

Matrix: **SO**

SampleID	*Analyte*	*Lab Qual*	*Result*	*Reporting Limit*	*RL Type*	*Units*	*Flag*
SL-159-SA5A-SB-4.0-5.0	ANTHRACENE	J	0.69	1.8	PQL	ug/Kg	J (all detects)
	BENZO(A)ANTHRACENE	J	1.1	1.8	PQL	ug/Kg	
	BENZO(A)PYRENE	J	1.0	1.8	PQL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	1.3	1.8	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	0.81	1.8	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	0.95	1.8	PQL	ug/Kg	
	CHRYSENE	J	1.1	1.8	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	0.72	1.8	PQL	ug/Kg	
	FLUORANTHENE	J	1.4	1.8	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	0.84	1.8	PQL	ug/Kg	
	PHENANTHRENE	J	1.2	1.8	PQL	ug/Kg	
	PYRENE	J	1.2	1.8	PQL	ug/Kg	
SL-160-SA5A-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	7.9	20	PQL	ug/Kg	J (all detects)
SL-160-SA5A-SB-9.0-10	PHENANTHRENE	J	0.90	1.8	PQL	ug/Kg	J (all detects)
SL-168-SA5A-SB-4.0-5.0	ANTHRACENE	J	0.89	1.8	PQL	ug/Kg	J (all detects)
	BENZO(A)ANTHRACENE	J	1.5	1.8	PQL	ug/Kg	
	BENZO(A)PYRENE	J	1.3	1.8	PQL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	1.6	1.8	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	0.88	1.8	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	1.1	1.8	PQL	ug/Kg	
	CHRYSENE	J	1.4	1.8	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	0.88	1.8	PQL	ug/Kg	
	PHENANTHRENE	J	1.6	1.8	PQL	ug/Kg	
	PYRENE	J	1.7	1.8	PQL	ug/Kg	

LDC #: 25911Q4 **VALIDATION COMPLETENESS WORKSHEET** Date: 8-31

SDG #: DE108 ADR

Laboratory: Lancaster Laboratories

Reviewer: CR

2nd Reviewer: C

METHOD: Metals (EPA SW 846 Method 6010B/6020A/7000)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	N	Sampling dates:
II.	ICP/MS Tune	—	
III.	Calibration	—	
IV.	Blanks	A	No Quals
V.	ICP Interference Check Sample (ICS) Analysis	N	
VI.	Matrix Spike Analysis	N	MS/D (Al, Ba, Ca, Fe, Mg, Ti, V, Zn >4X)
VII.	Duplicate Sample Analysis	N	DUP (Cd, Hg, Zr <5xRL)
VIII.	Laboratory Control Samples (LCS)	A	LCS
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	SW	J/UJ
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	—	
XV	Field Blanks	—	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: Soil

1	SL-159-SA5A-SB-4.0-5.0	11		21		31	
2	SL-169-SA5A-SB-4.0-5.0	12		22		32	
3	SL-168-SA5A-SB-4.0-5.0	13		23		33	
4	SL-160-SA5A-SB-4.0-5.0	14		24		34	
5	SL-160-SA5A-SB-9.0-10.0	15		25		35	
6	MS	16		26		36	
7	MSD	17		27		37	
8	DUP	18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 9
SERIAL DILUTIONS
SDG No.: DE108
Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: 6234510BKG Serial Dilution Lab Sample ID: 6234510L
Batch ID(s): P08008B, P08026A, P08726A
Concentration Units: UG/L

Analyte	Mass	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Diff.	Q	M
Aluminum		209623.1500		208997.8000		0		P
Antimony	121	0.3481	B	1.5000	U	100		MS
Arsenic	75	30.0500		25.0550		17		MS
Barium	137	415.0000		318.5500		23	E	MS
Beryllium	9	4.6530		3.9225		16		MS
Boron		21.8700	B	44.5000	U	100		P
Cadmium	111	0.2473	B	1.0000	U	100		MS
Calcium		21366.8800		22646.5000		6		P
Chromium	52	107.7000		95.7000		11	E	MS
Cobalt	59	21.2400		19.4800		8		MS
Copper	63	35.3400		33.7400		5		MS
Iron		220957.1000		225309.5500		2		P
Lead	208	36.1300		29.5550		18	E	MS
Lithium		217.5800		224.7500		3		P
Magnesium		39275.3100		40427.0500		3		P
Manganese		1860.8000		1951.8000		5		P
Molybdenum	98	4.4560		3.8860		13		MS
Nickel	60	52.7200		50.4500		4		MS
Phosphorus		1591.2100		1606.3500		1		P
Potassium		13678.7200		14152.6000		3		P
Selenium	78	0.7504	B	1.0000	U	100		MS
Silver	107	0.3939	B	0.3000	U	100		MS
Sodium		1031.8400		1865.0000	U	100		P
Strontium		208.6800		213.9000		3		P
Thallium	203	1.5320		1.1180	B	27		MS
Tin		28.5600	B	50.0000	U	100		P
Titanium		10409.5200		11228.3500		8		P
Vanadium	51	229.2000		204.4500		11	E	MS
Zinc	66	280.9000		241.9000		14	E	MS
Zirconium		18.3200	B	44.1000	B	141		P

NOTE: An E in column Q indicates the presence of a chemical or physical interference in the matrix when the % difference is greater than 10%. This applies only when (I) is greater than or equal to 50x MDL for ICP, 100x MDL for ICP-MS (6020), 50x MDL for ICP-MS (200.8), or 25x MDL for GFAA.

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry

CONCENTRATION QUALIFIERS:
U= Below MDL
B= Below LOQ

FLAGS:
E = Matrix Effects exist as proven by Serial Dilution or Spiked Dilution

SAMPLE DELIVERY GROUP

DE109

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
21-Mar-2011	TB-032111	6235706	TB	5030B	8015M	III
21-Mar-2011	TB-032111	6235706	TB	5030B	8260B	III
21-Mar-2011	TB-032111	6235706	TB	5030B	8260B SIM	III
21-Mar-2011	SL-161-SA5A-SB-4.0-5.0	6235702	N	3050B	6010B	III
21-Mar-2011	SL-161-SA5A-SB-4.0-5.0	6235702	N	3050B	6020	III
21-Mar-2011	SL-161-SA5A-SB-4.0-5.0	6235702	N	3060A	7199	III
21-Mar-2011	SL-161-SA5A-SB-4.0-5.0	6235702	N	3546	1625C	III
21-Mar-2011	SL-161-SA5A-SB-4.0-5.0	6235702	N	3550B	8015B	III
21-Mar-2011	SL-161-SA5A-SB-4.0-5.0	6235702	N	3550B	8015M	III
21-Mar-2011	SL-161-SA5A-SB-4.0-5.0	6235702	N	3550B	8082	III
21-Mar-2011	SL-161-SA5A-SB-4.0-5.0	6235702	N	3550B	8270C	III
21-Mar-2011	SL-161-SA5A-SB-4.0-5.0	6235702	N	3550B	8270C SIM	III
21-Mar-2011	SL-161-SA5A-SB-4.0-5.0	6235702	N	5035	8015M	III
21-Mar-2011	SL-161-SA5A-SB-4.0-5.0	6235702	N	5035	8260B	III
21-Mar-2011	SL-161-SA5A-SB-4.0-5.0	6235702	N	5035	8260B SIM	III
21-Mar-2011	SL-161-SA5A-SB-4.0-5.0	6235702	N	8330	8330A	III
21-Mar-2011	SL-161-SA5A-SB-4.0-5.0	6235702	N	Gen Prep	9045M	III
21-Mar-2011	SL-161-SA5A-SB-4.0-5.0	6235702	N	METHOD	300.0	III
21-Mar-2011	SL-161-SA5A-SB-4.0-5.0	6235702	N	METHOD	314.0	III
21-Mar-2011	SL-161-SA5A-SB-4.0-5.0	6235702	N	METHOD	7471A	III
21-Mar-2011	SL-161-SA5A-SB-4.0-5.0	6235702	N	METHOD	8015B	III
21-Mar-2011	SL-161-SA5A-SB-4.0-5.0	6235702	N	METHOD	8015M	III
21-Mar-2011	SL-161-SA5A-SB-4.0-5.0	6235702	N	METHOD	8315A	III
21-Mar-2011	SL-161-SA5A-SB-4.0-5.0	6235702	N	METHOD	9012B	III
21-Mar-2011	SL-161-SA5A-SB-4.0-5.0DUP	P235702D220857	DUP	METHOD	7471A	III
21-Mar-2011	SL-161-SA5A-SB-4.0-5.0DUP	P235702D221006	DUP	3050B	6010B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
21-Mar-2011	SL-161-SA5A-SB-4.0-5.0DUP	P235702D221232A	DUP	3050B	6020	III
21-Mar-2011	SL-161-SA5A-SB-4.0-5.0DUP	P235702D221232B	DUP	3050B	6020	III
21-Mar-2011	SL-161-SA5A-SB-4.0-5.0DUP	P235702D221232C	DUP	3050B	6020	III
21-Mar-2011	SL-161-SA5A-SB-4.0-5.0DUP	P235702D221232D	DUP	3050B	6020	III
21-Mar-2011	SL-161-SA5A-SB-4.0-5.0DUP	P235702D221316	DUP	3050B	6010B	III
21-Mar-2011	SL-161-SA5A-SB-4.0-5.0DUP	P235702D271300A	DUP	METHOD	314.0	III
21-Mar-2011	SL-161-SA5A-SB-4.0-5.0DUP	P235702D271621A	DUP	METHOD	300.0	III
21-Mar-2011	SL-161-SA5A-SB-4.0-5.0DUP	P235702D290900A	DUP	Gen Prep	9045M	III
21-Mar-2011	SL-161-SA5A-SB-4.0-5.0MSD	P235702M220859	MSD	METHOD	7471A	III
21-Mar-2011	SL-161-SA5A-SB-4.0-5.0MSD	P235702M221014	MSD	3050B	6010B	III
21-Mar-2011	SL-161-SA5A-SB-4.0-5.0MSD	P235702M221239A	MSD	3050B	6020	III
21-Mar-2011	SL-161-SA5A-SB-4.0-5.0MSD	P235702M221239B	MSD	3050B	6020	III
21-Mar-2011	SL-161-SA5A-SB-4.0-5.0MSD	P235702M221239C	MSD	3050B	6020	III
21-Mar-2011	SL-161-SA5A-SB-4.0-5.0MSD	P235702M221239D	MSD	3050B	6020	III
21-Mar-2011	SL-161-SA5A-SB-4.0-5.0MSD	P235702M221323	MSD	3050B	6010B	III
21-Mar-2011	SL-161-SA5A-SB-4.0-5.0MSD	P235702M242051A	MSD	3550B	8082	III
21-Mar-2011	SL-161-SA5A-SB-4.0-5.0MSD	P235702M260331	MSD	3550B	8270C SIM	III
21-Mar-2011	SL-161-SA5A-SB-4.0-5.0MSD	P235702M321426A	MSD	3550B	8015M	III
21-Mar-2011	SL-161-SA5A-SB-4.0-5.0MSD	P235702M321657A	MSD	METHOD	8015M	III
21-Mar-2011	SL-161-SA5A-SB-4.0-5.0MS	P235702R220858	MS	METHOD	7471A	III
21-Mar-2011	SL-161-SA5A-SB-4.0-5.0MS	P235702R221010	MS	3050B	6010B	III
21-Mar-2011	SL-161-SA5A-SB-4.0-5.0MS	P235702R221235A	MS	3050B	6020	III
21-Mar-2011	SL-161-SA5A-SB-4.0-5.0MS	P235702R221235B	MS	3050B	6020	III
21-Mar-2011	SL-161-SA5A-SB-4.0-5.0MS	P235702R221235C	MS	3050B	6020	III
21-Mar-2011	SL-161-SA5A-SB-4.0-5.0MS	P235702R221235D	MS	3050B	6020	III
21-Mar-2011	SL-161-SA5A-SB-4.0-5.0MS	P235702R221319	MS	3050B	6010B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
21-Mar-2011	SL-161-SA5A-SB-4.0-5.0MS	P235702R242033A	MS	3550B	8082	III
21-Mar-2011	SL-161-SA5A-SB-4.0-5.0MS	P235702R260259	MS	3550B	8270C SIM	III
21-Mar-2011	SL-161-SA5A-SB-4.0-5.0MS	P235702R271323A	MS	METHOD	314.0	III
21-Mar-2011	SL-161-SA5A-SB-4.0-5.0MS	P235702R271635A	MS	METHOD	300.0	III
21-Mar-2011	SL-161-SA5A-SB-4.0-5.0MS	P235702R321400A	MS	3550B	8015M	III
21-Mar-2011	SL-161-SA5A-SB-4.0-5.0MS	P235702R321622A	MS	METHOD	8015M	III
21-Mar-2011	SL-161-SA5A-SB-7.5-8.5	6235703	N	3050B	6010B	III
21-Mar-2011	SL-161-SA5A-SB-7.5-8.5	6235703	N	3050B	6020	III
21-Mar-2011	SL-161-SA5A-SB-7.5-8.5	6235703	N	3060A	7199	III
21-Mar-2011	SL-161-SA5A-SB-7.5-8.5	6235703	N	3546	1625C	III
21-Mar-2011	SL-161-SA5A-SB-7.5-8.5	6235703	N	3550B	8015B	III
21-Mar-2011	SL-161-SA5A-SB-7.5-8.5	6235703	N	3550B	8015M	III
21-Mar-2011	SL-161-SA5A-SB-7.5-8.5	6235703	N	3550B	8082	III
21-Mar-2011	SL-161-SA5A-SB-7.5-8.5	6235703	N	3550B	8270C	III
21-Mar-2011	SL-161-SA5A-SB-7.5-8.5	6235703	N	3550B	8270C SIM	III
21-Mar-2011	SL-161-SA5A-SB-7.5-8.5	6235703	N	5035	8015M	III
21-Mar-2011	SL-161-SA5A-SB-7.5-8.5	6235703	N	5035	8260B	III
21-Mar-2011	SL-161-SA5A-SB-7.5-8.5	6235703	N	5035	8260B SIM	III
21-Mar-2011	SL-161-SA5A-SB-7.5-8.5	6235703	N	8330	8330A	III
21-Mar-2011	SL-161-SA5A-SB-7.5-8.5	6235703	N	Gen Prep	9045M	III
21-Mar-2011	SL-161-SA5A-SB-7.5-8.5	6235703	N	METHOD	300.0	III
21-Mar-2011	SL-161-SA5A-SB-7.5-8.5	6235703	N	METHOD	314.0	III
21-Mar-2011	SL-161-SA5A-SB-7.5-8.5	6235703	N	METHOD	7471A	III
21-Mar-2011	SL-161-SA5A-SB-7.5-8.5	6235703	N	METHOD	8015B	III
21-Mar-2011	SL-161-SA5A-SB-7.5-8.5	6235703	N	METHOD	8015M	III
21-Mar-2011	SL-161-SA5A-SB-7.5-8.5	6235703	N	METHOD	8315A	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
21-Mar-2011	SL-161-SA5A-SB-7.5-8.5	6235703	N	METHOD	9012B	III
21-Mar-2011	SL-163-SA5A-SB-4.0-5.0	6235704	N	3050B	6010B	III
21-Mar-2011	SL-163-SA5A-SB-4.0-5.0	6235704	N	3050B	6020	III
21-Mar-2011	SL-163-SA5A-SB-4.0-5.0	6235704	N	3060A	7199	III
21-Mar-2011	SL-163-SA5A-SB-4.0-5.0	6235704	N	3546	1625C	III
21-Mar-2011	SL-163-SA5A-SB-4.0-5.0	6235704	N	3550B	8015B	III
21-Mar-2011	SL-163-SA5A-SB-4.0-5.0	6235704	N	3550B	8015M	III
21-Mar-2011	SL-163-SA5A-SB-4.0-5.0	6235704	N	3550B	8082	III
21-Mar-2011	SL-163-SA5A-SB-4.0-5.0	6235704	N	3550B	8270C	III
21-Mar-2011	SL-163-SA5A-SB-4.0-5.0	6235704	N	3550B	8270C SIM	III
21-Mar-2011	SL-163-SA5A-SB-4.0-5.0	6235704	N	5035	8015M	III
21-Mar-2011	SL-163-SA5A-SB-4.0-5.0	6235704	N	5035	8260B	III
21-Mar-2011	SL-163-SA5A-SB-4.0-5.0	6235704	N	5035	8260B SIM	III
21-Mar-2011	SL-163-SA5A-SB-4.0-5.0	6235704	N	8330	8330A	III
21-Mar-2011	SL-163-SA5A-SB-4.0-5.0	6235704	N	Gen Prep	9045M	III
21-Mar-2011	SL-163-SA5A-SB-4.0-5.0	6235704	N	METHOD	300.0	III
21-Mar-2011	SL-163-SA5A-SB-4.0-5.0	6235704	N	METHOD	314.0	III
21-Mar-2011	SL-163-SA5A-SB-4.0-5.0	6235704	N	METHOD	6850	III
21-Mar-2011	SL-163-SA5A-SB-4.0-5.0	6235704	N	METHOD	7471A	III
21-Mar-2011	SL-163-SA5A-SB-4.0-5.0	6235704	N	METHOD	8015B	III
21-Mar-2011	SL-163-SA5A-SB-4.0-5.0	6235704	N	METHOD	8015M	III
21-Mar-2011	SL-163-SA5A-SB-4.0-5.0	6235704	N	METHOD	8315A	III
21-Mar-2011	SL-163-SA5A-SB-4.0-5.0	6235704	N	METHOD	9012B	III
21-Mar-2011	SL-163-SA5A-SB-4.0-5.0MSD	P235704M241520A	MSD	METHOD	6850	III
21-Mar-2011	SL-163-SA5A-SB-4.0-5.0MS	P235704R241514A	MS	METHOD	6850	III
21-Mar-2011	SL-252-SA5A-SB-4.0-5.0	6235705	N	3050B	6010B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
21-Mar-2011	SL-252-SA5A-SB-4.0-5.0	6235705	N	3050B	6020	III
21-Mar-2011	SL-252-SA5A-SB-4.0-5.0	6235705	N	3060A	7199	III
21-Mar-2011	SL-252-SA5A-SB-4.0-5.0	6235705	N	3546	1625C	III
21-Mar-2011	SL-252-SA5A-SB-4.0-5.0	6235705	N	3550B	8015B	III
21-Mar-2011	SL-252-SA5A-SB-4.0-5.0	6235705	N	3550B	8015M	III
21-Mar-2011	SL-252-SA5A-SB-4.0-5.0	6235705	N	3550B	8082	III
21-Mar-2011	SL-252-SA5A-SB-4.0-5.0	6235705	N	3550B	8270C	III
21-Mar-2011	SL-252-SA5A-SB-4.0-5.0	6235705	N	3550B	8270C SIM	III
21-Mar-2011	SL-252-SA5A-SB-4.0-5.0	6235705	N	5035	8015M	III
21-Mar-2011	SL-252-SA5A-SB-4.0-5.0	6235705	N	5035	8260B	III
21-Mar-2011	SL-252-SA5A-SB-4.0-5.0	6235705	N	5035	8260B SIM	III
21-Mar-2011	SL-252-SA5A-SB-4.0-5.0	6235705	N	8330	8330A	III
21-Mar-2011	SL-252-SA5A-SB-4.0-5.0	6235705	N	Gen Prep	9045M	III
21-Mar-2011	SL-252-SA5A-SB-4.0-5.0	6235705	N	METHOD	300.0	III
21-Mar-2011	SL-252-SA5A-SB-4.0-5.0	6235705	N	METHOD	314.0	III
21-Mar-2011	SL-252-SA5A-SB-4.0-5.0	6235705	N	METHOD	7471A	III
21-Mar-2011	SL-252-SA5A-SB-4.0-5.0	6235705	N	METHOD	8015B	III
21-Mar-2011	SL-252-SA5A-SB-4.0-5.0	6235705	N	METHOD	8015M	III
21-Mar-2011	SL-252-SA5A-SB-4.0-5.0	6235705	N	METHOD	8315A	III
21-Mar-2011	SL-252-SA5A-SB-4.0-5.0	6235705	N	METHOD	9012B	III
21-Mar-2011	SL-252-SA5A-SB-4.0-5.0MSD	P235705M320127A	MSD	METHOD	8015B	III
21-Mar-2011	SL-252-SA5A-SB-4.0-5.0MS	P235705R320112A	MS	METHOD	8015B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE109 | Laboratory: LL

EDD Filename: PrepDE109_v1 | eQAPP Name: CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: SL-161-SA5A-SB-4.0-5.0 *Collected:* 3/21/2011 8:54:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.1		0.89	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-161-SA5A-SB-7.5-8.5 *Collected:* 3/21/2011 9:03:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.2		0.86	MDL	1.1	PQL	mg/Kg	J	Q
Nitrate-NO3	1.1	J	0.86	MDL	1.6	PQL	mg/Kg	J	Z

Sample ID: SL-163-SA5A-SB-4.0-5.0 *Collected:* 3/21/2011 11:49:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	0.93	U	0.93	MDL	1.2	PQL	mg/Kg	UJ	Q
Nitrate-NO3	1.3	J	0.93	MDL	1.7	PQL	mg/Kg	J	Z

Sample ID: SL-252-SA5A-SB-4.0-5.0 *Collected:* 3/21/2011 3:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	0.91	U	0.91	MDL	1.1	PQL	mg/Kg	UJ	Q
Nitrate-NO3	1.4	J	0.91	MDL	1.7	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-161-SA5A-SB-4.0-5.0 *Collected:* 3/21/2011 8:54:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	2630		19.6	MDL	54.5	PQL	mg/Kg	J	Q
SODIUM	81.5	J	40.7	MDL	109	PQL	mg/Kg	J	Z
TIN	3.30	J	1.09	MDL	10.9	PQL	mg/Kg	U	B
Zirconium	3.29	J	0.916	MDL	5.45	PQL	mg/Kg	J	Z

Sample ID: SL-161-SA5A-SB-7.5-8.5 *Collected:* 3/21/2011 9:03:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	1540		19.2	MDL	53.3	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE109 **Laboratory: LL**

EDD Filename: PrepDE109_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-161-SA5A-SB-7.5-8.5 *Collected:* 3/21/2011 9:03:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	3.44	J	1.07	MDL	10.7	PQL	mg/Kg	U	B
Zirconium	4.32	J	0.895	MDL	5.33	PQL	mg/Kg	J	Z

Sample ID: SL-163-SA5A-SB-4.0-5.0 *Collected:* 3/21/2011 11:49:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	1270		20.4	MDL	56.8	PQL	mg/Kg	J	Q
SODIUM	80.6	J	42.4	MDL	114	PQL	mg/Kg	J	Z
TIN	3.09	J	1.14	MDL	11.4	PQL	mg/Kg	U	B
Zirconium	3.36	J	0.954	MDL	5.68	PQL	mg/Kg	J	Z

Sample ID: SL-252-SA5A-SB-4.0-5.0 *Collected:* 3/21/2011 3:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	2530		20.1	MDL	56.0	PQL	mg/Kg	J	Q
SODIUM	83.0	J	41.7	MDL	112	PQL	mg/Kg	J	Z
TIN	3.28	J	1.12	MDL	11.2	PQL	mg/Kg	U	B
Zirconium	3.14	J	0.940	MDL	5.60	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-161-SA5A-SB-4.0-5.0 *Collected:* 3/21/2011 8:54:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.117	J	0.0432	MDL	0.432	PQL	mg/Kg	J	Z

Sample ID: SL-161-SA5A-SB-4.0-5.0 *Collected:* 3/21/2011 8:54:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.653		0.0540	MDL	0.108	PQL	mg/Kg	J	E

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE109 **Laboratory: LL**

EDD Filename: PrepDE109_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 ***Matrix:*** SO

Sample ID: SL-161-SA5A-SB-4.0-5.0 ***Collected:*** 3/21/2011 8:54:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.195	J	0.0648	MDL	0.216	PQL	mg/Kg	J	Z, Q
ARSENIC	5.30		0.0864	MDL	0.432	PQL	mg/Kg	J	E
CADMIUM	0.0991	J	0.0432	MDL	0.108	PQL	mg/Kg	J	Z
CHROMIUM	19.3		0.130	MDL	0.432	PQL	mg/Kg	J	A
COBALT	6.65		0.0216	MDL	0.108	PQL	mg/Kg	J	A
COPPER	8.20		0.0713	MDL	0.432	PQL	mg/Kg	J	A
NICKEL	11.2		0.108	MDL	0.432	PQL	mg/Kg	J	A
SILVER	0.0302	J	0.0130	MDL	0.108	PQL	mg/Kg	J	Z
VANADIUM	39.1		0.0238	MDL	0.108	PQL	mg/Kg	J	Q, A

Sample ID: SL-161-SA5A-SB-7.5-8.5 ***Collected:*** 3/21/2011 9:03:00 ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.120	J	0.0422	MDL	0.422	PQL	mg/Kg	J	Z

Sample ID: SL-161-SA5A-SB-7.5-8.5 ***Collected:*** 3/21/2011 9:03:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.642		0.0528	MDL	0.106	PQL	mg/Kg	J	E

Sample ID: SL-161-SA5A-SB-7.5-8.5 ***Collected:*** 3/21/2011 9:03:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.118	J	0.0633	MDL	0.211	PQL	mg/Kg	J	Z, Q
ARSENIC	6.59		0.0844	MDL	0.422	PQL	mg/Kg	J	E
CHROMIUM	23.8		0.127	MDL	0.422	PQL	mg/Kg	J	A
COBALT	6.27		0.0211	MDL	0.106	PQL	mg/Kg	J	A
COPPER	7.79		0.0697	MDL	0.422	PQL	mg/Kg	J	A
NICKEL	10.4		0.106	MDL	0.422	PQL	mg/Kg	J	A
SILVER	0.0312	J	0.0127	MDL	0.106	PQL	mg/Kg	J	Z
VANADIUM	47.5		0.0232	MDL	0.106	PQL	mg/Kg	J	Q, A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE109 **Laboratory: LL**

EDD Filename: PrepDE109_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6020** ***Matrix:*** **SO**

Sample ID: SL-163-SA5A-SB-4.0-5.0 ***Collected:*** 3/21/2011 11:49:00 ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.153	J	0.0463	MDL	0.463	PQL	mg/Kg	J	Z

Sample ID: SL-163-SA5A-SB-4.0-5.0 ***Collected:*** 3/21/2011 11:49:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.561		0.0579	MDL	0.116	PQL	mg/Kg	J	E

Sample ID: SL-163-SA5A-SB-4.0-5.0 ***Collected:*** 3/21/2011 11:49:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.143	J	0.0695	MDL	0.232	PQL	mg/Kg	J	Z, Q
ARSENIC	5.72		0.0927	MDL	0.463	PQL	mg/Kg	J	E
CHROMIUM	20.5		0.139	MDL	0.463	PQL	mg/Kg	J	A
COBALT	5.03		0.0232	MDL	0.116	PQL	mg/Kg	J	A
COPPER	6.03		0.0765	MDL	0.463	PQL	mg/Kg	J	A
NICKEL	9.38		0.116	MDL	0.463	PQL	mg/Kg	J	A
SILVER	0.0385	J	0.0139	MDL	0.116	PQL	mg/Kg	J	Z
VANADIUM	44.9		0.0255	MDL	0.116	PQL	mg/Kg	J	Q, A

Sample ID: SL-252-SA5A-SB-4.0-5.0 ***Collected:*** 3/21/2011 3:35:00 ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.184	J	0.0439	MDL	0.439	PQL	mg/Kg	J	Z

Sample ID: SL-252-SA5A-SB-4.0-5.0 ***Collected:*** 3/21/2011 3:35:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.613		0.0549	MDL	0.110	PQL	mg/Kg	J	E

Sample ID: SL-252-SA5A-SB-4.0-5.0 ***Collected:*** 3/21/2011 3:35:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.123	J	0.0659	MDL	0.220	PQL	mg/Kg	J	Z, Q
ARSENIC	4.64		0.0878	MDL	0.439	PQL	mg/Kg	J	E
CHROMIUM	19.9		0.132	MDL	0.439	PQL	mg/Kg	J	A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE109 **Laboratory: LL**

EDD Filename: PrepDE109_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-252-SA5A-SB-4.0-5.0 *Collected:* 3/21/2011 3:35:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COBALT	5.90		0.0220	MDL	0.110	PQL	mg/Kg	J	A
COPPER	7.42		0.0724	MDL	0.439	PQL	mg/Kg	J	A
NICKEL	10.8		0.110	MDL	0.439	PQL	mg/Kg	J	A
SILVER	0.0292	J	0.0132	MDL	0.110	PQL	mg/Kg	J	Z
VANADIUM	40.2		0.0241	MDL	0.110	PQL	mg/Kg	J	Q, A

Method Category: METALS

Method: 7199 **Matrix:** SO

Sample ID: SL-161-SA5A-SB-4.0-5.0 *Collected:* 3/21/2011 8:54:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.48	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-161-SA5A-SB-7.5-8.5 *Collected:* 3/21/2011 9:03:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.45	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-163-SA5A-SB-4.0-5.0 *Collected:* 3/21/2011 11:49:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.49	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-252-SA5A-SB-4.0-5.0 *Collected:* 3/21/2011 3:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.49	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE109 **Laboratory: LL**

EDD Filename: PrepDE109_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 7471A **Matrix:** SO

Sample ID: SL-163-SA5A-SB-4.0-5.0 *Collected:* 3/21/2011 11:49:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0088	J	0.0031	MDL	0.110	PQL	mg/Kg	J	Z

Sample ID: SL-252-SA5A-SB-4.0-5.0 *Collected:* 3/21/2011 3:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0061	J	0.0036	MDL	0.126	PQL	mg/Kg	J	Z

Method Category: SVOA

Method: 8015M **Matrix:** SO

Sample ID: SL-161-SA5A-SB-4.0-5.0 *Collected:* 3/21/2011 8:54:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	1.2	J	0.44	MDL	1.3	PQL	mg/Kg	J	Z, L
EFH (C8-C11)	0.49	J	0.44	MDL	1.3	PQL	mg/Kg	UJ	Q, B

Sample ID: SL-161-SA5A-SB-7.5-8.5 *Collected:* 3/21/2011 9:03:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	5.6		0.43	MDL	1.3	PQL	mg/Kg	J	L
EFH (C8-C11)	0.51	J	0.43	MDL	1.3	PQL	mg/Kg	U	B

Sample ID: SL-163-SA5A-SB-4.0-5.0 *Collected:* 3/21/2011 11:49:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	1.0	J	0.46	MDL	1.4	PQL	mg/Kg	J	Z, L
EFH (C8-C11)	0.49	J	0.46	MDL	1.4	PQL	mg/Kg	U	B

Sample ID: SL-252-SA5A-SB-4.0-5.0 *Collected:* 3/21/2011 3:35:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	1.0	J	0.46	MDL	1.4	PQL	mg/Kg	J	Z, L
EFH (C8-C11)	0.51	J	0.46	MDL	1.4	PQL	mg/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE109 **Laboratory: LL**

EDD Filename: PrepDE109_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SL-161-SA5A-SB-4.0-5.0 *Collected:* 3/21/2011 8:54:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-CHLOROISOPROPYL) ETHER	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
NITROBENZENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L

Sample ID: SL-161-SA5A-SB-7.5-8.5 *Collected:* 3/21/2011 9:03:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-CHLOROISOPROPYL) ETHER	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
NITROBENZENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L

Sample ID: SL-163-SA5A-SB-4.0-5.0 *Collected:* 3/21/2011 11:49:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-CHLOROISOPROPYL) ETHER	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
NITROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L

Sample ID: SL-252-SA5A-SB-4.0-5.0 *Collected:* 3/21/2011 3:35:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-CHLOROISOPROPYL) ETHER	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
NITROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L

Method Category: SVOA

Method: 8270C SIM **Matrix:** SO

Sample ID: SL-161-SA5A-SB-7.5-8.5 *Collected:* 3/21/2011 9:03:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NAPHTHALENE	0.81	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-252-SA5A-SB-4.0-5.0 *Collected:* 3/21/2011 3:35:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NAPHTHALENE	0.80	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE109 **Laboratory: LL**

EDD Filename: PrepDE109_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **VOA**

Method: **8260B** ***Matrix:*** **SO**

Sample ID: **SL-161-SA5A-SB-4.0-5.0** ***Collected:*** **3/21/2011 8:54:00** ***Analysis Type:*** **RES** ***Dilution:*** **0.82**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	1.9	J	0.22	MDL	3.7	PQL	ug/Kg	U	B

Sample ID: **SL-161-SA5A-SB-7.5-8.5** ***Collected:*** **3/21/2011 9:03:00** ***Analysis Type:*** **RES** ***Dilution:*** **1.05**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	3.9	J	0.27	MDL	4.5	PQL	ug/Kg	U	B
TOLUENE	0.10	J	0.09	MDL	4.5	PQL	ug/Kg	J	Z

Sample ID: **SL-163-SA5A-SB-4.0-5.0** ***Collected:*** **3/21/2011 11:49:00** ***Analysis Type:*** **RES** ***Dilution:*** **0.82**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	1.8	J	0.23	MDL	3.8	PQL	ug/Kg	U	B

Sample ID: **SL-252-SA5A-SB-4.0-5.0** ***Collected:*** **3/21/2011 3:35:00** ***Analysis Type:*** **RES** ***Dilution:*** **0.95**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	1.6	J	0.26	MDL	4.3	PQL	ug/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE109 **Laboratory: LL**

EDD Filename: PrepDE109_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
*#	Professional Judgment
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Verification Correlation Coefficient
C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE109 **Laboratory: LL**

EDD Filename: PrepDE109_v1 **eQAPP Name: CDM_SSFL_110509**

F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation
L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery Lower Estimation

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE109 **Laboratory: LL**

EDD Filename: PrepDE109_v1 **eQAPP Name: CDM_SSFL_110509**

R	Continuing Calibration Verification Percent Recovery Lower Rejection
R	Continuing Calibration Verification Percent Recovery Upper Estimation
R	Continuing Calibration Verification Percent Recovery Upper Rejection
R	Continuing Calibration Verification Relative Response Factor
R	Initial Calibration Relative Response Factor
R	Initial Calibration Verification Percent Recovery Lower Estimation
R	Initial Calibration Verification Percent Recovery Lower Rejection
R	Initial Calibration Verification Percent Recovery Upper Estimation
R	Initial Calibration Verification Percent Recovery Upper Rejection
R	Initial Calibration Verification Relative Response Factor
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control Outlier Reports

DE109

Method Blank Outlier Report

Lab Reporting Batch ID: DE109 | Laboratory: LL

EDD Filename: DE109_v1 | eQAPP Name: CDM_SSFL_110509

Method: 6010B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P08208BB220949	3/24/2011 9:49:00 AM	CALCIUM MAGNESIUM MANGANESE TIN	7.09 mg/Kg 4.17 mg/Kg 0.383 mg/Kg 1.58 mg/Kg	SL-161-SA5A-SB-4.0-5.0 SL-161-SA5A-SB-7.5-8.5 SL-163-SA5A-SB-4.0-5.0 SL-252-SA5A-SB-4.0-5.0
P08208BB221258	3/24/2011 12:58:00 PM	ALUMINUM IRON PHOSPHORUS	21.6 mg/Kg 17.0 mg/Kg 0.932 mg/Kg	SL-161-SA5A-SB-4.0-5.0 SL-161-SA5A-SB-7.5-8.5 SL-163-SA5A-SB-4.0-5.0 SL-252-SA5A-SB-4.0-5.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-161-SA5A-SB-4.0-5.0(RES)	TIN	3.30 mg/Kg	3.30U mg/Kg
SL-161-SA5A-SB-7.5-8.5(RES)	TIN	3.44 mg/Kg	3.44U mg/Kg
SL-163-SA5A-SB-4.0-5.0(RES)	TIN	3.09 mg/Kg	3.09U mg/Kg
SL-252-SA5A-SB-4.0-5.0(RES)	TIN	3.28 mg/Kg	3.28U mg/Kg

Method: 6020
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P08226AB221220A	3/27/2011 12:20:00 PM	COPPER	0.0716 mg/Kg	SL-161-SA5A-SB-4.0-5.0 SL-161-SA5A-SB-7.5-8.5 SL-163-SA5A-SB-4.0-5.0 SL-252-SA5A-SB-4.0-5.0

Method: 8015M
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P88883AB321243A	3/31/2011 12:43:00 PM	EFH (C8-C11)	0.50 mg/Kg	SL-161-SA5A-SB-4.0-5.0 SL-161-SA5A-SB-7.5-8.5 SL-163-SA5A-SB-4.0-5.0 SL-252-SA5A-SB-4.0-5.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-161-SA5A-SB-4.0-5.0(REA2)	EFH (C8-C11)	0.49 mg/Kg	1.3U mg/Kg
SL-161-SA5A-SB-7.5-8.5(REA2)	EFH (C8-C11)	0.51 mg/Kg	1.3U mg/Kg
SL-163-SA5A-SB-4.0-5.0(REA2)	EFH (C8-C11)	0.49 mg/Kg	1.4U mg/Kg
SL-252-SA5A-SB-4.0-5.0(REA2)	EFH (C8-C11)	0.51 mg/Kg	1.4U mg/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE109 **Laboratory: LL**

EDD Filename: DE109_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8260B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB01B211312A	3/23/2011 1:12:00 PM	METHYLENE CHLORIDE	0.68 ug/Kg	SL-161-SA5A-SB-4.0-5.0 SL-161-SA5A-SB-7.5-8.5 SL-163-SA5A-SB-4.0-5.0 SL-252-SA5A-SB-4.0-5.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-161-SA5A-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.9 ug/Kg	3.7U ug/Kg
SL-161-SA5A-SB-7.5-8.5(RES)	METHYLENE CHLORIDE	3.9 ug/Kg	4.5U ug/Kg
SL-163-SA5A-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.8 ug/Kg	3.8U ug/Kg
SL-252-SA5A-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.6 ug/Kg	4.3U ug/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE109 **Laboratory: LL**

EDD Filename: DE109_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-161-SA5A-SB-4.0-5.0MS (SL-161-SA5A-SB-4.0-5.0 SL -161-SA5A-SB-7.5-8.5 SL -163-SA5A-SB-4.0-5.0 SL -252-SA5A-SB-4.0-5.0)	VANADIUM	130	-	75.00-125.00	-	VANADIUM	J (all detects)
SL-161-SA5A-SB-4.0-5.0MS SL-161-SA5A-SB-4.0-5.0MSD (SL-161-SA5A-SB-4.0-5.0 SL -161-SA5A-SB-7.5-8.5 SL -163-SA5A-SB-4.0-5.0 SL -252-SA5A-SB-4.0-5.0)	ANTIMONY	48	42	75.00-125.00	-	ANTIMONY	J(all detects) UJ(all non-detects)
SL-161-SA5A-SB-4.0-5.0MSD (SL-161-SA5A-SB-4.0-5.0 SL -161-SA5A-SB-7.5-8.5 SL -163-SA5A-SB-4.0-5.0 SL -252-SA5A-SB-4.0-5.0)	BARIUM	-	63	75.00-125.00	-	BARIUM	No Qual, >4x

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-161-SA5A-SB-4.0-5.0MS	ALUMINUM	2023	2543	75.00-125.00	-	ALUMINUM	
SL-161-SA5A-SB-4.0-5.0MSD	CALCIUM	129	158	75.00-125.00	-	CALCIUM	J(all detects)
(SL-161-SA5A-SB-4.0-5.0	MAGNESIUM	138	244	75.00-125.00	-	MAGNESIUM	
SL -161-SA5A-SB-7.5-8.5	MANGANESE	157	195	75.00-125.00	-	MANGANESE	Al, Ca, Mg,
SL -163-SA5A-SB-4.0-5.0	POTASSIUM	-	128	75.00-125.00	-	POTASSIUM	Mn, Ti
SL -252-SA5A-SB-4.0-5.0)	TITANIUM	192	262	75.00-125.00	-	TITANIUM	No Qual, >4x
SL-161-SA5A-SB-4.0-5.0MS SL-161-SA5A-SB-4.0-5.0MSD (SL-161-SA5A-SB-4.0-5.0 SL -161-SA5A-SB-7.5-8.5 SL -163-SA5A-SB-4.0-5.0 SL -252-SA5A-SB-4.0-5.0)	IRON	-237	895	75.00-125.00	-	IRON	No Qual, >4x

Method: 300.0
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-161-SA5A-SB-4.0-5.0MS (SL-161-SA5A-SB-4.0-5.0 SL -161-SA5A-SB-7.5-8.5 SL -163-SA5A-SB-4.0-5.0 SL -252-SA5A-SB-4.0-5.0)	FLUORIDE	44	-	80.00-120.00	-	FLUORIDE	J(all detects) UJ(all non-detects)

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE109 **Laboratory: LL**

EDD Filename: DE109_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C SIM
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-161-SA5A-SB-4.0-5.0MSD (SL-161-SA5A-SB-4.0-5.0)	2-METHYLNAPHTHALENE	-	104	64.00-103.00	-	2-METHYLNAPHTHALENE	J(all detects)

Method: 8015M
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-161-SA5A-SB-4.0-5.0MS (SL-161-SA5A-SB-4.0-5.0)	EFH (C8-C11)	40	-	49.00-123.00	-	EFH (C8-C11)	J(all detects) UJ(all non-detects)

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE109 **Laboratory: LL**

EDD Filename: DE109_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 300.0
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-161-SA5A-SB-4.0-5.0DUP (SL-161-SA5A-SB-4.0-5.0 SL -161-SA5A-SB-7.5-8.5 SL -163-SA5A-SB-4.0-5.0 SL -252-SA5A-SB-4.0-5.0)	FLUORIDE	64	20.00	No Qual OK by difference
	Nitrate-NO3	32	20.00	

Method: 6010B
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-161-SA5A-SB-4.0-5.0DUP (SL-161-SA5A-SB-4.0-5.0 SL -161-SA5A-SB-7.5-8.5 SL -163-SA5A-SB-4.0-5.0 SL -252-SA5A-SB-4.0-5.0)	Zirconium	30	20.00	No Qual OK by difference

Method: 6020
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-161-SA5A-SB-4.0-5.0DUP (SL-161-SA5A-SB-4.0-5.0 SL -161-SA5A-SB-7.5-8.5 SL -163-SA5A-SB-4.0-5.0 SL -252-SA5A-SB-4.0-5.0)	ANTIMONY	200	20.00	J(all detects) UJ(all non-detects)
	ARSENIC	30	20.00	
	MOLYBDENUM	0.3015 mg/Kg	0.216 mg/Kg	
	SELENIUM	30	20.00	Sb, Se, Ag, Tl No Qual OK by difference
	SILVER	22	20.00	
	THALLIUM	22	20.00	

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE109 **Laboratory: LL**

EDD Filename: DE109_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P7LCLCSQ262223 (SL-161-SA5A-SB-4.0-5.0 SL-161-SA5A-SB-7.5-8.5 SL-163-SA5A-SB-4.0-5.0 SL-252-SA5A-SB-4.0-5.0)	BIS(2-CHLOROISOPROPYL) ET NITROBENZENE	63 70	- -	68.00-131.00 71.00-104.00	- -	BIS(2-CHLOROISOPROPYL) E NITROBENZENE	J (all detects) UJ (all non-detects)

Method: 8015M
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P10883AQ321309A (SL-161-SA5A-SB-4.0-5.0 SL-161-SA5A-SB-7.5-8.5 SL-163-SA5A-SB-4.0-5.0 SL-252-SA5A-SB-4.0-5.0)	EFH (C30-C40)	121	-	66.00-113.00	-	EFH (C30-C40)	J(all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE109 **Laboratory: LL**

EDD Filename: DE109_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 300.0

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-161-SA5A-SB-7.5-8.5	Nitrate-NO3	J	1.1	1.6	PQL	mg/Kg	J (all detects)
SL-163-SA5A-SB-4.0-5.0	Nitrate-NO3	J	1.3	1.7	PQL	mg/Kg	J (all detects)
SL-252-SA5A-SB-4.0-5.0	Nitrate-NO3	J	1.4	1.7	PQL	mg/Kg	J (all detects)

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-161-SA5A-SB-4.0-5.0	SODIUM	J	81.5	109	PQL	mg/Kg	J (all detects)
	TIN	J	3.30	10.9	PQL	mg/Kg	
	Zirconium	J	3.29	5.45	PQL	mg/Kg	
SL-161-SA5A-SB-7.5-8.5	TIN	J	3.44	10.7	PQL	mg/Kg	J (all detects)
	Zirconium	J	4.32	5.33	PQL	mg/Kg	
SL-163-SA5A-SB-4.0-5.0	SODIUM	J	80.6	114	PQL	mg/Kg	J (all detects)
	TIN	J	3.09	11.4	PQL	mg/Kg	
	Zirconium	J	3.36	5.68	PQL	mg/Kg	
SL-252-SA5A-SB-4.0-5.0	SODIUM	J	83.0	112	PQL	mg/Kg	J (all detects)
	TIN	J	3.28	11.2	PQL	mg/Kg	
	Zirconium	J	3.14	5.60	PQL	mg/Kg	

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-161-SA5A-SB-4.0-5.0	ANTIMONY	J	0.195	0.216	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0991	0.108	PQL	mg/Kg	
	SELENIUM	J	0.117	0.432	PQL	mg/Kg	
	SILVER	J	0.0302	0.108	PQL	mg/Kg	
SL-161-SA5A-SB-7.5-8.5	ANTIMONY	J	0.118	0.211	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.120	0.422	PQL	mg/Kg	
	SILVER	J	0.0312	0.106	PQL	mg/Kg	
SL-163-SA5A-SB-4.0-5.0	ANTIMONY	J	0.143	0.232	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.153	0.463	PQL	mg/Kg	
	SILVER	J	0.0385	0.116	PQL	mg/Kg	
SL-252-SA5A-SB-4.0-5.0	ANTIMONY	J	0.123	0.220	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.184	0.439	PQL	mg/Kg	
	SILVER	J	0.0292	0.110	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE109 **Laboratory: LL**

EDD Filename: DE109_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-161-SA5A-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.48	1.1	PQL	mg/Kg	J (all detects)
SL-161-SA5A-SB-7.5-8.5	HEXAVALENT CHROMIUM	J	0.45	1.1	PQL	mg/Kg	J (all detects)
SL-163-SA5A-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.49	1.2	PQL	mg/Kg	J (all detects)
SL-252-SA5A-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.49	1.1	PQL	mg/Kg	J (all detects)

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-163-SA5A-SB-4.0-5.0	MERCURY	J	0.0088	0.110	PQL	mg/Kg	J (all detects)
SL-252-SA5A-SB-4.0-5.0	MERCURY	J	0.0061	0.126	PQL	mg/Kg	J (all detects)

Method: 8015M

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-161-SA5A-SB-4.0-5.0	EFH (C30-C40) EFH (C8-C11)	J J	1.2 0.49	1.3 1.3	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-161-SA5A-SB-7.5-8.5	EFH (C8-C11)	J	0.51	1.3	PQL	mg/Kg	J (all detects)
SL-163-SA5A-SB-4.0-5.0	EFH (C30-C40) EFH (C8-C11)	J J	1.0 0.49	1.4 1.4	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-252-SA5A-SB-4.0-5.0	EFH (C30-C40) EFH (C8-C11)	J J	1.0 0.51	1.4 1.4	PQL PQL	mg/Kg mg/Kg	J (all detects)

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-161-SA5A-SB-4.0-5.0	METHYLENE CHLORIDE	J	1.9	3.7	PQL	ug/Kg	J (all detects)
SL-161-SA5A-SB-7.5-8.5	METHYLENE CHLORIDE TOLUENE	J J	3.9 0.10	4.5 4.5	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-163-SA5A-SB-4.0-5.0	METHYLENE CHLORIDE	J	1.8	3.8	PQL	ug/Kg	J (all detects)
SL-252-SA5A-SB-4.0-5.0	METHYLENE CHLORIDE	J	1.6	4.3	PQL	ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE109 **Laboratory: LL**

EDD Filename: DE109_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8270C SIM**

Matrix: **SO**

SampleID	*Analyte*	*Lab Qual*	*Result*	*Reporting Limit*	*RL Type*	*Units*	*Flag*
SL-161-SA5A-SB-7.5-8.5	NAPHTHALENE	J	0.81	1.8	PQL	ug/Kg	J (all detects)
SL-252-SA5A-SB-4.0-5.0	NAPHTHALENE	J	0.80	1.9	PQL	ug/Kg	J (all detects)

LDC #: 25911R4 **VALIDATION COMPLETENESS WORKSHEET** Date: 8-3-11

SDG #: DE109 ADR

Laboratory: Lancaster Laboratories

Reviewer: CR

2nd Reviewer: [illegible]

METHOD: Metals (EPA SW 846 Method 6010B/6020A/7000)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	N	Sampling dates:
II.	ICP/MS Tune	—	
III.	Calibration	—	
IV.	Blanks	A	No Quals
V.	ICP Interference Check Sample (ICS) Analysis	N	
VI.	Matrix Spike Analysis	N	MS/D (Al, Ba, Ca, Fe, Mg, Mn, Ti, Zn > 4X)
VII.	Duplicate Sample Analysis	N	Dup (Sb, Se, Ag, Zn, Tl < 5x RL) Mo by difference
VIII.	Laboratory Control Samples (LCS)	A	LCS
IX.	Internal Standard (ICP-MS)	N	~~0.0215~~ 0.3015 mg/g (<0.16)
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	SW	J/UJ
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	—	
XV	Field Blanks	—	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:

1	SL-161-SA5A-SB-4.0-5.0	11		21		31	
2	SL-161-SA5A-SB-7.5-8.5	12		22		32	
3	SL-163-SA5A-SB-4.0-5.0	13		23		33	
4	SL-252-SA5A-SB-4.0-5.0	14		24		34	
5	(~~X~~1) MS	15		25		35	
6	MSD	16		26		36	
7	DUP	17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 9
SERIAL DILUTIONS
SDG No.: DE109
Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: 6235702BKG Serial Dilution Lab Sample ID: 6235702L
Batch ID(s): P08208B, P08226A
Concentration Units: UG/L

Analyte	Mass	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Diff.	Q	M
Aluminum		155070.2700		149431.5500		4		P
Antimony	121	0.9044	B	1.5000	U	100		MS
Arsenic	75	24.5600		28.6750		17		MS
Barium	137	425.8000		466.8500		10		MS
Beryllium	9	2.9080		3.3270		14		MS
Boron		8.9000	U	44.5000	U			P
Cadmium	111	0.4586	B	1.0000	U	100		MS
Calcium		20201.8500		19953.7000		1		P
Chromium	52	89.3800		99.6000		11	E	MS
Cobalt	59	30.7900		34.0750		11	E	MS
Copper	63	37.9500		44.2200		17	E	MS
Iron		200614.5000		182573.6000		9		P
Lead	208	25.3300		26.3200		4		MS
Lithium		189.3800		194.2500		3		P
Magnesium		39280.8000		38725.6000		1		P
Manganese		2504.4600		2347.8000		6		P
Molybdenum	98	3.0210		2.5720		15		MS
Nickel	60	51.9600		59.7500		15	E	MS
Phosphorus		2547.9700		2437.4000		4		P
Potassium		24140.3600		23235.6000		4		P
Selenium	78	0.5400	B	1.0160	B	88		MS
Silver	107	0.1398	B	0.3000	U	100		MS
Sodium		747.0500	B	1865.0000	U	100		P
Strontium		166.2900		156.9500		6		P
Thallium	203	1.3360		1.4095	B	6		MS
Tin		30.2300	B	50.0000	U	100		P
Titanium		10662.0800		10650.3500		0		P
Vanadium	51	181.2000		200.9500		11	E	MS
Zinc	66	230.6000		255.8500		11		MS
Zirconium		30.1600	B	42.0000	U	100		P

NOTE: An E in column Q indicates the presence of a chemical or physical interference in the matrix when the % difference is greater than 10%. This applies only when (I) is greater than or equal to 50x MDL for ICP, 100x MDL for ICP-MS (6020), 50x MDL for ICP-MS (200.8), or 25x MDL for GFAA.

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry

CONCENTRATION QUALIFIERS:
U= Below MDL
B= Below LOQ

FLAGS:
E = Matrix Effects exist as proven by Serial Dilution or Spiked Dilution

SAMPLE DELIVERY GROUP

DE110

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
22-Mar-2011	TB-032211	6236857	TB	5030B	8015M	III
22-Mar-2011	TB-032211	6236857	TB	5030B	8260B	III
22-Mar-2011	TB-032211	6236857	TB	5030B	8260B SIM	III
22-Mar-2011	SL-231-SA5A-SB-2.0-3.0	6236853	N	3050B	6010B	III
22-Mar-2011	SL-231-SA5A-SB-2.0-3.0	6236853	N	3050B	6020	III
22-Mar-2011	SL-231-SA5A-SB-2.0-3.0	6236853	N	3060A	7199	III
22-Mar-2011	SL-231-SA5A-SB-2.0-3.0	6236853	N	3550B	8082	III
22-Mar-2011	SL-231-SA5A-SB-2.0-3.0	6236853	N	3550B	8270C	III
22-Mar-2011	SL-231-SA5A-SB-2.0-3.0	6236853	N	3550B	8270C SIM	III
22-Mar-2011	SL-231-SA5A-SB-2.0-3.0	6236853	N	5035	8260B	III
22-Mar-2011	SL-231-SA5A-SB-2.0-3.0	6236853	N	5035	8260B SIM	III
22-Mar-2011	SL-231-SA5A-SB-2.0-3.0	6236853	N	Gen Prep	9045M	III
22-Mar-2011	SL-231-SA5A-SB-2.0-3.0	6236853	N	METHOD	300.0	III
22-Mar-2011	SL-231-SA5A-SB-2.0-3.0	6236853	N	METHOD	314.0	III
22-Mar-2011	SL-231-SA5A-SB-2.0-3.0	6236853	N	METHOD	7471A	III
22-Mar-2011	SL-180-SA5A-SB-4.0-5.0	6236855	N	3050B	6010B	III
22-Mar-2011	SL-180-SA5A-SB-4.0-5.0	6236855	N	3050B	6020	III
22-Mar-2011	SL-180-SA5A-SB-4.0-5.0	6236855	N	3060A	7199	III
22-Mar-2011	SL-180-SA5A-SB-4.0-5.0	6236855	N	3546	1625C	III
22-Mar-2011	SL-180-SA5A-SB-4.0-5.0	6236855	N	3550B	8015B	III
22-Mar-2011	SL-180-SA5A-SB-4.0-5.0	6236855	N	3550B	8015M	III
22-Mar-2011	SL-180-SA5A-SB-4.0-5.0	6236855	N	3550B	8082	III
22-Mar-2011	SL-180-SA5A-SB-4.0-5.0	6236855	N	3550B	8270C	III
22-Mar-2011	SL-180-SA5A-SB-4.0-5.0	6236855	N	3550B	8270C SIM	III
22-Mar-2011	SL-180-SA5A-SB-4.0-5.0	6236855	N	5035	8015M	III
22-Mar-2011	SL-180-SA5A-SB-4.0-5.0	6236855	N	5035	8260B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
22-Mar-2011	SL-180-SA5A-SB-4.0-5.0	6236855	N	5035	8260B SIM	III
22-Mar-2011	SL-180-SA5A-SB-4.0-5.0	6236855	N	8330	8330A	III
22-Mar-2011	SL-180-SA5A-SB-4.0-5.0	6236855	N	Gen Prep	9045M	III
22-Mar-2011	SL-180-SA5A-SB-4.0-5.0	6236855	N	METHOD	300.0	III
22-Mar-2011	SL-180-SA5A-SB-4.0-5.0	6236855	N	METHOD	314.0	III
22-Mar-2011	SL-180-SA5A-SB-4.0-5.0	6236855	N	METHOD	7471A	III
22-Mar-2011	SL-180-SA5A-SB-4.0-5.0	6236855	N	METHOD	8015B	III
22-Mar-2011	SL-180-SA5A-SB-4.0-5.0	6236855	N	METHOD	8015M	III
22-Mar-2011	SL-180-SA5A-SB-4.0-5.0	6236855	N	METHOD	8315A	III
22-Mar-2011	SL-180-SA5A-SB-4.0-5.0	6236855	N	METHOD	9012B	III
22-Mar-2011	SL-181-SA5A-SB-4.0-5.0	6236854	N	3050B	6010B	III
22-Mar-2011	SL-181-SA5A-SB-4.0-5.0	6236854	N	3050B	6020	III
22-Mar-2011	SL-181-SA5A-SB-4.0-5.0	6236854	N	3060A	7199	III
22-Mar-2011	SL-181-SA5A-SB-4.0-5.0	6236854	N	3546	1625C	III
22-Mar-2011	SL-181-SA5A-SB-4.0-5.0	6236854	N	3550B	8015B	III
22-Mar-2011	SL-181-SA5A-SB-4.0-5.0	6236854	N	3550B	8015M	III
22-Mar-2011	SL-181-SA5A-SB-4.0-5.0	6236854	N	3550B	8082	III
22-Mar-2011	SL-181-SA5A-SB-4.0-5.0	6236854	N	3550B	8270C	III
22-Mar-2011	SL-181-SA5A-SB-4.0-5.0	6236854	N	3550B	8270C SIM	III
22-Mar-2011	SL-181-SA5A-SB-4.0-5.0	6236854	N	5035	8015M	III
22-Mar-2011	SL-181-SA5A-SB-4.0-5.0	6236854	N	5035	8260B	III
22-Mar-2011	SL-181-SA5A-SB-4.0-5.0	6236854	N	5035	8260B SIM	III
22-Mar-2011	SL-181-SA5A-SB-4.0-5.0	6236854	N	8330	8330A	III
22-Mar-2011	SL-181-SA5A-SB-4.0-5.0	6236854	N	Gen Prep	9045M	III
22-Mar-2011	SL-181-SA5A-SB-4.0-5.0	6236854	N	METHOD	300.0	III
22-Mar-2011	SL-181-SA5A-SB-4.0-5.0	6236854	N	METHOD	314.0	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
22-Mar-2011	SL-181-SA5A-SB-4.0-5.0	6236854	N	METHOD	7471A	III
22-Mar-2011	SL-181-SA5A-SB-4.0-5.0	6236854	N	METHOD	8015B	III
22-Mar-2011	SL-181-SA5A-SB-4.0-5.0	6236854	N	METHOD	8015M	III
22-Mar-2011	SL-181-SA5A-SB-4.0-5.0	6236854	N	METHOD	8315A	III
22-Mar-2011	SL-181-SA5A-SB-4.0-5.0	6236854	N	METHOD	9012B	III
22-Mar-2011	SL-181-SA5A-SB-4.0-5.0DUP	P236854D271844A	DUP	3060A	7199	III
22-Mar-2011	SL-181-SA5A-SB-4.0-5.0MS	P236854R271758A	MS	3060A	7199	III
22-Mar-2011	EB08-SA5A-032211	6236856	EB	3005A	6010B	III
22-Mar-2011	EB08-SA5A-032211	6236856	EB	3020A	6020	III
22-Mar-2011	EB08-SA5A-032211	6236856	EB	3510C	8082	III
22-Mar-2011	EB08-SA5A-032211	6236856	EB	3510C	8270C	III
22-Mar-2011	EB08-SA5A-032211	6236856	EB	3510C	8270C SIM	III
22-Mar-2011	EB08-SA5A-032211	6236856	EB	5030B	8260B	III
22-Mar-2011	EB08-SA5A-032211	6236856	EB	5030B	8260B SIM	III
22-Mar-2011	EB08-SA5A-032211	6236856	EB	Gen Prep	300.0	III
22-Mar-2011	EB08-SA5A-032211	6236856	EB	Gen Prep	314.0	III
22-Mar-2011	EB08-SA5A-032211	6236856	EB	Gen Prep	7199	III
22-Mar-2011	EB08-SA5A-032211	6236856	EB	Gen Prep	9040B	III
22-Mar-2011	EB08-SA5A-032211	6236856	EB	METHOD	7470A	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE110 **Laboratory: LL**

EDD Filename: PrepDE110_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: EM
Method: 9040B **Matrix:** AQ

Sample ID: EB08-SA5A-032211 *Collected:* 3/22/2011 3:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PH	5.9		0.010	MDL	0.010	PQL	pH unit	J	H

Method Category: GENCHEM
Method: 300.0 **Matrix:** SO

Sample ID: SL-180-SA5A-SB-4.0-5.0 *Collected:* 3/22/2011 1:49:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Nitrate-NO3	1.5	J	0.93	MDL	1.7	PQL	mg/Kg	J	Z

Sample ID: SL-181-SA5A-SB-4.0-5.0 *Collected:* 3/22/2011 3:13:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Nitrate-NO3	1.6	J	0.98	MDL	1.8	PQL	mg/Kg	J	Z

Method Category: METALS
Method: 6010B **Matrix:** AQ

Sample ID: EB08-SA5A-032211 *Collected:* 3/22/2011 3:30:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LITHIUM	0.0035	J	0.0024	MDL	0.0200	PQL	mg/L	U	B, B

Method Category: METALS
Method: 6010B **Matrix:** SO

Sample ID: SL-180-SA5A-SB-4.0-5.0 *Collected:* 3/22/2011 1:49:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.05	J	1.01	MDL	5.70	PQL	mg/Kg	J	Z
POTASSIUM	1640		20.5	MDL	57.0	PQL	mg/Kg	J	Q
TIN	3.50	J	1.14	MDL	11.4	PQL	mg/Kg	U	B
Zirconium	4.54	J	0.958	MDL	5.70	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE110 **Laboratory: LL**

EDD Filename: PrepDE110_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-181-SA5A-SB-4.0-5.0 *Collected:* 3/22/2011 3:13:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	2440		21.6	MDL	60.0	PQL	mg/Kg	J	Q
TIN	3.23	J	1.20	MDL	12.0	PQL	mg/Kg	U	B
Zirconium	3.75	J	1.01	MDL	6.00	PQL	mg/Kg	J	Z

Sample ID: SL-231-SA5A-SB-2.0-3.0 *Collected:* 3/22/2011 11:03:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	2890		20.4	MDL	56.6	PQL	mg/Kg	J	Q
TIN	3.42	J	1.13	MDL	11.3	PQL	mg/Kg	U	B
Zirconium	3.54	J	0.951	MDL	5.66	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-180-SA5A-SB-4.0-5.0 *Collected:* 3/22/2011 1:49:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.198	J	0.0461	MDL	0.461	PQL	mg/Kg	J	Z

Sample ID: SL-180-SA5A-SB-4.0-5.0 *Collected:* 3/22/2011 1:49:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.524		0.0576	MDL	0.115	PQL	mg/Kg	J	E

Sample ID: SL-180-SA5A-SB-4.0-5.0 *Collected:* 3/22/2011 1:49:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.123	J	0.0691	MDL	0.230	PQL	mg/Kg	J	Z, Q
ARSENIC	5.46		0.0921	MDL	0.461	PQL	mg/Kg	J	E
CHROMIUM	28.8		0.138	MDL	0.461	PQL	mg/Kg	J	A
COBALT	8.52		0.0230	MDL	0.115	PQL	mg/Kg	J	A
COPPER	12.0		0.0760	MDL	0.461	PQL	mg/Kg	J	A
NICKEL	18.5		0.115	MDL	0.461	PQL	mg/Kg	J	A
SILVER	0.0820	J	0.0138	MDL	0.115	PQL	mg/Kg	J	Z
VANADIUM	53.6		0.0253	MDL	0.115	PQL	mg/Kg	J	Q, A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE110 **Laboratory: LL**

EDD Filename: PrepDE110_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 ***Matrix:*** SO

Sample ID: SL-181-SA5A-SB-4.0-5.0 ***Collected:*** 3/22/2011 3:13:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.128	J	0.0485	MDL	0.485	PQL	mg/Kg	J	Z

Sample ID: SL-181-SA5A-SB-4.0-5.0 ***Collected:*** 3/22/2011 3:13:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.497		0.0606	MDL	0.121	PQL	mg/Kg	J	E

Sample ID: SL-181-SA5A-SB-4.0-5.0 ***Collected:*** 3/22/2011 3:13:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0938	J	0.0727	MDL	0.242	PQL	mg/Kg	J	Z, Q
ARSENIC	4.60		0.0969	MDL	0.485	PQL	mg/Kg	J	E
CHROMIUM	23.6		0.145	MDL	0.485	PQL	mg/Kg	J	A
COBALT	7.31		0.0242	MDL	0.121	PQL	mg/Kg	J	A
COPPER	10.2		0.0800	MDL	0.485	PQL	mg/Kg	J	A
NICKEL	15.2		0.121	MDL	0.485	PQL	mg/Kg	J	A
SILVER	0.0710	J	0.0145	MDL	0.121	PQL	mg/Kg	J	Z
VANADIUM	42.5		0.0267	MDL	0.121	PQL	mg/Kg	J	Q, A

Sample ID: SL-231-SA5A-SB-2.0-3.0 ***Collected:*** 3/22/2011 11:03:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.117	J	0.0449	MDL	0.449	PQL	mg/Kg	J	Z

Sample ID: SL-231-SA5A-SB-2.0-3.0 ***Collected:*** 3/22/2011 11:03:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.619		0.0561	MDL	0.112	PQL	mg/Kg	J	E

Sample ID: SL-231-SA5A-SB-2.0-3.0 ***Collected:*** 3/22/2011 11:03:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.229		0.0673	MDL	0.224	PQL	mg/Kg	J	Q
ARSENIC	8.05		0.0897	MDL	0.449	PQL	mg/Kg	J	E
CADMIUM	0.104	J	0.0449	MDL	0.112	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE110 **Laboratory: LL**

EDD Filename: PrepDE110_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS
Method: 6020 **Matrix:** SO

Sample ID: SL-231-SA5A-SB-2.0-3.0 *Collected:* 3/22/2011 11:03:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHROMIUM	28.3		0.135	MDL	0.449	PQL	mg/Kg	J	A
COBALT	8.92		0.0224	MDL	0.112	PQL	mg/Kg	J	A
COPPER	15.6		0.0740	MDL	0.449	PQL	mg/Kg	J	A
NICKEL	16.8		0.112	MDL	0.449	PQL	mg/Kg	J	A
SILVER	0.0557	J	0.0135	MDL	0.112	PQL	mg/Kg	J	Z
VANADIUM	48.5		0.0247	MDL	0.112	PQL	mg/Kg	J	Q, A

Method Category: METALS
Method: 7199 **Matrix:** SO

Sample ID: SL-181-SA5A-SB-4.0-5.0 *Collected:* 3/22/2011 3:13:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.42	J	0.24	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-231-SA5A-SB-2.0-3.0 *Collected:* 3/22/2011 11:03:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.33	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Method Category: METALS
Method: 7471A **Matrix:** SO

Sample ID: SL-180-SA5A-SB-4.0-5.0 *Collected:* 3/22/2011 1:49:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0092	J	0.0032	MDL	0.110	PQL	mg/Kg	J	Z

Sample ID: SL-181-SA5A-SB-4.0-5.0 *Collected:* 3/22/2011 3:13:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0199	J	0.0034	MDL	0.117	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE110 **Laboratory: LL**

EDD Filename: PrepDE110_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8015M **Matrix:** SO

Sample ID: SL-180-SA5A-SB-4.0-5.0 *Collected:* 3/22/2011 1:49:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	0.92	J	0.47	MDL	1.4	PQL	mg/Kg	J	Z
EFH (C8-C11)	0.48	J	0.47	MDL	1.4	PQL	mg/Kg	J	Z

Sample ID: SL-181-SA5A-SB-4.0-5.0 *Collected:* 3/22/2011 3:13:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	0.85	J	0.49	MDL	1.5	PQL	mg/Kg	J	Z

Method Category: SVOA

Method: 8270C **Matrix:** AQ

Sample ID: EB08-SA5A-032211 *Collected:* 3/22/2011 3:30:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NITROBENZENE	1	U	1	MDL	5	PQL	ug/L	UJ	L

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SL-180-SA5A-SB-4.0-5.0 *Collected:* 3/22/2011 1:49:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-CHLOROISOPROPYL) ETHER	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
NITROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L

Sample ID: SL-181-SA5A-SB-4.0-5.0 *Collected:* 3/22/2011 3:13:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-CHLOROISOPROPYL) ETHER	20	U	20	MDL	200	PQL	ug/Kg	UJ	L
NITROBENZENE	20	U	20	MDL	200	PQL	ug/Kg	UJ	L

Sample ID: SL-231-SA5A-SB-2.0-3.0 *Collected:* 3/22/2011 11:03:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-CHLOROISOPROPYL) ETHER	19	U	19	MDL	190	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE110 **Laboratory: LL**

EDD Filename: PrepDE110_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA
Method: 8270C **Matrix:** SO

Sample ID: SL-231-SA5A-SB-2.0-3.0 *Collected:* 3/22/2011 11:03:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	21	J	19	MDL	380	PQL	ug/Kg	J	Z
NITROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L

Method Category: SVOA
Method: 8270C SIM **Matrix:** AQ

Sample ID: EB08-SA5A-032211 *Collected:* 3/22/2011 3:30:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	0.22	J	0.049	MDL	0.99	PQL	ug/L	J	Z
Diethylphthalate	0.071	J	0.049	MDL	0.99	PQL	ug/L	J	Z
Di-n-butylphthalate	0.60	J	0.049	MDL	0.99	PQL	ug/L	U	B
Di-n-octylphthalate	0.31	J	0.049	MDL	0.99	PQL	ug/L	U	B

Method Category: SVOA
Method: 8270C SIM **Matrix:** SO

Sample ID: SL-180-SA5A-SB-4.0-5.0 *Collected:* 3/22/2011 1:49:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NAPHTHALENE	0.80	J	0.78	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-181-SA5A-SB-4.0-5.0 *Collected:* 3/22/2011 3:13:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACENAPHTHYLENE	1.1	J	0.41	MDL	2.0	PQL	ug/Kg	J	Z
ANTHRACENE	1.3	J	0.41	MDL	2.0	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	1.3	J	0.81	MDL	2.0	PQL	ug/Kg	J	Z

Sample ID: SL-231-SA5A-SB-2.0-3.0 *Collected:* 3/22/2011 11:03:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHRYSENE	0.85	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE110 **Laboratory: LL**

EDD Filename: PrepDE110_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **VOA**

Method: **8260B** ***Matrix:*** **SO**

Sample ID: **SL-180-SA5A-SB-4.0-5.0** ***Collected:*** **3/22/2011 1:49:00** ***Analysis Type:*** **RES** ***Dilution:*** **0.88**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ETHYLBENZENE	0.07	J	0.06	MDL	4.1	PQL	ug/Kg	J	Z
m,p-Xylene	0.21	J	0.17	MDL	4.1	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	2.3	J	0.24	MDL	4.1	PQL	ug/Kg	U	B

Sample ID: **SL-181-SA5A-SB-4.0-5.0** ***Collected:*** **3/22/2011 3:13:00** ***Analysis Type:*** **RES** ***Dilution:*** **0.92**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	4.1	J	0.27	MDL	4.5	PQL	ug/Kg	U	B

Sample ID: **SL-231-SA5A-SB-2.0-3.0** ***Collected:*** **3/22/2011 11:03:00** ***Analysis Type:*** **RES** ***Dilution:*** **0.84**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	7.1		0.23	MDL	3.8	PQL	ug/Kg	U	B
TOLUENE	0.12	J	0.08	MDL	3.8	PQL	ug/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE110 **Laboratory: LL**

EDD Filename: PrepDE110_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
*#	Professional Judgment
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Verification Correlation Coefficient
C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE110 **Laboratory: LL**

EDD Filename: PrepDE110_v1 **eQAPP Name: CDM_SSFL_110509**

F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation
L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery Lower Estimation

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE110 **Laboratory: LL**

EDD Filename: PrepDE110_v1 **eQAPP Name: CDM_SSFL_110509**

R	Continuing Calibration Verification Percent Recovery Lower Rejection
R	Continuing Calibration Verification Percent Recovery Upper Estimation
R	Continuing Calibration Verification Percent Recovery Upper Rejection
R	Continuing Calibration Verification Relative Response Factor
R	Initial Calibration Relative Response Factor
R	Initial Calibration Verification Percent Recovery Lower Estimation
R	Initial Calibration Verification Percent Recovery Lower Rejection
R	Initial Calibration Verification Percent Recovery Upper Estimation
R	Initial Calibration Verification Percent Recovery Upper Rejection
R	Initial Calibration Verification Relative Response Factor
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control Outlier Reports

DE110

QC Outlier Report: HoldingTimes

Lab Reporting Batch ID: DE110 **Laboratory: LL**
EDD Filename: DE110_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 9040B **Preparation Method: Gen Prep**
Matrix: AQ

Sample ID	Type	Actual	Criteria	Units	Flag
EB08-SA5A-032211 (RES)	Sampling To Analysis	77.00	48.00	HOURS	J (all detects) UJ (all non-detects)

Method Blank Outlier Report

Lab Reporting Batch ID: DE110 | Laboratory: LL

EDD Filename: DE110_v1 | eQAPP Name: CDM_SSFL_110509

Method: 6010B
Matrix: AQ

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P08348CB222137	3/25/2011 9:37:00 PM	LITHIUM	0.0024 mg/L	EB08-SA5A-032211

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
EB08-SA5A-032211(REA2)	LITHIUM	0.0035 mg/L	0.0035U mg/L

Method: 6010B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P08208BB220949	3/24/2011 9:49:00 AM	CALCIUM MAGNESIUM MANGANESE TIN	7.09 mg/Kg 4.17 mg/Kg 0.383 mg/Kg 1.58 mg/Kg	SL-180-SA5A-SB-4.0-5.0 SL-181-SA5A-SB-4.0-5.0 SL-231-SA5A-SB-2.0-3.0
P08208BB221258	3/24/2011 12:58:00 PM	ALUMINUM IRON PHOSPHORUS	21.6 mg/Kg 17.0 mg/Kg 0.932 mg/Kg	SL-180-SA5A-SB-4.0-5.0 SL-181-SA5A-SB-4.0-5.0 SL-231-SA5A-SB-2.0-3.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-180-SA5A-SB-4.0-5.0(RES)	TIN	3.50 mg/Kg	3.50U mg/Kg
SL-181-SA5A-SB-4.0-5.0(RES)	TIN	3.23 mg/Kg	3.23U mg/Kg
SL-231-SA5A-SB-2.0-3.0(RES)	TIN	3.42 mg/Kg	3.42U mg/Kg

Method: 6020
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P08226AB221220A	3/27/2011 12:20:00 PM	COPPER	0.0716 mg/Kg	SL-180-SA5A-SB-4.0-5.0 SL-181-SA5A-SB-4.0-5.0 SL-231-SA5A-SB-2.0-3.0

Method: 8260B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB02B211241A	3/24/2011 12:41:00 PM	METHYLENE CHLORIDE TOLUENE	1.5 ug/Kg 0.11 ug/Kg	SL-180-SA5A-SB-4.0-5.0 SL-181-SA5A-SB-4.0-5.0 SL-231-SA5A-SB-2.0-3.0

Method Blank Outlier Report

Lab Reporting Batch ID: DE110 | Laboratory: LL

EDD Filename: DE110_v1 | eQAPP Name: CDM_SSFL_110509

Method: 8260B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-180-SA5A-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	2.3 ug/Kg	4.1U ug/Kg
SL-181-SA5A-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	4.1 ug/Kg	4.5U ug/Kg
SL-231-SA5A-SB-2.0-3.0(RES)	METHYLENE CHLORIDE	7.1 ug/Kg	7.1U ug/Kg
SL-231-SA5A-SB-2.0-3.0(RES)	TOLUENE	0.12 ug/Kg	3.8U ug/Kg

Method: 8270C SIM
Matrix: AQ

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKWC08B260754	3/28/2011 7:54:00 AM	Di-n-butylphthalate Di-n-octylphthalate	0.32 ug/L 0.30 ug/L	EB08-SA5A-032211

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
EB08-SA5A-032211(RES)	Di-n-butylphthalate	0.60 ug/L	0.99U ug/L
EB08-SA5A-032211(RES)	Di-n-octylphthalate	0.31 ug/L	0.99U ug/L

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE110 **Laboratory: LL**

EDD Filename: DE110_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7199
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-181-SA5A-SB-4.0-5.0DUP (SL-180-SA5A-SB-4.0-5.0 SL -181-SA5A-SB-4.0-5.0 SL -231-SA5A-SB-2.0-3.0)	HEXAVALENT CHROMIUM	67	20.00	No Qual OK by difference

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE110 **Laboratory: LL**

EDD Filename: DE110_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P2WHLCSQ260046 P2WHLCSY260110 (EB08-SA5A-032211)	NITROBENZENE	73	74	75.00-109.00	-	NITROBENZENE	J (all detects) UJ (all non-detects)

Method: 7470A
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P09013CY220928 (EB08-SA5A-032211)	MERCURY	-	87	90.00-115.00	-	MERCURY	No Qual SRM within QC limits

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P7LCLCSQ262223 (SL-180-SA5A-SB-4.0-5.0 SL-181-SA5A-SB-4.0-5.0 SL-231-SA5A-SB-2.0-3.0)	BIS(2-CHLOROISOPROPYL) ET NITROBENZENE	63 70	- -	68.00-131.00 71.00-104.00	- -	BIS(2-CHLOROISOPROPYL) E NITROBENZENE	J(all detects) UJ(all non-detects)

Method: 8260B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
LCSB02Q211344A (SL-180-SA5A-SB-4.0-5.0 SL-181-SA5A-SB-4.0-5.0 SL-231-SA5A-SB-2.0-3.0)	BROMOCHLOROMETHANE	125	-	79.00-124.00	-	BROMOCHLOROMETHANE	J(all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE110 | Laboratory: LL

EDD Filename: DE110_v1 | eQAPP Name: CDM_SSFL_110509

Method: 6010B
Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB08-SA5A-032211	LITHIUM	J	0.0035	0.0200	PQL	mg/L	J (all detects)

Method: 8270C SIM
Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB08-SA5A-032211	BIS(2-ETHYLHEXYL)PHTHALATE	J	0.22	0.99	PQL	ug/L	J (all detects)
	Diethylphthalate	J	0.071	0.99	PQL	ug/L	
	Di-n-butylphthalate	J	0.60	0.99	PQL	ug/L	
	Di-n-octylphthalate	J	0.31	0.99	PQL	ug/L	

Method: 300.0
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-180-SA5A-SB-4.0-5.0	Nitrate-NO3	J	1.5	1.7	PQL	mg/Kg	J (all detects)
SL-181-SA5A-SB-4.0-5.0	Nitrate-NO3	J	1.6	1.8	PQL	mg/Kg	J (all detects)

Method: 6010B
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-180-SA5A-SB-4.0-5.0	BORON	J	2.05	5.70	PQL	mg/Kg	J (all detects)
	TIN	J	3.50	11.4	PQL	mg/Kg	
	Zirconium	J	4.54	5.70	PQL	mg/Kg	
SL-181-SA5A-SB-4.0-5.0	TIN	J	3.23	12.0	PQL	mg/Kg	J (all detects)
	Zirconium	J	3.75	6.00	PQL	mg/Kg	
SL-231-SA5A-SB-2.0-3.0	TIN	J	3.42	11.3	PQL	mg/Kg	J (all detects)
	Zirconium	J	3.54	5.66	PQL	mg/Kg	

Method: 6020
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-180-SA5A-SB-4.0-5.0	ANTIMONY	J	0.123	0.230	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.198	0.461	PQL	mg/Kg	
	SILVER	J	0.0820	0.115	PQL	mg/Kg	
SL-181-SA5A-SB-4.0-5.0	ANTIMONY	J	0.0938	0.242	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.128	0.485	PQL	mg/Kg	
	SILVER	J	0.0710	0.121	PQL	mg/Kg	

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Reporting Limit Outliers

Lab Reporting Batch ID: DE110 **Laboratory: LL**

EDD Filename: DE110_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-231-SA5A-SB-2.0-3.0	CADMIUM	J	0.104	0.112	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.117	0.449	PQL	mg/Kg	
	SILVER	J	0.0557	0.112	PQL	mg/Kg	

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-181-SA5A-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.42	1.2	PQL	mg/Kg	J (all detects)
SL-231-SA5A-SB-2.0-3.0	HEXAVALENT CHROMIUM	J	0.33	1.1	PQL	mg/Kg	J (all detects)

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-180-SA5A-SB-4.0-5.0	MERCURY	J	0.0092	0.110	PQL	mg/Kg	J (all detects)
SL-181-SA5A-SB-4.0-5.0	MERCURY	J	0.0199	0.117	PQL	mg/Kg	J (all detects)

Method: 8015M

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-180-SA5A-SB-4.0-5.0	EFH (C30-C40)	J	0.92	1.4	PQL	mg/Kg	J (all detects)
	EFH (C8-C11)	J	0.48	1.4	PQL	mg/Kg	
SL-181-SA5A-SB-4.0-5.0	EFH (C15-C20)	J	0.85	1.5	PQL	mg/Kg	J (all detects)

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-180-SA5A-SB-4.0-5.0	ETHYLBENZENE	J	0.07	4.1	PQL	ug/Kg	J (all detects)
	m,p-Xylene	J	0.21	4.1	PQL	ug/Kg	
	METHYLENE CHLORIDE	J	2.3	4.1	PQL	ug/Kg	
SL-181-SA5A-SB-4.0-5.0	METHYLENE CHLORIDE	J	4.1	4.5	PQL	ug/Kg	J (all detects)
SL-231-SA5A-SB-2.0-3.0	TOLUENE	J	0.12	3.8	PQL	ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE110 **Laboratory: LL**

EDD Filename: DE110_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8270C**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-231-SA5A-SB-2.0-3.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	21	380	PQL	ug/Kg	J (all detects)

Method: **8270C SIM**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-180-SA5A-SB-4.0-5.0	NAPHTHALENE	J	0.80	1.9	PQL	ug/Kg	J (all detects)
SL-181-SA5A-SB-4.0-5.0	ACENAPHTHYLENE	J	1.1	2.0	PQL	ug/Kg	J (all detects)
	ANTHRACENE	J	1.3	2.0	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	1.3	2.0	PQL	ug/Kg	
SL-231-SA5A-SB-2.0-3.0	CHRYSENE	J	0.85	1.9	PQL	ug/Kg	J (all detects)

LDC #: 25911S4 **VALIDATION COMPLETENESS WORKSHEET** Date: 8-3-11

SDG #: DE110 ADR

Laboratory: Lancaster Laboratories

Reviewer: CR

2nd Reviewer: A

METHOD: Metals (EPA SW 846 Method 6010B/6020A/7000)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	N	Sampling dates:
II.	ICP/MS Tune	—	
III.	Calibration	—	
IV.	Blanks	SW	
V.	ICP Interference Check Sample (ICS) Analysis	N	
VI.	Matrix Spike Analysis	N	MS/D (SD6:DE109)
VII.	Duplicate Sample Analysis	N	DUP ✓
VIII.	Laboratory Control Samples (LCS)	NA	LCS/D
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	—	(SD6:DE109)
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	—	
XV	Field Blanks	SW	EB=4

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:

1	SL-231-SA5A-SB-2.0-3.0	11		21		31	
2	SL-181-SA5A-SB-4.0-5.0	12		22		32	
3	SL-180-SA5A-SB-4.0-5.0	13		23		33	
4	EB08-SA5A-032211	14		24		34	
5		15		25		35	
6		16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

LDC #: 25911S4

VALIDATION FINDINGS WORKSHEET
PB/ICB/CCB QUALIFIED SAMPLES

Reviewer: OK
2nd Reviewer: A

METHOD: Trace metals (EPA SW 864 Method 6010B/6020/7000)
Sample Concentration units, unless otherwise noted: ug/L
Soil preparation factor applied: 100x x MS: 2xdil
Associated Samples: All Water

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit	4											
Li			3.6	18	3.5											

Samples with analyte concentrations within five times the associated ICB, CCB or PB concentration are listed above with the identifications from the Validation Completeness Worksheet. These sample results were qualified as not detected, "U".
Note : a - The listed analyte concentration is the highest ICB, CCB, or PB detected in the analysis of each element.

LDC #: 25911S4

VALIDATION FINDINGS WORKSHEET
Field Blanks

Page: 1 of 1
Reviewer: OR
2nd Reviewer: [illegible]

METHOD: Trace Metals (EPA SW846 6010B/7000)
Y N N/A Were field blanks identified in this SDG?
Y N N/A Were target analytes detected in the field blanks?
Blank units: ug/L **Associated sample units:** mg/Kg
Sampling date: 3/22/11 Soil factor applied 100x
Field blank type: (circle one) Field Blank / Rinsate / Other: Associated Samples: All Soil

Analyte	Blank ID	Sample Identification										
	4	Action Level	No Qualifiers									
Li	3.5	1.75										

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
Samples with analyte concentrations within five times the associated field blank concentration are listed above, these sample results were qualified as not detected, "U".

SAMPLE DELIVERY GROUP

DE111

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
23-Mar-2011	TB-032311	6237975	TB	5030B	8260B	III
23-Mar-2011	TB-032311	6237975	TB	5030B	8260B SIM	III
23-Mar-2011	SL-239-SA5A-SB-4.0-5.0	6237967	N	3050B	6010B	III
23-Mar-2011	SL-239-SA5A-SB-4.0-5.0	6237967	N	3050B	6020	III
23-Mar-2011	SL-239-SA5A-SB-4.0-5.0	6237967	N	3060A	7199	III
23-Mar-2011	SL-239-SA5A-SB-4.0-5.0	6237967	N	3550B	8082	III
23-Mar-2011	SL-239-SA5A-SB-4.0-5.0	6237967	N	3550B	8270C	III
23-Mar-2011	SL-239-SA5A-SB-4.0-5.0	6237967	N	3550B	8270C SIM	III
23-Mar-2011	SL-239-SA5A-SB-4.0-5.0	6237967	N	5035	8260B	III
23-Mar-2011	SL-239-SA5A-SB-4.0-5.0	6237967	N	5035	8260B SIM	III
23-Mar-2011	SL-239-SA5A-SB-4.0-5.0	6237967	N	Gen Prep	9045M	III
23-Mar-2011	SL-239-SA5A-SB-4.0-5.0	6237967	N	METHOD	300.0	III
23-Mar-2011	SL-239-SA5A-SB-4.0-5.0	6237967	N	METHOD	314.0	III
23-Mar-2011	SL-239-SA5A-SB-4.0-5.0	6237967	N	METHOD	7471A	III
23-Mar-2011	SL-239-SA5A-SB-4.0-5.0DUP	P237967D220617	DUP	3050B	6010B	III
23-Mar-2011	SL-239-SA5A-SB-4.0-5.0DUP	P237967D220627	DUP	METHOD	7471A	III
23-Mar-2011	SL-239-SA5A-SB-4.0-5.0DUP	P237967D220937A	DUP	3050B	6020	III
23-Mar-2011	SL-239-SA5A-SB-4.0-5.0DUP	P237967D221426A	DUP	3050B	6020	III
23-Mar-2011	SL-239-SA5A-SB-4.0-5.0DUP	P237967D221426B	DUP	3050B	6020	III
23-Mar-2011	SL-239-SA5A-SB-4.0-5.0DUP	P237967D221426C	DUP	3050B	6020	III
23-Mar-2011	SL-239-SA5A-SB-4.0-5.0DUP	P237967D221426D	DUP	3050B	6020	III
23-Mar-2011	SL-239-SA5A-SB-4.0-5.0MSD	P237967M220625	MSD	3050B	6010B	III
23-Mar-2011	SL-239-SA5A-SB-4.0-5.0MSD	P237967M220630	MSD	METHOD	7471A	III
23-Mar-2011	SL-239-SA5A-SB-4.0-5.0MSD	P237967M220941A	MSD	3050B	6020	III
23-Mar-2011	SL-239-SA5A-SB-4.0-5.0MSD	P237967M221432A	MSD	3050B	6020	III
23-Mar-2011	SL-239-SA5A-SB-4.0-5.0MSD	P237967M221432B	MSD	3050B	6020	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
23-Mar-2011	SL-239-SA5A-SB-4.0-5.0MSD	P237967M221432C	MSD	3050B	6020	III
23-Mar-2011	SL-239-SA5A-SB-4.0-5.0MSD	P237967M221432D	MSD	3050B	6020	III
23-Mar-2011	SL-239-SA5A-SB-4.0-5.0MS	P237967R220621	MS	3050B	6010B	III
23-Mar-2011	SL-239-SA5A-SB-4.0-5.0MS	P237967R220629	MS	METHOD	7471A	III
23-Mar-2011	SL-239-SA5A-SB-4.0-5.0MS	P237967R220939A	MS	3050B	6020	III
23-Mar-2011	SL-239-SA5A-SB-4.0-5.0MS	P237967R221429A	MS	3050B	6020	III
23-Mar-2011	SL-239-SA5A-SB-4.0-5.0MS	P237967R221429B	MS	3050B	6020	III
23-Mar-2011	SL-239-SA5A-SB-4.0-5.0MS	P237967R221429C	MS	3050B	6020	III
23-Mar-2011	SL-239-SA5A-SB-4.0-5.0MS	P237967R221429D	MS	3050B	6020	III
23-Mar-2011	SL-240-SA5A-SB-4.0-5.0	6237968	N	3050B	6010B	III
23-Mar-2011	SL-240-SA5A-SB-4.0-5.0	6237968	N	3050B	6020	III
23-Mar-2011	SL-240-SA5A-SB-4.0-5.0	6237968	N	3060A	7199	III
23-Mar-2011	SL-240-SA5A-SB-4.0-5.0	6237968	N	3550B	8082	III
23-Mar-2011	SL-240-SA5A-SB-4.0-5.0	6237968	N	3550B	8270C	III
23-Mar-2011	SL-240-SA5A-SB-4.0-5.0	6237968	N	3550B	8270C SIM	III
23-Mar-2011	SL-240-SA5A-SB-4.0-5.0	6237968	N	5035	8260B	III
23-Mar-2011	SL-240-SA5A-SB-4.0-5.0	6237968	N	5035	8260B SIM	III
23-Mar-2011	SL-240-SA5A-SB-4.0-5.0	6237968	N	Gen Prep	9045M	III
23-Mar-2011	SL-240-SA5A-SB-4.0-5.0	6237968	N	METHOD	300.0	III
23-Mar-2011	SL-240-SA5A-SB-4.0-5.0	6237968	N	METHOD	314.0	III
23-Mar-2011	SL-240-SA5A-SB-4.0-5.0	6237968	N	METHOD	7471A	III
23-Mar-2011	SL-240-SA5A-SB-9.0-10	6237969	N	3050B	6010B	III
23-Mar-2011	SL-240-SA5A-SB-9.0-10	6237969	N	3050B	6020	III
23-Mar-2011	SL-240-SA5A-SB-9.0-10	6237969	N	3060A	7199	III
23-Mar-2011	SL-240-SA5A-SB-9.0-10	6237969	N	3550B	8082	III
23-Mar-2011	SL-240-SA5A-SB-9.0-10	6237969	N	3550B	8270C	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
23-Mar-2011	SL-240-SA5A-SB-9.0-10	6237969	N	3550B	8270C SIM	III
23-Mar-2011	SL-240-SA5A-SB-9.0-10	6237969	N	Gen Prep	9045M	III
23-Mar-2011	SL-240-SA5A-SB-9.0-10	6237969	N	METHOD	300.0	III
23-Mar-2011	SL-240-SA5A-SB-9.0-10	6237969	N	METHOD	314.0	III
23-Mar-2011	SL-240-SA5A-SB-9.0-10	6237969	N	METHOD	7471A	III
23-Mar-2011	SL-197-SA5A-SB-4.0-5.0	6237970	N	3050B	6010B	III
23-Mar-2011	SL-197-SA5A-SB-4.0-5.0	6237970	N	3050B	6020	III
23-Mar-2011	SL-197-SA5A-SB-4.0-5.0	6237970	N	3060A	7199	III
23-Mar-2011	SL-197-SA5A-SB-4.0-5.0	6237970	N	3550B	8082	III
23-Mar-2011	SL-197-SA5A-SB-4.0-5.0	6237970	N	3550B	8270C	III
23-Mar-2011	SL-197-SA5A-SB-4.0-5.0	6237970	N	3550B	8270C SIM	III
23-Mar-2011	SL-197-SA5A-SB-4.0-5.0	6237970	N	5035	8260B	III
23-Mar-2011	SL-197-SA5A-SB-4.0-5.0	6237970	N	5035	8260B SIM	III
23-Mar-2011	SL-197-SA5A-SB-4.0-5.0	6237970	N	Gen Prep	9045M	III
23-Mar-2011	SL-197-SA5A-SB-4.0-5.0	6237970	N	METHOD	300.0	III
23-Mar-2011	SL-197-SA5A-SB-4.0-5.0	6237970	N	METHOD	314.0	III
23-Mar-2011	SL-197-SA5A-SB-4.0-5.0	6237970	N	METHOD	7471A	III
23-Mar-2011	SL-197-SA5A-SB-4.0-5.0DUP	P237970D271754B	DUP	METHOD	314.0	III
23-Mar-2011	SL-197-SA5A-SB-4.0-5.0DUP	P237970D271940B	DUP	METHOD	300.0	III
23-Mar-2011	SL-197-SA5A-SB-4.0-5.0MS	P237970R271816B	MS	METHOD	314.0	III
23-Mar-2011	SL-197-SA5A-SB-4.0-5.0MS	P237970R271954B	MS	METHOD	300.0	III
23-Mar-2011	SL-197-SA5A-SB-8.0-9.0	6237971	N	3050B	6010B	III
23-Mar-2011	SL-197-SA5A-SB-8.0-9.0	6237971	N	3050B	6020	III
23-Mar-2011	SL-197-SA5A-SB-8.0-9.0	6237971	N	3060A	7199	III
23-Mar-2011	SL-197-SA5A-SB-8.0-9.0	6237971	N	3550B	8082	III
23-Mar-2011	SL-197-SA5A-SB-8.0-9.0	6237971	N	3550B	8270C	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
23-Mar-2011	SL-197-SA5A-SB-8.0-9.0	6237971	N	3550B	8270C SIM	III
23-Mar-2011	SL-197-SA5A-SB-8.0-9.0	6237971	N	Gen Prep	9045M	III
23-Mar-2011	SL-197-SA5A-SB-8.0-9.0	6237971	N	METHOD	300.0	III
23-Mar-2011	SL-197-SA5A-SB-8.0-9.0	6237971	N	METHOD	314.0	III
23-Mar-2011	SL-197-SA5A-SB-8.0-9.0	6237971	N	METHOD	7471A	III
23-Mar-2011	SL-198-SA5A-SB-3.0-4.0	6237972	N	3050B	6010B	III
23-Mar-2011	SL-198-SA5A-SB-3.0-4.0	6237972	N	3050B	6020	III
23-Mar-2011	SL-198-SA5A-SB-3.0-4.0	6237972	N	3060A	7199	III
23-Mar-2011	SL-198-SA5A-SB-3.0-4.0	6237972	N	3550B	8082	III
23-Mar-2011	SL-198-SA5A-SB-3.0-4.0	6237972	N	3550B	8270C	III
23-Mar-2011	SL-198-SA5A-SB-3.0-4.0	6237972	N	3550B	8270C SIM	III
23-Mar-2011	SL-198-SA5A-SB-3.0-4.0	6237972	N	5035	8260B	III
23-Mar-2011	SL-198-SA5A-SB-3.0-4.0	6237972	N	5035	8260B SIM	III
23-Mar-2011	SL-198-SA5A-SB-3.0-4.0	6237972	N	Gen Prep	9045M	III
23-Mar-2011	SL-198-SA5A-SB-3.0-4.0	6237972	N	METHOD	300.0	III
23-Mar-2011	SL-198-SA5A-SB-3.0-4.0	6237972	N	METHOD	314.0	III
23-Mar-2011	SL-198-SA5A-SB-3.0-4.0	6237972	N	METHOD	7471A	III
23-Mar-2011	EB09-SA5A-032311	6237974	EB	3510C	8015B	III
23-Mar-2011	EB09-SA5A-032311	6237974	EB	3510C	8015M	III
23-Mar-2011	EB09-SA5A-032311	6237974	EB	3520C	1625C	III
23-Mar-2011	EB09-SA5A-032311	6237974	EB	5030B	8015M	III
23-Mar-2011	EB09-SA5A-032311	6237974	EB	8330	8330A	III
23-Mar-2011	EB09-SA5A-032311	6237974	EB	Gen Prep	300.0	III
23-Mar-2011	EB09-SA5A-032311	6237974	EB	Gen Prep	8015B	III
23-Mar-2011	EB09-SA5A-032311	6237974	EB	Gen Prep	8015M	III
23-Mar-2011	EB09-SA5A-032311	6237974	EB	METHOD	8315A	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
23-Mar-2011	EB09-SA5A-032311	6237974	EB	METHOD	9012B	III
23-Mar-2011	EB09-SA5A-032311MSD	P237974M321642A	MSD	Gen Prep	8015M	III
23-Mar-2011	EB09-SA5A-032311MS	P237974R321607A	MS	Gen Prep	8015M	III
23-Mar-2011	SL-200-SA5A-SB-4.0-5.0	6237973	N	3050B	6010B	III
23-Mar-2011	SL-200-SA5A-SB-4.0-5.0	6237973	N	3050B	6020	III
23-Mar-2011	SL-200-SA5A-SB-4.0-5.0	6237973	N	3060A	7199	III
23-Mar-2011	SL-200-SA5A-SB-4.0-5.0	6237973	N	3550B	8082	III
23-Mar-2011	SL-200-SA5A-SB-4.0-5.0	6237973	N	3550B	8270C	III
23-Mar-2011	SL-200-SA5A-SB-4.0-5.0	6237973	N	3550B	8270C SIM	III
23-Mar-2011	SL-200-SA5A-SB-4.0-5.0	6237973	N	5035	8260B	III
23-Mar-2011	SL-200-SA5A-SB-4.0-5.0	6237973	N	5035	8260B SIM	III
23-Mar-2011	SL-200-SA5A-SB-4.0-5.0	6237973	N	Gen Prep	9045M	III
23-Mar-2011	SL-200-SA5A-SB-4.0-5.0	6237973	N	METHOD	300.0	III
23-Mar-2011	SL-200-SA5A-SB-4.0-5.0	6237973	N	METHOD	314.0	III
23-Mar-2011	SL-200-SA5A-SB-4.0-5.0	6237973	N	METHOD	6850	III
23-Mar-2011	SL-200-SA5A-SB-4.0-5.0	6237973	N	METHOD	7471A	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE111 **Laboratory: LL**

EDD Filename: DE111_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: GENCHEM

Method: 300.0 **Matrix: SO**

Sample ID: SL-197-SA5A-SB-4.0-5.0 *Collected:* 3/23/2011 12:14:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.6		0.89	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-197-SA5A-SB-8.0-9.0 *Collected:* 3/23/2011 12:23:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	4.3		0.95	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-198-SA5A-SB-3.0-4.0 *Collected:* 3/23/2011 2:24:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.8		0.90	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-200-SA5A-SB-4.0-5.0 *Collected:* 3/23/2011 3:49:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	5.1		0.88	MDL	1.1	PQL	mg/Kg	J	Q

Method Category: GENCHEM

Method: 314.0 **Matrix: SO**

Sample ID: SL-197-SA5A-SB-4.0-5.0 *Collected:* 3/23/2011 12:14:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PERCHLORATE	10.0	U	10.0	MDL	33.4	PQL	ug/Kg	R	Q

Sample ID: SL-197-SA5A-SB-8.0-9.0 *Collected:* 3/23/2011 12:23:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PERCHLORATE	10.7	U	10.7	MDL	35.6	PQL	ug/Kg	R	Q

Sample ID: SL-198-SA5A-SB-3.0-4.0 *Collected:* 3/23/2011 2:24:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PERCHLORATE	10.1	U	10.1	MDL	33.7	PQL	ug/Kg	R	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE111 **Laboratory: LL**

EDD Filename: DE111_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: GENCHEM

Method: 314.0 **Matrix: SO**

Sample ID: SL-200-SA5A-SB-4.0-5.0 *Collected:* 3/23/2011 3:49:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PERCHLORATE	9.9	U	9.9	MDL	33.0	PQL	ug/Kg	R	Q

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-197-SA5A-SB-4.0-5.0 *Collected:* 3/23/2011 12:14:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.17	J	0.962	MDL	5.41	PQL	mg/Kg	J	Z
MANGANESE	242		0.0843	MDL	0.541	PQL	mg/Kg	J	Q, E, E
PHOSPHORUS	184		0.605	MDL	10.8	PQL	mg/Kg	J	E
TIN	3.15	J	1.08	MDL	10.8	PQL	mg/Kg	U	B

Sample ID: SL-197-SA5A-SB-8.0-9.0 *Collected:* 3/23/2011 12:23:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.70	J	1.03	MDL	5.77	PQL	mg/Kg	J	Z
MANGANESE	306		0.0899	MDL	0.577	PQL	mg/Kg	J	Q, E, E
PHOSPHORUS	365		0.646	MDL	11.5	PQL	mg/Kg	J	E
TIN	3.69	J	1.15	MDL	11.5	PQL	mg/Kg	U	B

Sample ID: SL-198-SA5A-SB-3.0-4.0 *Collected:* 3/23/2011 2:24:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	436		0.0850	MDL	0.545	PQL	mg/Kg	J	Q, E, E
PHOSPHORUS	245		0.610	MDL	10.9	PQL	mg/Kg	J	E
TIN	2.93	J	1.09	MDL	10.9	PQL	mg/Kg	U	B

Sample ID: SL-200-SA5A-SB-4.0-5.0 *Collected:* 3/23/2011 3:49:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.93	J	0.940	MDL	5.28	PQL	mg/Kg	J	Z
MANGANESE	87.4		0.0824	MDL	0.528	PQL	mg/Kg	J	Q, E, E
PHOSPHORUS	62.4		0.592	MDL	10.6	PQL	mg/Kg	J	E
TIN	2.93	J	1.06	MDL	10.6	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE111 **Laboratory: LL**

EDD Filename: DE111_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-239-SA5A-SB-4.0-5.0 *Collected:* 3/23/2011 9:34:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.96	J	0.928	MDL	5.21	PQL	mg/Kg	J	Z
MANGANESE	150		0.0813	MDL	0.521	PQL	mg/Kg	J	Q, E, E
PHOSPHORUS	132		0.584	MDL	10.4	PQL	mg/Kg	J	E
TIN	3.58	J	1.04	MDL	10.4	PQL	mg/Kg	U	B
Zirconium	1.06	J	0.876	MDL	5.21	PQL	mg/Kg	J	Z

Sample ID: SL-240-SA5A-SB-4.0-5.0 *Collected:* 3/23/2011 10:55:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.79	J	0.973	MDL	5.46	PQL	mg/Kg	J	Z
MANGANESE	272		0.0853	MDL	0.546	PQL	mg/Kg	J	Q, E, E
PHOSPHORUS	197		0.612	MDL	10.9	PQL	mg/Kg	J	E
TIN	3.14	J	1.09	MDL	10.9	PQL	mg/Kg	U	B
Zirconium	1.34	J	0.918	MDL	5.46	PQL	mg/Kg	J	Z

Sample ID: SL-240-SA5A-SB-9.0-10 *Collected:* 3/23/2011 11:03:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.48	J	1.02	MDL	5.74	PQL	mg/Kg	J	Z
MANGANESE	297		0.0896	MDL	0.574	PQL	mg/Kg	J	Q, E, E
PHOSPHORUS	217		0.643	MDL	11.5	PQL	mg/Kg	J	E
TIN	2.96	J	1.15	MDL	11.5	PQL	mg/Kg	U	B

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-197-SA5A-SB-4.0-5.0 *Collected:* 3/23/2011 12:14:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.0755	J	0.0441	MDL	0.110	PQL	mg/Kg	J	Z

Sample ID: SL-197-SA5A-SB-4.0-5.0 *Collected:* 3/23/2011 12:14:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.117	J	0.0441	MDL	0.441	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE111 **Laboratory: LL**

EDD Filename: DE111_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6020** ***Matrix:*** **SO**

Sample ID: **SL-197-SA5A-SB-4.0-5.0** ***Collected:*** **3/23/2011 12:14:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.151	J	0.0662	MDL	0.221	PQL	mg/Kg	J	Z, Q
ARSENIC	7.00		0.0882	MDL	0.441	PQL	mg/Kg	J	Q
COBALT	15.5		0.0221	MDL	0.110	PQL	mg/Kg	J	E, A
LEAD	9.74		0.0115	MDL	0.221	PQL	mg/Kg	J	Q, E
NICKEL	16.5		0.110	MDL	0.441	PQL	mg/Kg	J	A
SILVER	0.0695	J	0.0132	MDL	0.110	PQL	mg/Kg	J	Z
ZINC	46.2		0.617	MDL	3.31	PQL	mg/Kg	J	Q

Sample ID: **SL-197-SA5A-SB-8.0-9.0** ***Collected:*** **3/23/2011 12:23:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.0776	J	0.0457	MDL	0.114	PQL	mg/Kg	J	Z

Sample ID: **SL-197-SA5A-SB-8.0-9.0** ***Collected:*** **3/23/2011 12:23:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.134	J	0.0457	MDL	0.457	PQL	mg/Kg	J	Z

Sample ID: **SL-197-SA5A-SB-8.0-9.0** ***Collected:*** **3/23/2011 12:23:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.232		0.0685	MDL	0.228	PQL	mg/Kg	J	Q
ARSENIC	11.5		0.0914	MDL	0.457	PQL	mg/Kg	J	Q
COBALT	22.1		0.0228	MDL	0.114	PQL	mg/Kg	J	E, A
LEAD	19.1		0.0119	MDL	0.228	PQL	mg/Kg	J	Q, E
NICKEL	38.2		0.114	MDL	0.457	PQL	mg/Kg	J	A
ZINC	107		0.640	MDL	3.43	PQL	mg/Kg	J	Q

Sample ID: **SL-198-SA5A-SB-3.0-4.0** ***Collected:*** **3/23/2011 2:24:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.0581	J	0.0444	MDL	0.111	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE111 **Laboratory: LL**

EDD Filename: DE111_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6020** ***Matrix:*** **SO**

Sample ID: **SL-198-SA5A-SB-3.0-4.0** ***Collected:*** **3/23/2011 2:24:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.156	J	0.0444	MDL	0.444	PQL	mg/Kg	J	Z

Sample ID: **SL-198-SA5A-SB-3.0-4.0** ***Collected:*** **3/23/2011 2:24:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0926	J	0.0667	MDL	0.222	PQL	mg/Kg	J	Z, Q
ARSENIC	6.27		0.0889	MDL	0.444	PQL	mg/Kg	J	Q
COBALT	9.52		0.0222	MDL	0.111	PQL	mg/Kg	J	E, A
LEAD	6.71		0.0116	MDL	0.222	PQL	mg/Kg	J	Q, E
NICKEL	24.3		0.111	MDL	0.444	PQL	mg/Kg	J	A
SILVER	0.0289	J	0.0133	MDL	0.111	PQL	mg/Kg	J	Z
ZINC	50.8		0.622	MDL	3.33	PQL	mg/Kg	J	Q

Sample ID: **SL-200-SA5A-SB-4.0-5.0** ***Collected:*** **3/23/2011 3:49:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0974	J	0.0653	MDL	0.218	PQL	mg/Kg	J	Z, Q
ARSENIC	3.16		0.0870	MDL	0.435	PQL	mg/Kg	J	Q
COBALT	3.17		0.0218	MDL	0.109	PQL	mg/Kg	J	E, A
LEAD	5.12		0.0113	MDL	0.218	PQL	mg/Kg	J	Q, E
NICKEL	7.49		0.109	MDL	0.435	PQL	mg/Kg	J	A
SILVER	0.0408	J	0.0131	MDL	0.109	PQL	mg/Kg	J	Z
ZINC	28.4		0.609	MDL	3.26	PQL	mg/Kg	J	Q

Sample ID: **SL-239-SA5A-SB-4.0-5.0** ***Collected:*** **3/23/2011 9:34:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.0525	J	0.0421	MDL	0.105	PQL	mg/Kg	J	Z

Sample ID: **SL-239-SA5A-SB-4.0-5.0** ***Collected:*** **3/23/2011 9:34:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0890	J	0.0421	MDL	0.421	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE111 **Laboratory: LL**

EDD Filename: DE111_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 ***Matrix:*** SO

Sample ID: SL-239-SA5A-SB-4.0-5.0 ***Collected:*** 3/23/2011 9:34:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.158	J	0.0632	MDL	0.211	PQL	mg/Kg	J	Z, Q
ARSENIC	6.09		0.0842	MDL	0.421	PQL	mg/Kg	J	Q
COBALT	6.53		0.0211	MDL	0.105	PQL	mg/Kg	J	E, A
LEAD	8.49		0.0110	MDL	0.211	PQL	mg/Kg	J	Q, E
NICKEL	11.3		0.105	MDL	0.421	PQL	mg/Kg	J	A
SILVER	0.0753	J	0.0126	MDL	0.105	PQL	mg/Kg	J	Z
ZINC	35.5		0.590	MDL	3.16	PQL	mg/Kg	J	Q

Sample ID: SL-240-SA5A-SB-4.0-5.0 ***Collected:*** 3/23/2011 10:55:00 ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.109	J	0.0442	MDL	0.110	PQL	mg/Kg	J	Z

Sample ID: SL-240-SA5A-SB-4.0-5.0 ***Collected:*** 3/23/2011 10:55:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0603	J	0.0442	MDL	0.442	PQL	mg/Kg	J	Z

Sample ID: SL-240-SA5A-SB-4.0-5.0 ***Collected:*** 3/23/2011 10:55:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.102	J	0.0662	MDL	0.221	PQL	mg/Kg	J	Z, Q
ARSENIC	5.34		0.0883	MDL	0.442	PQL	mg/Kg	J	Q
COBALT	5.45		0.0221	MDL	0.110	PQL	mg/Kg	J	E, A
LEAD	5.83		0.0115	MDL	0.221	PQL	mg/Kg	J	Q, E
NICKEL	13.9		0.110	MDL	0.442	PQL	mg/Kg	J	A
SILVER	0.0503	J	0.0132	MDL	0.110	PQL	mg/Kg	J	Z
ZINC	49.5		0.618	MDL	3.31	PQL	mg/Kg	J	Q

Sample ID: SL-240-SA5A-SB-9.0-10 ***Collected:*** 3/23/2011 11:03:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0580	J	0.0473	MDL	0.473	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE111 **Laboratory: LL**

EDD Filename: DE111_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-240-SA5A-SB-9.0-10 *Collected:* 3/23/2011 11:03:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.140	J	0.0710	MDL	0.237	PQL	mg/Kg	J	Z, Q
ARSENIC	6.04		0.0947	MDL	0.473	PQL	mg/Kg	J	Q
COBALT	9.31		0.0237	MDL	0.118	PQL	mg/Kg	J	E, A
LEAD	7.64		0.0123	MDL	0.237	PQL	mg/Kg	J	Q, E
NICKEL	16.5		0.118	MDL	0.473	PQL	mg/Kg	J	A
ZINC	53.8		0.663	MDL	3.55	PQL	mg/Kg	J	Q

Method Category: METALS

Method: 7199 **Matrix:** SO

Sample ID: SL-197-SA5A-SB-4.0-5.0 *Collected:* 3/23/2011 12:14:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.30	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-197-SA5A-SB-8.0-9.0 *Collected:* 3/23/2011 12:23:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.62	J	0.24	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-198-SA5A-SB-3.0-4.0 *Collected:* 3/23/2011 2:24:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.48	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-200-SA5A-SB-4.0-5.0 *Collected:* 3/23/2011 3:49:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.34	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-240-SA5A-SB-9.0-10 *Collected:* 3/23/2011 11:03:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	1.1	J	0.24	MDL	1.2	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE111 **Laboratory: LL**

EDD Filename: DE111_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 7471A **Matrix: SO**

Sample ID: SL-197-SA5A-SB-4.0-5.0 *Collected:* 3/23/2011 12:14:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0072	J	0.0031	MDL	0.108	PQL	mg/Kg	J	Z

Sample ID: SL-197-SA5A-SB-8.0-9.0 *Collected:* 3/23/2011 12:23:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0337	J	0.0033	MDL	0.115	PQL	mg/Kg	J	Z

Sample ID: SL-198-SA5A-SB-3.0-4.0 *Collected:* 3/23/2011 2:24:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0049	J	0.0031	MDL	0.108	PQL	mg/Kg	J	Z

Sample ID: SL-239-SA5A-SB-4.0-5.0 *Collected:* 3/23/2011 9:34:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0034	J	0.0031	MDL	0.107	PQL	mg/Kg	J	Z

Method Category: SVOA

Method: 1625C **Matrix: AQ**

Sample ID: EB09-SA5A-032311 *Collected:* 3/23/2011 2:30:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	0.879	J	0.497	MDL	0.993	PQL	ng/L	U	B

Method Category: SVOA

Method: 8015M **Matrix: AQ**

Sample ID: EB09-SA5A-032311 *Collected:* 3/23/2011 2:30:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DIETHYLENE GLYCOL	10	J	10	MDL	100	PQL	mg/L	J	Z
ETHYLENE GLYCOL	14	J	10	MDL	100	PQL	mg/L	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE111 **Laboratory: LL**

EDD Filename: DE111_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA
Method: 8082 **Matrix:** SO

Sample ID: SL-197-SA5A-SB-4.0-5.0 *Collected:* 3/23/2011 12:14:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 100

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	170	J	43	MDL	190	PQL	ug/Kg	J	Z

Method Category: SVOA
Method: 8270C **Matrix:** SO

Sample ID: SL-197-SA5A-SB-4.0-5.0 *Collected:* 3/23/2011 12:14:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-CHLOROISOPROPYL) ETHER	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
NITROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L

Sample ID: SL-197-SA5A-SB-8.0-9.0 *Collected:* 3/23/2011 12:23:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-CHLOROISOPROPYL) ETHER	20	U	20	MDL	200	PQL	ug/Kg	UJ	L
NITROBENZENE	20	U	20	MDL	200	PQL	ug/Kg	UJ	L

Sample ID: SL-198-SA5A-SB-3.0-4.0 *Collected:* 3/23/2011 2:24:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-CHLOROISOPROPYL) ETHER	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
NITROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L

Sample ID: SL-200-SA5A-SB-4.0-5.0 *Collected:* 3/23/2011 3:49:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-CHLOROISOPROPYL) ETHER	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
NITROBENZENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L

Sample ID: SL-239-SA5A-SB-4.0-5.0 *Collected:* 3/23/2011 9:34:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-CHLOROISOPROPYL) ETHER	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
NITROBENZENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE111 **Laboratory: LL**

EDD Filename: DE111_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SL-240-SA5A-SB-4.0-5.0 *Collected:* 3/23/2011 10:55:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-CHLOROISOPROPYL) ETHER	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
NITROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L

Sample ID: SL-240-SA5A-SB-9.0-10 *Collected:* 3/23/2011 11:03:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-CHLOROISOPROPYL) ETHER	20	U	20	MDL	200	PQL	ug/Kg	UJ	L
NITROBENZENE	20	U	20	MDL	200	PQL	ug/Kg	UJ	L

Method Category: SVOA

Method: 8270C SIM **Matrix:** SO

Sample ID: SL-197-SA5A-SB-4.0-5.0 *Collected:* 3/23/2011 12:14:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	0.92	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	0.98	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-197-SA5A-SB-8.0-9.0 *Collected:* 3/23/2011 12:23:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	1.1	J	0.79	MDL	2.0	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	0.99	J	0.79	MDL	2.0	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	1.7	J	0.79	MDL	2.0	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.1	J	0.79	MDL	2.0	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	0.88	J	0.79	MDL	2.0	PQL	ug/Kg	J	Z
FLUORANTHENE	1.6	J	0.79	MDL	2.0	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	0.82	J	0.79	MDL	2.0	PQL	ug/Kg	J	Z
PHENANTHRENE	0.92	J	0.79	MDL	2.0	PQL	ug/Kg	J	Z
PYRENE	1.8	J	0.79	MDL	2.0	PQL	ug/Kg	J	Z

Sample ID: SL-198-SA5A-SB-3.0-4.0 *Collected:* 3/23/2011 2:24:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	8.6	J	6.7	MDL	20	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE111 **Laboratory: LL**

EDD Filename: DE111_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C SIM **Matrix: SO**

Sample ID: SL-200-SA5A-SB-4.0-5.0 *Collected:* 3/23/2011 3:49:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	7.9	J	6.6	MDL	20	PQL	ug/Kg	J	Z

Sample ID: SL-240-SA5A-SB-4.0-5.0 *Collected:* 3/23/2011 10:55:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	1.1	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	0.95	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	1.6	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.1	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.0	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z
CHRYSENE	1.5	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	0.87	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z

Method Category: VOA

Method: 8260B **Matrix: SO**

Sample ID: SL-197-SA5A-SB-4.0-5.0 *Collected:* 3/23/2011 12:14:00 *Analysis Type:* RES *Dilution:* 0.89

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	2.3	J	0.24	MDL	4.0	PQL	ug/Kg	U	B

Sample ID: SL-198-SA5A-SB-3.0-4.0 *Collected:* 3/23/2011 2:24:00 *Analysis Type:* RES *Dilution:* 0.98

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	2.5	J	0.26	MDL	4.4	PQL	ug/Kg	U	B

Sample ID: SL-200-SA5A-SB-4.0-5.0 *Collected:* 3/23/2011 3:49:00 *Analysis Type:* RES *Dilution:* 0.96

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	2.7	J	0.25	MDL	4.2	PQL	ug/Kg	U	B
TOLUENE	0.09	J	0.08	MDL	4.2	PQL	ug/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE111 **Laboratory: LL**

EDD Filename: DE111_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **VOA**

Method: **8260B** ***Matrix:*** **SO**

Sample ID: **SL-239-SA5A-SB-4.0-5.0** ***Collected:*** **3/23/2011 9:34:00** ***Analysis Type:*** **RES** ***Dilution:*** **0.98**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.82	J	0.25	MDL	4.2	PQL	ug/Kg	U	B
TOLUENE	0.09	J	0.08	MDL	4.2	PQL	ug/Kg	U	B

Sample ID: **SL-240-SA5A-SB-4.0-5.0** ***Collected:*** **3/23/2011 10:55:00** ***Analysis Type:*** **RES** ***Dilution:*** **0.88**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	2.5	J	0.24	MDL	3.9	PQL	ug/Kg	U	B
TOLUENE	0.09	J	0.08	MDL	3.9	PQL	ug/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE111 **Laboratory: LL**

EDD Filename: DE111_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
*#	Professional Judgment
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Verification Correlation Coefficient
C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE111 **Laboratory: LL**

EDD Filename: DE111_v1 **eQAPP Name: CDM_SSFL_110509**

F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation
L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery Lower Estimation

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE111 **Laboratory: LL**

EDD Filename: DE111_v1 **eQAPP Name: CDM_SSFL_110509**

R	Continuing Calibration Verification Percent Recovery Lower Rejection
R	Continuing Calibration Verification Percent Recovery Upper Estimation
R	Continuing Calibration Verification Percent Recovery Upper Rejection
R	Continuing Calibration Verification Relative Response Factor
R	Initial Calibration Relative Response Factor
R	Initial Calibration Verification Percent Recovery Lower Estimation
R	Initial Calibration Verification Percent Recovery Lower Rejection
R	Initial Calibration Verification Percent Recovery Upper Estimation
R	Initial Calibration Verification Percent Recovery Upper Rejection
R	Initial Calibration Verification Relative Response Factor
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control Outlier Reports

DE111

Method Blank Outlier Report

Lab Reporting Batch ID: DE111 **Laboratory: LL**

EDD Filename: DE111_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1625C**
Matrix: **AQ**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKWC08B261554	3/30/2011 3:54:00 PM	N-NITROSODIMETHYLAMINE	0.673 ng/L	EB09-SA5A-032311

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
EB09-SA5A-032311(RES)	N-NITROSODIMETHYLAMINE	0.879 ng/L	0.993U ng/L

Method: **6010B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P08308CB220558	3/25/2011 5:58:00 AM	PHOSPHORUS TIN	1.10 mg/Kg 1.50 mg/Kg	SL-197-SA5A-SB-4.0-5.0 SL-197-SA5A-SB-8.0-9.0 SL-198-SA5A-SB-3.0-4.0 SL-200-SA5A-SB-4.0-5.0 SL-239-SA5A-SB-4.0-5.0 SL-240-SA5A-SB-4.0-5.0 SL-240-SA5A-SB-9.0-10

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-197-SA5A-SB-4.0-5.0(RES)	TIN	3.15 mg/Kg	3.15U mg/Kg
SL-197-SA5A-SB-8.0-9.0(RES)	TIN	3.69 mg/Kg	3.69U mg/Kg
SL-198-SA5A-SB-3.0-4.0(RES)	TIN	2.93 mg/Kg	2.93U mg/Kg
SL-200-SA5A-SB-4.0-5.0(RES)	TIN	2.93 mg/Kg	2.93U mg/Kg
SL-239-SA5A-SB-4.0-5.0(RES)	TIN	3.58 mg/Kg	3.58U mg/Kg
SL-240-SA5A-SB-4.0-5.0(RES)	TIN	3.14 mg/Kg	3.14U mg/Kg
SL-240-SA5A-SB-9.0-10(RES)	TIN	2.96 mg/Kg	2.96U mg/Kg

Method: **6020**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P08326AB221414A	3/27/2011 2:14:00 PM	COPPER	0.0944 mg/Kg	SL-197-SA5A-SB-4.0-5.0 SL-197-SA5A-SB-8.0-9.0 SL-198-SA5A-SB-3.0-4.0 SL-200-SA5A-SB-4.0-5.0 SL-239-SA5A-SB-4.0-5.0 SL-240-SA5A-SB-4.0-5.0 SL-240-SA5A-SB-9.0-10

Method Blank Outlier Report

Lab Reporting Batch ID: DE111 **Laboratory: LL**

EDD Filename: DE111_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8260B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB06B210202A	3/28/2011 2:02:00 AM	ACETONE METHYLENE CHLORIDE TOLUENE	7.7 ug/Kg 0.95 ug/Kg 0.16 ug/Kg	SL-197-SA5A-SB-4.0-5.0 SL-198-SA5A-SB-3.0-4.0 SL-200-SA5A-SB-4.0-5.0 SL-239-SA5A-SB-4.0-5.0 SL-240-SA5A-SB-4.0-5.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-197-SA5A-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	2.3 ug/Kg	4.0U ug/Kg
SL-198-SA5A-SB-3.0-4.0(RES)	METHYLENE CHLORIDE	2.5 ug/Kg	4.4U ug/Kg
SL-200-SA5A-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	2.7 ug/Kg	4.2U ug/Kg
SL-200-SA5A-SB-4.0-5.0(RES)	TOLUENE	0.09 ug/Kg	4.2U ug/Kg
SL-239-SA5A-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.82 ug/Kg	4.2U ug/Kg
SL-239-SA5A-SB-4.0-5.0(RES)	TOLUENE	0.09 ug/Kg	4.2U ug/Kg
SL-240-SA5A-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	2.5 ug/Kg	3.9U ug/Kg
SL-240-SA5A-SB-4.0-5.0(RES)	TOLUENE	0.09 ug/Kg	3.9U ug/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE111 **Laboratory: LL**

EDD Filename: DE111_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-239-SA5A-SB-4.0-5.0MS	ANTIMONY	40	42	75.00-125.00	-	ANTIMONY	
SL-239-SA5A-SB-4.0-5.0MSD	ARSENIC	-	69	75.00-125.00	-	ARSENIC	
(SL-197-SA5A-SB-4.0-5.0	LEAD	43	50	75.00-125.00	-	LEAD	
SL -197-SA5A-SB-8.0-9.0	ZINC	73	-	75.00-125.00	-	ZINC	
SL -198-SA5A-SB-3.0-4.0							J (all detects)
SL -200-SA5A-SB-4.0-5.0							UJ (all non-detects)
SL -239-SA5A-SB-4.0-5.0							
SL -240-SA5A-SB-4.0-5.0							
SL -240-SA5A-SB-9.0-10)							

Method: 314.0
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-197-SA5A-SB-4.0-5.0MS	PERCHLORATE	0	-	80.00-120.00	-	PERCHLORATE	
(SL-197-SA5A-SB-4.0-5.0							J(all detects)
SL -197-SA5A-SB-8.0-9.0							R(all non-detects)
SL -198-SA5A-SB-3.0-4.0							
SL -200-SA5A-SB-4.0-5.0)							

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-239-SA5A-SB-4.0-5.0MS	ALUMINUM	2696	2782	75.00-125.00	-	ALUMINUM	
SL-239-SA5A-SB-4.0-5.0MSD	CALCIUM	149	129	75.00-125.00	-	CALCIUM	
(SL-197-SA5A-SB-4.0-5.0	IRON	2352	691	75.00-125.00	-	IRON	
SL -197-SA5A-SB-8.0-9.0	MAGNESIUM	279	188	75.00-125.00	-	MAGNESIUM	
SL -198-SA5A-SB-3.0-4.0	TITANIUM	269	232	75.00-125.00	-	TITANIUM	No Qual, >4x
SL -200-SA5A-SB-4.0-5.0							
SL -239-SA5A-SB-4.0-5.0							
SL -240-SA5A-SB-4.0-5.0							
SL -240-SA5A-SB-9.0-10)							
SL-239-SA5A-SB-4.0-5.0MS	MANGANESE	187	-	75.00-125.00	21 (20.00)	MANGANESE	
SL-239-SA5A-SB-4.0-5.0MSD							
(SL-197-SA5A-SB-4.0-5.0							
SL -197-SA5A-SB-8.0-9.0							
SL -198-SA5A-SB-3.0-4.0							J(all detects)
SL -200-SA5A-SB-4.0-5.0							UJ(all non-detects)
SL -239-SA5A-SB-4.0-5.0							
SL -240-SA5A-SB-4.0-5.0							
SL -240-SA5A-SB-9.0-10)							

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE111 **Laboratory: LL**

EDD Filename: DE111_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **300.0**

Matrix: **SO**

QC Sample ID (Associated Samples)	*Compound*	*MS %R*	*MSD %R*	*%R Limits*	*RPD (Limits)*	*Affected Compounds*	*Flag*
SL-197-SA5A-SB-4.0-5.0MS (SL-197-SA5A-SB-4.0-5.0 SL -197-SA5A-SB-8.0-9.0 SL -198-SA5A-SB-3.0-4.0 SL -200-SA5A-SB-4.0-5.0)	FLUORIDE	27	-	80.00-120.00	-	FLUORIDE	J(all detects) R(all non-detects)

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE111 **Laboratory: LL**

EDD Filename: DE111_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-239-SA5A-SB-4.0-5.0DUP	MANGANESE	38	20.00	
(SL-197-SA5A-SB-4.0-5.0	PHOSPHORUS	24	20.00	
SL -197-SA5A-SB-8.0-9.0	TIN	21	20.00	J (all detects)
SL -198-SA5A-SB-3.0-4.0	Zirconium	44	20.00	UJ (all non-detects)
SL -200-SA5A-SB-4.0-5.0				
SL -239-SA5A-SB-4.0-5.0				Sn, Zr No Qual
SL -240-SA5A-SB-4.0-5.0				OK by difference
SL -240-SA5A-SB-9.0-10)				

Method: 6020
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-239-SA5A-SB-4.0-5.0DUP	ANTIMONY	28	20.00	
(SL-197-SA5A-SB-4.0-5.0	CADMIUM	200	20.00	
SL -197-SA5A-SB-8.0-9.0	COBALT	25	20.00	J(all detects)
SL -198-SA5A-SB-3.0-4.0	LEAD	25	20.00	UJ(all non-detects)
SL -200-SA5A-SB-4.0-5.0	MOLYBDENUM	26	20.00	
SL -239-SA5A-SB-4.0-5.0				Sb, Cd, Mo
SL -240-SA5A-SB-4.0-5.0				No Qual
SL -240-SA5A-SB-9.0-10)				OK by difference

Method: 7471A
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-239-SA5A-SB-4.0-5.0DUP	MERCURY	22	20.00	
(SL-197-SA5A-SB-4.0-5.0				
SL -197-SA5A-SB-8.0-9.0				
SL -198-SA5A-SB-3.0-4.0				No Qual
SL -200-SA5A-SB-4.0-5.0				OK by difference
SL -239-SA5A-SB-4.0-5.0				
SL -240-SA5A-SB-4.0-5.0				
SL -240-SA5A-SB-9.0-10)				

Method: 300.0
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-197-SA5A-SB-4.0-5.0DUP	FLUORIDE	200	20.00	
(SL-197-SA5A-SB-4.0-5.0				
SL -197-SA5A-SB-8.0-9.0				No Qual
SL -198-SA5A-SB-3.0-4.0				OK by difference
SL -200-SA5A-SB-4.0-5.0)				

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE111 **Laboratory: LL**

EDD Filename: DE111_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8260B
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
LCSY78Q211734A LCSY78Y211755A (TB-032311)	BROMOMETHANE TRICHLOROFLUOROMETHANE	- 137	123 131	44.00-120.00 64.00-129.00	- -	BROMOMETHANE TRICHLOROFLUOROMETHAN	J(all detects)

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P08326AQ221417A (SL-197-SA5A-SB-4.0-5.0 SL -197-SA5A-SB-8.0-9.0 SL -198-SA5A-SB-3.0-4.0 SL -200-SA5A-SB-4.0-5.0 SL -239-SA5A-SB-4.0-5.0 SL -240-SA5A-SB-4.0-5.0 SL -240-SA5A-SB-9.0-10)	SILVER	124	-	80.00-120.00	-	SILVER	No Qual SRM within QC limits

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P7LCLCSQ262223 (SL-197-SA5A-SB-4.0-5.0 SL -197-SA5A-SB-8.0-9.0 SL -198-SA5A-SB-3.0-4.0 SL -200-SA5A-SB-4.0-5.0 SL -239-SA5A-SB-4.0-5.0 SL -240-SA5A-SB-4.0-5.0 SL -240-SA5A-SB-9.0-10)	BIS(2-CHLOROISOPROPYL) ET NITROBENZENE	63 70	- -	68.00-131.00 71.00-104.00	- -	BIS(2-CHLOROISOPROPYL) E NITROBENZENE	J(all detects) UJ(all non-detects)

Method: 8270C SIM
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P9LDLCSQ261926 (SL-197-SA5A-SB-4.0-5.0 SL -197-SA5A-SB-8.0-9.0 SL -198-SA5A-SB-3.0-4.0 SL -200-SA5A-SB-4.0-5.0 SL -239-SA5A-SB-4.0-5.0 SL -240-SA5A-SB-4.0-5.0 SL -240-SA5A-SB-9.0-10)	Dimethylphthalate	143	-	79.00-121.00	-	Dimethylphthalate	J(all detects)

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE111 **Laboratory: LL**

EDD Filename: DE111_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8260B**

Matrix: **SO**

QC Sample ID (Associated Samples)	*Compound*	*LCS %R*	*LCSD %R*	*%R Limits*	*RPD (Limits)*	*Affected Compounds*	*Flag*
LCSB06Q210323A (SL-197-SA5A-SB-4.0-5.0 SL -198-SA5A-SB-3.0-4.0 SL -200-SA5A-SB-4.0-5.0 SL -239-SA5A-SB-4.0-5.0 SL -240-SA5A-SB-4.0-5.0)	BROMOCHLOROMETHANE	128	-	79.00-124.00	-	BROMOCHLOROMETHANE	J(all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE111 **Laboratory: LL**

EDD Filename: DE111_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1625C

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB09-SA5A-032311	N-NITROSODIMETHYLAMINE	J	0.879	0.993	PQL	ng/L	J (all detects)

Method: 8015M

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB09-SA5A-032311	DIETHYLENE GLYCOL	J	10	100	PQL	mg/L	J (all detects)
	ETHYLENE GLYCOL	J	14	100	PQL	mg/L	

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-197-SA5A-SB-4.0-5.0	BORON	J	3.17	5.41	PQL	mg/Kg	J (all detects)
	TIN	J	3.15	10.8	PQL	mg/Kg	
SL-197-SA5A-SB-8.0-9.0	BORON	J	3.70	5.77	PQL	mg/Kg	J (all detects)
	TIN	J	3.69	11.5	PQL	mg/Kg	
SL-198-SA5A-SB-3.0-4.0	TIN	J	2.93	10.9	PQL	mg/Kg	J (all detects)
SL-200-SA5A-SB-4.0-5.0	BORON	J	1.93	5.28	PQL	mg/Kg	J (all detects)
	TIN	J	2.93	10.6	PQL	mg/Kg	
SL-239-SA5A-SB-4.0-5.0	BORON	J	1.96	5.21	PQL	mg/Kg	J (all detects)
	TIN	J	3.58	10.4	PQL	mg/Kg	
	Zirconium	J	1.06	5.21	PQL	mg/Kg	
SL-240-SA5A-SB-4.0-5.0	BORON	J	2.79	5.46	PQL	mg/Kg	J (all detects)
	TIN	J	3.14	10.9	PQL	mg/Kg	
	Zirconium	J	1.34	5.46	PQL	mg/Kg	
SL-240-SA5A-SB-9.0-10	BORON	J	2.48	5.74	PQL	mg/Kg	J (all detects)
	TIN	J	2.96	11.5	PQL	mg/Kg	

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-197-SA5A-SB-4.0-5.0	ANTIMONY	J	0.151	0.221	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0755	0.110	PQL	mg/Kg	
	SELENIUM	J	0.117	0.441	PQL	mg/Kg	
	SILVER	J	0.0695	0.110	PQL	mg/Kg	
SL-197-SA5A-SB-8.0-9.0	CADMIUM	J	0.0776	0.114	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.134	0.457	PQL	mg/Kg	
SL-198-SA5A-SB-3.0-4.0	ANTIMONY	J	0.0926	0.222	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0581	0.111	PQL	mg/Kg	
	SELENIUM	J	0.156	0.444	PQL	mg/Kg	
	SILVER	J	0.0289	0.111	PQL	mg/Kg	

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Reporting Limit Outliers

Lab Reporting Batch ID: DE111 **Laboratory: LL**

EDD Filename: DE111_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-200-SA5A-SB-4.0-5.0	ANTIMONY	J	0.0974	0.218	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0408	0.109	PQL	mg/Kg	
SL-239-SA5A-SB-4.0-5.0	ANTIMONY	J	0.158	0.211	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0525	0.105	PQL	mg/Kg	
	SELENIUM	J	0.0890	0.421	PQL	mg/Kg	
	SILVER	J	0.0753	0.105	PQL	mg/Kg	
SL-240-SA5A-SB-4.0-5.0	ANTIMONY	J	0.102	0.221	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.109	0.110	PQL	mg/Kg	
	SELENIUM	J	0.0603	0.442	PQL	mg/Kg	
	SILVER	J	0.0503	0.110	PQL	mg/Kg	
SL-240-SA5A-SB-9.0-10	ANTIMONY	J	0.140	0.237	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0580	0.473	PQL	mg/Kg	

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-197-SA5A-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.30	1.1	PQL	mg/Kg	J (all detects)
SL-197-SA5A-SB-8.0-9.0	HEXAVALENT CHROMIUM	J	0.62	1.2	PQL	mg/Kg	J (all detects)
SL-198-SA5A-SB-3.0-4.0	HEXAVALENT CHROMIUM	J	0.48	1.1	PQL	mg/Kg	J (all detects)
SL-200-SA5A-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.34	1.1	PQL	mg/Kg	J (all detects)
SL-240-SA5A-SB-9.0-10	HEXAVALENT CHROMIUM	J	1.1	1.2	PQL	mg/Kg	J (all detects)

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-197-SA5A-SB-4.0-5.0	MERCURY	J	0.0072	0.108	PQL	mg/Kg	J (all detects)
SL-197-SA5A-SB-8.0-9.0	MERCURY	J	0.0337	0.115	PQL	mg/Kg	J (all detects)
SL-198-SA5A-SB-3.0-4.0	MERCURY	J	0.0049	0.108	PQL	mg/Kg	J (all detects)
SL-239-SA5A-SB-4.0-5.0	MERCURY	J	0.0034	0.107	PQL	mg/Kg	J (all detects)

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-197-SA5A-SB-4.0-5.0	AROCLOR 1260	J	170	190	PQL	ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE111 **Laboratory: LL**

EDD Filename: DE111_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-197-SA5A-SB-4.0-5.0	METHYLENE CHLORIDE	J	2.3	4.0	PQL	ug/Kg	J (all detects)
SL-198-SA5A-SB-3.0-4.0	METHYLENE CHLORIDE	J	2.5	4.4	PQL	ug/Kg	J (all detects)
SL-200-SA5A-SB-4.0-5.0	METHYLENE CHLORIDE	J	2.7	4.2	PQL	ug/Kg	J (all detects)
	TOLUENE	J	0.09	4.2	PQL	ug/Kg	
SL-239-SA5A-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.82	4.2	PQL	ug/Kg	J (all detects)
	TOLUENE	J	0.09	4.2	PQL	ug/Kg	
SL-240-SA5A-SB-4.0-5.0	METHYLENE CHLORIDE	J	2.5	3.9	PQL	ug/Kg	J (all detects)
	TOLUENE	J	0.09	3.9	PQL	ug/Kg	

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-197-SA5A-SB-4.0-5.0	BENZO(B)FLUORANTHENE	J	0.92	1.9	PQL	ug/Kg	J (all detects)
	BENZO(G,H,I)PERYLENE	J	0.98	1.9	PQL	ug/Kg	
SL-197-SA5A-SB-8.0-9.0	BENZO(A)ANTHRACENE	J	1.1	2.0	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	0.99	2.0	PQL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	1.7	2.0	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.1	2.0	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	0.88	2.0	PQL	ug/Kg	
	FLUORANTHENE	J	1.6	2.0	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	0.82	2.0	PQL	ug/Kg	
	PHENANTHRENE	J	0.92	2.0	PQL	ug/Kg	
	PYRENE	J	1.8	2.0	PQL	ug/Kg	
SL-198-SA5A-SB-3.0-4.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	8.6	20	PQL	ug/Kg	J (all detects)
SL-200-SA5A-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	7.9	20	PQL	ug/Kg	J (all detects)
SL-240-SA5A-SB-4.0-5.0	BENZO(A)ANTHRACENE	J	1.1	1.9	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	0.95	1.9	PQL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	1.6	1.9	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.1	1.9	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	1.0	1.9	PQL	ug/Kg	
	CHRYSENE	J	1.5	1.9	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	0.87	1.9	PQL	ug/Kg	

LDC #: 25911T4 **VALIDATION COMPLETENESS WORKSHEET** Date: 8-3-11

SDG #: DE111 ADR

Laboratory: Lancaster Laboratories

Reviewer: CR

2nd Reviewer: [illegible]

METHOD: Metals (EPA SW 846 Method 6010B/6020A/7000)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	N	Sampling dates:
II.	ICP/MS Tune	—	
III.	Calibration	—	
IV.	Blanks	A	No quals
V.	ICP Interference Check Sample (ICS) Analysis	N	
VI.	Matrix Spike Analysis	N	MS/D (Al, Ba, Ca, Fe, Mg, Ti > 4X)
VII.	Duplicate Sample Analysis	N	Dup (Sb, Cd, Hg, Mo, Sn, Zn <5xRL)
VIII.	Laboratory Control Samples (LCS)	N	LCS
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	SW	Co: 14%, Ni: 11% (J/UJ)
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	—	
XV	Field Blanks	—	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:

1	SL-239-SA5A-SB-4.0-5.0	11		21		31	
2	SL-240-SA5A-SB-4.0-5.0	12		22		32	
3	SL-240-SA5A-SB-9.0-10.0	13		23		33	
4	SL-197-SA5A-SB-4.0-5.0	14		24		34	
5	SL-197-SA5A-SB-8.0-9.0	15		25		35	
6	SL-198-SA5A-SB-3.0-4.0	16		26		36	
7	SL-200-SA5A-SB-4.0-5.0	17		27		37	
8	(#1) MS	18		28		38	
9	MSD	19		29		39	
10	DUP	20		30		40	

Notes:

SAMPLE DELIVERY GROUP

DE112

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
24-Mar-2011	TB-032411	6239185	TB	5030B	8015M	IV
24-Mar-2011	TB-032411	6239185	TB	5030B	8260B	IV
24-Mar-2011	TB-032411	6239185	TB	5030B	8260B SIM	IV
24-Mar-2011	SL-199-SA5A-SB-2.5-3.5	6239175	N	3050B	6010B	IV
24-Mar-2011	SL-199-SA5A-SB-2.5-3.5	6239175	N	3050B	6020	IV
24-Mar-2011	SL-199-SA5A-SB-2.5-3.5	6239175	N	3060A	7199	IV
24-Mar-2011	SL-199-SA5A-SB-2.5-3.5	6239175	N	3550B	8082	IV
24-Mar-2011	SL-199-SA5A-SB-2.5-3.5	6239175	N	3550B	8270C	IV
24-Mar-2011	SL-199-SA5A-SB-2.5-3.5	6239175	N	3550B	8270C SIM	IV
24-Mar-2011	SL-199-SA5A-SB-2.5-3.5	6239175	N	5035	8260B	IV
24-Mar-2011	SL-199-SA5A-SB-2.5-3.5	6239175	N	5035	8260B SIM	IV
24-Mar-2011	SL-199-SA5A-SB-2.5-3.5	6239175	N	Gen Prep	9045M	IV
24-Mar-2011	SL-199-SA5A-SB-2.5-3.5	6239175	N	METHOD	300.0	IV
24-Mar-2011	SL-199-SA5A-SB-2.5-3.5	6239175	N	METHOD	314.0	IV
24-Mar-2011	SL-199-SA5A-SB-2.5-3.5	6239175	N	METHOD	7471A	IV
24-Mar-2011	DUP10-SA5A-QC-032411	6239181	FD	3050B	6010B	IV
24-Mar-2011	DUP10-SA5A-QC-032411	6239181	FD	3050B	6020	IV
24-Mar-2011	DUP10-SA5A-QC-032411	6239181	FD	3060A	7199	IV
24-Mar-2011	DUP10-SA5A-QC-032411	6239181	FD	3546	1625C	IV
24-Mar-2011	DUP10-SA5A-QC-032411	6239181	FD	3550B	8015B	IV
24-Mar-2011	DUP10-SA5A-QC-032411	6239181	FD	3550B	8015M	IV
24-Mar-2011	DUP10-SA5A-QC-032411	6239181	FD	3550B	8082	IV
24-Mar-2011	DUP10-SA5A-QC-032411	6239181	FD	3550B	8270C	IV
24-Mar-2011	DUP10-SA5A-QC-032411	6239181	FD	3550B	8270C SIM	IV
24-Mar-2011	DUP10-SA5A-QC-032411	6239181	FD	5035	8015M	IV
24-Mar-2011	DUP10-SA5A-QC-032411	6239181	FD	5035	8260B	IV

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
24-Mar-2011	DUP10-SA5A-QC-032411	6239181	FD	5035	8260B SIM	IV
24-Mar-2011	DUP10-SA5A-QC-032411	6239181	FD	8330	8330A	IV
24-Mar-2011	DUP10-SA5A-QC-032411	6239181	FD	Gen Prep	9045M	IV
24-Mar-2011	DUP10-SA5A-QC-032411	6239181	FD	METHOD	300.0	IV
24-Mar-2011	DUP10-SA5A-QC-032411	6239181	FD	METHOD	314.0	IV
24-Mar-2011	DUP10-SA5A-QC-032411	6239181	FD	METHOD	7471A	IV
24-Mar-2011	DUP10-SA5A-QC-032411	6239181	FD	METHOD	8015B	IV
24-Mar-2011	DUP10-SA5A-QC-032411	6239181	FD	METHOD	8015M	IV
24-Mar-2011	DUP10-SA5A-QC-032411	6239181	FD	METHOD	8315A	IV
24-Mar-2011	DUP10-SA5A-QC-032411	6239181	FD	METHOD	9012B	IV
24-Mar-2011	SL-223-SA5A-SB-8.5-9.5	6239180	N	3050B	6010B	IV
24-Mar-2011	SL-223-SA5A-SB-8.5-9.5	6239180	N	3050B	6020	IV
24-Mar-2011	SL-223-SA5A-SB-8.5-9.5	6239180	N	3060A	7199	IV
24-Mar-2011	SL-223-SA5A-SB-8.5-9.5	6239180	N	3546	1625C	IV
24-Mar-2011	SL-223-SA5A-SB-8.5-9.5	6239180	N	3550B	8015B	IV
24-Mar-2011	SL-223-SA5A-SB-8.5-9.5	6239180	N	3550B	8015M	IV
24-Mar-2011	SL-223-SA5A-SB-8.5-9.5	6239180	N	3550B	8082	IV
24-Mar-2011	SL-223-SA5A-SB-8.5-9.5	6239180	N	3550B	8270C	IV
24-Mar-2011	SL-223-SA5A-SB-8.5-9.5	6239180	N	3550B	8270C SIM	IV
24-Mar-2011	SL-223-SA5A-SB-8.5-9.5	6239180	N	5035	8015M	IV
24-Mar-2011	SL-223-SA5A-SB-8.5-9.5	6239180	N	5035	8260B	IV
24-Mar-2011	SL-223-SA5A-SB-8.5-9.5	6239180	N	5035	8260B SIM	IV
24-Mar-2011	SL-223-SA5A-SB-8.5-9.5	6239180	N	8330	8330A	IV
24-Mar-2011	SL-223-SA5A-SB-8.5-9.5	6239180	N	Gen Prep	9045M	IV
24-Mar-2011	SL-223-SA5A-SB-8.5-9.5	6239180	N	METHOD	300.0	IV
24-Mar-2011	SL-223-SA5A-SB-8.5-9.5	6239180	N	METHOD	314.0	IV

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
24-Mar-2011	SL-223-SA5A-SB-8.5-9.5	6239180	N	METHOD	7471A	IV
24-Mar-2011	SL-223-SA5A-SB-8.5-9.5	6239180	N	METHOD	8015B	IV
24-Mar-2011	SL-223-SA5A-SB-8.5-9.5	6239180	N	METHOD	8015M	IV
24-Mar-2011	SL-223-SA5A-SB-8.5-9.5	6239180	N	METHOD	8315A	IV
24-Mar-2011	SL-223-SA5A-SB-8.5-9.5	6239180	N	METHOD	9012B	IV
24-Mar-2011	SL-223-SA5A-SB-8.5-9.5DUP	P239180D291330B	DUP	Gen Prep	9045M	IV
24-Mar-2011	SL-223-SA5A-SB-4.0-5.0	6239176	N	3050B	6010B	IV
24-Mar-2011	SL-223-SA5A-SB-4.0-5.0	6239176	N	3050B	6020	IV
24-Mar-2011	SL-223-SA5A-SB-4.0-5.0	6239176	N	3060A	7199	IV
24-Mar-2011	SL-223-SA5A-SB-4.0-5.0	6239176	N	3546	1625C	IV
24-Mar-2011	SL-223-SA5A-SB-4.0-5.0	6239176	N	3550B	8015B	IV
24-Mar-2011	SL-223-SA5A-SB-4.0-5.0	6239176	N	3550B	8015M	IV
24-Mar-2011	SL-223-SA5A-SB-4.0-5.0	6239176	N	3550B	8082	IV
24-Mar-2011	SL-223-SA5A-SB-4.0-5.0	6239176	N	3550B	8270C	IV
24-Mar-2011	SL-223-SA5A-SB-4.0-5.0	6239176	N	3550B	8270C SIM	IV
24-Mar-2011	SL-223-SA5A-SB-4.0-5.0	6239176	N	5035	8015M	IV
24-Mar-2011	SL-223-SA5A-SB-4.0-5.0	6239176	N	5035	8260B	IV
24-Mar-2011	SL-223-SA5A-SB-4.0-5.0	6239176	N	5035	8260B SIM	IV
24-Mar-2011	SL-223-SA5A-SB-4.0-5.0	6239176	N	8330	8330A	IV
24-Mar-2011	SL-223-SA5A-SB-4.0-5.0	6239176	N	Gen Prep	9045M	IV
24-Mar-2011	SL-223-SA5A-SB-4.0-5.0	6239176	N	METHOD	300.0	IV
24-Mar-2011	SL-223-SA5A-SB-4.0-5.0	6239176	N	METHOD	314.0	IV
24-Mar-2011	SL-223-SA5A-SB-4.0-5.0	6239176	N	METHOD	7471A	IV
24-Mar-2011	SL-223-SA5A-SB-4.0-5.0	6239176	N	METHOD	8015B	IV
24-Mar-2011	SL-223-SA5A-SB-4.0-5.0	6239176	N	METHOD	8015M	IV
24-Mar-2011	SL-223-SA5A-SB-4.0-5.0	6239176	N	METHOD	8315A	IV

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
24-Mar-2011	SL-223-SA5A-SB-4.0-5.0	6239176	N	METHOD	9012B	IV
24-Mar-2011	SL-223-SA5A-SB-4.0-5.0MS	6239177	MS	3050B	6010B	IV
24-Mar-2011	SL-223-SA5A-SB-4.0-5.0MS	6239177	MS	3050B	6020	IV
24-Mar-2011	SL-223-SA5A-SB-4.0-5.0MS	6239177	MS	3060A	7199	IV
24-Mar-2011	SL-223-SA5A-SB-4.0-5.0MS	6239177	MS	3546	1625C	IV
24-Mar-2011	SL-223-SA5A-SB-4.0-5.0MS	6239177	MS	3550B	8015B	IV
24-Mar-2011	SL-223-SA5A-SB-4.0-5.0MS	6239177	MS	3550B	8015M	IV
24-Mar-2011	SL-223-SA5A-SB-4.0-5.0MS	6239177	MS	3550B	8082	IV
24-Mar-2011	SL-223-SA5A-SB-4.0-5.0MS	6239177	MS	3550B	8270C	IV
24-Mar-2011	SL-223-SA5A-SB-4.0-5.0MS	6239177	MS	3550B	8270C SIM	IV
24-Mar-2011	SL-223-SA5A-SB-4.0-5.0MS	6239177	MS	5035	8015M	IV
24-Mar-2011	SL-223-SA5A-SB-4.0-5.0MS	6239177	MS	5035	8260B	IV
24-Mar-2011	SL-223-SA5A-SB-4.0-5.0MS	6239177	MS	5035	8260B SIM	IV
24-Mar-2011	SL-223-SA5A-SB-4.0-5.0MS	6239177	MS	8330	8330A	IV
24-Mar-2011	SL-223-SA5A-SB-4.0-5.0MS	6239177	MS	METHOD	300.0	IV
24-Mar-2011	SL-223-SA5A-SB-4.0-5.0MS	6239177	MS	METHOD	314.0	IV
24-Mar-2011	SL-223-SA5A-SB-4.0-5.0MS	6239177	MS	METHOD	7471A	IV
24-Mar-2011	SL-223-SA5A-SB-4.0-5.0MS	6239177	MS	METHOD	8015B	IV
24-Mar-2011	SL-223-SA5A-SB-4.0-5.0MS	6239177	MS	METHOD	8015M	IV
24-Mar-2011	SL-223-SA5A-SB-4.0-5.0MS	6239177	MS	METHOD	8315A	IV
24-Mar-2011	SL-223-SA5A-SB-4.0-5.0MS	6239177	MS	METHOD	9012B	IV
24-Mar-2011	SL-223-SA5A-SB-4.0-5.0MSD	6239178	MSD	3050B	6010B	IV
24-Mar-2011	SL-223-SA5A-SB-4.0-5.0MSD	6239178	MSD	3050B	6020	IV
24-Mar-2011	SL-223-SA5A-SB-4.0-5.0MSD	6239178	MSD	3546	1625C	IV
24-Mar-2011	SL-223-SA5A-SB-4.0-5.0MSD	6239178	MSD	3550B	8015B	IV
24-Mar-2011	SL-223-SA5A-SB-4.0-5.0MSD	6239178	MSD	3550B	8015M	IV

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
24-Mar-2011	SL-223-SA5A-SB-4.0-5.0MSD	6239178	MSD	3550B	8082	IV
24-Mar-2011	SL-223-SA5A-SB-4.0-5.0MSD	6239178	MSD	3550B	8270C	IV
24-Mar-2011	SL-223-SA5A-SB-4.0-5.0MSD	6239178	MSD	3550B	8270C SIM	IV
24-Mar-2011	SL-223-SA5A-SB-4.0-5.0MSD	6239178	MSD	5035	8015M	IV
24-Mar-2011	SL-223-SA5A-SB-4.0-5.0MSD	6239178	MSD	5035	8260B	IV
24-Mar-2011	SL-223-SA5A-SB-4.0-5.0MSD	6239178	MSD	5035	8260B SIM	IV
24-Mar-2011	SL-223-SA5A-SB-4.0-5.0MSD	6239178	MSD	8330	8330A	IV
24-Mar-2011	SL-223-SA5A-SB-4.0-5.0MSD	6239178	MSD	METHOD	7471A	IV
24-Mar-2011	SL-223-SA5A-SB-4.0-5.0MSD	6239178	MSD	METHOD	8015B	IV
24-Mar-2011	SL-223-SA5A-SB-4.0-5.0MSD	6239178	MSD	METHOD	8015M	IV
24-Mar-2011	SL-223-SA5A-SB-4.0-5.0MSD	6239178	MSD	METHOD	8315A	IV
24-Mar-2011	SL-223-SA5A-SB-4.0-5.0DUP	6239179	DUP	3050B	6010B	IV
24-Mar-2011	SL-223-SA5A-SB-4.0-5.0DUP	6239179	DUP	3050B	6020	IV
24-Mar-2011	SL-223-SA5A-SB-4.0-5.0DUP	6239179	DUP	3060A	7199	IV
24-Mar-2011	SL-223-SA5A-SB-4.0-5.0DUP	6239179	DUP	Gen Prep	9045M	IV
24-Mar-2011	SL-223-SA5A-SB-4.0-5.0DUP	6239179	DUP	METHOD	300.0	IV
24-Mar-2011	SL-223-SA5A-SB-4.0-5.0DUP	6239179	DUP	METHOD	314.0	IV
24-Mar-2011	SL-223-SA5A-SB-4.0-5.0DUP	6239179	DUP	METHOD	7471A	IV
24-Mar-2011	SL-223-SA5A-SB-4.0-5.0DUP	6239179	DUP	METHOD	9012B	IV
24-Mar-2011	SL-226-SA5A-SB-4.0-5.0	6239182	N	3050B	6010B	IV
24-Mar-2011	SL-226-SA5A-SB-4.0-5.0	6239182	N	3050B	6020	IV
24-Mar-2011	SL-226-SA5A-SB-4.0-5.0	6239182	N	3060A	7199	IV
24-Mar-2011	SL-226-SA5A-SB-4.0-5.0	6239182	N	3546	1625C	IV
24-Mar-2011	SL-226-SA5A-SB-4.0-5.0	6239182	N	3550B	8015B	IV
24-Mar-2011	SL-226-SA5A-SB-4.0-5.0	6239182	N	3550B	8015M	IV
24-Mar-2011	SL-226-SA5A-SB-4.0-5.0	6239182	N	3550B	8082	IV

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
24-Mar-2011	SL-226-SA5A-SB-4.0-5.0	6239182	N	3550B	8270C	IV
24-Mar-2011	SL-226-SA5A-SB-4.0-5.0	6239182	N	3550B	8270C SIM	IV
24-Mar-2011	SL-226-SA5A-SB-4.0-5.0	6239182	N	5035	8015M	IV
24-Mar-2011	SL-226-SA5A-SB-4.0-5.0	6239182	N	5035	8260B	IV
24-Mar-2011	SL-226-SA5A-SB-4.0-5.0	6239182	N	5035	8260B SIM	IV
24-Mar-2011	SL-226-SA5A-SB-4.0-5.0	6239182	N	8330	8330A	IV
24-Mar-2011	SL-226-SA5A-SB-4.0-5.0	6239182	N	Gen Prep	9045M	IV
24-Mar-2011	SL-226-SA5A-SB-4.0-5.0	6239182	N	METHOD	300.0	IV
24-Mar-2011	SL-226-SA5A-SB-4.0-5.0	6239182	N	METHOD	314.0	IV
24-Mar-2011	SL-226-SA5A-SB-4.0-5.0	6239182	N	METHOD	7471A	IV
24-Mar-2011	SL-226-SA5A-SB-4.0-5.0	6239182	N	METHOD	8015B	IV
24-Mar-2011	SL-226-SA5A-SB-4.0-5.0	6239182	N	METHOD	8015M	IV
24-Mar-2011	SL-226-SA5A-SB-4.0-5.0	6239182	N	METHOD	8315A	IV
24-Mar-2011	SL-226-SA5A-SB-4.0-5.0	6239182	N	METHOD	9012B	IV
24-Mar-2011	SL-225-SA5A-SB-4.0-5.0	6239183	N	3050B	6010B	IV
24-Mar-2011	SL-225-SA5A-SB-4.0-5.0	6239183	N	3050B	6020	IV
24-Mar-2011	SL-225-SA5A-SB-4.0-5.0	6239183	N	3060A	7199	IV
24-Mar-2011	SL-225-SA5A-SB-4.0-5.0	6239183	N	3546	1625C	IV
24-Mar-2011	SL-225-SA5A-SB-4.0-5.0	6239183	N	3550B	8015B	IV
24-Mar-2011	SL-225-SA5A-SB-4.0-5.0	6239183	N	3550B	8015M	IV
24-Mar-2011	SL-225-SA5A-SB-4.0-5.0	6239183	N	3550B	8082	IV
24-Mar-2011	SL-225-SA5A-SB-4.0-5.0	6239183	N	3550B	8270C	IV
24-Mar-2011	SL-225-SA5A-SB-4.0-5.0	6239183	N	3550B	8270C SIM	IV
24-Mar-2011	SL-225-SA5A-SB-4.0-5.0	6239183	N	5035	8015M	IV
24-Mar-2011	SL-225-SA5A-SB-4.0-5.0	6239183	N	5035	8260B	IV
24-Mar-2011	SL-225-SA5A-SB-4.0-5.0	6239183	N	5035	8260B SIM	IV

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
24-Mar-2011	SL-225-SA5A-SB-4.0-5.0	6239183	N	8330	8330A	IV
24-Mar-2011	SL-225-SA5A-SB-4.0-5.0	6239183	N	Gen Prep	9045M	IV
24-Mar-2011	SL-225-SA5A-SB-4.0-5.0	6239183	N	METHOD	300.0	IV
24-Mar-2011	SL-225-SA5A-SB-4.0-5.0	6239183	N	METHOD	314.0	IV
24-Mar-2011	SL-225-SA5A-SB-4.0-5.0	6239183	N	METHOD	7471A	IV
24-Mar-2011	SL-225-SA5A-SB-4.0-5.0	6239183	N	METHOD	8015B	IV
24-Mar-2011	SL-225-SA5A-SB-4.0-5.0	6239183	N	METHOD	8015M	IV
24-Mar-2011	SL-225-SA5A-SB-4.0-5.0	6239183	N	METHOD	8315A	IV
24-Mar-2011	SL-225-SA5A-SB-4.0-5.0	6239183	N	METHOD	9012B	IV
24-Mar-2011	SL-224-SA5A-SB-4.0-5.0	6239184	N	3050B	6010B	IV
24-Mar-2011	SL-224-SA5A-SB-4.0-5.0	6239184	N	3050B	6020	IV
24-Mar-2011	SL-224-SA5A-SB-4.0-5.0	6239184	N	3060A	7199	IV
24-Mar-2011	SL-224-SA5A-SB-4.0-5.0	6239184	N	3546	1625C	IV
24-Mar-2011	SL-224-SA5A-SB-4.0-5.0	6239184	N	3550B	8015B	IV
24-Mar-2011	SL-224-SA5A-SB-4.0-5.0	6239184	N	3550B	8015M	IV
24-Mar-2011	SL-224-SA5A-SB-4.0-5.0	6239184	N	3550B	8082	IV
24-Mar-2011	SL-224-SA5A-SB-4.0-5.0	6239184	N	3550B	8270C	IV
24-Mar-2011	SL-224-SA5A-SB-4.0-5.0	6239184	N	3550B	8270C SIM	IV
24-Mar-2011	SL-224-SA5A-SB-4.0-5.0	6239184	N	5035	8260B	IV
24-Mar-2011	SL-224-SA5A-SB-4.0-5.0	6239184	N	5035	8260B SIM	IV
24-Mar-2011	SL-224-SA5A-SB-4.0-5.0	6239184	N	8330	8330A	IV
24-Mar-2011	SL-224-SA5A-SB-4.0-5.0	6239184	N	Gen Prep	9045M	IV
24-Mar-2011	SL-224-SA5A-SB-4.0-5.0	6239184	N	M5035A	8015M	IV
24-Mar-2011	SL-224-SA5A-SB-4.0-5.0	6239184	N	METHOD	300.0	IV
24-Mar-2011	SL-224-SA5A-SB-4.0-5.0	6239184	N	METHOD	314.0	IV
24-Mar-2011	SL-224-SA5A-SB-4.0-5.0	6239184	N	METHOD	7471A	IV

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
24-Mar-2011	SL-224-SA5A-SB-4.0-5.0	6239184	N	METHOD	8015B	IV
24-Mar-2011	SL-224-SA5A-SB-4.0-5.0	6239184	N	METHOD	8015M	IV
24-Mar-2011	SL-224-SA5A-SB-4.0-5.0	6239184	N	METHOD	8315A	IV
24-Mar-2011	SL-224-SA5A-SB-4.0-5.0	6239184	N	METHOD	9012B	IV

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE112 | Laboratory: LL

EDD Filename: DE112_v1 | eQAPP Name: CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: DUP10-SA5A-QC-032411 *Collected:* 3/24/2011 10:58:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.8		0.89	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-199-SA5A-SB-2.5-3.5 *Collected:* 3/24/2011 8:59:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.2		0.86	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-223-SA5A-SB-4.0-5.0 *Collected:* 3/24/2011 11:14:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	3.1		0.91	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-223-SA5A-SB-8.5-9.5 *Collected:* 3/24/2011 11:04:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.2		0.85	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-224-SA5A-SB-4.0-5.0 *Collected:* 3/24/2011 3:29:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.8		0.89	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-225-SA5A-SB-4.0-5.0 *Collected:* 3/24/2011 2:33:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	5.5		0.95	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-226-SA5A-SB-4.0-5.0 *Collected:* 3/24/2011 12:24:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	5.3		0.91	MDL	1.1	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE112 **Laboratory: LL**

EDD Filename: DE112_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6010B** ***Matrix:*** **SO**

Sample ID: **DUP10-SA5A-QC-032411** ***Collected:*** **3/24/2011 10:58:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	370		0.620	MDL	11.1	PQL	mg/Kg	J	Q
POTASSIUM	4120		19.9	MDL	55.4	PQL	mg/Kg	J	Q
TIN	3.25	J	1.11	MDL	11.1	PQL	mg/Kg	U	B
Zirconium	1.03	J	0.930	MDL	5.54	PQL	mg/Kg	J	Z

Sample ID: **SL-199-SA5A-SB-2.5-3.5** ***Collected:*** **3/24/2011 8:59:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	95.2		0.588	MDL	10.5	PQL	mg/Kg	J	Q
POTASSIUM	1780		18.9	MDL	52.5	PQL	mg/Kg	J	Q
TIN	3.49	J	1.05	MDL	10.5	PQL	mg/Kg	U	B

Sample ID: **SL-223-SA5A-SB-4.0-5.0** ***Collected:*** **3/24/2011 11:14:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	345		0.624	MDL	11.1	PQL	mg/Kg	J	Q
POTASSIUM	3630		20.1	MDL	55.7	PQL	mg/Kg	J	Q
TIN	3.33	J	1.11	MDL	11.1	PQL	mg/Kg	U	B
Zirconium	1.50	J	0.936	MDL	5.57	PQL	mg/Kg	J	Z

Sample ID: **SL-223-SA5A-SB-8.5-9.5** ***Collected:*** **3/24/2011 11:04:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	207		0.590	MDL	10.5	PQL	mg/Kg	J	Q
POTASSIUM	2140		19.0	MDL	52.7	PQL	mg/Kg	J	Q
TIN	3.36	J	1.05	MDL	10.5	PQL	mg/Kg	U	B

Sample ID: **SL-224-SA5A-SB-4.0-5.0** ***Collected:*** **3/24/2011 3:29:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	306		0.606	MDL	10.8	PQL	mg/Kg	J	Q
POTASSIUM	3100		19.5	MDL	54.1	PQL	mg/Kg	J	Q
SODIUM	107	J	40.4	MDL	108	PQL	mg/Kg	J	Z
TIN	3.21	J	1.08	MDL	10.8	PQL	mg/Kg	U	B
Zirconium	1.34	J	0.909	MDL	5.41	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE112 **Laboratory: LL**

EDD Filename: DE112_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-225-SA5A-SB-4.0-5.0 *Collected:* 3/24/2011 2:33:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	384		0.636	MDL	11.4	PQL	mg/Kg	J	Q
POTASSIUM	3910		20.5	MDL	56.8	PQL	mg/Kg	J	Q
TIN	3.61	J	1.14	MDL	11.4	PQL	mg/Kg	U	B

Sample ID: SL-226-SA5A-SB-4.0-5.0 *Collected:* 3/24/2011 12:24:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	336		0.634	MDL	11.3	PQL	mg/Kg	J	Q
POTASSIUM	3130		20.4	MDL	56.6	PQL	mg/Kg	J	Q
TIN	3.53	J	1.13	MDL	11.3	PQL	mg/Kg	U	B

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: DUP10-SA5A-QC-032411 *Collected:* 3/24/2011 10:58:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0789	J	0.0651	MDL	0.217	PQL	mg/Kg	J	Z, Q
CADMIUM	0.0577	J	0.0434	MDL	0.109	PQL	mg/Kg	J	Z, FD
CHROMIUM	17.3		0.130	MDL	0.434	PQL	mg/Kg	J	Q, E
COBALT	6.02		0.0217	MDL	0.109	PQL	mg/Kg	J	E, A
COPPER	8.25		0.0717	MDL	0.434	PQL	mg/Kg	J	Q, E, A
NICKEL	13.1		0.109	MDL	0.434	PQL	mg/Kg	J	Q
SILVER	0.0443	J	0.0130	MDL	0.109	PQL	mg/Kg	J	Z, FD
ZINC	50.0		0.608	MDL	3.26	PQL	mg/Kg	J	E, FD

Sample ID: DUP10-SA5A-QC-032411 *Collected:* 3/24/2011 10:58:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.132	J	0.0434	MDL	0.434	PQL	mg/Kg	J	Z

Sample ID: DUP10-SA5A-QC-032411 *Collected:* 3/24/2011 10:58:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	100		0.117	MDL	0.434	PQL	mg/Kg	J	E, A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE112 **Laboratory: LL**

EDD Filename: DE112_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: DUP10-SA5A-QC-032411 *Collected:* 3/24/2011 10:58:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	6.01		0.0113	MDL	0.217	PQL	mg/Kg	J	A

Sample ID: SL-199-SA5A-SB-2.5-3.5 *Collected:* 3/24/2011 8:59:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0920	J	0.0630	MDL	0.210	PQL	mg/Kg	J	Z, Q
CHROMIUM	15.9		0.126	MDL	0.420	PQL	mg/Kg	J	Q, E
COBALT	3.31		0.0210	MDL	0.105	PQL	mg/Kg	J	E, A
COPPER	5.42		0.0693	MDL	0.420	PQL	mg/Kg	J	Q, E, A
NICKEL	8.46		0.105	MDL	0.420	PQL	mg/Kg	J	Q
SILVER	0.0240	J	0.0126	MDL	0.105	PQL	mg/Kg	J	Z
ZINC	43.1		0.588	MDL	3.15	PQL	mg/Kg	J	E

Sample ID: SL-199-SA5A-SB-2.5-3.5 *Collected:* 3/24/2011 8:59:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.153	J	0.0420	MDL	0.420	PQL	mg/Kg	J	Z

Sample ID: SL-199-SA5A-SB-2.5-3.5 *Collected:* 3/24/2011 8:59:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	60.5		0.113	MDL	0.420	PQL	mg/Kg	J	E, A

Sample ID: SL-199-SA5A-SB-2.5-3.5 *Collected:* 3/24/2011 8:59:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	6.34		0.0109	MDL	0.210	PQL	mg/Kg	J	A

Sample ID: SL-223-SA5A-SB-4.0-5.0 *Collected:* 3/24/2011 11:14:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.105	J	0.0668	MDL	0.223	PQL	mg/Kg	J	Z, Q
CADMIUM	0.136		0.0446	MDL	0.111	PQL	mg/Kg	J	FD
CHROMIUM	16.8		0.134	MDL	0.446	PQL	mg/Kg	J	Q, E
COBALT	6.64		0.0223	MDL	0.111	PQL	mg/Kg	J	E, A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE112 **Laboratory: LL**

EDD Filename: DE112_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6020** ***Matrix:*** **SO**

Sample ID: **SL-223-SA5A-SB-4.0-5.0** ***Collected:*** **3/24/2011 11:14:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	9.86		0.0735	MDL	0.446	PQL	mg/Kg	J	Q, E, A
NICKEL	13.8		0.111	MDL	0.446	PQL	mg/Kg	J	Q
SILVER	0.0262	J	0.0134	MDL	0.111	PQL	mg/Kg	J	Z, FD
ZINC	92.5		0.624	MDL	3.34	PQL	mg/Kg	J	E, FD

Sample ID: **SL-223-SA5A-SB-4.0-5.0** ***Collected:*** **3/24/2011 11:14:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.118	J	0.0446	MDL	0.446	PQL	mg/Kg	J	Z

Sample ID: **SL-223-SA5A-SB-4.0-5.0** ***Collected:*** **3/24/2011 11:14:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	121		0.120	MDL	0.446	PQL	mg/Kg	J	E, A

Sample ID: **SL-223-SA5A-SB-4.0-5.0** ***Collected:*** **3/24/2011 11:14:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	5.68		0.0116	MDL	0.223	PQL	mg/Kg	J	A

Sample ID: **SL-223-SA5A-SB-8.5-9.5** ***Collected:*** **3/24/2011 11:04:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0710	J	0.0626	MDL	0.209	PQL	mg/Kg	J	Z, Q
CHROMIUM	16.9		0.125	MDL	0.417	PQL	mg/Kg	J	Q, E
COBALT	4.65		0.0209	MDL	0.104	PQL	mg/Kg	J	E, A
COPPER	6.36		0.0688	MDL	0.417	PQL	mg/Kg	J	Q, E, A
NICKEL	8.78		0.104	MDL	0.417	PQL	mg/Kg	J	Q
SILVER	0.0179	J	0.0125	MDL	0.104	PQL	mg/Kg	J	Z
ZINC	44.0		0.584	MDL	3.13	PQL	mg/Kg	J	E

Sample ID: **SL-223-SA5A-SB-8.5-9.5** ***Collected:*** **3/24/2011 11:04:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0696	J	0.0417	MDL	0.417	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE112 **Laboratory: LL**

EDD Filename: DE112_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6020** ***Matrix:*** **SO**

Sample ID: **SL-223-SA5A-SB-8.5-9.5** ***Collected:*** **3/24/2011 11:04:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	70.1		0.113	MDL	0.417	PQL	mg/Kg	J	E, A

Sample ID: **SL-223-SA5A-SB-8.5-9.5** ***Collected:*** **3/24/2011 11:04:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	5.49		0.0108	MDL	0.209	PQL	mg/Kg	J	A

Sample ID: **SL-224-SA5A-SB-4.0-5.0** ***Collected:*** **3/24/2011 3:29:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0840	J	0.0656	MDL	0.219	PQL	mg/Kg	J	Z, Q
CADMIUM	0.104	J	0.0437	MDL	0.109	PQL	mg/Kg	J	Z
CHROMIUM	25.6		0.131	MDL	0.437	PQL	mg/Kg	J	Q, E
COBALT	7.65		0.0219	MDL	0.109	PQL	mg/Kg	J	E, A
COPPER	13.7		0.0721	MDL	0.437	PQL	mg/Kg	J	Q, E, A
NICKEL	17.9		0.109	MDL	0.437	PQL	mg/Kg	J	Q
SILVER	0.0303	J	0.0131	MDL	0.109	PQL	mg/Kg	J	Z
ZINC	70.8		0.612	MDL	3.28	PQL	mg/Kg	J	E

Sample ID: **SL-224-SA5A-SB-4.0-5.0** ***Collected:*** **3/24/2011 3:29:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0897	J	0.0437	MDL	0.437	PQL	mg/Kg	J	Z

Sample ID: **SL-224-SA5A-SB-4.0-5.0** ***Collected:*** **3/24/2011 3:29:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	131		0.118	MDL	0.437	PQL	mg/Kg	J	E, A

Sample ID: **SL-224-SA5A-SB-4.0-5.0** ***Collected:*** **3/24/2011 3:29:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	5.75		0.0114	MDL	0.219	PQL	mg/Kg	J	A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE112 **Laboratory: LL**

EDD Filename: DE112_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 ***Matrix:*** SO

Sample ID: SL-225-SA5A-SB-4.0-5.0 ***Collected:*** 3/24/2011 2:33:00 ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0702	U	0.0702	MDL	0.234	PQL	mg/Kg	UJ	Q
CADMIUM	0.0855	J	0.0468	MDL	0.117	PQL	mg/Kg	J	Z
CHROMIUM	12.4		0.140	MDL	0.468	PQL	mg/Kg	J	Q, E
COBALT	4.88		0.0234	MDL	0.117	PQL	mg/Kg	J	E, A
COPPER	5.89		0.0772	MDL	0.468	PQL	mg/Kg	J	Q, E, A
NICKEL	8.10		0.117	MDL	0.468	PQL	mg/Kg	J	Q
ZINC	60.8		0.655	MDL	3.51	PQL	mg/Kg	J	E

Sample ID: SL-225-SA5A-SB-4.0-5.0 ***Collected:*** 3/24/2011 2:33:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.181	J	0.0468	MDL	0.468	PQL	mg/Kg	J	Z

Sample ID: SL-225-SA5A-SB-4.0-5.0 ***Collected:*** 3/24/2011 2:33:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	85.7		0.126	MDL	0.468	PQL	mg/Kg	J	E, A

Sample ID: SL-225-SA5A-SB-4.0-5.0 ***Collected:*** 3/24/2011 2:33:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	10.3		0.0122	MDL	0.234	PQL	mg/Kg	J	A

Sample ID: SL-226-SA5A-SB-4.0-5.0 ***Collected:*** 3/24/2011 12:24:00 ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0680	U	0.0680	MDL	0.227	PQL	mg/Kg	UJ	Q
CHROMIUM	18.4		0.136	MDL	0.453	PQL	mg/Kg	J	Q, E
COBALT	6.47		0.0227	MDL	0.113	PQL	mg/Kg	J	E, A
COPPER	11.2		0.0747	MDL	0.453	PQL	mg/Kg	J	Q, E, A
NICKEL	13.8		0.113	MDL	0.453	PQL	mg/Kg	J	Q
ZINC	66.0		0.634	MDL	3.40	PQL	mg/Kg	J	E

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE112 **Laboratory: LL**

EDD Filename: DE112_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 ***Matrix:*** SO

Sample ID: SL-226-SA5A-SB-4.0-5.0 ***Collected:*** 3/24/2011 12:24:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0833	J	0.0453	MDL	0.453	PQL	mg/Kg	J	Z

Sample ID: SL-226-SA5A-SB-4.0-5.0 ***Collected:*** 3/24/2011 12:24:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	130		0.122	MDL	0.453	PQL	mg/Kg	J	E, A

Sample ID: SL-226-SA5A-SB-4.0-5.0 ***Collected:*** 3/24/2011 12:24:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	4.36		0.0118	MDL	0.227	PQL	mg/Kg	J	A

Method Category: METALS

Method: 7199 ***Matrix:*** SO

Sample ID: DUP10-SA5A-QC-032411 ***Collected:*** 3/24/2011 10:58:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.53	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z, FD

Sample ID: SL-199-SA5A-SB-2.5-3.5 ***Collected:*** 3/24/2011 8:59:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.38	J	0.21	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-223-SA5A-SB-4.0-5.0 ***Collected:*** 3/24/2011 11:14:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.23	U	0.23	MDL	1.1	PQL	mg/Kg	UJ	FD

Sample ID: SL-223-SA5A-SB-8.5-9.5 ***Collected:*** 3/24/2011 11:04:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.44	J	0.21	MDL	1.1	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE112 | Laboratory: LL

EDD Filename: DE112_v1 | eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 7199 **Matrix:** SO

Sample ID: SL-224-SA5A-SB-4.0-5.0 *Collected:* 3/24/2011 3:29:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.51	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-225-SA5A-SB-4.0-5.0 *Collected:* 3/24/2011 2:33:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.60	J	0.24	MDL	1.2	PQL	mg/Kg	J	Z

Method Category: SVOA

Method: 1625C **Matrix:** SO

Sample ID: DUP10-SA5A-QC-032411 *Collected:* 3/24/2011 10:58:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	47.7		18.5	MDL	36.9	PQL	ng/Kg	UJ	B, FD

Sample ID: SL-223-SA5A-SB-4.0-5.0 *Collected:* 3/24/2011 11:14:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	189	U	189	MDL	379	PQL	ng/Kg	UJ	FD

Sample ID: SL-224-SA5A-SB-4.0-5.0 *Collected:* 3/24/2011 3:29:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	80.2		18.6	MDL	37.2	PQL	ng/Kg	U	B

Sample ID: SL-225-SA5A-SB-4.0-5.0 *Collected:* 3/24/2011 2:33:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	61.2		19.7	MDL	39.4	PQL	ng/Kg	U	B

Sample ID: SL-226-SA5A-SB-4.0-5.0 *Collected:* 3/24/2011 12:24:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	54.7		18.9	MDL	37.8	PQL	ng/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE112 **Laboratory: LL**

EDD Filename: DE112_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **8015M** ***Matrix:*** **SO**

Sample ID: DUP10-SA5A-QC-032411 ***Collected:*** 3/24/2011 10:58:00 ***Analysis Type:*** REA2 ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	0.76	J	0.44	MDL	1.3	PQL	mg/Kg	J	Z, FD
EFH (C21-C30)	12		0.44	MDL	1.3	PQL	mg/Kg	J	FD
EFH (C8-C11)	0.52	J	0.44	MDL	1.3	PQL	mg/Kg	J	Z

Sample ID: SL-223-SA5A-SB-4.0-5.0 ***Collected:*** 3/24/2011 11:14:00 ***Analysis Type:*** REA2 ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	0.45	U	0.45	MDL	1.4	PQL	mg/Kg	UJ	FD
EFH (C21-C30)	6.8		0.45	MDL	1.4	PQL	mg/Kg	J	Q, Q, Q, FD
EFH (C8-C11)	0.48	J	0.45	MDL	1.4	PQL	mg/Kg	J	Z

Sample ID: SL-223-SA5A-SB-8.5-9.5 ***Collected:*** 3/24/2011 11:04:00 ***Analysis Type:*** REA2 ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	0.45	J	0.43	MDL	1.3	PQL	mg/Kg	J	Z

Sample ID: SL-224-SA5A-SB-4.0-5.0 ***Collected:*** 3/24/2011 3:29:00 ***Analysis Type:*** REA2 ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C21-C30)	0.62	J	0.45	MDL	1.3	PQL	mg/Kg	J	Z
EFH (C30-C40)	1.2	J	0.45	MDL	1.3	PQL	mg/Kg	J	Z
EFH (C8-C11)	0.53	J	0.45	MDL	1.3	PQL	mg/Kg	J	Z

Sample ID: SL-225-SA5A-SB-4.0-5.0 ***Collected:*** 3/24/2011 2:33:00 ***Analysis Type:*** REA2 ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	0.73	J	0.47	MDL	1.4	PQL	mg/Kg	J	Z

Sample ID: SL-226-SA5A-SB-4.0-5.0 ***Collected:*** 3/24/2011 12:24:00 ***Analysis Type:*** REA2 ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	1.0	J	0.45	MDL	1.4	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE112 **Laboratory: LL**

EDD Filename: DE112_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA
Method: 8082 **Matrix:** SO

Sample ID: SL-226-SA5A-SB-4.0-5.0 *Collected:* 3/24/2011 12:24:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	1.2	J	0.44	MDL	1.9	PQL	ug/Kg	J	Z

Method Category: SVOA
Method: 8270C **Matrix:** SO

Sample ID: DUP10-SA5A-QC-032411 *Collected:* 3/24/2011 10:58:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	31	J	18	MDL	180	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	26	J	18	MDL	180	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	30	J	18	MDL	180	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	25	J	18	MDL	180	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	23	J	18	MDL	180	PQL	ug/Kg	J	Z
BIS(2-CHLOROISOPROPYL) ETHER	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	24	J	18	MDL	370	PQL	ug/Kg	J	Z
CHRYSENE	31	J	18	MDL	180	PQL	ug/Kg	J	Z
FLUORANTHENE	28	J	18	MDL	180	PQL	ug/Kg	J	Z
NITROBENZENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
N-NITROSO-DI-N-PROPYLAMINE	18	U	18	MDL	180	PQL	ug/Kg	UJ	C
PYRENE	43	J	18	MDL	180	PQL	ug/Kg	J	Z

Sample ID: SL-199-SA5A-SB-2.5-3.5 *Collected:* 3/24/2011 8:59:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-CHLOROISOPROPYL) ETHER	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
NITROBENZENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
N-NITROSO-DI-N-PROPYLAMINE	18	U	18	MDL	180	PQL	ug/Kg	UJ	C

Sample ID: SL-223-SA5A-SB-4.0-5.0 *Collected:* 3/24/2011 11:14:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-CHLOROISOPROPYL) ETHER	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
ISOPHORONE	19	U	19	MDL	190	PQL	ug/Kg	UJ	Q
NITROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	Q, L
N-NITROSO-DI-N-PROPYLAMINE	19	U	19	MDL	190	PQL	ug/Kg	UJ	C

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE112 **Laboratory: LL**

EDD Filename: DE112_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SL-223-SA5A-SB-8.5-9.5 *Collected:* 3/24/2011 11:04:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-CHLOROISOPROPYL) ETHER	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
NITROBENZENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
N-NITROSO-DI-N-PROPYLAMINE	18	U	18	MDL	180	PQL	ug/Kg	UJ	C

Sample ID: SL-224-SA5A-SB-4.0-5.0 *Collected:* 3/24/2011 3:29:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-CHLOROISOPROPYL) ETHER	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
NITROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
N-NITROSO-DI-N-PROPYLAMINE	19	U	19	MDL	190	PQL	ug/Kg	UJ	C

Sample ID: SL-225-SA5A-SB-4.0-5.0 *Collected:* 3/24/2011 2:33:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-CHLOROISOPROPYL) ETHER	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	26	J	19	MDL	390	PQL	ug/Kg	J	Z
NITROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
N-NITROSO-DI-N-PROPYLAMINE	19	U	19	MDL	190	PQL	ug/Kg	UJ	C

Sample ID: SL-226-SA5A-SB-4.0-5.0 *Collected:* 3/24/2011 12:24:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-CHLOROISOPROPYL) ETHER	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
NITROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
N-NITROSO-DI-N-PROPYLAMINE	19	U	19	MDL	190	PQL	ug/Kg	UJ	C

Method Category: SVOA

Method: 8270C SIM **Matrix:** SO

Sample ID: SL-226-SA5A-SB-4.0-5.0 *Collected:* 3/24/2011 12:24:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NAPHTHALENE	1.4	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE112 **Laboratory: LL**

EDD Filename: DE112_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: VOA

Method: 8015B ***Matrix:*** SO

Sample ID: SL-223-SA5A-SB-4.0-5.0 ***Collected:*** 3/24/2011 11:14:00 ***Analysis Type:*** REA3 ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
m-Terphenyl	1.7	U	1.7	MDL	4.0	PQL	mg/Kg	UJ	Q
p-Terphenyl	1.7	U	1.7	MDL	4.0	PQL	mg/Kg	UJ	Q

Method Category: VOA

Method: 8260B ***Matrix:*** AQ

Sample ID: TB-032411 ***Collected:*** 3/24/2011 8:00:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-CHLOROETHYL VINYL ETHER	2	U	2	MDL	10	PQL	ug/L	UJ	C
ACETONE	6	U	6	MDL	20	PQL	ug/L	UJ	C
DICHLORODIFLUOROMETHANE	2	U	2	MDL	5	PQL	ug/L	UJ	C
TRICHLOROFLUOROMETHANE	2	U	2	MDL	5	PQL	ug/L	UJ	C

Method Category: VOA

Method: 8260B ***Matrix:*** SO

Sample ID: DUP10-SA5A-QC-032411 ***Collected:*** 3/24/2011 10:58:00 ***Analysis Type:*** RES ***Dilution:*** 0.89

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BROMOCHLOROMETHANE	0.32	U	0.32	MDL	3.9	PQL	ug/Kg	UJ	C
METHYLENE CHLORIDE	2.9	J	0.24	MDL	3.9	PQL	ug/Kg	U	B
TOLUENE	0.08	U	0.08	MDL	3.9	PQL	ug/Kg	UJ	FD

Sample ID: SL-199-SA5A-SB-2.5-3.5 ***Collected:*** 3/24/2011 8:59:00 ***Analysis Type:*** RES ***Dilution:*** 1.01

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BROMOCHLOROMETHANE	0.36	U	0.36	MDL	4.3	PQL	ug/Kg	UJ	C
METHYLENE CHLORIDE	2.1	J	0.26	MDL	4.3	PQL	ug/Kg	U	B

Sample ID: SL-223-SA5A-SB-4.0-5.0 ***Collected:*** 3/24/2011 11:14:00 ***Analysis Type:*** RES ***Dilution:*** 0.81

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BROMOCHLOROMETHANE	0.30	U	0.30	MDL	3.7	PQL	ug/Kg	UJ	C
METHYLENE CHLORIDE	3.5	J	0.22	MDL	3.7	PQL	ug/Kg	UJ	Q, B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE112 **Laboratory: LL**

EDD Filename: DE112_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **VOA**

Method: **8260B** ***Matrix:*** **SO**

Sample ID: **SL-223-SA5A-SB-4.0-5.0** ***Collected:*** **3/24/2011 11:14:00** ***Analysis Type:*** **RES** ***Dilution:*** **0.81**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TOLUENE	0.08	J	0.07	MDL	3.7	PQL	ug/Kg	UJ	B, FD

Sample ID: **SL-223-SA5A-SB-8.5-9.5** ***Collected:*** **3/24/2011 11:04:00** ***Analysis Type:*** **RES** ***Dilution:*** **0.99**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BROMOCHLOROMETHANE	0.35	U	0.35	MDL	4.2	PQL	ug/Kg	UJ	C
METHYLENE CHLORIDE	2.3	J	0.25	MDL	4.2	PQL	ug/Kg	U	B

Sample ID: **SL-224-SA5A-SB-4.0-5.0** ***Collected:*** **3/24/2011 3:29:00** ***Analysis Type:*** **RES** ***Dilution:*** **0.86**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BROMOCHLOROMETHANE	0.32	U	0.32	MDL	3.8	PQL	ug/Kg	UJ	C
METHYLENE CHLORIDE	5.4		0.23	MDL	3.8	PQL	ug/Kg	U	B

Sample ID: **SL-225-SA5A-SB-4.0-5.0** ***Collected:*** **3/24/2011 2:33:00** ***Analysis Type:*** **RES** ***Dilution:*** **0.85**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BROMOCHLOROMETHANE	0.33	U	0.33	MDL	4.0	PQL	ug/Kg	UJ	C
METHYLENE CHLORIDE	2.7	J	0.24	MDL	4.0	PQL	ug/Kg	U	B

Sample ID: **SL-226-SA5A-SB-4.0-5.0** ***Collected:*** **3/24/2011 12:24:00** ***Analysis Type:*** **RES** ***Dilution:*** **0.84**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BROMOCHLOROMETHANE	0.32	U	0.32	MDL	3.8	PQL	ug/Kg	UJ	C
METHYLENE CHLORIDE	3.0	J	0.23	MDL	3.8	PQL	ug/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE112 **Laboratory: LL**

EDD Filename: DE112_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
*#	Professional Judgment
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Verification Correlation Coefficient
C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE112 **Laboratory: LL**

EDD Filename: DE112_v1 **eQAPP Name: CDM_SSFL_110509**

F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation
L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery Lower Estimation

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE112 **Laboratory: LL**

EDD Filename: DE112_v1 **eQAPP Name: CDM_SSFL_110509**

R	Continuing Calibration Verification Percent Recovery Lower Rejection
R	Continuing Calibration Verification Percent Recovery Upper Estimation
R	Continuing Calibration Verification Percent Recovery Upper Rejection
R	Continuing Calibration Verification Relative Response Factor
R	Initial Calibration Relative Response Factor
R	Initial Calibration Verification Percent Recovery Lower Estimation
R	Initial Calibration Verification Percent Recovery Lower Rejection
R	Initial Calibration Verification Percent Recovery Upper Estimation
R	Initial Calibration Verification Percent Recovery Upper Rejection
R	Initial Calibration Verification Relative Response Factor
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control Outlier Reports

DE112

Method Blank Outlier Report

Lab Reporting Batch ID: DE112 **Laboratory: LL**

EDD Filename: DE112_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1625C**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKLB09B261132	4/11/2011 11:32:00 AM	N-NITROSODIMETHYLAMINE	21.5 ng/Kg	DUP10-SA5A-QC-032411 SL-223-SA5A-SB-4.0-5.0 SL-223-SA5A-SB-8.5-9.5 SL-224-SA5A-SB-4.0-5.0 SL-225-SA5A-SB-4.0-5.0 SL-226-SA5A-SB-4.0-5.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
DUP10-SA5A-QC-032411(RES)	N-NITROSODIMETHYLAMINE	47.7 ng/Kg	47.7U ng/Kg
SL-224-SA5A-SB-4.0-5.0(RES)	N-NITROSODIMETHYLAMINE	80.2 ng/Kg	80.2U ng/Kg
SL-225-SA5A-SB-4.0-5.0(RES)	N-NITROSODIMETHYLAMINE	61.2 ng/Kg	61.2U ng/Kg
SL-226-SA5A-SB-4.0-5.0(RES)	N-NITROSODIMETHYLAMINE	54.7 ng/Kg	54.7U ng/Kg

Method: **6010B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P08808DB221821	3/30/2011 6:21:00 PM	CALCIUM PHOSPHORUS TIN	6.36 mg/Kg 1.28 mg/Kg 1.86 mg/Kg	DUP10-SA5A-QC-032411 SL-199-SA5A-SB-2.5-3.5 SL-223-SA5A-SB-4.0-5.0 SL-223-SA5A-SB-8.5-9.5 SL-224-SA5A-SB-4.0-5.0 SL-225-SA5A-SB-4.0-5.0 SL-226-SA5A-SB-4.0-5.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
DUP10-SA5A-QC-032411(RES)	TIN	3.25 mg/Kg	3.25U mg/Kg
SL-199-SA5A-SB-2.5-3.5(RES)	TIN	3.49 mg/Kg	3.49U mg/Kg
SL-223-SA5A-SB-4.0-5.0(RES)	TIN	3.33 mg/Kg	3.33U mg/Kg
SL-223-SA5A-SB-8.5-9.5(RES)	TIN	3.36 mg/Kg	3.36U mg/Kg
SL-224-SA5A-SB-4.0-5.0(RES)	TIN	3.21 mg/Kg	3.21U mg/Kg
SL-225-SA5A-SB-4.0-5.0(RES)	TIN	3.61 mg/Kg	3.61U mg/Kg
SL-226-SA5A-SB-4.0-5.0(RES)	TIN	3.53 mg/Kg	3.53U mg/Kg

Method: **6020**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P08826BB221251A	4/1/2011 12:51:00 PM	COPPER NICKEL	0.195 mg/Kg 0.125 mg/Kg	DUP10-SA5A-QC-032411 SL-199-SA5A-SB-2.5-3.5 SL-223-SA5A-SB-4.0-5.0 SL-223-SA5A-SB-8.5-9.5 SL-224-SA5A-SB-4.0-5.0 SL-225-SA5A-SB-4.0-5.0 SL-226-SA5A-SB-4.0-5.0

Method Blank Outlier Report

Lab Reporting Batch ID: DE112 **Laboratory: LL**

EDD Filename: DE112_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **6020**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

Method: **8260B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB06B210202A	3/28/2011 2:02:00 AM	ACETONE METHYLENE CHLORIDE TOLUENE	7.7 ug/Kg 0.95 ug/Kg 0.16 ug/Kg	DUP10-SA5A-QC-032411 SL-199-SA5A-SB-2.5-3.5 SL-223-SA5A-SB-4.0-5.0 SL-223-SA5A-SB-8.5-9.5 SL-224-SA5A-SB-4.0-5.0 SL-225-SA5A-SB-4.0-5.0 SL-226-SA5A-SB-4.0-5.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
DUP10-SA5A-QC-032411(RES)	METHYLENE CHLORIDE	2.9 ug/Kg	3.9U ug/Kg
SL-199-SA5A-SB-2.5-3.5(RES)	METHYLENE CHLORIDE	2.1 ug/Kg	4.3U ug/Kg
SL-223-SA5A-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	3.5 ug/Kg	3.7U ug/Kg
SL-223-SA5A-SB-4.0-5.0(RES)	TOLUENE	0.08 ug/Kg	3.7U ug/Kg
SL-223-SA5A-SB-8.5-9.5(RES)	METHYLENE CHLORIDE	2.3 ug/Kg	4.2U ug/Kg
SL-224-SA5A-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	5.4 ug/Kg	5.4U ug/Kg
SL-225-SA5A-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	2.7 ug/Kg	4.0U ug/Kg
SL-226-SA5A-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	3.0 ug/Kg	3.8U ug/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE112 **Laboratory: LL**

EDD Filename: DE112_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-223-SA5A-SB-4.0-5.0MS (DUP10-SA5A-QC-032411 SL-199-SA5A-SB-2.5-3.5 SL-223-SA5A-SB-4.0-5.0 SL-223-SA5A-SB-8.5-9.5 SL-224-SA5A-SB-4.0-5.0 SL-225-SA5A-SB-4.0-5.0 SL-226-SA5A-SB-4.0-5.0)	CHROMIUM COPPER NICKEL	129 133 138	- - -	75.00-125.00 75.00-125.00 75.00-125.00	- - -	CHROMIUM COPPER NICKEL	J (all detects)
SL-223-SA5A-SB-4.0-5.0MS SL-223-SA5A-SB-4.0-5.0MSD (DUP10-SA5A-QC-032411 SL-199-SA5A-SB-2.5-3.5 SL-223-SA5A-SB-4.0-5.0 SL-223-SA5A-SB-8.5-9.5 SL-224-SA5A-SB-4.0-5.0 SL-225-SA5A-SB-4.0-5.0 SL-226-SA5A-SB-4.0-5.0)	ANTIMONY ZINC	24 -70	30 -107	75.00-125.00 75.00-125.00	- -	ANTIMONY ZINC	J(all detects) UJ(all non-detects) Sb Post Spike = 106% Zn No Qual. >4x
SL-223-SA5A-SB-4.0-5.0MS SL-223-SA5A-SB-4.0-5.0MSD (DUP10-SA5A-QC-032411 SL-199-SA5A-SB-2.5-3.5 SL-223-SA5A-SB-4.0-5.0 SL-223-SA5A-SB-8.5-9.5 SL-224-SA5A-SB-4.0-5.0 SL-225-SA5A-SB-4.0-5.0 SL-226-SA5A-SB-4.0-5.0)	BARIUM	379	228	75.00-125.00	-	BARIUM	No Qual, >4x

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-223-SA5A-SB-4.0-5.0MS SL-223-SA5A-SB-4.0-5.0MSD (DUP10-SA5A-QC-032411 SL-199-SA5A-SB-2.5-3.5 SL-223-SA5A-SB-4.0-5.0 SL-223-SA5A-SB-8.5-9.5 SL-224-SA5A-SB-4.0-5.0 SL-225-SA5A-SB-4.0-5.0 SL-226-SA5A-SB-4.0-5.0)	ALUMINUM CALCIUM IRON MAGNESIUM MANGANESE PHOSPHORUS POTASSIUM TITANIUM	2355 151 3391 283 279 151 198 308	2579 171 2762 378 166 - 155 284	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	- - - - - - - -	ALUMINUM CALCIUM IRON MAGNESIUM MANGANESE PHOSPHORUS POTASSIUM TITANIUM	J(all detects) Al, Ca, Fe, Mg, Mn, Ti No Qual, >4x

Method: 8270C SIM
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-223-SA5A-SB-4.0-5.0MS (SL-223-SA5A-SB-4.0-5.0)	2-METHYLNAPHTHALENE	105	-	64.00-103.00	-	2-METHYLNAPHTHALENE	J(all detects)

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE112 **Laboratory: LL**

EDD Filename: DE112_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-223-SA5A-SB-4.0-5.0MS SL-223-SA5A-SB-4.0-5.0MSD (SL-223-SA5A-SB-4.0-5.0)	ISOPHORONE NITROBENZENE	- 70	72 70	73.00-102.00 72.00-106.00	- -	ISOPHORONE NITROBENZENE	J(all detects) UJ(all non-detects)

Method: 1625C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-223-SA5A-SB-4.0-5.0MS SL-223-SA5A-SB-4.0-5.0MSD (SL-223-SA5A-SB-4.0-5.0)	N-NITROSODIMETHYLAMINE	132	140	70.00-130.00	-	N-NITROSODIMETHYLAMINE	J(all detects)

Method: 300.0
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-223-SA5A-SB-4.0-5.0MS (DUP10-SA5A-QC-032411 SL-199-SA5A-SB-2.5-3.5 SL-223-SA5A-SB-4.0-5.0 SL-223-SA5A-SB-8.5-9.5 SL-224-SA5A-SB-4.0-5.0 SL-225-SA5A-SB-4.0-5.0 SL-226-SA5A-SB-4.0-5.0)	FLUORIDE	61	-	80.00-120.00	-	FLUORIDE	J(all detects) UJ(all non-detects)

Method: 8015M
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-223-SA5A-SB-4.0-5.0MS SL-223-SA5A-SB-4.0-5.0MSD (SL-223-SA5A-SB-4.0-5.0)	EFH (C15-C20)	234	-	49.00-123.00	69 (20.00)	EFH (C15-C20)	J(all detects)
SL-223-SA5A-SB-4.0-5.0MS SL-223-SA5A-SB-4.0-5.0MSD (SL-223-SA5A-SB-4.0-5.0)	EFH (C21-C30) EFH (C30-C40)	1671 2421	-112 -308	49.00-123.00 49.00-123.00	167 (20.00) 168 (20.00)	EFH (C21-C30) EFH (C30-C40)	J(all detects) R(all non-detects) EFH (C30-C40) No Qual >4x

Method: 8015B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-223-SA5A-SB-4.0-5.0MS (SL-223-SA5A-SB-4.0-5.0)	m-Terphenyl p-Terphenyl	72 71	- -	75.00-125.00 75.00-125.00	- -	m-Terphenyl p-Terphenyl	J(all detects) UJ(all non-detects)

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE112 **Laboratory: LL**

EDD Filename: DE112_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8260B**

Matrix: **SO**

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-223-SA5A-SB-4.0-5.0MS	2-Chloro-1,1,1-trifluoroethane	133	-	61.00-131.00	-	2-Chloro-1,1,1-trifluoroethane	
SL-223-SA5A-SB-4.0-5.0MSD	ACETONE	211	-	15.00-210.00	-	ACETONE	J(all detects)
(SL-223-SA5A-SB-4.0-5.0)	METHYLENE CHLORIDE	-	142	61.00-141.00	-	METHYLENE CHLORIDE	

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE112 **Laboratory: LL**

EDD Filename: DE112_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-223-SA5A-SB-4.0-5.0DUP (DUP10-SA5A-QC-032411 SL-199-SA5A-SB-2.5-3.5 SL-223-SA5A-SB-4.0-5.0 SL-223-SA5A-SB-8.5-9.5 SL-224-SA5A-SB-4.0-5.0 SL-225-SA5A-SB-4.0-5.0 SL-226-SA5A-SB-4.0-5.0)	Zirconium	200	20.00	No Qual OK by difference

Method: 6020
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-223-SA5A-SB-4.0-5.0DUP (DUP10-SA5A-QC-032411 SL-199-SA5A-SB-2.5-3.5 SL-223-SA5A-SB-4.0-5.0 SL-223-SA5A-SB-8.5-9.5 SL-224-SA5A-SB-4.0-5.0 SL-225-SA5A-SB-4.0-5.0 SL-226-SA5A-SB-4.0-5.0)	ANTIMONY	39	20.00	J(all detects) UJ(all non-detects) Sb, Cd, Se, Ag No Qual OK by difference
	BARIUM	27	20.00	
	CADMIUM	56	20.00	
	CHROMIUM	22	20.00	
	COBALT	24	20.00	
	COPPER	26	20.00	
	SELENIUM	35	20.00	
	SILVER	44	20.00	
	ZINC	24	20.00	

Method: 7199
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-223-SA5A-SB-4.0-5.0DUP (DUP10-SA5A-QC-032411 SL-199-SA5A-SB-2.5-3.5 SL-223-SA5A-SB-4.0-5.0 SL-223-SA5A-SB-8.5-9.5 SL-224-SA5A-SB-4.0-5.0 SL-225-SA5A-SB-4.0-5.0 SL-226-SA5A-SB-4.0-5.0)	HEXAVALENT CHROMIUM	200	20.00	No Qual OK by difference

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE112 **Laboratory: LL**

EDD Filename: DE112_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8260B
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
LCSY78Q211734A LCSY78Y211755A (TB-032411)	BROMOMETHANE TRICHLOROFLUOROMETHANE	- 137	123 131	44.00-120.00 64.00-129.00	- -	BROMOMETHANE TRICHLOROFLUOROMETHAN	J(all detects)

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P08826BQ221253A (DUP10-SA5A-QC-032411 SL-199-SA5A-SB-2.5-3.5 SL-223-SA5A-SB-4.0-5.0 SL-223-SA5A-SB-8.5-9.5 SL-224-SA5A-SB-4.0-5.0 SL-225-SA5A-SB-4.0-5.0 SL-226-SA5A-SB-4.0-5.0)	ANTIMONY	60	-	80.00-120.00	-	ANTIMONY	No Qual SRM within QC limits

Method: 8270C SIM
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P9LDLCSQ261926 (DUP10-SA5A-QC-032411 SL-199-SA5A-SB-2.5-3.5 SL-223-SA5A-SB-4.0-5.0 SL-223-SA5A-SB-8.5-9.5 SL-224-SA5A-SB-4.0-5.0 SL-225-SA5A-SB-4.0-5.0 SL-226-SA5A-SB-4.0-5.0)	Dimethylphthalate	143	-	79.00-121.00	-	Dimethylphthalate	J(all detects)

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P1LCLCSQ261146 (DUP10-SA5A-QC-032411 SL-199-SA5A-SB-2.5-3.5 SL-223-SA5A-SB-4.0-5.0 SL-223-SA5A-SB-8.5-9.5 SL-224-SA5A-SB-4.0-5.0 SL-225-SA5A-SB-4.0-5.0 SL-226-SA5A-SB-4.0-5.0)	BIS(2-CHLOROISOPROPYL) ET NITROBENZENE	64 70	- -	68.00-131.00 71.00-104.00	- -	BIS(2-CHLOROISOPROPYL) E NITROBENZENE	J(all detects) UJ(all non-detects)

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE112 **Laboratory: LL**

EDD Filename: DE112_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8260B**

Matrix: **SO**

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
LCSB06Q210323A (DUP10 -SA5A -QC-032411 SL -199-SA5A -SB-2.5-3.5 SL -223-SA5A -SB-4.0-5.0 SL -223-SA5A -SB-8.5-9.5 SL -224-SA5A -SB-4.0-5.0 SL -225-SA5A -SB-4.0-5.0 SL -226-SA5A -SB-4.0-5.0)	BROMOCHLOROMETHANE	128	-	79.00-124.00	-	BROMOCHLOROMETHANE	J(all detects)

Field Duplicate RPD Report

Lab Reporting Batch ID: DE112 **Laboratory: LL**

EDD Filename: DE112_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 160.3M
Matrix: SO

Analyte	Concentration (%)		Sample RPD	eQAPP RPD	Flag
	SL-223-SA5A-SB-4.0-5.0	DUP10-SA5A-QC-032411			
MOISTURE	12.0	9.7	21		No Qualifiers Applied

Method: 1625C
Matrix: SO

Analyte	Concentration (ng/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-223-SA5A-SB-4.0-5.0	DUP10-SA5A-QC-032411			
N-NITROSODIMETHYLAMINE	379 U	47.7	200	50.00	J(all detects) UJ(all non-detects)

Method: 300.0
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-223-SA5A-SB-4.0-5.0	DUP10-SA5A-QC-032411			
FLUORIDE	3.1	2.8	10	50.00	No Qualifiers Applied
Nitrate-NO3	2.0	2.1	5	50.00	

Method: 6010B
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-223-SA5A-SB-4.0-5.0	DUP10-SA5A-QC-032411			
ALUMINUM	14600	16300	11	50.00	No Qualifiers Applied
BORON	7.72	8.57	10	50.00	
CALCIUM	2830	2670	6	50.00	
IRON	18900	20000	6	50.00	
LITHIUM	22.5	21.2	6	50.00	
MAGNESIUM	4100	4310	5	50.00	
MANGANESE	282	345	20	50.00	
PHOSPHORUS	345	370	7	50.00	
POTASSIUM	3630	4120	13	50.00	
SODIUM	221	195	12	50.00	
STRONTIUM	17.7	21.3	18	50.00	
TIN	3.33	3.25	2	50.00	
TITANIUM	1130	1160	3	50.00	
Zirconium	1.50	1.03	37	50.00	

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Field Duplicate RPD Report

Lab Reporting Batch ID: DE112 **Laboratory: LL**

EDD Filename: DE112_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020
Matrix: SO

Analyte	Concentration (mg/Kg) SL-223-SA5A-SB-4.0-5.0	Concentration (mg/Kg) DUP10-SA5A-QC-032411	Sample RPD	eQAPP RPD	Flag
ANTIMONY	0.105	0.0789	28	50.00	No Qualifiers Applied
ARSENIC	4.12	4.49	9	50.00	
BARIUM	121	100	19	50.00	
BERYLLIUM	0.463	0.636	31	50.00	
CHROMIUM	16.8	17.3	3	50.00	
COBALT	6.64	6.02	10	50.00	
COPPER	9.86	8.25	18	50.00	
LEAD	5.68	6.01	6	50.00	
MOLYBDENUM	0.482	0.445	8	50.00	
NICKEL	13.8	13.1	5	50.00	
SELENIUM	0.118	0.132	11	50.00	
THALLIUM	0.242	0.306	23	50.00	
VANADIUM	34.8	33.7	3	50.00	
CADMIUM	0.136	0.0577	81	50.00	J(all detects)
SILVER	0.0262	0.0443	51	50.00	
ZINC	92.5	50.0	60	50.00	

Method: 7199
Matrix: SO

Analyte	Concentration (mg/Kg) SL-223-SA5A-SB-4.0-5.0	Concentration (mg/Kg) DUP10-SA5A-QC-032411	Sample RPD	eQAPP RPD	Flag
HEXAVALENT CHROMIUM	1.1 U	0.53	200	50.00	J(all detects) UJ(all non-detects)

Method: 8015M
Matrix: SO

Analyte	Concentration (mg/Kg) SL-223-SA5A-SB-4.0-5.0	Concentration (mg/Kg) DUP10-SA5A-QC-032411	Sample RPD	eQAPP RPD	Flag
EFH (C30-C40)	16	19	17	50.00	No Qualifiers Applied
EFH (C8-C11)	0.48	0.52	8	50.00	
EFH (C15-C20)	1.4 U	0.76	200	50.00	J(all detects)
EFH (C21-C30)	6.8	12	55	50.00	UJ(all non-detects)

Method: 8082
Matrix: SO

Analyte	Concentration (ug/Kg) SL-223-SA5A-SB-4.0-5.0	Concentration (ug/Kg) DUP10-SA5A-QC-032411	Sample RPD	eQAPP RPD	Flag
AROCLOR 1260	4.0	5.2	26	50.00	No Qualifiers Applied

Method: 8260B
Matrix: SO

Analyte	Concentration (ug/Kg) SL-223-SA5A-SB-4.0-5.0	Concentration (ug/Kg) DUP10-SA5A-QC-032411	Sample RPD	eQAPP RPD	Flag
METHYLENE CHLORIDE	3.5	2.9	19	50.00	No Qualifiers Applied
TOLUENE	0.08	3.9 U	200	50.00	J(all detects) UJ(all non-detects)

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Field Duplicate RPD Report

Lab Reporting Batch ID: DE112 **Laboratory: LL**

EDD Filename: DE112_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 9045M
Matrix: SO

Analyte	Concentration (pH unit)		Sample RPD	eQAPP RPD	Flag
	SL-223-SA5A-SB-4.0-5.0	DUP10-SA5A-QC-032411			
PH	8.28	8.41	2	50.00	No Qualifiers Applied

Method: ASTM D1498
Matrix: SO

Analyte	Concentration (mV)		Sample RPD	eQAPP RPD	Flag
	SL-223-SA5A-SB-4.0-5.0	DUP10-SA5A-QC-032411			
Oxidation Reduction Potential	480	413	15		No Qualifiers Applied

Reporting Limit Outliers

Lab Reporting Batch ID: DE112 **Laboratory: LL**

EDD Filename: DE112_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP10-SA5A-QC-032411	TIN	J	3.25	11.1	PQL	mg/Kg	J (all detects)
	Zirconium	J	1.03	5.54	PQL	mg/Kg	
SL-199-SA5A-SB-2.5-3.5	TIN	J	3.49	10.5	PQL	mg/Kg	J (all detects)
SL-223-SA5A-SB-4.0-5.0	TIN	J	3.33	11.1	PQL	mg/Kg	J (all detects)
	Zirconium	J	1.50	5.57	PQL	mg/Kg	
SL-223-SA5A-SB-8.5-9.5	TIN	J	3.36	10.5	PQL	mg/Kg	J (all detects)
SL-224-SA5A-SB-4.0-5.0	SODIUM	J	107	108	PQL	mg/Kg	J (all detects)
	TIN	J	3.21	10.8	PQL	mg/Kg	
	Zirconium	J	1.34	5.41	PQL	mg/Kg	
SL-225-SA5A-SB-4.0-5.0	TIN	J	3.61	11.4	PQL	mg/Kg	J (all detects)
SL-226-SA5A-SB-4.0-5.0	TIN	J	3.53	11.3	PQL	mg/Kg	J (all detects)

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP10-SA5A-QC-032411	ANTIMONY	J	0.0789	0.217	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0577	0.109	PQL	mg/Kg	
	SELENIUM	J	0.132	0.434	PQL	mg/Kg	
	SILVER	J	0.0443	0.109	PQL	mg/Kg	
SL-199-SA5A-SB-2.5-3.5	ANTIMONY	J	0.0920	0.210	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.153	0.420	PQL	mg/Kg	
	SILVER	J	0.0240	0.105	PQL	mg/Kg	
SL-223-SA5A-SB-4.0-5.0	ANTIMONY	J	0.105	0.223	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.118	0.446	PQL	mg/Kg	
	SILVER	J	0.0262	0.111	PQL	mg/Kg	
SL-223-SA5A-SB-8.5-9.5	ANTIMONY	J	0.0710	0.209	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0696	0.417	PQL	mg/Kg	
	SILVER	J	0.0179	0.104	PQL	mg/Kg	
SL-224-SA5A-SB-4.0-5.0	ANTIMONY	J	0.0840	0.219	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.104	0.109	PQL	mg/Kg	
	SELENIUM	J	0.0897	0.437	PQL	mg/Kg	
	SILVER	J	0.0303	0.109	PQL	mg/Kg	
SL-225-SA5A-SB-4.0-5.0	CADMIUM	J	0.0855	0.117	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.181	0.468	PQL	mg/Kg	
SL-226-SA5A-SB-4.0-5.0	SELENIUM	J	0.0833	0.453	PQL	mg/Kg	J (all detects)

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP10-SA5A-QC-032411	HEXAVALENT CHROMIUM	J	0.53	1.1	PQL	mg/Kg	J (all detects)
SL-199-SA5A-SB-2.5-3.5	HEXAVALENT CHROMIUM	J	0.38	1.1	PQL	mg/Kg	J (all detects)

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Reporting Limit Outliers

Lab Reporting Batch ID: DE112 **Laboratory: LL**

EDD Filename: DE112_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-223-SA5A-SB-8.5-9.5	HEXAVALENT CHROMIUM	J	0.44	1.1	PQL	mg/Kg	J (all detects)
SL-224-SA5A-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.51	1.1	PQL	mg/Kg	J (all detects)
SL-225-SA5A-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.60	1.2	PQL	mg/Kg	J (all detects)

Method: 8015M

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP10-SA5A-QC-032411	EFH (C15-C20) EFH (C8-C11)	J J	0.76 0.52	1.3 1.3	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-223-SA5A-SB-4.0-5.0	EFH (C8-C11)	J	0.48	1.4	PQL	mg/Kg	J (all detects)
SL-223-SA5A-SB-8.5-9.5	EFH (C30-C40)	J	0.45	1.3	PQL	mg/Kg	J (all detects)
SL-224-SA5A-SB-4.0-5.0	EFH (C21-C30) EFH (C30-C40) EFH (C8-C11)	J J J	0.62 1.2 0.53	1.3 1.3 1.3	PQL PQL PQL	mg/Kg mg/Kg mg/Kg	J (all detects)
SL-225-SA5A-SB-4.0-5.0	EFH (C30-C40)	J	0.73	1.4	PQL	mg/Kg	J (all detects)
SL-226-SA5A-SB-4.0-5.0	EFH (C30-C40)	J	1.0	1.4	PQL	mg/Kg	J (all detects)

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-226-SA5A-SB-4.0-5.0	AROCLOR 1260	J	1.2	1.9	PQL	ug/Kg	J (all detects)

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP10-SA5A-QC-032411	METHYLENE CHLORIDE	J	2.9	3.9	PQL	ug/Kg	J (all detects)
SL-199-SA5A-SB-2.5-3.5	METHYLENE CHLORIDE	J	2.1	4.3	PQL	ug/Kg	J (all detects)
SL-223-SA5A-SB-4.0-5.0	METHYLENE CHLORIDE TOLUENE	J J	3.5 0.08	3.7 3.7	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-223-SA5A-SB-8.5-9.5	METHYLENE CHLORIDE	J	2.3	4.2	PQL	ug/Kg	J (all detects)
SL-225-SA5A-SB-4.0-5.0	METHYLENE CHLORIDE	J	2.7	4.0	PQL	ug/Kg	J (all detects)
SL-226-SA5A-SB-4.0-5.0	METHYLENE CHLORIDE	J	3.0	3.8	PQL	ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE112 **Laboratory: LL**

EDD Filename: DE112_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8270C**

Matrix: **SO**

SampleID	*Analyte*	*Lab Qual*	*Result*	*Reporting Limit*	*RL Type*	*Units*	*Flag*
DUP10-SA5A-QC-032411	BENZO(A)ANTHRACENE	J	31	180	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	26	180	PQL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	30	180	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	25	180	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	23	180	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	24	370	PQL	ug/Kg	
	CHRYSENE	J	31	180	PQL	ug/Kg	
	FLUORANTHENE	J	28	180	PQL	ug/Kg	
	PYRENE	J	43	180	PQL	ug/Kg	
SL-225-SA5A-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	26	390	PQL	ug/Kg	J (all detects)

Method: **8270C SIM**

Matrix: **SO**

SampleID	*Analyte*	*Lab Qual*	*Result*	*Reporting Limit*	*RL Type*	*Units*	*Flag*
SL-226-SA5A-SB-4.0-5.0	NAPHTHALENE	J	1.4	1.9	PQL	ug/Kg	J (all detects)

Enclosure II

EPA Level IV Validation Reports

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	March 24, 2011
LDC Report Date:	August 9, 2011
Matrix:	Soil/Water
Parameters:	Volatiles
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE112

Sample Identification

SL-199-SA5A-SB-2.5-3.5
SL-223-SA5A-SB-4.0-5.0
SL-223-SA5A-SB-8.5-9.5
DUP10-SA5A-QC-032411
SL-226-SA5A-SB-4.0-5.0
SL-225-SA5A-SB-4.0-5.0
SL-224-SA5A-SB-4.0-5.0
TB-032411
SL-223-SA5A-SB-4.0-5.0MS
SL-223-SA5A-SB-4.0-5.0MSD

Introduction

This data review covers 9 soil samples and one water sample listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8260B for Volatiles.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 30.0% for all compounds.

In the case where the laboratory used a calibration curve to evaluate the compounds, all coefficients of determination (r^2) were greater than or equal to 0.990 .

Average relative response factors (RRF) for all compounds were within method and validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs) and 25.0% for all other compounds with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
3/29/11	Trichlorofluoromethane	27	All water samples in SDG DE112	J (all detects) UJ (all non-detects)	A
	2-Chloroethylvinyl ether	27		J (all detects) UJ (all non-detects)	

The percent differences (%D) of the second source calibration standard were less than or equal to 25.0% for all compounds with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
3/1/11	Bromochloromethane	36	All soil samples in SDG DE112	J (all detects) UJ (all non-detects)	A
2/10/11	Dichlorodifluoromethane Acetone	30 28	All water samples in SDG DE112	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A

All of the continuing calibration relative response factors (RRF) were within method and validation criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No volatile contaminants were found in the method blanks with the following exceptions:

Method Blank ID	Analysis Date	Compound TIC (RT in minutes)	Concentration	Associated Samples
VBLKB06	3/28/11	Acetone Methylene chloride Toluene	7.7 ug/Kg 0.95 ug/Kg 0.16 ug/Kg	All soil samples in SDG DE112

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated method blanks with the following exceptions:

Sample	Compound TIC (RT in minutes)	Reported Concentration	Modified Final Concentration
SL-199-SA5A-SB-2.5-3.5	Methylene chloride	2.1 ug/Kg	4.3U ug/Kg
SL-223-SA5A-SB-4.0-5.0	Methylene chloride Toluene	3.5 ug/Kg 0.08 ug/Kg	3.7U ug/Kg 3.7U ug/Kg
SL-223-SA5A-SB-8.5-9.5	Methylene chloride	2.3 ug/Kg	4.2U ug/Kg
DUP10-SA5A-QC-032411	Methylene chloride	2.9 ug/Kg	3.9U ug/Kg
SL-226-SA5A-SB-4.0-5.0	Methylene chloride	3.0 ug/Kg	3.8U ug/Kg
SL-225-SA5A-SB-4.0-5.0	Methylene chloride	2.7 ug/Kg	4.0U ug/Kg
SL-224-SA5A-SB-4.0-5.0	Methylene chloride	5.4 ug/Kg	5.4U ug/Kg

Sample TB-032411 was identified as a trip blank. No volatile contaminants were found.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
SL-223-SA5A-SB-4.0-5.0MS/MSD (SL-223-SA5A-SB-4.0-5.0)	Freon-133a Acetone Methylene chloride	133 (61-131) 211 (15-210) -	- - 142 (61-141)	- - -	J (all detects) J (all detects) J (all detects)	A

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

LCS ID (Associated Samples)	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Flag	A or P
LCSB06 (All soil samples in SDG DE112)	Bromochloromethane	128 (79-124)	-	-	J (all detects)	P
LCS/DY78 (All water samples in SDG DE112)	Bromomethane Trichlorofluoromethane	- 137 (64-129)	123 (44-120) 131 (64-129)	- -	J (all detects) J (all detects)	P

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE112	All compounds reported below the RL.	J (all detects)	A

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was acceptable.

XV. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

Samples SL-223-SA5A-SB-4.0-5.0 and DUP10-SA5A-QC-032411 were identified as field duplicates. No volatiles were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/Kg)		RPD (Limits)	Flags	A or P
	SL-223-SA5A-SB-4.0-5.0	DUP10-SA5A-QC-032411			
Methylene chloride	3.5	2.9	19 (≤50)	-	-
Toluene	0.08	3.9U	200 (≤50)	J (all detects) UJ (all non-detects)	A

Santa Susana Field Laboratory
Volatiles - Data Qualification Summary - SDG DE112

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE112	TB-032411	Trichlorofluoromethane 2-Chloroethylvinyl ether	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A	Continuing calibration (%D) (C)
DE112	SL-199-SA5A-SB-2.5-3.5 SL-223-SA5A-SB-4.0-5.0 SL-223-SA5A-SB-8.5-9.5 DUP10-SA5A-QC-032411 SL-226-SA5A-SB-4.0-5.0 SL-225-SA5A-SB-4.0-5.0 SL-224-SA5A-SB-4.0-5.0	Bromochloromethane	J (all detects) UJ (all non-detects)	A	Continuing calibration (ICV %D) (C)
DE112	TB-032411	Dichlorodifluoromethane Acetone	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A	Continuing calibration (ICV %D) (C)
DE112	SL-223-SA5A-SB-4.0-5.0	Freon-133a Acetone Methylene chloride	J (all detects) J (all detects) J (all detects)	A	Matrix spike/Matrix spike duplicate (%R) (Q)
DE112	SL-199-SA5A-SB-2.5-3.5 SL-223-SA5A-SB-4.0-5.0 SL-223-SA5A-SB-8.5-9.5 DUP10-SA5A-QC-032411 SL-226-SA5A-SB-4.0-5.0 SL-225-SA5A-SB-4.0-5.0 SL-224-SA5A-SB-4.0-5.0	Bromochloromethane	J (all detects)	P	Laboratory control samples (%R) (L)
DE112	TB-032411	Bromomethane Trichlorofluoromethane	J (all detects) J (all detects)	P	Laboratory control samples (%R) (L)
DE112	SL-199-SA5A-SB-2.5-3.5 SL-223-SA5A-SB-4.0-5.0 SL-223-SA5A-SB-8.5-9.5 DUP10-SA5A-QC-032411 SL-226-SA5A-SB-4.0-5.0 SL-225-SA5A-SB-4.0-5.0 SL-224-SA5A-SB-4.0-5.0 TB-032411	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)
DE112	SL-223-SA5A-SB-4.0-5.0 DUP10-SA5A-QC-032411	Toluene	J (all detects) UJ (all non-detects)	A	Field duplicates (RPD) (FD)

Santa Susana Field Laboratory
Volatiles - Laboratory Blank Data Qualification Summary - SDG DE112

SDG	Sample	Compound TIC (RT in minutes)	Modified Final Concentration	A or P	Code
DE112	SL-199-SA5A-SB-2.5-3.5	Methylene chloride	4.3U ug/Kg	A	B
DE112	SL-223-SA5A-SB-4.0-5.0	Methylene chloride Toluene	3.7U ug/Kg 3.7U ug/Kg	A	B
DE112	SL-223-SA5A-SB-8.5-9.5	Methylene chloride	4.2U ug/Kg	A	B
DE112	DUP10-SA5A-QC-032411	Methylene chloride	3.9U ug/Kg	A	B
DE112	SL-226-SA5A-SB-4.0-5.0	Methylene chloride	3.8U ug/Kg	A	B
DE112	SL-225-SA5A-SB-4.0-5.0	Methylene chloride	4.0U ug/Kg	A	B
DE112	SL-224-SA5A-SB-4.0-5.0	Methylene chloride	5.4U ug/Kg	A	B

Santa Susana Field Laboratory
Volatiles - Field Blank Data Qualification Summary - SDG DE112

No Sample Data Qualified in this SDG

LDC #: 25911U1a **VALIDATION COMPLETENESS WORKSHEET** Date: 8/9/11
SDG #: DE112 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC/MS Volatiles (EPA SW 846 Method 8260B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 3/24/11
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	A	% RSD ≤ 30, r2
IV.	Continuing calibration/ICV	SW	10% / CCV ≤ 25
V.	Blanks	SW	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	SW	
VIII.	Laboratory control samples	SW	LCS ID
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A	
XI.	Target compound identification	A	
XII.	Compound quantitation/CRQLs	A	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	A	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	SW	D = 2, 4
XVII.	Field blanks	ND	TB = 8

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:

soil + water

1	SL-199-SA5A-SB-2.5-3.5 S	11	VBLKB06	21		31	
2	SL-223-SA5A-SB-4.0-5.0	12	VBLKY78	22		32	
3	SL-223-SA5A-SB-8.5-9.5	13		23		33	
4	DUP10-SA5A-QC-032411	14		24		34	
5	SL-226-SA5A-SB-4.0-5.0	15		25		35	
6	SL-225-SA5A-SB-4.0-5.0	16		26		36	
7	SL-224-SA5A-SB-4.0-5.0	17		27		37	
8	TB-032411 W	18		28		38	
9	SL-223-SA5A-SB-4.0-5.0MS S	19		29		39	
10	SL-223-SA5A-SB-4.0-5.0MSD	20		30		40	

LDC #: 259 1/4 a

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer: C

Method: Volatiles (EPA SW 846 Method 8260B)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. GC/MS Instrument performance check				
Were the BFB performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
III. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Was a curve fit used for evaluation?	✓			
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?	✓			
Were all percent relative standard deviations (%RSD) ≤ 30% and relative response factors (RRF) ≥ 0.05?	✓			
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓			
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Were all percent differences (%D) ≤ 25% and relative response factors (RRF) ≥ 0.05?		✓		
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed at least once every 12 hours for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.	✓			
VI. Surrogate spikes				
Were all surrogate %R within QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?		✓		
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			

LDC #: 25911U|a

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer: A

Validation Area	Yes	No	NA	Findings/Comments
Was an LCS analyzed per analytical batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?		✓		
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
X. Internal standards				
Were internal standard area counts within -50% or +100% of the associated calibration standard?	✓			
Were retention times within ± 30 seconds of the associated calibration standard?	✓			
XI. Target compound identification				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?	✓			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	✓			
Were chromatogram peaks verified and accounted for?	✓			
XII. Compound quantitation/CRQLs				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	✓			
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XIII. Tentatively identified compounds (TICs)				
Were the major ions (> 10 percent relative intensity) in the reference spectrum evaluated in sample spectrum?			✓	
Were relative intensities of the major ions within ± 20% between the sample and the reference spectra?			✓	
Did the raw data indicate that the laboratory performed a library search for all required peaks in the chromatograms (samples and blanks)?			✓	
XIV. System performance				
System performance was found to be acceptable.	✓			
XV. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XVI. Field duplicates				
Field duplicate pairs were identified in this SDG.	✓			
Target compounds were detected in the field duplicates.	✓			
XVII. Field blanks				
Field blanks were identified in this SDG.	✓			
Target compounds were detected in the field blanks.		✓		

TARGET COMPOUND WORKSHEET

METHOD: VOA (EPA SW 846 Method 8260B)

A. Chloromethane*	U. 1,1,2-Trichloroethane	OO. 2,2-Dichloropropane	III. n-Butylbenzene	CCCC.1-Chlorohexane
B. Bromomethane	V. Benzene	PP. Bromochloromethane	JJJ. 1,2-Dichlorobenzene	DDDD. Isopropyl alcohol
C. Vinyl choride**	W. trans-1,3-Dichloropropene	QQ. 1,1-Dichloropropene	KKK. 1,2,4-Trichlorobenzene	EEEE. Acetonitrile
D. Chloroethane	X. Bromoform*	RR. Dibromomethane	LLL. Hexachlorobutadiene	FFFF. Acrolein
E. Methylene chloride	Y. 4-Methyl-2-pentanone	SS. 1,3-Dichloropropane	MMM. Naphthalene	GGGG. Acrylonitrile
F. Acetone	Z. 2-Hexanone	TT. 1,2-Dibromoethane	NNN. 1,2,3-Trichlorobenzene	HHHH. 1,4-Dioxane
G. Carbon disulfide	AA. Tetrachloroethene	UU. 1,1,1,2-Tetrachloroethane	OOO. 1,3,5-Trichlorobenzene	IIII. Isobutyl alcohol
H. 1,1-Dichloroethene**	BB. 1,1,2,2-Tetrachloroethane*	VV. Isopropylbenzene	PPP. trans-1,2-Dichloroethene	JJJJ. Methacrylonitrile
I. 1,1-Dichloroethane*	CC. Toluene**	WW. Bromobenzene	QQQ. cis-1,2-Dichloroethene	KKKK. Propionitrile
J. 1,2-Dichloroethene, total	DD. Chlorobenzene*	XX. 1,2,3-Trichloropropane	RRR. m,p-Xylenes	LLLL. Ethyl ether
K. Chloroform**	EE. Ethylbenzene**	YY. n-Propylbenzene	SSS. o-Xylene	MMMM. Benzyl chloride
L. 1,2-Dichloroethane	FF. Styrene	ZZ. 2-Chlorotoluene	TTT. 1,1,2-Trichloro-1,2,2-trifluoroethane	NNNN.
M. 2-Butanone	GG. Xylenes, total	AAA. 1,3,5-Trimethylbenzene	UUU. 1,2-Dichlorotetrafluoroethane	OOOO.
N. 1,1,1-Trichloroethane	HH. Vinyl acetate	BBB. 4-Chlorotoluene	VVV. 4-Ethyltoluene	PPPP.
O. Carbon tetrachloride	II. 2-Chloroethylvinyl ether	CCC. tert-Butylbenzene	WWW. Ethanol	QQQQ.
P. Bromodichloromethane	JJ. Dichlorodifluoromethane	DDD. 1,2,4-Trimethylbenzene	XXX. Di-isopropyl ether	RRRR.
Q. 1,2-Dichloropropane**	KK. Trichlorofluoromethane	EEE. sec-Butylbenzene	YYY. tert-Butanol	SSSS.
R. cis-1,3-Dichloropropene	LL. Methyl-tert-butyl ether	FFF. 1,3-Dichlorobenzene	ZZZ. tert-Butyl alcohol	TTTT.
S. Trichloroethene	MM. 1,2-Dibromo-3-chloropropane	GGG. p-Isopropyltoluene	AAAA. Ethyl tert-butyl ether	UUUU.
T. Dibromochloromethane	NN. Methyl ethyl ketone	HHH. 1,4-Dichlorobenzene	BBBB. tert-Amyl methyl ether	VVVV.

* = System performance check compounds (SPCC) for RRF ; ** = Calibration check compounds (CCC) for %RSD.

LDC #: 259/14/a

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Page: 1 of 1
Reviewer: FT
2nd Reviewer: C

METHOD: GC/MS VOA (EPA SW 846 Method 8260)
Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?
Y N N/A Were percent differences (%D) and relative response factors (RRF) within method criteria for all CCC's and SPCC's ?
Y N N/A Were all %D and RRFs within the validation criteria of ≤25 %D and ≥0.05 RRF ?

#	Date	Standard ID	Compound	Finding %D (Limit: ≤25.0%)	Finding RRF (Limit: ≥0.05)	Associated Samples	Qualifications
	3/01/11	ICV	PP	36		all soils	J/UJ/A (C)
	2/10/11	ICV	JJ	30		all water	↓
			F	28		↓	
	3/29/11	CCV	KK	27		all water	↓
			II	27		↓	

CONCAL_8260B.1S

LDC #: 25911U/R

VALIDATION FINDINGS WORKSHEET
Blanks

Reviewer: FT
2nd Reviewer: C

METHOD: GC/MS VOA (EPA SW 846 Method 8260)
Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a method blank associated with every sample in this SDG?
Y N N/A Was a method blank analyzed at least once every 12 hours for each matrix and concentration?
Y N N/A Was there contamination in the method blanks? If yes, please see the qualifications below.

Blank analysis date: 3/28/11
Conc. units: ug/kg
Associated Samples: All SOILS

Compound	Blank ID	Sample Identification								
[redacted]	VBLKB06	1	2	3	4	5	6	7		
F	7.7	-	-	-	-	-	-			
E	0.95	2.1/4.34	3.5/3.74	2.3/4.24	2.9/3.94	3.0/3.84	2.7/4.04	5.4/4		
CC	0.16	-	0.08/3.7/4	-	-	-	-	-		
CRQL										

Blank analysis date: ~~3/29/11~~
Conc. units: ug/kg
Associated Samples:

Compound	Blank ID	Sample Identification								
[redacted]	~~VBLRY78~~									
CRQL										

All results were qualified using the criteria stated below except those circled.

Note: Common contaminants such as Methylene chloride, Acetone, 2-Butanone, Carbon disulfide and TICs that were detected in samples within ten times the associated method blank concentration were qualified as not detected, "U". Other contaminants within five times the method blank concentration were also qualified as not detected, "U".

LDC #: 259114 1a

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Page: 1 of 1
Reviewer: FT
2nd Reviewer: [illegible]

METHOD : GC/MS VOA (EPA SW 846 Method 8260)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.

Y N N/A Was a MS/MSD analyzed every 20 samples of each matrix?

Y N N/A Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?

#	MS/MSD ID	Compound	MS %R (Limits)	MSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
	9 & 10	Freon 133a	133 (61-131)	( )	( )	2	J/A det (Q)
		F	211 (15-210)	( )	( )	↓	↓ ↓
		E	( )	142 (61-141)	( )	↓	↓ ↓
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
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			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		

	Compound	QC Limits (Soil)	RPD (Soil)	QC Limits (Water)	RPD (Water)
H.	1,1-Dichloroethene	59-172%	≤ 22%	61-145%	≤ 14%
S.	Trichloroethene	62-137%	≤ 24%	71-120%	≤ 14%
V.	Benzene	66-142%	≤ 21%	76-127%	≤ 11%
CC.	Toluene	59-139%	≤ 21%	76-125%	≤ 13%
DD.	Chlorobenzene	60-133%	≤ 21%	75-130%	≤ 13%

LDC #: 25911U1a

VALIDATION FINDINGS WORKSHEET
Laboratory Control Samples (LCS)

Reviewer: FT
2nd Reviewer: A

METHOD: GC/MS VOA (EPA SW 846 Method 8260)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a LCS required?
Y N N/A Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?

#	Date	LCS/LCSD ID	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
		LCSB06	PP	128 (79-124)	( )	( )	All soils	J/Pdet (L)
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
		LCS/DY78	B	( )	123 (44-120)	( )	All water	J/Pdet (L)
			KK	137 (64-129)	131 (64-129)	( )	↓	↓ ↓
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		

LDC #: 25911 U/a

VALIDATION FINDINGS WORKSHEET
Field Duplicates

Page: 1 of 1
Reviewer: EJ
2nd reviewer: C

METHOD: GC/MS VOA (EPA SW 846 Method 8260)

Y N N/A Were field duplicate pairs identified in this SDG?
Y N N/A Were target compounds detected in the field duplicate pairs?

Compound	Concentration (ug/Kg)		≤ 50 RPD
	2	4	
E	3.5	2.9	19
CC	0.08	3.94	200 J/UJ/A (EQ) (FD)

Compound	Concentration ( )		RPD

Compound	Concentration ( )		RPD

Compound	Concentration ( )		RPD

LDC #: 25911U/a

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: FT
2nd Reviewer: C

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

RRF = $(A_x)(C_{is})/(A_{is})(C_x)$
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

A_x = Area of compound,
C_x = Concentration of compound,
S = Standard deviation of the RRFs
X = Mean of the RRFs

A_{is} = Area of associated internal standard
C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Reported RRF (50 std)	Recalculated RRF (50 std)	Reported Average RRF (initial)	Recalculated Average RRF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL 50/L	3/01/11	C (1st internal standard)	0.4158	0.4158	0.4296	0.4296	9	9
			EE (2nd internal standard)	1.6663	1.6663	1.5916	1.5916	10	10
			JJJ (3rd internal standard)	1.4144	1.4144	1.3506	1.3506	9	9
			(4th internal standard)						
2	ICAL water	2/10/11	C (1st internal standard)	0.3993	0.3993	0.4001	0.4001	7	7
			EE (2nd internal standard)	1.9698	1.9698	1.9465	1.9465	3	3
			JJJ (3rd internal standard)	1.6823	1.6823	1.6848	1.6848	4	4
			(4th internal standard)						
3			(1st internal standard)						
			(2nd internal standard)						
			(3rd internal standard)						
			(4th internal standard)						
4			(1st internal standard)						
			(2nd internal standard)						
			(3rd internal standard)						
			(4th internal standard)						

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25911 4/a

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Page: 1 of 1
Reviewer: FT
2nd Reviewer: [illegible]

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
RRF = $(A_x)(C_{is})/(A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference internal Standard)	Average RRF (initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
1	CCV 1:12	3/28/11	C (1st internal standard)	0.4296	0.4192	0.4192	2	2
			EE (2nd internal standard)	1.5916	1.5030	1.5030	6	6
			JJ (3rd internal standard)	1.3506	1.2906	1.2906	4	4
			(4th internal standard)					
2	CCV 16:11	3/29/11	↓ (1st internal standard)	0.4001	0.4012	0.4012	0	0
			(2nd internal standard)	1.9465	1.9930	1.9930	2	2
			(3rd internal standard)	1.6848	1.7159	1.7159	2	2
			(4th internal standard)					
3			(1st internal standard)					
			(2nd internal standard)					
			(3rd internal standard)					
			(4th internal standard)					
4			(1st internal standard)					
			(2nd internal standard)					
			(3rd internal standard)					
			(4th internal standard)					

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25914 1a

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT
2nd reviewer: [illegible]

METHOD: GC/MS VOA (EPA SW 846 Method 8260)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane	50.0	49.780	100	100	0
1,2-Dichloroethane-d4	↓	51.618	103	103	↓
Toluene-d8		48.812	98	98	
Bromofluorobenzene		47.195	94	94	

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

LDC #: 25914/a

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Reviewer: FT
2nd Reviewer: C

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SSC - SC)/SA Where: SSC = Spiked sample concentration, SA = Spike added, SC = Sample concentration

RPD = | MSC - MSC | * 2/(MSC + MSDC) MSC = Matrix spike concentration MSDC = Matrix spike duplicate concentration

MS/MSD sample: 9 & 10

Compound	Spike Added (ug/kg)		Sample Concentration (ug/kg)	Spiked Sample Concentration (ug/kg)		Matrix Spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	----	MS	MSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalculated
1,1-Dichloroethene	17.09	17.09	ND	20.24	20.72	118	118	126	126	2	2
Trichloroethene	↓	↓	↓	18.71	18.88	109	109	114	114	1	1
Benzene	↓	↓	↓	19.16	19.47	112	112	118	118	2	2
Toluene	↓	↓	0.07	18.75	19.06	109	109	115	115	2	2
Chlorobenzene	↓	↓	ND	18.08	18.26	106	106	111	111	1	1

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: [illegible]

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample Results Verification

Reviewer: FT
2nd Reviewer: C

METHOD: GC/MS VOA (EPA SW 846 Method 8260)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratoy control sample and laboratory control sample duplicate (if applicable) were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * SSC/SA Where: SSC = Spiked sample concentration
SA = Spike added

RPD = I LCS - LCSD I * 2/(LCS + LCSD) LCS = Laboraotry control sample percent recovery LCSD = Laboratory control sample duplicate percent recovery

LCS ID: LCS S01

Compound	Spike Added (ug/kg)		Spiked Sample Concentration (ug/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
1,1-Dichloroethene	20	NA	22.35	NA	112	112				
Trichloroethene	↓	↓	19.85	↓	99	99				
Benzene	↓	↓	20.98	↓	105	105				
Toluene	↓	↓	19.93	↓	100	100				
Chlorobenzene	↓	↓	19.56	↓	98	98	NA			

Comments: Refer to Laboratory Control Sample findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25914/2

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: FT
2nd reviewer: A

METHOD: GC/MS VOA (EPA SW 846 Method 8260)

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(DF)}{(A_{is})(RRF)(V_o)(\%S)}$

A_x	=	Area of the characteristic ion (EICP) for the compound to be measured
A_{is}	=	Area of the characteristic ion (EICP) for the specific internal standard
I_s	=	Amount of internal standard added in nanograms (ng)
RRF	=	Relative response factor of the calibration standard.
V_o	=	Volume or weight of sample pruged in milliliters (ml) or grams (g).
Df	=	Dilution factor.
%S	=	Percent solids, applicable to soils and solid matrices only.

Example:

Sample I.D. #1 , E

Conc. = (11696)(50)(5) / (954152)(0.3108)(4.95)(0.93)

=

2.1 ng/kg

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	March 24, 2011
LDC Report Date:	August 11, 2011
Matrix:	Soil/Water
Parameters:	1,4-Dioxane
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE112

Sample Identification

SL-199-SA5A-SB-2.5-3.5
SL-223-SA5A-SB-4.0-5.0
SL-223-SA5A-SB-8.5-9.5
DUP10-SA5A-QC-032411
SL-226-SA5A-SB-4.0-5.0
SL-225-SA5A-SB-4.0-5.0
SL-224-SA5A-SB-4.0-5.0
TB-032411
SL-223-SA5A-SB-4.0-5.0MS
SL-223-SA5A-SB-4.0-5.0MSD

Introduction

This data review covers 9 soil samples and one water sample listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8260B using Selected Ion Monitoring (SIM) for 1,4-Dioxane.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 30.0% for 1,4-Dioxane.

Average relative response factors (RRF) for all compounds were within method and validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 25.0% for 1,4-Dioxane.

The percent differences (%D) of the second source calibration standard were less than or equal to 25.0% for 1,4-Dioxane.

All of the continuing calibration relative response factors (RRF) were within method and validation criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No 1,4-dioxane was found in the method blanks.

Sample TB-032411 was identified as a trip blank. No 1,4-dioxane was found.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE112	All compounds reported below the RL.	J (all detects)	A

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was acceptable.

XV. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

Samples SL-223-SA5A-SB-4.0-5.0 and DUP10-SA5A-QC-032411 were identified as field duplicates. No 1,4-dioxane was detected in any of the samples.

Santa Susana Field Laboratory
1,4-Dioxane - Data Qualification Summary - SDG DE112

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE112	SL-199-SA5A-SB-2.5-3.5 SL-223-SA5A-SB-4.0-5.0 SL-223-SA5A-SB-8.5-9.5 DUP10-SA5A-QC-032411 SL-226-SA5A-SB-4.0-5.0 SL-225-SA5A-SB-4.0-5.0 SL-224-SA5A-SB-4.0-5.0 TB-032411	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
1,4-Dioxane - Laboratory Blank Data Qualification Summary - SDG DE112

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
1,4-Dioxane - Field Blank Data Qualification Summary - SDG DE112

No Sample Data Qualified in this SDG

LDC #: 25911U1b **VALIDATION COMPLETENESS WORKSHEET** Date: 8/9/11
SDG #: DE112 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC/MS 1,4-Dioxane (EPA SW 846 Method 8260B-SIM)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 3/24/11
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	A	% RSD ≤30
IV.	Continuing calibration/ICV	A	ICV/CCV ≤20
V.	Blanks	A	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	A	
VIII.	Laboratory control samples	A	LCS 1/D
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A	
XI.	Target compound identification	A	
XII.	Compound quantitation/CRQLs	A	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	A	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	ND	D = 2, 4
XVII.	Field blanks	ND	TB = 8

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:
Soil + water

1	SL-199-SA5A-SB-2.5-3.5	11 1	VBLKE70	21		31	
2	SL-223-SA5A-SB-4.0-5.0	12 2	VBLKE69	22		32	
3	SL-223-SA5A-SB-8.5-9.5	13		23		33	
4	DUP10-SA5A-QC-032411	14		24		34	
5	SL-226-SA5A-SB-4.0-5.0	15		25		35	
6	SL-225-SA5A-SB-4.0-5.0	16		26		36	
7	SL-224-SA5A-SB-4.0-5.0	17		27		37	
8 2	TB-032411	18		28		38	
9	SL-223-SA5A-SB-4.0-5.0MS	19		29		39	
10	SL-223-SA5A-SB-4.0-5.0MSD	20		30		40	

LDC #: 25911416

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer: C

Method: Volatiles (EPA SW 846 Method 8260B)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. GC/MS instrument performance check				
Were the BFB performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
III. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?			✓	
Was a curve fit used for evaluation?		✓		
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?			✓	
Were all percent relative standard deviations (%RSD) ≤ 30% and relative response factors (RRF) > 0.05?	✓	✓		
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓	✓		
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Were all percent differences (%D) ≤ 25% and relative response factors (RRF) ≥ 0.05?	✓	✓		
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed at least once every 12 hours for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within QC limits?	✓	✓		
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?	✓			
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			

LDC #: 259 1/41b

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer: [illegible]

Validation Area	Yes	No	NA	Findings/Comments
Was an LCS analyzed per analytical batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
X. Internal standards				
Were internal standard area counts within -50% or +100% of the associated calibration standard?	✓			
Were retention times within ± 30 seconds of the associated calibration standard?	✓			
XI. Target compound identification				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?			✓	
Did compound spectra meet specified EPA "Functional Guidelines" criteria?			✓	
Were chromatogram peaks verified and accounted for?	✓			
XII. Compound quantitation/CRQLs				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?			✓	
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?		✓		
XIII. Tentatively identified compounds (TICs)				
Were the major ions (> 10 percent relative intensity) in the reference spectrum evaluated in sample spectrum?			✓	
Were relative intensities of the major ions within ± 20% between the sample and the reference spectra?			✓	
Did the raw data indicate that the laboratory performed a library search for all required peaks in the chromatograms (samples and blanks)?			✓	
XIV. System performance				
System performance was found to be acceptable.		✓		
XV. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XVI. Field duplicates				
Field duplicate pairs were identified in this SDG.	✓			
Target compounds were detected in the field duplicates.		✓		
XVII. Field blanks				
Field blanks were identified in this SDG.	✓			
Target compounds were detected in the field blanks.		✓		

TARGET COMPOUND WORKSHEET

METHOD: VOA (EPA SW 846 Method 8260B)

A. Chloromethane*	U. 1,1,2-Trichloroethane	OO. 2,2-Dichloropropane	III. n-Butylbenzene	CCCC.1-Chlorohexane
B. Bromomethane	V. Benzene	PP. Bromochloromethane	JJJ. 1,2-Dichlorobenzene	DDDD. Isopropyl alcohol
C. Vinyl choride**	W. trans-1,3-Dichloropropene	QQ. 1,1-Dichloropropene	KKK. 1,2,4-Trichlorobenzene	EEEE. Acetonitrile
D. Chloroethane	X. Bromoform*	RR. Dibromomethane	LLL. Hexachlorobutadiene	FFFF. Acrolein
E. Methylene chloride	Y. 4-Methyl-2-pentanone	SS. 1,3-Dichloropropane	MMM. Naphthalene	GGGG. Acrylonitrile
F. Acetone	Z. 2-Hexanone	TT. 1,2-Dibromoethane	NNN. 1,2,3-Trichlorobenzene	HHHH. 1,4-Dioxane
G. Carbon disulfide	AA. Tetrachloroethene	UU. 1,1,1,2-Tetrachloroethane	OOO. 1,3,5-Trichlorobenzene	IIII. Isobutyl alcohol
H. 1,1-Dichloroethene**	BB. 1,1,2,2-Tetrachloroethane*	VV. Isopropylbenzene	PPP. trans-1,2-Dichloroethene	JJJJ. Methacrylonitrile
I. 1,1-Dichloroethane*	CC. Toluene**	WW. Bromobenzene	QQQ. cis-1,2-Dichloroethene	KKKK. Propionitrile
J. 1,2-Dichloroethene, total	DD. Chlorobenzene*	XX. 1,2,3-Trichloropropane	RRR. m,p-Xylenes	LLLL. Ethyl ether
K. Chloroform**	EE. Ethylbenzene**	YY. n-Propylbenzene	SSS. o-Xylene	MMMM. Benzyl chloride
L. 1,2-Dichloroethane	FF. Styrene	ZZ. 2-Chlorotoluene	TTT. 1,1,2-Trichloro-1,2,2-trifluoroethane	NNNN.
M. 2-Butanone	GG. Xylenes, total	AAA. 1,3,5-Trimethylbenzene	UUU. 1,2-Dichlorotetrafluoroethane	OOOO.
N. 1,1,1-Trichloroethane	HH. Vinyl acetate	BBB. 4-Chlorotoluene	VVV. 4-Ethyltoluene	PPPP.
O. Carbon tetrachloride	II. 2-Chloroethylvinyl ether	CCC. tert-Butylbenzene	WWW. Ethanol	QQQQ.
P. Bromodichloromethane	JJ. Dichlorodifluoromethane	DDD. 1,2,4-Trimethylbenzene	XXX. Di-isopropyl ether	RRRR.
Q. 1,2-Dichloropropane**	KK. Trichlorofluoromethane	EEE. sec-Butylbenzene	YYY. tert-Butanol	SSSS.
R. cis-1,3-Dichloropropene	LL. Methyl-tert-butyl ether	FFF. 1,3-Dichlorobenzene	ZZZ. tert-Butyl alcohol	TTTT.
S. Trichloroethene	MM. 1,2-Dibromo-3-chloropropane	GGG. p-Isopropyltoluene	AAAA. Ethyl tert-butyl ether	UUUU.
T. Dibromochloromethane	NN. Methyl ethyl ketone	HHH. 1,4-Dichlorobenzene	BBBB. tert-Amyl methyl ether	VVVV.

* = System performance check compounds (SPCC) for RRF ; ** = Calibration check compounds (CCC) for %RSD.

LDC #: 25911416

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: FT
2nd Reviewer: C

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

RRF = $(A_x)(C_{is})/(A_{is})(C_x)$
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

A_x = Area of compound,
C_x = Concentration of compound,
S = Standard deviation of the RRFs
X = Mean of the RRFs

A_{is} = Area of associated internal standard
C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Reported RRF (5 std)	Recalculated RRF (5 std)	Reported Average RRF (initial)	Recalculated Average RRF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	11/7/11	1,4-Dioxane (1st internal standard)	1.3539	1.3539	1.3396	1.3396	2	2
			(2nd internal standard)						
			(3rd internal standard)						
			(4th internal standard)						
2	ICAL	11/01/11	↓ (1st internal standard)	1.3004	1.3004	1.3219	1.3219	1	1
			(2nd internal standard)						
			(3rd internal standard)						
			(4th internal standard)						
3			(1st internal standard)						
			(2nd internal standard)						
			(3rd internal standard)						
			(4th internal standard)						
4			(1st internal standard)						
			(2nd internal standard)						
			(3rd internal standard)						
			(4th internal standard)						

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25911 4 1D

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: FT
2nd Reviewer: [illegible]

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
RRF = $(A_x)(C_{is})/(A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference internal Standard)	Average RRF (initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
1	CCV 19:30	3/28/11	1,4-Dioxane (1st internal standard)	1.3396	1.5065	1.5065	11	11
			(2nd internal standard)					
			(3rd internal standard)					
			(4th internal standard)					
2	CCV 9:54	3/28/11	↓ (1st internal standard)	1.3219	1.4994	1.4994	13	13
			(2nd internal standard)					
			(3rd internal standard)					
			(4th internal standard)					
3			(1st internal standard)					
			(2nd internal standard)					
			(3rd internal standard)					
			(4th internal standard)					
4			(1st internal standard)					
			(2nd internal standard)					
			(3rd internal standard)					
			(4th internal standard)					

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25911 41b

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT
2nd reviewer: [illegible]

METHOD: GC/MS VOA (EPA SW 846 Method 8260)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8	10	8.964	90	90	0
Bromofluorobenzene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

LDC #: 25911416

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Reviewer: FT
2nd Reviewer: C

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SSC - SC)/SA Where: SSC = Spiked sample concentration; SA = Spike added; SC = Sample concentration

RPD = I MSC - MSC I * 2/(MSC + MSDC) MSC = Matrix spike concentration MSDC = Matrix spike duplicate concentration

MS/MSD sample: 9 + 10

Compound	Spike Added (ug/kg)		Sample Concentration (ug/kg)	Spiked Sample Concentration (ug/kg)		Matrix Spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	---	MS	MSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
~~1,1-Dichloroethene~~ 1,4-Dioxane	103.5	103.5	ND	123.02	118.58	119	119	113	113	4	4
Trichloroethene											
Benzene											
Toluene											
Chlorobenzene											

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: [illegible]

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample Results Verification

Reviewer: FT
2nd Reviewer: [illegible]

METHOD: GC/MS VOA (EPA SW 846 Method 8260)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratoy control sample and laboratory control sample duplicate (if applicable) were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * SSC/SA Where: SSC = Spiked sample concentration
SA = Spike added

RPD = I LCS - LCSD I * 2/(LCS + LCSD) LCS = Laboraotry control sample percent recovery LCSD = Laboratory control sample duplicate percent recovery

LCS ID: LCS401

Compound	Spike Added (ug/kg)		Spiked Sample Concentration (ug/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
~~1,1-Dichloroethene~~ 1,4-Dioxane	125	NA	134.84	NA	108	108	NA			
Trichloroethene										
Benzene										
Toluene										
~~Chlorobenzene~~										

Comments: Refer to Laboratory Control Sample findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25914lb

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: FT
2nd reviewer: [illegible]

METHOD: GC/MS VOA (EPA SW 846 Method 8260)

Y N N/A Were all reported results recalculated and verified for all level IV samples?

Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(DF)}{(A_{is})(RRF)(V_o)(\%S)}$

A_x	=	Area of the characteristic ion (EICP) for the compound to be measured
A_{is}	=	Area of the characteristic ion (EICP) for the specific internal standard
I_s	=	Amount of internal standard added in nanograms (ng)
RRF	=	Relative response factor of the calibration standard.
V_o	=	Volume or weight of sample pruged in milliliters (ml) or grams (g).
Df	=	Dilution factor.
%S	=	Percent solids, applicable to soils and solid matrices only.

Example:

Sample I.D. _____, _____:

Conc. = (_____)(_____)(_____)(_____) / (_____)(_____)(_____)(_____)

= ND

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	March 24, 2011
LDC Report Date:	August 11, 2011
Matrix:	Soil
Parameters:	Semivolatiles
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE112

Sample Identification

SL-199-SA5A-SB-2.5-3.5
SL-223-SA5A-SB-4.0-5.0
SL-223-SA5A-SB-8.5-9.5
DUP10-SA5A-QC-032411
SL-226-SA5A-SB-4.0-5.0
SL-225-SA5A-SB-4.0-5.0
SL-224-SA5A-SB-4.0-5.0
SL-223-SA5A-SB-4.0-5.0MS
SL-223-SA5A-SB-4.0-5.0MSD

Introduction

This data review covers 9 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8270C for Semivolatiles.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 30.0% for all compounds.

In the case where the laboratory used a calibration curve to evaluate the compounds, all coefficients of determination (r^2) were greater than or equal to 0.990 .

Average relative response factors (RRF) for all compounds were within method and validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs) and 25.0% for all other compounds with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
4/4/11	N-Nitroso-di-n-propylamine	29	All samples in SDG DE112	J (all detects) UJ (all non-detects)	A

The percent differences (%D) of the second source calibration standard were less than or equal to 25.0% for all compounds.

All of the continuing calibration relative response factors (RRF) were within method and validation criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No semivolatile contaminants were found in the method blanks.

No field blanks were identified in this SDG.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
SL-223-SA5A-SB-4.0-5.0MS/MSD (SL-223-SA5A-SB-4.0-5.0)	Nitrobenzene	70 (72-106)	70 (72-106)	-	J (all detects) UJ (all non-detects)	A
	Isophorone	-	72 (73-102)	-	J (all detects) UJ (all non-detects)	

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits with the following exceptions:

LCS ID	Compound	%R (Limits)	Associated Samples	Flag	A or P
LCS	Bis(2-chloroisopropyl) ether	64 (68-131)	All samples in SDG DE112	J (all detects) UJ (all non-detects)	P
	Nitrobenzene	70 (71-104)		J (all detects) UJ (all non-detects)	

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE112	All compounds reported below the RL.	J (all detects)	A

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was acceptable.

XV. Overall Assessment

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

Samples SL-223-SA5A-SB-4.0-5.0 and DUP10-SA5A-QC-032411 were identified as field duplicates. No semivolatiles were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/Kg)		RPD (Limits)	Flags	A or P
	SL-223-SA5A-SB-4.0-5.0	DUP10-SA5A-QC-032411			
Benzo(a)anthracene	Not reported*	31	-	-	-
Benzo(a)pyrene	Not reported*	26	-	-	-
Benzo(b)fluoranthene	Not reported*	30	-	-	-
Benzo(g,h,i)perylene	Not reported*	25	-	-	-
Benzo(k)fluoranthene	Not reported*	23	-	-	-
Chrysene	Not reported*	31	-	-	-

Compound	Concentration (ug/Kg)		RPD (Limits)	Flags	A or P
	SL-223-SA5A-SB-4.0-5.0	DUP10-SA5A-QC-032411			
Bis(2-ethylhexyl)phthalate	Not reported*	24	-	-	-
Fluoranthene	Not reported*	28	-	-	-
Pyrene	Not reported*	43	-	-	-

*Result reported in 8270C-SIM analysis

Santa Susana Field Laboratory
Semivolatiles - Data Qualification Summary - SDG DE112

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE112	SL-199-SA5A-SB-2.5-3.5 SL-223-SA5A-SB-4.0-5.0 SL-223-SA5A-SB-8.5-9.5 DUP10-SA5A-QC-032411 SL-226-SA5A-SB-4.0-5.0 SL-225-SA5A-SB-4.0-5.0 SL-224-SA5A-SB-4.0-5.0	N-Nitroso-di-n-propylamine	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D) (C)
DE112	SL-223-SA5A-SB-4.0-5.0	Nitrobenzene Isophorone	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicate (%R) (Q)
DE112	SL-199-SA5A-SB-2.5-3.5 SL-223-SA5A-SB-4.0-5.0 SL-223-SA5A-SB-8.5-9.5 DUP10-SA5A-QC-032411 SL-226-SA5A-SB-4.0-5.0 SL-225-SA5A-SB-4.0-5.0 SL-224-SA5A-SB-4.0-5.0	Bis(2-chloroisopropyl) ether Nitrobenzene	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	P	Laboratory control samples (%R) (L)
DE112	SL-199-SA5A-SB-2.5-3.5 SL-223-SA5A-SB-4.0-5.0 SL-223-SA5A-SB-8.5-9.5 DUP10-SA5A-QC-032411 SL-226-SA5A-SB-4.0-5.0 SL-225-SA5A-SB-4.0-5.0 SL-224-SA5A-SB-4.0-5.0	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
Semivolatiles - Laboratory Blank Data Qualification Summary - SDG DE112

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Semivolatiles - Field Blank Data Qualification Summary - SDG DE112

No Sample Data Qualified in this SDG

LDC #: 25911U2a **VALIDATION COMPLETENESS WORKSHEET** Date: 8/9/11
SDG #: DE112 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC/MS Semivolatiles (EPA SW 846 Method 8270C)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 3/24/11
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	A	% RSD ≤ 30, r²
IV.	Continuing calibration/ICV	SW	ICV/CCV ≤ 25
V.	Blanks	A	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	SW	
VIII.	Laboratory control samples	SW	LCS
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A	
XI.	Target compound identification	A	
XII.	Compound quantitation/CRQLs	A	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	A	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	SW	D = 2, 4
XVII.	Field blanks	N	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:

SOIL

1	SL-199-SA5A-SB-2.5-3.5	11	SBLKLC091	21		31	
2	SL-223-SA5A-SB-4.0-5.0	12		22		32	
3	SL-223-SA5A-SB-8.5-9.5	13		23		33	
4	DUP10-SA5A-QC-032411	14		24		34	
5	SL-226-SA5A-SB-4.0-5.0	15		25		35	
6	SL-225-SA5A-SB-4.0-5.0	16		26		36	
7	SL-224-SA5A-SB-4.0-5.0	17		27		37	
8	SL-223-SA5A-SB-4.0-5.0MS	18		28		38	
9	SL-223-SA5A-SB-4.0-5.0MSD	19		29		39	
10		20		30		40	

LDC #: 25911U2a

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer: C

Method: Semivolatiles (EPA SW 846 Method 8270C)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. GC/MS Instrument performance check				
Were the DFTPP performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
III. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Was a curve fit used for evaluation?	✓			
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?	✓			
Were all percent relative standard deviations (%RSD) ≤ 30% and relative response factors (RRF) > 0.05?	✓			
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓			
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Were all percent differences (%D) ≤ 25% and relative response factors (RRF) ≥ 0.05?		✓		
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogates				
Were all surrogate %R within QC limits?	✓			
If 2 or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R?			✓	
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?			✓	
VII. Matrix spike/matrix spike duplicate				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?		✓		
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			

LDC #: 25911429

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer: [illegible]

Validation Area	Yes	No	NA	Findings/Comments
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?		✓		
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
X. Internal standards				
Were internal standard area counts within -50% or +100% of the associated calibration standard?	✓			
Were retention times within ± 30 seconds from the associated calibration standard?	✓			
XI. Target compounds				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?	✓			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	✓			
Were chromatogram peaks verified and accounted for?				
XII. Compound quantitation				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	✓			
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XIII. Tentatively identified compounds				
Were the major ions (> 10 percent relative intensity) in the reference spectrum evaluated in sample spectrum?			✓	
Were relative intensities of the major ions within ± 20% between the sample and the reference spectra?			✓	
Did the raw data indicate that the laboratory performed a library search for all required peaks in the chromatograms (samples and blanks)?			✓	
XIV. Overall assessment of data				
System performance was found to be acceptable.	✓			
XV. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XVI. Field duplicates				
Field duplicate pairs were identified in this SDG.	✓			
Target compounds were detected in the field duplicates.	✓			
XVII. Field blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

VALIDATION FINDINGS WORKSHEET

METHOD: GC/MS BNA (EPA Method 8270)

A. Phenol	P. Bis(2-chloroethoxy)methane	EE. 2,6-Dinitrotoluene	TT. Pentachlorophenol	III. Benzo(a)pyrene
B. Bis (2-chloroethyl) ether	Q. 2,4-Dichlorophenol	FF. 3-Nitroaniline	UU. Phenanthrene	JJJ. Indeno(1,2,3-cd)pyrene
C. 2-Chlorophenol	R. 1,2,4-Trichlorobenzene	GG. Acenaphthene	VV. Anthracene	KKK. Dibenz(a,h)anthracene
D. 1,3-Dichlorobenzene	S. Naphthalene	HH. 2,4-Dinitrophenol	WW. Carbazole	LLL. Benzo(g,h,i)perylene
E. 1,4-Dichlorobenzene	T. 4-Chloroaniline	II. 4-Nitrophenol	XX. Di-n-butylphthalate	MMM. Bis(2-Chloroisopropyl)ether
F. 1,2-Dichlorobenzene	U. Hexachlorobutadiene	JJ. Dibenzofuran	YY. Fluoranthene	NNN. Aniline
G. 2-Methylphenol	V. 4-Chloro-3-methylphenol	KK. 2,4-Dinitrotoluene	ZZ. Pyrene	OOO. N-Nitrosodimethylamine
H. 2,2'-Oxybis(1-chloropropane)	W. 2-Methylnaphthalene	LL. Diethylphthalate	AAA. Butylbenzylphthalate	PPP. Benzoic Acid
I. 4-Methylphenol	X. Hexachlorocyclopentadiene	MM. 4-Chlorophenyl-phenyl ether	BBB. 3,3'-Dichlorobenzidine	QQQ. Benzyl alcohol
J. N-Nitroso-di-n-propylamine	Y. 2,4,6-Trichlorophenol	NN. Fluorene	CCC. Benzo(a)anthracene	RRR. Pyridine
K. Hexachloroethane	Z. 2,4,5-Trichlorophenol	OO. 4-Nitroaniline	DDD. Chrysene	SSS. Benzidine
L. Nitrobenzene	AA. 2-Chloronaphthalene	PP. 4,6-Dinitro-2-methylphenol	EEE. Bis(2-ethylhexyl)phthalate	TTT. 1-Methylnaphthalene
M. Isophorone	BB. 2-Nitroaniline	QQ. N-Nitrosodiphenylamine (1)	FFF. Di-n-octylphthalate	UUU.
N. 2-Nitrophenol	CC. Dimethylphthalate	RR. 4-Bromophenyl-phenylether	GGG. Benzo(b)fluoranthene	VVV.
O. 2,4-Dimethylphenol	DD. Acenaphthylene	SS. Hexachlorobenzene	HHH. Benzo(k)fluoranthene	WWW.

LDC #: 25911U2a

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Page: 1 of 1
Reviewer: FT
2nd Reviewer: C

METHOD: GC/MS BNA (EPA SW 846 Method 8270)
Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a continuing calibration standard analyzed at least once every 12 hours of sample analysis for each instrument?
Y N N/A Were percent differences (%D) and relative response factors (RRF) within method criteria for all CCC's and SPCC's ?
Y N N/A Were all %D and RRFs within the validation criteria of ≤25 %D and ≥0.05 RRF ?

#	Date	Standard ID	Compound	Finding %D (Limit: <25.0%)	Finding RRF (Limit: >0.05)	Associated Samples	Qualifications
	4/4/11	CCV	J	29		All	J/UJ/A(c)

LDC #: 25911142a

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Page: 1 of 1
Reviewer: ____ FT __
2nd Reviewer: A

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.

Y N N/A Was a MS/MSD analyzed every 20 samples of each matrix?

Y N N/A Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?

#	Date	MS/MSD ID	Compound	MS %R (Limits)	MSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
		8+9	L	70 (72-106)	70 (72-106)	( )	2	J/UJ/A (Q)
			M	( )	72 (73-102)	( )	↓	↓ ↓
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
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LDC #: 2591/U2a

VALIDATION FINDINGS WORKSHEET
Laboratory Control Samples (LCS)

Page: 1 of 7
Reviewer: FT
2nd Reviewer: A

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a LCS required?

Y N N/A Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?

#	Date	LCS/LCSD ID	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
		LCS	MMM	64 (68-13)	( )	( )	All	J/UJ/P (L)
			L	70 (71-104)	( )	( )	↓	↓ ↓
				( )	( )	( )		
				( )	( )	( )		
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LDC #: 25911429

VALIDATION FINDINGS WORKSHEET
Field Duplicates

Reviewer: FT
2nd reviewer: C

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Y N N/A Were field duplicate pairs identified in this SDG?
Y N N/A Were target compounds identified in the field duplicate pairs?

NR not reported

Compound	Concentration (ug/kg) 2 *	4	RPD
CCC	NR	31	–
III		~~*~~ 26	–
GGG		30	–
LLL		25	–
HHH		23	–

Compound	Concentration (ug/kg) 2	4	RPD
DDD	NR	31	–
EEE		24	–
YY		28	–
ZZ		43	–

Compound	Concentration ( )		RPD
	* compounds were reported		
	in Method SVOA 8270C-SIM		

Compound	Concentration ( )		RPD

LDC #: 25911A 2S

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: FT
2nd Reviewer: A

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

RRF = $(A_x)(C_{is})/(A_{is})(C_x)$
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

A_x = Area of compound,
C_x = Concentration of compound,
S = Standard deviation of the RRFs,

A_{is} = Area of associated internal standard
C_{is} = Concentration of internal standard
X = Mean of the RRFs

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Reported RRF (50 std)	Recalculated RRF (50 std)	Reported Average RRF (initial)	Recalculated Average RRF (initial)	Reported %RSD	Recalculated %RSD
1	1CB2	3/18/11	Phenol (1st internal standard)	3.164	3.164	3.132	3.132	3	3
			Naphthalene (2nd internal standard)	1.175	1.175	1.156	1.156	3	3
			Fluorene (3rd internal standard)	1.508	1.508	1.481	1.481	4	4
			Pentachlorophenol (4th internal standard)	0.140	0.140	0.133	0.133	10	10
			Bis(2-ethylhexyl)phthalate (5th internal standard)	0.823	0.823	0.814	0.814	3	3
			Benzo(a)pyrene (6th internal standard)	1.141	1.141	1.116	1.116	4	4
2			Phenol (1st internal standard)						
			Naphthalene (2nd internal standard)						
			Fluorene (3rd internal standard)						
			Pentachlorophenol (4th internal standard)						
			Bis(2-ethylhexyl)phthalate (5th internal standard)						
			Benzo(a)pyrene (6th internal standard)						
3			Phenol (1st internal standard)						
			Naphthalene (2nd internal standard)						
			Fluorene (3rd internal standard)						
			Pentachlorophenol (4th internal standard)						
			Bis(2-ethylhexyl)phthalate (5th internal standard)						
			Benzo(a)pyrene (6th internal standard)						

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25911429

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: FT
2nd Reviewer: [illegible]

METHOD: GC/MS BNA (EPA SW 846 Method 8270C)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
RRF = $(A_x)(C_{is})/(A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Average RRF (initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
1	ccv 4:39	4/4/11	Phenol (1st internal standard)	3.132	2.794	2.794	11	11
			Naphthalene (2nd internal standard)	1.156	1.142	1.142	1	1
			Fluorene (3rd internal standard)	1.481	1.420	1.420	4	4
			Pentachlorophenol (4th internal standard)	0.133	0.125	0.125	6	6
			Bis(2-ethylhexyl)phthalate (5th internal standard)	0.814	0.797	0.797	2	2
			Benzo(a)pyrene (6th internal standard)	1.116	1.142	1.142	2	2
2			Phenol (1st internal standard)					
			Naphthalene (2nd internal standard)					
			Fluorene (3rd internal standard)					
			Pentachlorophenol (4th internal standard)					
			Bis(2-ethylhexyl)phthalate (5th internal standard)					
			Benzo(a)pyrene (6th internal standard)					
3			Phenol (1st internal standard)					
			Naphthalene (2nd internal standard)					
			Fluorene (3rd internal standard)					
			Pentachlorophenol (4th internal standard)					
			Bis(2-ethylhexyl)phthalate (5th internal standard)					
			Benzo(a)pyrene (6th internal standard)					

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25911429

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT
2nd reviewer: [illegible]

METHOD: GC/MS Semivolatiles (EPA SW 846 Method 8270)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5	100	67.671	68	68	0
2-Fluorobiphenyl	↓	86.726	87	87	↓
Terphenyl-d14	↓	96.855	97	97	↓
Phenol-d5	200	155.875	78	78	↓
2-Fluorophenol	↓	167.106	84	84	↓
2,4,6-Tribromophenol	↓	159.382	80	80	↓
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5					
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5					
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

LDC #: 25911429

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Reviewer: FT
2nd Reviewer: [illegible]

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SSC - SC)/SA Where: SSC = Spiked sample concentration; SA = Spike added; SC = Sample concentation

RPD = I MSC - MSC I * 2/(MSC + MSDC) MSC = Matrix spike concentration MSDC = Matrix spike duplicate concentration

MS/MSD samples: 8 + 9

Compound	Spike Added (ug/Kg)		Sample Concentration (ug/Kg)	Spiked Sample Concentration (ug/Kg)		Matrix Spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	-----	MS	MSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalculated
Phenol	1639.34	1639.34	ND	1276.3	1316.25	78	78	79	79	3	3
N-Nitroso-di-n-propylamine			ND	1075.82	1114.3	66	66	67	67	4	4
4-Chloro-3-methylphenol				1279.07	1263.57	78	78	76	76	1	1
Acenaphthene				1401.44	1424.39	85	85	86	86	2	2
Pentachlorophenol				1334.31	1323.89	81	81	80	80	1	1
Pyrene				1778.88	1816.11	109	109	109	109	2	2

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25911u29

VALIDATION FINDINGS WORKSHEET

Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: FT

2nd Reviewer: A

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SC/SA

Where: SSC = Spike concentration
SA = Spike added

RPD = I LCSC - LCSDC I * 2/(LCSC + LCSDC)

LCSC = Laboraotry control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCS/LCSD samples: yes

Compound	Spike Added (ug/kg)		Spike Concentration (ug/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
Phenol	1666.67	NA	1325.58	NA	80	80				
N-Nitroso-di-n-propylamine			1098.99		66	66				
4-Chloro-3-methylphenol			1329.75		80	80				
Acenaphthene			1426.58		86	86				
Pentachlorophenol			1263.03		76	76				
Pyrene			1753.51		105	105	NA			

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 259 11429

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: FT
2nd reviewer: [illegible]

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(V_t)(DF)(2.0)}{(A_{is})(RRF)(V_o)(V_i)(\%S)}$

A_x = Area of the characteristic ion (EICP) for the compound to be measured

A_{is} = Area of the characteristic ion (EICP) for the specific internal standard

I_s = Amount of internal standard added in nanograms (ng)

V_o = Volume or weight of sample extract in milliliters (ml) or grams (g).

V_i = Volume of extract injected in microliters (ul)

V_t = Volume of the concentrated extract in microliters (ul)

Df = Dilution Factor.

%S = Percent solids, applicable to soil and solid matrices only.

2.0 = Factor of 2 to account for GPC cleanup

Example:

Sample I.D. #4, ~~[illegible]~~: III

Conc. = (9733)(40)(1000)( )( )
(484458)(1.116)(30)(0.90)

=

26.6 ug/kg

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	March 24, 2011
LDC Report Date:	August 11, 2011
Matrix:	Soil
Parameters:	Semivolatiles
Validation Level:	Level IV
Laboratory:	Lancaster laboratories
Sample Delivery Group (SDG):	DE112

Sample Identification

SL-199-SA5A-SB-2.5-3.5
SL-223-SA5A-SB-4.0-5.0
SL-223-SA5A-SB-8.5-9.5
DUP10-SA5A-QC-032411
SL-226-SA5A-SB-4.0-5.0
SL-225-SA5A-SB-4.0-5.0
SL-224-SA5A-SB-4.0-5.0
SL-223-SA5A-SB-4.0-5.0MS
SL-223-SA5A-SB-4.0-5.0MSD

Introduction

This data review covers 9 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Semivolatiles.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 30.0% for all compounds.

In the case where the laboratory used a calibration curve to evaluate the compounds, all coefficients of determination (r^2) were greater than or equal to 0.990 .

Average relative response factors (RRF) for all compounds were within method and validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs) and 25.0% for all other compounds.

The percent differences (%D) of the second source calibration standard were less than or equal to 25.0% for all compounds.

All of the continuing calibration relative response factors (RRF) were within method and validation criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No semivolatile contaminants were found in the method blanks.

No field blanks were identified in this SDG.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
SL-223-SA5A-SB-4.0-5.0MS/MSD (SL-223-SA5A-SB-4.0-5.0)	2-Methylnaphthalene	105 (64-103)	-	-	J (all detects)	A

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits with the following exceptions:

LCS ID	Compound	%R (Limits)	Associated Samples	Flag	A or P
LCS	Dimethylphthalate	143 (79-121)	All samples in SDG DE112	J (all detects)	P

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE112	All compounds reported below the RL.	J (all detects)	A

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was acceptable.

XV. Overall Assessment

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

Samples SL-223-SA5A-SB-4.0-5.0 and DUP10-SA5A-QC-032411 were identified as field duplicates. No semivolatiles were detected in any of the samples.

Santa Susana Field Laboratory
Semivolatiles- Data Qualification Summary - SDG DE112

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE112	SL-223-SA5A-SB-4.0-5.0	2-Methylnaphthalene	J (all detects)	A	Matrix spike/Matrix spike duplicate (%R) (Q)
DE112	SL-199-SA5A-SB-2.5-3.5 SL-223-SA5A-SB-4.0-5.0 SL-223-SA5A-SB-8.5-9.5 DUP10-SA5A-QC-032411 SL-226-SA5A-SB-4.0-5.0 SL-225-SA5A-SB-4.0-5.0 SL-224-SA5A-SB-4.0-5.0	Dimethylphthalate	J (all detects)	P	Laboratory control samples (%R) (L)
DE112	SL-199-SA5A-SB-2.5-3.5 SL-223-SA5A-SB-4.0-5.0 SL-223-SA5A-SB-8.5-9.5 DUP10-SA5A-QC-032411 SL-226-SA5A-SB-4.0-5.0 SL-225-SA5A-SB-4.0-5.0 SL-224-SA5A-SB-4.0-5.0	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and RLs (Z)

Santa Susana Field Laboratory
Semivolatiles- Laboratory Blank Data Qualification Summary - SDG DE112

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Semivolatiles- Field Blank Data Qualification Summary - SDG DE112

No Sample Data Qualified in this SDG

LDC #: 25911U2b

VALIDATION COMPLETENESS WORKSHEET

Level IV

Date: 8/9/11

SDG #: DE112

Page: 1 of 1

Laboratory: Lancaster Laboratories

SVOA

Reviewer:

2nd Reviewer:

METHOD: GC/MS P~~olynuclear Aromatic Hydrocarbon~~s (EPA SW 846 Method 8270C-SIM)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 3/24/11
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	A	% RSD ≤ 30, r²
IV.	Continuing calibration/ICV	A	ICV/CCV ≤ 25
V.	Blanks	A	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	SW	
VIII.	Laboratory control samples	SW	LCS
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A	
XI.	Target compound identification	A	
XII.	Compound quantitation/CRQLs	A	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	A	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	ND	D = 2, 4
XVII.	Field blanks	N	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: SOIL

1	SL-199-SA5A-SB-2.5-3.5	11	SB LKLD089	21		31	
2	SL-223-SA5A-SB-4.0-5.0	12		22		32	
3	SL-223-SA5A-SB-8.5-9.5	13		23		33	
4	DUP10-SA5A-QC-032411	14		24		34	
5	SL-226-SA5A-SB-4.0-5.0	15		25		35	
6	SL-225-SA5A-SB-4.0-5.0	16		26		36	
7	SL-224-SA5A-SB-4.0-5.0	17		27		37	
8	SL-223-SA5A-SB-4.0-5.0MS	18		28		38	
9	SL-223-SA5A-SB-4.0-5.0MSD	19		29		39	
10		20		30		40	

LDC #: 25911426

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer: C

Method: Semivolatiles (EPA SW 846 Method 8270C)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. GC/MS Instrument performance check				
Were the DFTPP performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
III. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Was a curve fit used for evaluation?	✓			
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?	✓			
Were all percent relative standard deviations (%RSD) ≤ 30% and relative response factors (RRF) > 0.05?	✓			
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓			
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Were all percent differences (%D) ≤ 25% and relative response factors (RRF) ≥ 0.05?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within QC limits?	✓			
If 2 or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R?			✓	
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?			✓	
VII. Matrix spike/matrix spike duplicate				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?		✓		
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			

LDC #: 25911426b

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer: [illegible]

Validation Area	Yes	No	NA	Findings/Comments
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?		✓		
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
X. Internal Standards				
Were internal standard area counts within -50% or +100% of the associated calibration standard?	✓			
Were retention times within ± 30 seconds from the associated calibration standard?	✓			
XI. Target Compound Identification				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?	✓			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	✓			
Were chromatogram peaks verified and accounted for?	✓			
XII. Compound Quantitation				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	✓			
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XIII. Tentatively Identified Compounds				
Were the major ions (> 10 percent relative intensity) in the reference spectrum evaluated in sample spectrum?			✓	
Were relative intensities of the major ions within ± 20% between the sample and the reference spectra?			✓	
Did the raw data indicate that the laboratory performed a library search for all required peaks in the chromatograms (samples and blanks)?				✓
XIV. System Performance				
System performance was found to be acceptable.		✓		
XV. Overall Assessment of Data				
Overall assessment of data was found to be acceptable.	✓			
XVI. Field Duplicates				
Field duplicate pairs were identified in this SDG.	✓			
Target compounds were detected in the field duplicates.	✓			
XVII. Field Blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

VALIDATION FINDINGS WORKSHEET

METHOD: GC/MS BNA (EPA Method 8270)

A. Phenol	P. Bis(2-chloroethoxy)methane	EE. 2,6-Dinitrotoluene	TT. Pentachlorophenol	III. Benzo(a)pyrene
B. Bis (2-chloroethyl) ether	Q. 2,4-Dichlorophenol	FF. 3-Nitroaniline	UU. Phenanthrene	JJJ. Indeno(1,2,3-cd)pyrene
C. 2-Chlorophenol	R. 1,2,4-Trichlorobenzene	GG. Acenaphthene	VV. Anthracene	KKK. Dibenz(a,h)anthracene
D. 1,3-Dichlorobenzene	S. Naphthalene	HH. 2,4-Dinitrophenol	WW. Carbazole	LLL. Benzo(g,h,i)perylene
E. 1,4-Dichlorobenzene	T. 4-Chloroaniline	II. 4-Nitrophenol	XX. Di-n-butylphthalate	MMM. Bis(2-Chloroisopropyl)ether
F. 1,2-Dichlorobenzene	U. Hexachlorobutadiene	JJ. Dibenzofuran	YY. Fluoranthene	NNN. Aniline
G. 2-Methylphenol	V. 4-Chloro-3-methylphenol	KK. 2,4-Dinitrotoluene	ZZ. Pyrene	OOO. N-Nitrosodimethylamine
H. 2,2'-Oxybis(1-chloropropane)	W. 2-Methylnaphthalene	LL. Diethylphthalate	AAA. Butylbenzylphthalate	PPP. Benzoic Acid
I. 4-Methylphenol	X. Hexachlorocyclopentadiene	MM. 4-Chlorophenyl-phenyl ether	BBB. 3,3'-Dichlorobenzidine	QQQ. Benzyl alcohol
J. N-Nitroso-di-n-propylamine	Y. 2,4,6-Trichlorophenol	NN. Fluorene	CCC. Benzo(a)anthracene	RRR. Pyridine
K. Hexachloroethane	Z. 2,4,5-Trichlorophenol	OO. 4-Nitroaniline	DDD. Chrysene	SSS. Benzidine
L. Nitrobenzene	AA. 2-Chloronaphthalene	PP. 4,6-Dinitro-2-methylphenol	EEE. Bis(2-ethylhexyl)phthalate	TTT. 1-Methylnaphthalene
M. Isophorone	BB. 2-Nitroaniline	QQ. N-Nitrosodiphenylamine (1)	FFF. Di-n-octylphthalate	UUU.
N. 2-Nitrophenol	CC. Dimethylphthalate	RR. 4-Bromophenyl-phenylether	GGG. Benzo(b)fluoranthene	VVV.
O. 2,4-Dimethylphenol	DD. Acenaphthylene	SS. Hexachlorobenzene	HHH. Benzo(k)fluoranthene	WWW.

LDC #: 25911426

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Page: 1 of 1
Reviewer: FT
2nd Reviewer: A

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.

Y N N/A Was a MS/MSD analyzed every 20 samples of each matrix?

Y N N/A Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?

#	Date	MS/MSD ID	Compound	MS %R (Limits)	MSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
		8 + 9	W	105 (64-103)	( )	( )	2	J/A dit (Q)
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
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				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		

LDC #: 25911426

VALIDATION FINDINGS WORKSHEET
Laboratory Control Samples (LCS)

Page: 1 of 1
Reviewer: FT
2nd Reviewer: A

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a LCS required?

Y N N/A Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?

#	Date	LCS/LCSD ID	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
		LCS	CC	143 (79-121)	( )	( )	All	J/Pdet (L)
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
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				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		

LDC #: 25911426

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: FT
2nd Reviewer: [illegible]

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

RRF = $(A_x)(C_{is})/(A_{is})(C_x)$
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

A_x = Area of compound,
C_x = Concentration of compound,
S = Standard deviation of the RRFs,

A_{is} = Area of associated internal standard
C_{is} = Concentration of internal standard
X = Mean of the RRFs

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Reported RRF (/ std)	Recalculated RRF (/ std)	Reported Average RRF (initial)	Recalculated Average RRF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	3/30/11	~~Phenol (1st internal standard)~~						
			Naphthalene (2nd internal standard)	1.083	1.083	1.042	1.042	4	4
			Fluorene (3rd internal standard)	1.328	1.328	1.293	1.293	8	8
			~~Pentachlorophenol~~ Anthracene (4th internal standard)	1.116	1.116	1.101	1.101	7	7
			~~Bis(2-ethylhexyl)phthalate~~ Chrysene (5th internal standard)	1.278	1.278	1.293	1.293	2	2
			Benzo(a)pyrene (6th internal standard)	1.547	1.547	1.509	1.509	13	13
2			Phenol (1st internal standard)						
			Naphthalene (2nd internal standard)						
			Fluorene (3rd internal standard)						
			Pentachlorophenol (4th internal standard)						
			Bis(2-ethylhexyl)phthalate (5th internal standard)						
			Benzo(a)pyrene (6th internal standard)						
3			Phenol (1st internal standard)						
			Naphthalene (2nd internal standard)						
			Fluorene (3rd internal standard)						
			Pentachlorophenol (4th internal standard)						
			Bis(2-ethylhexyl)phthalate (5th internal standard)						
			Benzo(a)pyrene (6th internal standard)						

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25911426

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Page: 1 of 1
Reviewer: FT
2nd Reviewer: [illegible]

METHOD: GC/MS BNA (EPA SW 846 Method 8270C)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
RRF = $(A_x)(C_{is})/(A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Average RRF (initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
1	CCV	4/2/11	~~Phenol (1st internal standard)~~					
	17:52		Naphthalene (2nd internal standard)	1.042	1.062	1.062	2.	2
			Fluorene (3rd internal standard)	1.293	1.341	1.341	4	4
			~~Pentachlorophenol~~ Anthracene (4th internal standard)	1.101	1.081	1.081	2	2
			~~Bis(2-ethylhexyl)phthalate~~ Chrysene (5th internal standard)	1.293	1.192	1.192	8	8
			Benzo(a)pyrene (6th internal standard)	1.509	1.523	1.523	1	1
2			Phenol (1st internal standard)					
			Naphthalene (2nd internal standard)					
			Fluorene (3rd internal standard)					
			Pentachlorophenol (4th internal standard)					
			Bis(2-ethylhexyl)phthalate (5th internal standard)					
			Benzo(a)pyrene (6th internal standard)					
3			Phenol (1st internal standard)					
			Naphthalene (2nd internal standard)					
			Fluorene (3rd internal standard)					
			Pentachlorophenol (4th internal standard)					
			Bis(2-ethylhexyl)phthalate (5th internal standard)					
			Benzo(a)pyrene (6th internal standard)					

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25911u2b

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Page: 1 of 1
Reviewer: FT
2nd reviewer: [illegible]

METHOD: GC/MS Semivolatiles (EPA SW 846 Method 8270)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5	1.0	0.701	70	70	0
2-Fluorobiphenyl	↓	0.657	66	66	↓
Terphenyl-d14	↓	0.749	75	75	↓
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5					
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5					
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

LDC #: 25911 42p

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Reviewer: FT
2nd Reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SSC - SC)/SA Where: SSC = Spiked sample concentration, SA = Spike added, SC = Sample concentation

RPD = I MSC - MSC I * 2/(MSC + MSDC) MSC = Matrix spike concentration MSDC = Matrix spike duplicate concentration

MS/MSD samples: 8 + 9

Compound	Spike Added (ug/Kg)		Sample Concentration (ug/Kg)	Spiked Sample Concentration (ug/Kg)		Matrix Spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	----	MS	MSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalculated
Phenol											
N-Nitroso-di-n-propylamine											
4-Chloro-3-methylphenol											
Acenaphthene	33.33	33.33	ND	30.8	27.49	92	92	82	82	11	11
Pentachlorophenol											
Pyrene	↓	↓	↓	30.88	28.15	93	93	84	84	9	9

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25911406

VALIDATION FINDINGS WORKSHEET

Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: FT

2nd Reviewer: A

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SC/SA

Where: SSC = Spike concentration
SA = Spike added

RPD = I LCSC - LCSDC I * 2/(LCSC + LCSDC)

LCSC = Laboraotry control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCS/LCSD samples: LCS

Compound	Spike Added (ug/kg)		Spike Concentration (ug/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
Phenol										
N-Nitroso-di-n-propylamine										
4-Chloro-3-methylphenol										
Acenaphthene	33.33	NA	32.28	NA	97	97				
Pentachlorophenol										
Pyrene	33.33	↓	33.17	↓	100	100	NA			

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25911426

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: FT
2nd reviewer: [illegible]

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(V_t)(DF)(2.0)}{(A_{is})(RRF)(V_o)(V_i)(\%S)}$

A_x	=	Area of the characteristic ion (EICP) for the compound to be measured
A_{is}	=	Area of the characteristic ion (EICP) for the specific internal standard
I_s	=	Amount of internal standard added in nanograms (ng)
V_o	=	Volume or weight of sample extract in milliliters (ml) or grams (g).
V_i	=	Volume of extract injected in microliters (ul)
V_t	=	Volume of the concentrated extract in microliters (ul)
Df	=	Dilution Factor.
%S	=	Percent solids, applicable to soil and solid matrices only.
2.0	=	Factor of 2 to account for GPC cleanup

Example:

Sample I.D. #5, S:

Conc. = $\frac{7967 \times 1.0 \times 1000}{202209 \times (1.042) \times (30) \times 0.88}$

= 1.43 ug/kg

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	March 24, 2011
LDC Report Date:	August 9, 2011
Matrix:	Soil
Parameters:	N-Nitrosodimethylamine
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE112

Sample Identification

SL-223-SA5A-SB-4.0-5.0
SL-223-SA5A-SB-8.5-9.5
DUP10-SA5A-QC-032411
SL-226-SA5A-SB-4.0-5.0
SL-225-SA5A-SB-4.0-5.0
SL-224-SA5A-SB-4.0-5.0
SL-223-SA5A-SB-4.0-5.0MS
SL-223-SA5A-SB-4.0-5.0MSD

Introduction

This data review covers 8 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA Method 1625C for N-Nitrosodimethylamine.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance check is not required for by this method.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 30.0% .

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% .

The percent difference (%D) of the second source calibration standard were less than or equal to 30.0% .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No N-nitrosodimethylamine was found in the method blanks with the following exceptions:

Method Blank ID	Extraction Date	Compound	Concentration	Associated Samples
SBLKB092	4/4/11	N-Nitrosodimethylamine	22 ng/Kg	All samples in SDG DE112

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated method blanks with the following exceptions:

Sample	Compound	Reported Concentration	Modified Final Concentration
DUP10-SA5A-QC-032411	N-Nitrosodimethylamine	47.7 ng/Kg	47.7U ng/Kg
SL-226-SA5A-SB-4.0-5.0	N-Nitrosodimethylamine	54.7 ng/Kg	54.7U ng/Kg

Sample	Compound	Reported Concentration	Modified Final Concentration
SL-225-SA5A-SB-4.0-5.0	N-Nitrosodimethylamine	61.2 ng/Kg	61.2U ng/Kg
SL-224-SA5A-SB-4.0-5.0	N-Nitrosodimethylamine	80.2 ng/Kg	80.2U ng/Kg

No field blanks were identified in this SDG.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
SL-223-SA5A-SB-4.0-5.0MS/MSD (SL-223-SA5A-SB-4.0-5.0)	N-Nitrosodimethylamine	132 (70-130)	140 (70-130)	-	J (all detects)	A

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE112	All compounds reported below the RL.	J (all detects)	A

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was within validation criteria.

XV. Overall Assessment

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

Samples SL-223-SA5A-SB-4.0-5.0 and DUP10-SA5A-QC-032411 were identified as field duplicates. No N-nitrosodimethylamine were detected in any of the samples with the following exceptions:

Compound	Concentration (ng/Kg)		RPD (Limits)	Flags	A or P
	SL-223-SA5A-SB-4.0-5.0	DUP10-SA5A-QC-032411			
N-Nitrosodimethylamine	379U	47.7	200 (≤50)	J (all detects) UJ (all non-detects)	A

Santa Susana Field Laboratory
N-Nitrosodimethylamine - Data Qualification Summary - SDG DE112

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE112	SL-223-SA5A-SB-4.0-5.0	N-Nitrosodimethylamine	J (all detects)	A	Matrix spike/Matrix spike duplicate (%R) (Q)
DE112	SL-223-SA5A-SB-4.0-5.0 SL-223-SA5A-SB-8.5-9.5 DUP10-SA5A-QC-032411 SL-226-SA5A-SB-4.0-5.0 SL-225-SA5A-SB-4.0-5.0 SL-224-SA5A-SB-4.0-5.0	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)
DE112	SL-223-SA5A-SB-4.0-5.0 DUP10-SA5A-QC-032411	N-Nitrosodimethylamine	J (all detects) UJ (all non-detects)	A	Field duplicates (RPD) (FD)

Santa Susana Field Laboratory
N-Nitrosodimethylamine - Laboratory Blank Data Qualification Summary - SDG DE112

SDG	Sample	Compound TIC (RT in minutes)	Modified Final Concentration	A or P
DE112	DUP10-SA5A-QC-032411	N-Nitrosodimethylamine	47.7U ng/Kg	A
DE112	SL-226-SA5A-SB-4.0-5.0	N-Nitrosodimethylamine	54.7U ng/Kg	A
DE112	SL-225-SA5A-SB-4.0-5.0	N-Nitrosodimethylamine	61.2U ng/Kg	A
DE112	SL-224-SA5A-SB-4.0-5.0	N-Nitrosodimethylamine	80.2U ng/Kg	A

Santa Susana Field Laboratory
N-Nitrosodimethylamine - Field Blank Data Qualification Summary - SDG DE112

No Sample Data Qualified in this SDG

LDC #: 25911U2c **VALIDATION COMPLETENESS WORKSHEET** Date: 8/9/11
SDG #: DE112 Level IV Page: 1 of 7
Laboratory: Lancaster Laboratories Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC/MS N-Nitrosodimethylamine (EPA Method 1625C)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 3/24/11
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	A	% RSD ≤ 30
IV.	Continuing calibration/ICV	A	ICV ≤ 30 CCV ≤ 20
V.	Blanks	SW	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	SW	
VIII.	Laboratory control samples	A	LCS
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A	
XI.	Target compound identification	A	
XII.	Compound quantitation/CRQLs	A	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	A	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	SW	p = 1.3
XVII.	Field blanks	N	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: SOIL

1	SL-223-SA5A-SB-4.0-5.0	11	SBLKLB092	21		31	
2	SL-223-SA5A-SB-8.5-9.5	12		22		32	
3	DUP10-SA5A-QC-032411	13		23		33	
4	SL-226-SA5A-SB-4.0-5.0	14		24		34	
5	SL-225-SA5A-SB-4.0-5.0	15		25		35	
6	SL-224-SA5A-SB-4.0-5.0	16		26		36	
7	SL-223-SA5A-SB-4.0-5.0MS	17		27		37	
8	SL-223-SA5A-SB-4.0-5.0MSD	18		28		38	
9		19		29		39	
10		20		30		40	

LDC #: 25911U2C

VALIDATION FINDINGS CHECKLIST

Reviewer: FT

2nd Reviewer: A

Method: ~~Semivolatiles (EPA SW 846 Method 8270C)~~ 1625C

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. GC/MS Instrument performance check				
Were the DFTPP performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
III. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?		✓	✓	
Was a curve fit used for evaluation?		✓		
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?			✓	
Were all percent relative standard deviations (%RSD) ≤ ~~30%~~ 20 and relative response factors (RRF) > 0.05?	✓			
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓			
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Were all percent differences (%D) ≤ ~~25%~~ 20 and relative response factors (RRF) ≥ 0.05?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.	✓			
VI. Surrogate spikes				
Were all surrogate %R within QC limits?	✓			
If 2 or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R?			✓	
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?			✓	
VII. Matrix spike/matrix spike duplicate				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?		✓		
VIII. LCS/LCSD				
Was an LCS analyzed for this SDG?	✓			

LDC #: 25911 42C

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer: A

Validation Area	Yes	No	NA	Findings/Comments
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
X. Internal Standards				
Were internal standard area counts within -50% or +100% of the associated calibration standard?	✓			
Were retention times within ± 30 seconds from the associated calibration standard?	✓			
XI. Target Compound Identification				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?	✓			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	✓			
Were chromatogram peaks verified and accounted for?	✓			
XII. Compound Quantitation				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	✓			
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XIII. Tentatively Identified Compounds				
Were the major ions (> 10 percent relative intensity) in the reference spectrum evaluated in sample spectrum?			✓	
Were relative intensities of the major ions within ± 20% between the sample and the reference spectra?			✓	
Did the raw data indicate that the laboratory performed a library search for all required peaks in the chromatograms (samples and blanks)?			✓	
XIV. Overall Assessment of Data				
System performance was found to be acceptable.	✓			
XV. Overall Assessment of Data				
Overall assessment of data was found to be acceptable.	✓			
XVI. Field Duplicates				
Field duplicate pairs were identified in this SDG.	✓			
Target compounds were detected in the field duplicates.	✓			
XVII. Field Blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

VALIDATION FINDINGS WORKSHEET

METHOD: GC/MS BNA (EPA Method 8270)

A. Phenol	P. Bis(2-chloroethoxy)methane	EE. 2,6-Dinitrotoluene	TT. Pentachlorophenol	III. Benzo(a)pyrene
B. Bis (2-chloroethyl) ether	Q. 2,4-Dichlorophenol	FF. 3-Nitroaniline	UU. Phenanthrene	JJJ. Indeno(1,2,3-cd)pyrene
C. 2-Chlorophenol	R. 1,2,4-Trichlorobenzene	GG. Acenaphthene	VV. Anthracene	KKK. Dibenz(a,h)anthracene
D. 1,3-Dichlorobenzene	S. Naphthalene	HH. 2,4-Dinitrophenol	WW. Carbazole	LLL. Benzo(g,h,i)perylene
E. 1,4-Dichlorobenzene	T. 4-Chloroaniline	II. 4-Nitrophenol	XX. Di-n-butylphthalate	MMM. Bis(2-Chloroisopropyl)ether
F. 1,2-Dichlorobenzene	U. Hexachlorobutadiene	JJ. Dibenzofuran	YY. Fluoranthene	NNN. Aniline
G. 2-Methylphenol	V. 4-Chloro-3-methylphenol	KK. 2,4-Dinitrotoluene	ZZ. Pyrene	OOO. N-Nitrosodimethylamine
H. 2,2'-Oxybis(1-chloropropane)	W. 2-Methylnaphthalene	LL. Diethylphthalate	AAA. Butylbenzylphthalate	PPP. Benzoic Acid
I. 4-Methylphenol	X. Hexachlorocyclopentadiene	MM. 4-Chlorophenyl-phenyl ether	BBB. 3,3'-Dichlorobenzidine	QQQ. Benzyl alcohol
J. N-Nitroso-di-n-propylamine	Y. 2,4,6-Trichlorophenol	NN. Fluorene	CCC. Benzo(a)anthracene	RRR. Pyridine
K. Hexachloroethane	Z. 2,4,5-Trichlorophenol	OO. 4-Nitroaniline	DDD. Chrysene	SSS. Benzidine
L. Nitrobenzene	AA. 2-Chloronaphthalene	PP. 4,6-Dinitro-2-methylphenol	EEE. Bis(2-ethylhexyl)phthalate	TTT. 1-Methylnaphthalene
M. Isophorone	BB. 2-Nitroaniline	QQ. N-Nitrosodiphenylamine (1)	FFF. Di-n-octylphthalate	UUU.
N. 2-Nitrophenol	CC. Dimethylphthalate	RR. 4-Bromophenyl-phenylether	GGG. Benzo(b)fluoranthene	VVV.
O. 2,4-Dimethylphenol	DD. Acenaphthylene	SS. Hexachlorobenzene	HHH. Benzo(k)fluoranthene	WWW.

LDC #: 25911 42C

VALIDATION FINDINGS WORKSHEET
Blanks

Page: 1 of 1
Reviewer: FT
2nd Reviewer: A

METHOD: ~~GC/MS BNA (EPA SW 846 Method 8270)~~ 1625C

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a method blank analyzed for each matrix?
Y N N/A Was a method blank analyzed for each concentration preparation level?
Y N N/A Was a method blank associated with every sample?
Y N N/A Was the blank contaminated? If yes, please see qualification below.

(B)

Blank extraction date: 4/4/11 **Blank analysis date:** 4/11/11

Conc. units: ng/kg Associated Samples: All

Compound	Blank ID	5X							
		Sample Identification							
	SBLKLB092	1	2	2	3	4	5	6	
N-Nitrosodimethylamine	22	110	11	112	47.7/4	54.7/4	61.2/4	80.2/4	

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
Common contaminants such as the phthalates and TICs noted above that were detected in samples within ten times the associated method blank concentration were qualified as not detected, "U". Other contaminants within five times the method blank concentration were also qualified as not detected, "U".

LDC #: 25911 42C

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Page: 1 of 1
Reviewer: FT
2nd Reviewer:

METHOD: GC/~~MS BNA (EPA SW 846 Method 8270)~~ 1625C

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.

Y N N/A Was a MS/MSD analyzed every 20 samples of each matrix?

Y N N/A Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?

#	Date	MS/MSD ID	Compound	MS %R (Limits)	MSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
		7+8	*	132 (70-130)	140 (70-130)	( )	1	J/A det (Q)
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
		* N-Nitrosodimethylamine		( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		

LDC #: 25911 42C

VALIDATION FINDINGS WORKSHEET
Field Duplicates

Reviewer: FT
2nd reviewer: C

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Y N N/A Were field duplicate pairs identified in this SDG?
Y N N/A Were target compounds identified in the field duplicate pairs?

(Fd)

Compound	Concentration (ng/kg)		RPD ≤50
	1	3	
N. Nitrosodimethylamine	379 U	47.7	200 J/UJ/A

Compound	Concentration ( )		RPD

Compound	Concentration ( )		RPD

Compound	Concentration ( )		RPD

LDC #: 25911 42C

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: FT
2nd Reviewer: [illegible]

METHOD: ~~GC/MS BNA (EPA SW 846 Method 8270)~~ 1625 C

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

RRF = $(A_x)(C_{is})/(A_{is})(C_x)$
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

A_x = Area of compound,
C_x = Concentration of compound,
S = Standard deviation of the RRFs,

A_{is} = Area of associated internal standard
C_{is} = Concentration of internal standard
X = Mean of the RRFs

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Reported RRF (10 std)	Recalculated RRF (10 std)	Reported Average RRF (initial)	Recalculated Average RRF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	3/31/11	~~Phenol (1st internal standard)~~ NDMA	1.607	1.607	1.633	1.633	16	16
			~~Naphthalene (2nd internal standard)~~						
			Fluorene (3rd internal standard)						
			Pentachlorophenol (4th internal standard)						
			Bis(2-ethylhexyl)phthalate (5th internal standard)						
			~~Benzo(a)pyrene (6th internal standard)~~						
2	ICAL	4/14/11	~~Phenol (1st internal standard)~~ NDMA	1.605	1.605	1.705	1.705	19	19
			Naphthalene (2nd internal standard)						
			Fluorene (3rd internal standard)						
			Pentachlorophenol (4th internal standard)						
			Bis(2-ethylhexyl)phthalate (5th internal standard)						
			~~Benzo(a)pyrene (6th internal standard)~~						
3			Phenol (1st internal standard)						
			Naphthalene (2nd internal standard)						
			Fluorene (3rd internal standard)						
			Pentachlorophenol (4th internal standard)						
			Bis(2-ethylhexyl)phthalate (5th internal standard)						
			Benzo(a)pyrene (6th internal standard)						

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25914 2C

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: FT
2nd Reviewer: [illegible]

METHOD: ~~GC/MS BNA (EPA SW 846 Method 8270C)~~ 1625C

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
RRF = $(A_x)(C_{is})/(A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Average RRF (initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
1	CCV 10:59	4/11/11	~~Phenol~~ NDMA (1st internal standard)	0.69902	0.76319	0.76319	9.179	9.179
			Naphthalene (2nd internal standard)					
			Fluorene (3rd internal standard)					
			Pentachlorophenol (4th internal standard)					
			Bis(2-ethylhexyl)phthalate (5th internal standard)					
			Benzo(a)pyrene (6th internal standard)					
2	CCV 13:59	4/11/11	~~Phenol (1st internal standard)~~ NDMA	↓	0.83689	0.83689	19.72	19.72
			Naphthalene (2nd internal standard)					
			Fluorene (3rd internal standard)					
			Pentachlorophenol (4th internal standard)					
			Bis(2-ethylhexyl)phthalate (5th internal standard)					
			Benzo(a)pyrene (6th internal standard)					
3	CCV 15:24	4/14/11	~~Phenol (1st internal standard)~~ NDMA	0.51358	0.47884	0.47884	6.7639	6.7639
			Naphthalene (2nd internal standard)					
			Fluorene (3rd internal standard)					
			Pentachlorophenol (4th internal standard)					
			Bis(2-ethylhexyl)phthalate (5th internal standard)					
			Benzo(a)pyrene (6th internal standard)					

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25911 42C

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT
2nd reviewer: E

METHOD: ~~GC/MS Semivolatiles (EPA SW 846 Method 8270)~~ 1625C

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
~~Nitrobenzene-d5~~ N-Nitrosodimethylamine-d6	25	26.471	106	106	0
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5					
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5					
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

LDC #: 35911 42C

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Reviewer: FT
2nd Reviewer: [illegible]

METHOD: ~~GC/MS BNA (EPA SW 846 Method 8270)~~ 1625C

The percent recoveries (%R) and Relative Percent Difference (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SSC - SC)/SA Where: SSC = Spiked sample concentration; SA = Spike added; SC = Sample concentation

RPD = I MSC - MSC I * 2/(MSC + MSDC) MSC = Matrix spike concentration MSDC = Matrix spike duplicate concentration

MS/MSD samples: 7+8

Compound	Spike Added (ng/kg)		Sample Concentration (ng/kg)	Spiked Sample Concentration (ng/kg)		Matrix Spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	-----	MS	MSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalculated
Phenol											
N-Nitroso-di-n-propylamine											
4-Chloro-3-methylphenol											
Acenaphthene											
Pentachlorophenol											
Pyrene											
NDMA	833.33	833.33	ND	1101.77	1164.52	132	132	140	140	6	6

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25911420

VALIDATION FINDINGS WORKSHEET

Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: FT

2nd Reviewer: [illegible]

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SC/SA

Where: SSC = Spike concentration
SA = Spike added

RPD = I LCSC - LCSDC I * 2/(LCSC + LCSDC)

LCSC = Laboraotry control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCS/LCSD samples: LCS

Compound	Spike Added (ug/Kg)		Spike Concentration (ug/Kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
~~Phenol~~ NDMA	833.33	NA	636.89	NA	76	76	NA			
N-Nitroso-di-n-propylamine										
4-Chloro-3-methylphenol										
Acenaphthene										
Pentachlorophenol										
Pyrene										

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25911 42 C

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: FT
2nd reviewer: [illegible]

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(V_t)(DF)(2.0)}{(A_{is})(RRF)(V_o)(V_i)(\%S)}$

A_x = Area of the characteristic ion (EICP) for the compound to be measured

A_{is} = Area of the characteristic ion (EICP) for the specific internal standard

I_s = Amount of internal standard added in nanograms (ng)

V_o = Volume or weight of sample extract in milliliters (ml) or grams (g).

V_i = Volume of extract injected in microliters (ul)

V_t = Volume of the concentrated extract in microliters (ul)

Df = Dilution Factor.

%S = Percent solids, applicable to soil and solid matrices only.

2.0 = Factor of 2 to account for GPC cleanup

Example:

Sample I.D. #2, NDMA

Conc. = $\frac{(1982)(25)(1000)(\quad)(\quad)}{(96010)(1.633)(30)(0.94)(\quad)}$

= 112 ng/kg

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	March 24, 2011
LDC Report Date:	August 9, 2011
Matrix:	Soil
Parameters:	Polychlorinated Biphenyls
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE112

Sample Identification

SL-199-SA5A-SB-2.5-3.5
SL-223-SA5A-SB-4.0-5.0
SL-223-SA5A-SB-8.5-9.5
DUP10-SA5A-QC-032411
SL-226-SA5A-SB-4.0-5.0
SL-225-SA5A-SB-4.0-5.0
SL-224-SA5A-SB-4.0-5.0
SL-223-SA5A-SB-4.0-5.0MS
SL-223-SA5A-SB-4.0-5.0MSD

Introduction

This data review covers 9 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8082 for Polychlorinated Biphenyls.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/ECD Instrument Performance Check

Instrument performance was acceptable unless noted otherwise under initial calibration and continuing calibration sections.

III. Initial Calibration

Initial calibration of multicomponent compounds was performed for the primary (quantitation) column as required by the method.

The percent relative standard deviations (%RSD) were less than or equal to 20.0% for all compounds.

Retention time windows were evaluated and considered technically acceptable.

IV. Continuing Calibration

Continuing calibration was performed at required frequencies.

The percent differences (%D) of calibration factors in continuing standard mixtures were within the 20.0% QC limits.

The percent difference (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

Retention times (RT) of all compounds in the calibration standards were within QC limits.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polychlorinated biphenyl contaminants were found in the method blanks.

No field duplicates were identified in this SDG.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Florisil Cartridge Check

Florisil cleanup was not required and therefore not performed in this SDG.

XI. GPC Calibration

GPC cleanup was not required and therefore not performed in this SDG.

XII. Target Compound Identification

All target compound identifications were within validation criteria.

XIII. Compound Quantitation and Reported CRQLs

All compound quantitation and CRQLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE112	All compounds reported below the RL.	J (all detects)	A

XIV. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XV. Field Duplicates

Samples SL-223-SA5A-SB-4.0-5.0 and DUP10-SA5A-QC-032411 were identified as field duplicates. No polychlorinated biphenyls were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/Kg)		RPD (Limits)	Flags	A or P
	SL-223-SA5A-SB-4.0-5.0	DUP10-SA5A-QC-032411			
PCB-1260	4.0	5.2	26 (≤50)	-	-

Santa Susana Field Laboratory
Polychlorinated Biphenyls - Data Qualification Summary - SDG DE112

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE112	SL-199-SA5A-SB-2.5-3.5 SL-223-SA5A-SB-4.0-5.0 SL-223-SA5A-SB-8.5-9.5 DUP10-SA5A-QC-032411 SL-226-SA5A-SB-4.0-5.0 SL-225-SA5A-SB-4.0-5.0 SL-224-SA5A-SB-4.0-5.0	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
Polychlorinated Biphenyls - Laboratory Blank Data Qualification Summary - SDG DE112

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Polychlorinated Biphenyls - Field Blank Data Qualification Summary - SDG DE112

No Sample Data Qualified in this SDG

LDC #: 25911U3b

VALIDATION COMPLETENESS WORKSHEET

Level IV

SDG #: DE112

Laboratory: Lancaster Laboratories

Date: 8/9/11

Page: 1 of 1

Reviewer: [illegible]

2nd Reviewer: [illegible]

METHOD: GC Polychlorinated Biphenyls (EPA SW 846 Method 8082)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 3/24/11
II.	GC/ECD Instrument Performance Check	NA	
III.	Initial calibration	A	% RSD ≤ 20
IV.	Continuing calibration/ICV	A	ICV/CCV ≤ 20
V.	Blanks	A	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	A	
VIII.	Laboratory control samples	A	LCS
IX.	Regional quality assurance and quality control	N	
X.	Florisil cartridge check	N	
XI.	GPC Calibration	N	
XII.	Target compound identification	A	
XIII.	Compound quantitation and reported CRQLs	A	
XIV.	Overall assessment of data	A	
XV.	Field duplicates	SW	D = 2, 4
XVI.	Field blanks	N	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:

SOIL

1	SL-199-SA5A-SB-2.5-~~63.5~~ 3.5	11	PBLK 40090	21		31	
2	SL-223-SA5A-SB-4.0-5.0	12		22		32	
3	SL-223-SA5A-SB-8.5-9.5	13		23		33	
4	DUP10-SA5A-QC-032411	14		24		34	
5	SL-226-SA5A-SB-4.0-5.0	15		25		35	
6	SL-225-SA5A-SB-4.0-5.0	16		26		36	
7	SL-224-SA5A-SB-4.0-5.0	17		27		37	
8	SL-223-SA5A-SB-4.0-5.0MS	18		28		38	
9	SL-223-SA5A-SB-4.0-5.0MSD	19		29		39	
10		20		30		40	

Notes:

LDC #: 25911436
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Page: 1 of 2
Reviewer: [illegible]
2nd Reviewer: [illegible]

Method: ✓ GC ____ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation?		✓		
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?			✓	
Were the RT windows properly established?	✓			
IV. Continuing calibration				
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20%.0 or percent recoveries 80-120%?	✓			
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?	✓			
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	

LDC #: 25911436
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Reviewer: FJ
2nd Reviewer: C

Validation Area	Yes	No	NA	Findings/Comments
X. Target compound identification				
Were the retention times of reported detects within the RT windows?	✓		✓	
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.	✓			
Target compounds were detected in the field duplicates.		✓		
XV. Field blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

LDC #: 25911436

SDG #: See cover

VALIDATION FINDINGS WORKSHEET
Field Duplicates

Page: 6 of 1

Reviewer: FT

2nd reviewer: [illegible]

METHOD: ___ **GC** ___ **HPLC**

Y N N/A Were field duplicate pairs identified in this SDG?

Y N N/A Were target compounds detected in the field duplicate pairs?

Compound	Concentration (ug/kg)		%RPD Limit 50	Qualification Parent only / All Samples
	2	4		
RCB-1260	4.0	5.2	26	

Compound	Concentration ( )		%RPD Limit _____	Qualification Parent only / All Samples

LDC #: 591143h
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC ✓ HPLC _____

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

#	Standard ID	Calibration Date	Compound	Reported CF (200 std)	Recalculated CF (200 std)	Reported Average CF (initial)	Recalculated Average CF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL ZBmulti R1	3/31/11	Aroclor 1260-1	18	18	19	19	3	3
	ZBmulti R2	3/31/11	↓	253	253	254	254	9.4	9.4
2									
3									
4									

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: J591143b
SDG #: pw cover

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: EJ
2nd Reviewer: [illegible]

METHOD: GC ✓ HPLC ____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF - CF)/ave. CF
CF = A/C

Where: ave. CF = initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(Ical)/ CCV Conc.	Reported CF/Conc. CCV	Recalculated CF/Conc. CCV	Reported %D	Recalculated %D
1	ccv 13:28	4/6/11	Aroclor 1260	200.0	206.41	206.41	3.2	3.2
	ZBR1							
	ZBR2		↓	200.0	205.20	205.20	2.6	2.6
2	~~ccv 13:46~~	~~4/6/11~~	↓					
	ZBR1							
3								
4								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25711430

SDG #: see cover

METHOD: ✓ GC ___ HPLC

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT

2nd reviewer: [illegible]

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
TCMX	ZB multi R2	1.04	0.830805	80	80	0
PCB	↓	1.04	0.872272	84	84	0

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

LDC #: [illegible]
SDG #: per cover

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Reviewer: FT
2nd Reviewer: [illegible]

METHOD: __ GC __HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

%Recovery = 100 * (SSC - SC)/SA Where SSC = Spiked sample concentration SC = Sample concentration
SA = Spike added
RPD =(((SSCMS - SSCMSD) * 2) / (SSCMS + SSCMSD))*100 MS = Matrix spike MSD = Matrix spike duplicate

MS/MSD samples: 8 + 9

Compound	Spike Added ( )		Sample Conc. ( )	Spike Sample Concentration ( )		Matrix spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	—	MS	MSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)											
Diesel (8015)											
Benzene (8021B)											
Methane (RSK-175)											
2,4-D (8151)											
Dinoseb (8151)											
Naphthalene (8310)											
Anthracene (8310)											
HMX (8330)											
2,4,6-Trinitrotoluene (8330)											
PCB-1260	16.64	16.64	3.56	16.09	19.02	75	75	93	93	17	17

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25911436
SDG #: pu cover

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: ✓ GC __HPLC

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100* (SSC-SC)/SA
RPD = I LCS - LCSD I * 2/(LCS + LCSD)

Where: SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory control sample percent recovery
SC = Concentration
LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: LCS

Compound	Spike Added (ug/kg)		Spiked Sample Concentration (ug/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)										
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)										
2,4,6-Trinitrotoluene (8330)										
PCB - 1260	16.67	NA	15.9	NA	95	95	NA			

Comments: Refer to Labpratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 2591U3b
SDG #: pu series

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: B
2nd Reviewer: A

METHOD: ✓ GC ___ HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= (A)(Fv)(Df) / (RF)(Vs or Ws)(%S/100)

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound in the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID. #1 Compound Name Aroclor 1260

Conc. = 3.545 / 0.88

= 4.02 ug/kg

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications
	#2 Aroclor 1260	-1 = 2348.71997-1 (2000) / 19 (60.2)(1000)	= 4.1	Aroclor 1260	-1 = 4.1
					2 = 2.94
					3 = 1.59
					4 = 4.64
					5 = 4.28
					6 = 3.69
					3.545

Comments:

SAMPCALew.wpd

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: March 24, 2011

LDC Report Date: August 11, 2011

Matrix: Soil

Parameters: Metals

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE112

Sample Identification

SL-223-SA5A-SB-4.0-5.0
SL-223-SA5A-SB-8.5-9.5
DUP10-SA5A-QC-032411
SL-226-SA5A-SB-4.0-5.0
SL-225-SA5A-SB-4.0-5.0
SL-224-SA5A-SB-4.0-5.0
SL-223-SA5A-SB-4.0-5.0MS
SL-223-SA5A-SB-4.0-5.0MSD
SL-223-SA5A-SB-4.0-5.0DUP
SL-199-SA5A-SB-2.5-3.5

Introduction

This data review covers 10 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Methods 6010B, 6020, and 7000 for Metals. The metals analyzed were Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Phosphorus, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, and Zirconium.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review (January 2010).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. ICPMS Tune

The mass calibration was within 0.1 AMU and the percent relative standard deviation (%RSD) was less than or equal to 5% .

III. Calibration

An initial calibration was performed.

The frequency and analysis criteria of the initial calibration verification (ICV) and continuing calibration verification (CCV) were met.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No metal contaminants were found in the initial, continuing and preparation blanks with the following exceptions:

Method Blank ID	Analyte	Maximum Concentration	Associated Samples
PB (prep blank)	Calcium Copper Nickel Phosphorus Tin	6.360 mg/Kg 0.195 mg/Kg 0.125 mg/Kg 1.280 mg/Kg 1.864 mg/Kg	All samples in SDG DE112
ICB/CCB	Titanium	1.8 ug/L	SL-223-SA5A-SB-4.0-5.0 SL-223-SA5A-SB-8.5-9.5 SL-199-SA5A-SB-2.5-3.5
ICB/CCB	Titanium	2.9 ug/L	DUP10-SA5A-QC-032411 SL-226-SA5A-SB-4.0-5.0 SL-225-SA5A-SB-4.0-5.0 SL-224-SA5A-SB-4.0-5.0

Data qualification by the initial, continuing and preparation blanks (ICB/CCB/PBs) was based on the maximum contaminant concentration in the ICB/CCB/PBs in the analysis of each analyte. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated method blanks with the following exceptions:

Sample	Analyte	Reported Concentration	Modified Final Concentration
SL-223-SA5A-SB-4.0-5.0	Tin	3.3 mg/Kg	3.3U mg/Kg
SL-223-SA5A-SB-8.5-9.5	Tin	3.4 mg/Kg	3.4U mg/Kg
DUP10-SA5A-QC-032411	Tin	3.3 mg/Kg	3.3U mg/Kg
SL-226-SA5A-SB-4.0-5.0	Tin	3.5 mg/Kg	3.5U mg/Kg
SL-225-SA5A-SB-4.0-5.0	Tin	3.6 mg/Kg	3.6U mg/Kg
SL-224-SA5A-SB-4.0-5.0	Tin	3.2 mg/Kg	3.2U mg/Kg
SL-199-SA5A-SB-2.5-3.5	Tin	3.5 mg/Kg	3.5U mg/Kg

No field blanks were identified in this SDG.

V. ICP Interference Check Sample (ICS) Analysis

The frequency of analysis was met.

The criteria for analysis were met.

VI. Matrix Spike Analysis

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Analyte	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
SL-223-SA5A-SB-4.0-5.0MS/MSD (All samples in SDG DE112)	Antimony	24 (75-125)	30 (75-125)	-	J (all detects) UJ (all non-detects)	A
SL-223-SA5A-SB-4.0-5.0MS/MSD (All samples in SDG DE112)	Chromium Copper Nickel Phosphorus Potassium	129 (75-125) 133 (75-125) 138 (75-125) 151 (75-125) 198 (75-125)	- - - - 155 (75-125)	- - - - -	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	A

VII. Duplicate Sample Analysis

Duplicate (DUP) sample analyses were reviewed for each matrix as applicable. Results were within QC limits with the following exceptions:

DUP ID (Associated Samples)	Analyte	RPD (Limits)	Difference (Limits)	Flag	A or P
SL-223-SA5A-SB-4.0-5.0DUP (All samples in SDG DE112)	Barium Chromium Cobalt Copper Zinc	27 (≤20) 22 (≤20) 24 (≤20) 26 (≤20) 24 (≤20)	- - - - -	J (all detects) UJ (all non-detects)	A

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Internal Standards

All internal standard percent recoveries (%R) were within QC limits.

X. Furnace Atomic Absorption QC

Graphite furnace atomic absorption was not utilized in this SDG.

XI. ICP Serial Dilution

ICP serial dilution analysis was performed by the laboratory. The analysis criteria were met with the following exceptions:

Diluted Sample	Analyte	%D (Limits)	Associated Samples	Flag	A or P
SL-223-SA5A-SB-4.0-5.0	Barium Cobalt Copper Lead	14 (≤10) 13 (≤10) 13 (≤10) 25 (≤10)	All samples in SDG DE112	J (all detects) UJ (all non-detects)	A

XII. Sample Result Verification

All sample result verifications were acceptable.

All metals reported below the RL and above the MDL were qualified as follows:

Sample	Analyte	Flag	A or P
All samples in SDG DE112	All analytes reported below the RL and above the MDL.	J (all detects)	A

XIII. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XIV. Field Duplicates

Samples SL-223-SA5A-SB-4.0-5.0 and DUP10-SA5A-QC-032411 were identified as field duplicates. No metals were detected in any of the samples with the following exceptions:

Analyte	Concentration (mg/Kg)		RPD (Limits)	Flags	A or P
	SL-223-SA5A-SB-4.0-5.0	DUP10-SA5A-QC-032411			
Aluminum	14600	16300	11 (≤50)	-	-
Antimony	0.11	0.079	33 (≤50)	-	-
Arsenic	4.1	4.5	9 (≤50)	-	-
Barium	121	100	19 (≤50)	-	-
Beryllium	0.46	0.64	33 (≤50)	-	-
Boron	7.7	8.6	11 (≤50)	-	-
Cadmium	0.14	0.058	83 (≤50)	J (all detects)	A
Calcium	2830	2670	6 (≤50)	-	-
Chromium	16.8	17.3	3 (≤50)	-	-
Cobalt	6.6	6.0	10 (≤50)	-	-
Copper	9.9	8.2	19 (≤50)	-	-
Iron	18900	20000	6 (≤50)	-	-
Lead	5.7	6.0	5 (≤50)	-	-
Lithium	22.5	21.2	6 (≤50)	-	-
Magnesium	4100	4310	5 (≤50)	-	-
Manganese	282	345	20 (≤50)	-	-
Molybdenum	0.48	0.45	6 (≤50)	-	-
Nickel	13.8	13.1	5 (≤50)	-	-
Phosphorus	345	370	7 (≤50)	-	-

Analyte	Concentration (mg/Kg)		RPD (Limits)	Flags	A or P
	SL-223-SA5A-SB-4.0-5.0	DUP10-SA5A-QC-032411			
Potassium	3630	4120	13 (≤50)	-	-
Selenium	0.12	0.13	8 (≤50)	-	-
Silver	0.026	0.044	51 (≤50)	J (all detects)	A
Sodium	221	195	13 (≤50)	-	-
Strontium	17.7	21.3	18 (≤50)	-	-
Thallium	0.24	0.31	25 (≤50)	-	-
Tin	3.3	3.3	0 (≤50)	-	-
Titanium	1130	1160	3 (≤50)	-	-
Vanadium	34.8	33.7	3 (≤50)	-	-
Zinc	92.5	50.0	60 (≤50)	J (all detects)	A
Zirconium	1.5	1.0	40 (≤50)	-	-

Santa Susana Field Laboratory
Metals - Data Qualification Summary - SDG DE112

SDG	Sample	Analyte	Flag	A or P	Reason (Code)
DE112	SL-223-SA5A-SB-4.0-5.0 SL-223-SA5A-SB-8.5-9.5 DUP10-SA5A-QC-032411 SL-226-SA5A-SB-4.0-5.0 SL-225-SA5A-SB-4.0-5.0 SL-224-SA5A-SB-4.0-5.0 SL-199-SA5A-SB-2.5-3.5	Antimony	J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicate (%R) (Q)
DE112	SL-223-SA5A-SB-4.0-5.0 SL-223-SA5A-SB-8.5-9.5 DUP10-SA5A-QC-032411 SL-226-SA5A-SB-4.0-5.0 SL-225-SA5A-SB-4.0-5.0 SL-224-SA5A-SB-4.0-5.0 SL-199-SA5A-SB-2.5-3.5	Chromium Copper Nickel Phosphorus Potassium	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	A	Matrix spike/Matrix spike duplicate (%R) (Q)
DE112	SL-223-SA5A-SB-4.0-5.0 SL-223-SA5A-SB-8.5-9.5 DUP10-SA5A-QC-032411 SL-226-SA5A-SB-4.0-5.0 SL-225-SA5A-SB-4.0-5.0 SL-224-SA5A-SB-4.0-5.0 SL-199-SA5A-SB-2.5-3.5	Barium Chromium Cobalt Copper Zinc	J (all detects) UJ (all non-detects)	A	Duplicate sample analysis (RPD) (E)
DE112	SL-223-SA5A-SB-4.0-5.0 SL-223-SA5A-SB-8.5-9.5 DUP10-SA5A-QC-032411 SL-226-SA5A-SB-4.0-5.0 SL-225-SA5A-SB-4.0-5.0 SL-224-SA5A-SB-4.0-5.0 SL-199-SA5A-SB-2.5-3.5	Barium Cobalt Copper Lead	J (all detects) UJ (all non-detects)	A	ICP serial dilution (%D) (A)
DE112	SL-223-SA5A-SB-4.0-5.0 SL-223-SA5A-SB-8.5-9.5 DUP10-SA5A-QC-032411 SL-226-SA5A-SB-4.0-5.0 SL-225-SA5A-SB-4.0-5.0 SL-224-SA5A-SB-4.0-5.0 SL-199-SA5A-SB-2.5-3.5	All analytes reported below the RL and above the MDL.	J (all detects)	A	Sample result verification (Z)
DE112	SL-223-SA5A-SB-4.0-5.0 DUP10-SA5A-QC-032411	Cadmium Silver Zinc	J (all detects) J (all detects) J (all detects)	A	Field duplicates (RPD) (FD)

Santa Susana Field Laboratory
Metals - Laboratory Blank Data Qualification Summary - SDG DE112

SDG	Sample	Analyte	Modified Final Concentration	A or P	Code
DE112	SL-223-SA5A-SB-4.0-5.0	Tin	3.3U mg/Kg	A	B

SDG	Sample	Analyte	Modified Final Concentration	A or P	Code
DE112	SL-223-SA5A-SB-8.5-9.5	Tin	3.4U mg/Kg	A	B
DE112	DUP10-SA5A-QC-032411	Tin	3.3U mg/Kg	A	B
DE112	SL-226-SA5A-SB-4.0-5.0	Tin	3.5U mg/Kg	A	B
DE112	SL-225-SA5A-SB-4.0-5.0	Tin	3.6U mg/Kg	A	B
DE112	SL-224-SA5A-SB-4.0-5.0	Tin	3.2U mg/Kg	A	B
DE112	SL-199-SA5A-SB-2.5-3.5	Tin	3.5U mg/Kg	A	B

Santa Susana Field Laboratory
Metals - Field Blank Data Qualification Summary - SDG DE112

No Sample Data Qualified in this SDG

LDC #: 25911U4

SDG #: DE112

Laboratory: Lancaster Laboratories

VALIDATION COMPLETENESS WORKSHEET

Level IV

Date: 8-2-11

Page: 1 of 1

Reviewer: [illegible]

2nd Reviewer: [illegible]

METHOD: Metals (EPA SW 846 Method 6010B/6020A/7000)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 3/24/11
II.	ICP/MS Tune	A	
III.	Calibration	A	
IV.	Blanks	SW	
V.	ICP Interference Check Sample (ICS) Analysis	SW	
VI.	Matrix Spike Analysis	SW	MS/D
VII.	Duplicate Sample Analysis	SW	Dup
VIII.	Laboratory Control Samples (LCS)	A	LCS
IX.	Internal Standard (ICP-MS)	A	
X.	Furnace Atomic Absorption QC	N	Not utilized
XI.	ICP Serial Dilution	SW	
XII.	Sample Result Verification	A	
XIII.	Overall Assessment of Data	A	
XIV.	Field Duplicates	SW	(1,3)
XV	Field Blanks	N	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: soil

1	SL-223-SA5A-SB-4.0-5.0	11	RB5	21		31	
2	SL-223-SA5A-SB-8.5-9.5	12		22		32	
3	DUP10-SA5A-QC-032411	13		23		33	
4	SL-226-SA5A-SB-4.0-5.0	14		24		34	
5	SL-225-SA5A-SB-4.0-5.0	15		25		35	
6	SL-224-SA5A-SB-4.0-5.0	16		26		36	
7	SL-223-SA5A-SB-4.0-5.0MS	17		27		37	
8	SL-223-SA5A-SB-4.0-5.0MSD	18		28		38	
9	SL-223-SA5A-SB-4.0-5.0DUP	19		29		39	
10	SL-199-SA5A-SB-2.5-3.5	20		30		40	

Notes:

LDC #: 259104

VALIDATION FINDINGS CHECKLIST

Reviewer: CR
2nd Reviewer: W

Method: Metals (EPA SW 846 Method 6010B/7000/6020)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. ICP/MS Tune				
Were all isotopes in the tuning solution mass resolution within 0.1 amu?	✓			
Were %RSD of isotopes in the tuning solution ≤5%?	✓			
III. Calibration				
Were all instruments calibrated daily, each set-up time?	✓			
Were the proper number of standards used?	✓			
Were all initial and continuing calibration verification %Rs within the 90-110% (80-120% for mercury) QC limits?	✓			
Were all initial calibration correlation coefficients > 0.995?	✓			
IV. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.	✓			
V. ICP Interference Check Sample				
Were ICP interference check samples performed daily?	✓			
Were the AB solution percent recoveries (%R) with the 80-120% QC limits?	✓			
VI. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and duplicate (DUP) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD or MS/DUP. Soil / Water.	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the 75-125 QC limits? If the sample concentration exceeded the spike concentration by a factor of 4 or more, no action was taken.		✓		
Were the MS/MSD or duplicate relative percent differences (RPD) ≤ 20% for waters and ≤ 35% for soil samples? A control limit of +/- RL(+/-2X RL for soil) was used for samples that were ≤ 5X the RL, including when only one of the duplicate sample values were < 5X the RL.		✓		
VII. Laboratory control samples				
Was an LCS anaylzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the 80-120% QC limits for water samples and laboratory established QC limits for soils?	✓			

DC #: 2591104

VALIDATION FINDINGS CHECKLIST

Reviewer: AR
2nd Reviewer: [illegible]

Validation Area	Yes	No	NA	Findings/Comments
VIII. Furnace Atomic Absorption QC				
If MSA was performed, was the correlation coefficients > 0.995?			✓	
Do all applicable analysies have duplicate injections? (Level IV only)			✓	
For sample concentrations > RL, are applicable duplicate injection RSD values < 20%? (Level IV only)			✓	
Were analytical spike recoveries within the 85-115% QC limits?			✓	
IX. ICP Serial Dilution				
Was an ICP serial dilution analyzed if analyte concentrations were > 50X the MDL (ICP)/>100X the MDL(ICP/MS)?	✓			
Were all percent differences (%Ds) < 10%?		✓		
Was there evidence of negative interference? If yes, professional judgement will be used to qualify the data.		✓		
X. Internal Standards (EPA SW 846 Method 6020/EPA 200.8)				
Were all the percent recoveries (%R) within the 30-120% (6020)/60-125% (200.8) of the intensity of the internal standard in the associated initial calibration?	✓			
If the %Rs were outside the criteria, was a reanalysis performed?		✓		
XI. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?		✓		
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
XII. Sample Result Verification				
Were RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.	✓			
Target analytes were detected in the field duplicates.	✓			
XV. Field blanks				
Field blanks were identified in this SDG.		✓		
Target analytes were detected in the field blanks.			✓	

LDC #: 25911J4

VALIDATION FINDINGS WORKSHEET
Sample Specific Element Reference

Reviewer: CR
2nd reviewer: [illegible]

All circled elements are applicable to each sample.

Sample ID	Matrix	Target Analyte List (TAL)
1-6,10		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
QC: 7-9		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr

LDC #: 25911U4

VALIDATION FINDINGS WORKSHEET
PB/ICB/CCB QUALIFIED SAMPLES

Page: 1 of 1
Reviewer: CR
2nd Reviewer: [illegible]

METHOD: Trace metals (EPA SW 864 Method 6010B/6020/7000) Soil preparation factor applied: 100x x (MS: 2xdil)

Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: All

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit	1	2	3	4	5	6	10			
Ca	6.360			31.8										
Cu	0.195			0.975										
Ni	0.125			0.625										
P	1.280			6.4										
Sn	1.864			9.32	3.3	3.4	3.3	3.5	3.6	3.2	3.5			

Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: 1, 2, 10

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit	No Qualifiers									
Ti			1.8	0.9										

Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: 3-6

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit	No Qualifiers									
Ti			2.9	1.45										

Samples with analyte concentrations within five times the associated ICB, CCB or PB concentration are listed above with the identifications from the Validation Completeness Worksheet. These sample results were qualified as not detected, "U".

Note : a - The listed analyte concentration is the highest ICB, CCB, or PB detected in the analysis of each element.

LDC #: 25911104

VALIDATION FINDINGS WORKSHEET
ICP Interference Check Sample

Reviewer: CR
2nd Reviewer: [illegible]

METHOD: Trace Metals (EPA SW 846 Method 6010/6020/7000)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".
Y N N/A Were ICP interference check samples performed as required?
Y N N/A Were the AB solution percent recoveries (%R) within the control limits of 80-120% ?
LEVEL IV ONLY:
Y N N/A Were recalculated results acceptable? See Level IV Recalculation Worksheet for recalculations.

#	Date	ICS Identification	Analyte	Concentration (ug/L)	Limit (<MDL)	Associated Samples	Qualifications
	3/30/11	ICSA (18:05)	Mn	4	0.78	All	No Qual (> 10x)
	3/30/11	ICSA (20:07)	Mn	4	↓	↓	↓

Comments:

LDC #: 25911C4

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: Trace metals (EPA SW 846 Method 6010/6020/7000)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a matrix spike analyzed for each matrix in this SDG?

Y N N/A Were matrix spike percent recoveries (%R) within the control limits of 75-125? If the sample concentration exceeded the spike concentration by a factor of 4 or more, no action was taken.

Y N N/A Were all duplicate sample relative percent differences (RPD) ≤ 20% for water samples and ≤35% for soil samples?

LEVEL IV ONLY:

Y N N/A Were recalculated results acceptable? See Level IV Recalculation Worksheet for recalculations.

#	MS/MSD ID	Matrix	Analyte	MS %Recovery	MSD %Recovery	RPD (Limits)	Associated Samples	Qualifications
	7/8	S	Sb	24	30			J/UJ/A (Q) (%R=106%)
			Cr	129				J/A (Q)
			Cu	133				
			Ni	138				
			P	151				
			K	198	155			

Comments:

MSD.4SW

LDC #: 25911104

VALIDATION FINDINGS WORKSHEET
Duplicate Analysis

Page: 1 of 1
Reviewer: CR
2nd Reviewer: [illegible]

METHOD: Trace Metals (EPA SW 846 Method 6010/6020/7000)
Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a duplicate sample analyzed for each matrix in this SDG?

Y N N/A Were all duplicate sample relative percent differences (RPD) ≤ 20% for water samples and ≤ 35% for soil samples? If no, see qualifications below. A control limit of ±R.L. (±2X R.L. for soil) was used for sample values that were <5X the R.L., including the case when only one of the duplicate sample values was <5X R.L.. If field blanks were used for laboratory duplicates, note in the Overall Assessment.

LEVEL IV ONLY:

Y N N/A Were recalculated results acceptable? See Level IV Recalculation Worksheet for recalculations.

#	Date	Duplicate ID	Matrix	Analyte	RPD (Limits)	Difference (Limits)	Associated Samples	Qualifications
		9	BS	Ba	27		All	J/UJ/A(E)
				Cr	22			
				Co	24			
				Cu	26			
				Zn	24			

Comments:

DUP.4SW

LDC #: 25911104

VALIDATION FINDINGS WORKSHEET
ICP Serial Dilution

Page: 1 of 1
Reviewer: CR
2nd Reviewer: [illegible]

METHOD: Trace Metals (EPA SW 846 Method 6010/6020/7000)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A If analyte concentrations were > 50X the MDL (ICP) ,or >100X the MDL (ICP/MS), was a serial dilution analyzed?
Y N N/A Were ICP serial dilution percent differences (%D) ≤10%?
Y N N/A Is there evidence of negative interference? If yes, professional judgement will be used to qualify the data.

LEVEL IV ONLY:

Y N N/A Were recalculated results acceptable? See Level IV Recalculation Worksheet for recalculations.

#	Date	Diluted Sample ID	Matrix	Analyte	%D (Limits)	Associated Samples	Qualifications
		1	S	Ba	14	All	J/UJ/A
				Co	13		
				Cu	13		
				Pb	25		

Comments:

SDILICPMS.wpd

LDC#: 25911U4

VALIDATION FINDINGS WORKSHEET
Field Duplicates

Page: 12 of
Reviewer:
2nd Reviewer:

METHOD: Metals (EPA Method 6010B/7000)

Y N NA Were field duplicate pairs identified in this SDG?
Y N NA Were target analytes detected in the field duplicate pairs?

Analyte	Concentration (mg/Kg)		RPD (≤50)	Qualifiers: (Parents Only)
	1	3		
Aluminum	14600	16300	11	
Antimony	0.11	0.079	33	
Arsenic	4.1	4.5	9	
Barium	121	100	19	
Beryllium	0.46	0.64	33	
Boron	7.7	8.6	11	
Cadmium	0.14	0.058	83	Jdet/A (FD)
Calcium	2830	2670	6	
Chromium	16.8	17.3	3	
Cobalt	6.6	6.0	10	
Copper	9.9	8.2	19	
Iron	18900	20000	6	
Lead	5.7	6.0	5	
Lithium	22.5	21.2	6	
Magnesium	4100	4310	5	
Manganese	282	345	20	
Molybdenum	0.48	0.45	6	
Nickel	13.8	13.1	5	
Phosphorus	345	370	7	

LDC#: 25911U4

VALIDATION FINDINGS WORKSHEET
Field Duplicates

Page: 2 of 2
Reviewer: CR
2nd Reviewer: [illegible]

METHOD: Metals (EPA Method 6010B/7000)

Y N NA Were field duplicate pairs identified in this SDG?
Y N NA Were target analytes detected in the field duplicate pairs?

Analyte	Concentration (mg/Kg)		RPD (≤50)	Qualifiers: (Parents Only)
	1	3		
Potassium	3630	4120	13	
Selenium	0.12	0.13	8	
Silver	0.026	0.044	51	Jdet/A (FD)
Sodium	221	195	13	
Strontium	17.7	21.3	18	
Thallium	0.24	0.31	25	
Tin	3.3	3.3	0	
Titanium	1130	1160	3	
Vanadium	34.8	33.7	3	
Zinc	~~82.6~~ 92.5	50.0	~~49~~ 60	J det/A (FD)
Zirconium	1.5	1.0	40	

V:\FIELD DUPLICATES\FD_inorganic\25911U4.wpd

LDC #: ZS91104

VALIDATION FINDINGS WORKSHEET
Initial and Continuing Calibration Calculation Verification

Page: 1 of 1
Reviewer: CB
2nd Reviewer: [illegible]

METHOD: Trace Metals (EPA SW 846 Method 6010/6020/7000)

An initial and continuing calibration verification percent recovery (%R) was recalculated for each type of analysis using the following formula:

$\%R = \frac{Found}{True} \times 100$ Where, Found = concentration (in ug/L) of each analyte measured in the analysis of the ICV or CCV solution
True = concentration (in ug/L) of each analyte in the ICV or CCV source

Standard ID	Type of Analysis	Element	Found (ug/L)	True (ug/L)	Recalculated %R	Reported %R	Acceptable (Y/N)
ICV	ICP (Initial calibration)	Sr	589.27	600	98.2	98.2	Y
ICV	ICP/MS (Initial calibration)	Pb	51.21	50	102.4	102.4	
ICV	CVAA (Initial calibration)	Hg	2.42	2.5	96.8	96.8	
CCV (19:00)	ICP (Continuing calibration)	Zr	498.83	500	99.8	99.8	
CCV (04:58)	ICP/MS (Continuing calibration)	Se	24.89	25	99.6	99.6	
CCV	CVAA (Continuing calibration)	Hg	0.93	1	93	93	
	GFAA (Initial calibration)						
	GFAA (Continuing calibation)						

Comments: Refer to Calibration Verification findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

CALCLC.4SW

LDC #: 25911U4

VALIDATION FINDINGS WORKSHEET
Level IV Recalculation Worksheet

Reviewer: CR
2nd Reviewer: L

METHOD: Trace Metals (EPA SW 846 Method 6010/6020/7000)

Percent recoveries (%R) for an ICP interference check sample, a laboratory control sample and a matrix spike sample were recalculated using the following formula:

$\%R = \frac{Found}{True} \times 100$ Where, Found = Concentration of each analyte measured in the analysis of the sample. For the matrix spike calculation, Found = SSR (spiked sample result) - SR (sample result). True = Concentration of each analyte in the source.

A sample and duplicate relative percent difference (RPD) was recalculated using the following formula:

$RPD = \frac{|S-D|}{(S+D)/2} \times 100$ Where, S = Original sample concentration, D = Duplicate sample concentration

An ICP serial dilution percent difference (%D) was recalculated using the following formula:

$\%D = \frac{|I-SDR|}{I} \times 100$ Where, I = Initial Sample Result (mg/L), SDR = Serial Dilution Result (mg/L) (Instrument Reading x 5)

Sample ID	Type of Analysis	Element	Found / S / I (units)	True / D / SDR (units)	Recalculated %R / RPD / %D	Reported %R / RPD / %D	Acceptable (Y/N)
ICSAB	ICP interference check	Mo	206.6	200	103.3	103.3	Y
LCS	Laboratory control sample	Li	1003.6	1000	100	100	
7	Matrix spike	As	(SSR-SR) 2.7726	2.2502	123	123	
~~2~~ 8 9	Duplicate	V	34.8039	29.1740	18	18	
1	ICP serial dilution	Ti	10098.37	10706.05	6	6	

Comments: Refer to appropriate worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

TOTCLC.4SW

LDC #: 25911V4

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer:
2nd reviewer:

METHOD: Trace Metals (EPA SW 846 Method 6010/6020/7000)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Have results been reported and calculated correctly?
Y N N/A Are results within the calibrated range of the instruments and within the linear range of the ICP?
Y N N/A Are all detection limits below the CRDL?

Detected analyte results for Be were recalculated and verified using the following equation:

Concentration = (RD)(FV)(Dil) / (In. Vol.)

RD = Raw data concentration
FV = Final volume (ml)
In. Vol. = Initial volume (ml) or weight (G)
Dil = Dilution factor

Recalculation:

$$\frac{(100mL)(2)(3.698 ug/L)}{0.934(1.02g)(1000)} = 0.78 mg/kg$$

#	Sample ID	Analyte	Reported Concentration mg/kg	Calculated Concentration mg/kg	Acceptable (Y/N)
	10	Al	22200	22200	Y
		Sb	0.092	0.092	
		As	4.8	4.8	
		Ba	60.5	60.5	
		Be	0.78	0.78	
		B	7.0	7.0	
		Ca	2250	2250	
		Cr	15.9	15.9	
		Co	3.3	3.3	
		Cu	5.4	5.4	
		Fe	23500	23500	
		Pb	6.3	6.3	
		Li	25.1	25.1	
		Mg	4190	4190	
		Mn	153	153	
		Mo	0.31	0.31	
		Ni	8.5	8.5	
		P	95.2	95.2	
		K	1780	1780	
		Se	0.15	0.15	
		Ag	0.024	0.024	
		Na	188	188	
		Tl	0.21	0.21	

LDC #: 2591104

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: CC
2nd reviewer: [illegible]

METHOD: Trace Metals (EPA SW 846 Method 6010/6020/7000)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Have results been reported and calculated correctly?
Y N N/A Are results within the calibrated range of the instruments and within the linear range of the ICP?
Y N N/A Are all detection limits below the CRDL?

Detected analyte results for _____ were recalculated and verified using the following equation:

Concentration = (RD)(FV)(Dil) / (In. Vol.)

RD = Raw data concentration
FV = Final volume (ml)
In. Vol. = Initial volume (ml) or weight (G)
Dil = Dilution factor

Recalculation: see previous page

#	Sample ID	Analyte	Reported Concentration (mg/kg)	Calculated Concentration (mg/kg)	Acceptable (Y/N)
	10	Sn	3.5	3.5	Y
		Ti	1020	1020	
		V	32.0	32.0	
		Zn	43.1	43.1	

Note: _____

RECALC.4SW

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: March 24, 2011

LDC Report Date: August 11, 2011

Matrix: Soil

Parameters: Wet Chemistry

Validation Level: Level IV

Laboratory, Area IV: Lancaster Laboratories

Sample Delivery Group (SDG): DE112

Sample Identification

SL-199-SA5A-SB-2.5-3.5
SL-223-SA5A-SB-4.0-5.0
SL-223-SA5A-SB-8.5-9.5
DUP10-SA5A-QC-032411
SL-226-SA5A-SB-4.0-5.0
SL-225-SA5A-SB-4.0-5.0
SL-224-SA5A-SB-4.0-5.0
SL-223-SA5A-SB-4.0-5.0MS
SL-223-SA5A-SB-4.0-5.0DUP

Introduction

This data review covers 9 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 9012B for Cyanide, EPA Method 300.0 for Nitrate and Fluoride, EPA SW 846 Method 7199 for Hexavalent Chromium, EPA SW 846 Method 9045C for pH, and EPA Method 314.0 for Perchlorate.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review (January 2010).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

All criteria for the initial calibration of each method were met.

III. Calibration Verification

Calibration verification frequency and analysis criteria were met for each method when applicable.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No contaminant concentrations were found in the initial, continuing and preparation blanks.

No field blanks were identified in this SDG.

V. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) analyses were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Analyte	%R (Limits)	Flag	A or P
SL-223-SA5A-SB-4.0-5.0MS (All samples in SDG DE112)	Fluoride	61 (80-120)	J (all detects) UJ (all non-detects)	A

VI. Duplicates

Duplicate (DUP) sample analyses were reviewed for each matrix as applicable. Results were within QC limits.

VII. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

VIII. Sample Result Verification

All sample result verifications were acceptable.

All analytes reported below the RL were qualified as follows:

Sample	Analyte	Flag	A or P
All samples in SDG DE112	All analytes reported below the RL and above the MDL.	J (all detects)	A

IX. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

X. Field Duplicates

Samples SL-223-SA5A-SB-4.0-5.0 and DUP10-SA5A-QC-032411 were identified as field duplicates. No contaminant concentrations were detected in any of the samples with the following exceptions:

Analyte	Concentration		RPD (Limits)	Flags	A or P
	SL-223-SA5A-SB-4.0-5.0	DUP10-SA5A-QC-032411			
Fluoride	3.1 mg/Kg	2.8 mg/Kg	10 (≤50)	-	-
Nitrate	2.0 mg/Kg	2.1 mg/Kg	5 (≤50)	-	-
pH	8.28 units	8.41 units	2 (≤50)	-	-
Hexavalent chromium	1.1U mg/Kg	0.53 mg/Kg	200 (≤50)	J (all detects) UJ (all non-detects)	A

Santa Susana Field Laboratory
Wet Chemistry - Data Qualification Summary - SDG DE112

SDG	Sample	Analyte	Flag	A or P	Reason (Code)
DE029	SL-199-SA5A-SB-2.5-3.5 SL-223-SA5A-SB-4.0-5.0 SL-223-SA5A-SB-8.5-9.5 DUP10-SA5A-QC-032411 SL-226-SA5A-SB-4.0-5.0 SL-225-SA5A-SB-4.0-5.0 SL-224-SA5A-SB-4.0-5.0	Fluoride	J (all detects) UJ (all non-detects)	A	Matrix spike analysis (%R) (Q)
DE029	SL-199-SA5A-SB-2.5-3.5 SL-223-SA5A-SB-4.0-5.0 SL-223-SA5A-SB-8.5-9.5 DUP10-SA5A-QC-032411 SL-226-SA5A-SB-4.0-5.0 SL-225-SA5A-SB-4.0-5.0 SL-224-SA5A-SB-4.0-5.0	All analytes reported below the RL and above the MDL.	J (all detects)	A	Sample result verification (Z)
DE029	SL-223-SA5A-SB-4.0-5.0 DUP10-SA5A-QC-032411	Hexavalent chromium	J (all detects) UJ (all non-detects)	A	Field duplicates (RPD) (FD)

Santa Susana Field Laboratory
Wet Chemistry – Laboratory Blank Data Qualification Summary - SDG DE112

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Wet Chemistry - Field Blank Data Qualification Summary - SDG DE112

No Sample Data Qualified in this SDG

LDC #: 25911U6

SDG #: DE112

Laboratory: Lancaster Laboratories

VALIDATION COMPLETENESS WORKSHEET

Level IV

Date: 8-2-11

Page: 1 of 1

Reviewer: CR

2nd Reviewer: [illegible]

METHOD: (Analyte) Cyanide (EPA SW846 Method 9012B), Nitrate/N, Fluoride (EPA Method 300.0), Hexavalent Chromium (EPA SW846 Method 7199), pH (~~EPA Method 150.1~~/EPA SW846 Method 9045C), Perchlorate (EPA Method 314.0)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 3/24/11
IIa.	Initial calibration	A	
IIb.	Calibration verification	A	
III.	Blanks	A	
IV	Matrix Spike/Matrix Spike Duplicates	SW	MS
V	Duplicates	A	DUP
VI.	Laboratory control samples	A	LCS
VII.	Sample result verification	A	
VIII.	Overall assessment of data	A	
IX.	Field duplicates	SW	(2,4)
X.	Field blanks	N	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: Soil

1	SL-199-SA5A-SB-2.5-~~8~~3.5	11		21		31	
2	SL-223-SA5A-SB-4.0-5.0	12		22		32	
3	SL-223-SA5A-SB-8.5-9.5	13		23		33	
4	DUP10-SA5A-QC-032411	14		24		34	
5	SL-226-SA5A-SB-4.0-5.0	15		25		35	
6	SL-225-SA5A-SB-4.0-5.0	16		26		36	
7	SL-224-SA5A-SB-4.0-5.0	17		27		37	
8	SL-223-SA5A-SB-4.0-5.0MS	18		28		38	
~~9~~	~~SL-223-SA5A-SB-4.0-5.0MSD~~	19		29		39	
10	SL-223-SA5A-SB-4.0-5.0DUP	20		30		40	

Notes:

LDC #: 25911U6

VALIDATION FINDINGS CHECKLIST

Reviewer: CR
2nd Reviewer: V

Method: Inorganics (EPA Method See cover)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Calibration				
Were all instruments calibrated daily, each set-up time?	✓			
Were the proper number of standards used?	✓			
Were all initial calibration correlation coefficients > 0.995?	✓			
Were all initial and continuing calibration verification %Rs within the 90-110% QC limits?	✓			
Were titrant checks performed as required? (Level IV only)			✓	
Were balance checks performed as required? (Level IV only)			✓	
III. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
IV. Matrix spike/Matrix spike duplicates and Duplicates				
Were a matrix spike (MS) and duplicate (DUP) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD or MS/DUP. Soil / Water.	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the 75-125 QC limits? If the sample concentration exceeded the spike concentration by a factor of 4 or more, no action was taken.		✓		
Were the MS/MSD or duplicate relative percent differences (RPD) ≤ 20% for waters and ≤ 35% for soil samples? A control limit of ≤ CRDL(≤ 2X CRDL for soil) was used for samples that were ≤ 5X the CRDL, including when only one of the duplicate sample values were < 5X the CRDL.	✓			
V. Laboratory control samples				
Was an LCS anaylzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the 80-120% (85-115% for Method 300.0) QC limits?	✓			
VI. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?		✓		
Were the performance evaluation (PE) samples within the acceptance limits?			✓	

LDC #: 25911U6

VALIDATION FINDINGS CHECKLIST

Reviewer: CR
2nd Reviewer: W

Validation Area	Yes	No	NA	Findings/Comments
VII. Sample Result Verification				
Were RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
Were detection limits < RL?	✓			
VIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
IX. Field duplicates				
Field duplicate pairs were identified in this SDG.	✓			
Target analytes were detected in the field duplicates.	✓			
X. Field blanks				
Field blanks were identified in this SDG.		✓		
Target analytes were detected in the field blanks.			✓	

LDC #: 25911U6

VALIDATION FINDINGS WORKSHEET
Sample Specific Analysis Reference

Reviewer: CR
2nd reviewer: V

All circled methods are applicable to each sample.

Sample ID	Matrix	Parameter
1		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
2-7		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
QC: 8,10		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4

Comments:

LDC #: 25911G6

VALIDATION FINDINGS WORKSHEET
Matrix Spike Analysis

Page: 1 of 1
Reviewer: CR
2nd Reviewer: [illegible]

METHOD: Inorganics, Method See CR

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a matrix spike analyzed for each matrix in this SDG?

Y N N/A Were matrix spike percent recoveries (%R) within the control limits of ~~75-125~~ 80-120 (85-115% for Method 300.0)? If the sample concentration exceeded the spike concentration by a factor of 4 or more, no action was taken.

LEVEL IV ONLY:

Y N N/A Were recalculated results acceptable? See Level IV Recalculation Worksheet for recalculations.

#	Date	Matrix Spike ID	Matrix	Analyte	%R	Associated Samples	Qualifications
		8	S	F	61	All	J/UJ/A (Q)

Comments:

MS.6

LDC# 25911U6

VALIDATION FINDINGS WORKSHEET
Field Duplicates

Page: 1 of
Reviewer:
2nd Reviewer:

Inorganics, Method See Cover

Y N NA Were field duplicate pairs identified in this SDG?
Y N NA Were target analytes detected in the field duplicate pairs?

Analyte	Concentration (mg/Kg)		RPD (≤50)	(Parents Only)
	2	4		
Fluoride	3.1	2.8	10	
Nitrate	2.0	2.1	5	
pH (units)	8.28	8.41	2	
Hexavalent Chromium	1.1U	0.53	200	J/UJ/A (FD)

V:\FIELD DUPLICATES\FD_inorganic\25911U6.wpd

LDC #: 25911U6

Validation Findings Worksheet
Initial and Continuing Calibration Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

Method: Inorganics, Method See Cover

The correlation coefficient (r) for the calibration of ClO4 was recalculated. Calibration date: 4/11/11

An initial or continuing calibration verification percent recovery (%R) was recalculated for each type of analysis using the following formula:

%R = Found X 100 / True

Where, Found = concentration of each analyte measured in the analysis of the ICV or CCV solution
True = concentration of each analyte in the ICV or CCV source

Type of analysis	Analyte	Standard	Conc. (ug/L)	Response	Recalculated r or r^2	Reported r or r^2	Acceptable (Y/N)
Initial calibration	ClO4	s1	2	0.004	0.9999	0.9999	Y
		s2	4.00	0.01			
		s3	10.00	0.025			
		s4	25.00	0.072			
		s5	100.00	0.292			
Calibration verification	CN	CCV	0.3440	0.15	91	91	
Calibration verification	NO3		1.52	1.5	101	101	
Calibration verification	Cr6+		202.307	200	101	101	

Comments: Refer to Calibration Verification findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25911U6

VALIDATION FINDINGS WORKSHEET
Level IV Recalculation Worksheet

Reviewer: QR
2nd Reviewer: [illegible]

METHOD: Inorganics, Method See cover

Percent recoveries (%R) for a laboratory control sample and a matrix spike sample were recalculated using the following formula:

$$\%R = \frac{Found}{True} \times 100$$

Where, Found = concentration of each analyte measured in the analysis of the sample. For the matrix spike calculation, Found = SSR (spiked sample result) - SR (sample result).
True = concentration of each analyte in the source.

A sample and duplicate relative percent difference (RPD) was recalculated using the following formula:

$$RPD = \frac{|S-D|}{(S+D)/2} \times 100$$

Where, S = Original sample concentration
D = Duplicate sample concentration

Sample ID	Type of Analysis	Element	Found / S (units)	True / D (units)	Recalculated %R / RPD	Reported %R / RPD	Acceptable (Y/N)
LCS	Laboratory control sample	NO3	9.9	10	99	—	Y
8	Matrix spike sample	PO4	(SSR-SR) 39.3	40	98	98	✓
10	Duplicate sample	F	2.8	2.8	0	0	✓

Comments: Refer to appropriate worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25911U6

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: CR
2nd reviewer: [illegible]

METHOD: Inorganics, Method See cover

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Have results been reported and calculated correctly?
Y N N/A Are results within the calibrated range of the instruments?
Y N N/A Are all detection limits below the CRQL?

Compound (analyte) results for NO_3 reported with a positive detect were recalculated and verified using the following equation:

Concentration = $y = 0.2859x - 0.0192$

Recalculation: $\frac{\frac{0.031 + 0.0192}{0.2859} \times 50mL}{0.88\ (5.06g)} = 1.97 mg/kg$

#	Sample ID	Analyte	Reported Concentration (mg/kg)	Calculated Concentration (mg/kg)	Acceptable (Y/N)
	2	F	3.1	3.1	Y
		NO_3	2.0	2.0	✓
		pH	8.28	8.28	✓

Note:

RECALC.6

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	March 24, 2011
LDC Report Date:	August 9, 2011
Matrix:	Soil/Water
Parameters:	Total Petroleum Hydrocarbons as Gasoline
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE112

Sample Identification

SL-223-SA5A-SB-4.0-5.0
SL-223-SA5A-SB-8.5-9.5
DUP10-SA5A-QC-032411
SL-226-SA5A-SB-4.0-5.0
SL-225-SA5A-SB-4.0-5.0
SL-224-SA5A-SB-4.0-5.0
TB-032411
SL-223-SA5A-SB-4.0-5.0MS
SL-223-SA5A-SB-4.0-5.0MSD

Introduction

This data review covers 8 soil samples and one water sample listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8015B for Total Petroleum Hydrocarbons (TPH) as Gasoline.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0% .

III. Calibration Verification

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 20.0% QC limits.

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No total petroleum hydrocarbons as gasoline contaminants were found in the method blanks.

Sample TB-032411 was identified as a trip blank. No total petroleum hydrocarbons as gasoline contaminants were found.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VI. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VII. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE112	All compounds reported below the RL.	J (all detects)	A

X. System Performance

The system performance was acceptable.

XI. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XII. Field Duplicates

Samples SL-223-SA5A-SB-4.0-5.0 and DUP10-SA5A-QC-032411 were identified as field duplicates. No total petroleum hydrocarbons as gasoline were detected in any of the samples.

Santa Susana Field Laboratory
Total Petroleum Hydrocarbons as Gasoline - Data Qualification Summary - SDG DE112

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE112	SL-223-SA5A-SB-4.0-5.0 SL-223-SA5A-SB-8.5-9.5 DUP10-SA5A-QC-032411 SL-226-SA5A-SB-4.0-5.0 SL-225-SA5A-SB-4.0-5.0 SL-224-SA5A-SB-4.0-5.0 TB-032411	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
Total Petroleum Hydrocarbons as Gasoline - Laboratory Blank Data Qualification Summary - SDG DE112

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Total Petroleum Hydrocarbons as Gasoline - Field Blank Data Qualification Summary - SDG DE112

No Sample Data Qualified in this SDG

LDC #: 25911U7 **VALIDATION COMPLETENESS WORKSHEET** Date: 8/9/11
SDG #: DE112 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC TPH as Gasoline (EPA SW 846 Method 8015B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 3/24/11
II	Initial calibration	A	% RSD ≤ 20
III.	Calibration verification/ICV	A	ICV/CCV ≤ 20
IV.	Blanks	A	
V	Surrogate recovery	A	
VI.	Matrix spike/Matrix spike duplicates	A	
VII.	Laboratory control samples	A	LCS/D
VIII.	Target compound identification	A	
IX.	Compound Quantitation and CRQLs	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	ND	D = 1,3
XIII.	Field blanks	ND	TB = 7

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:
soil + water

1 1	SL-223-SA5A-SB-4.0-5.0 S	11 1	BLK15	21		31	
2 1	SL-223-SA5A-SB-8.5-9.5	12 2	BLK3A	22		32	
3 1	DUP10-SA5A-QC-032411	13		23		33	
4 1	SL-226-SA5A-SB-4.0-5.0	14		24		34	
5 1	SL-225-SA5A-SB-4.0-5.0	15		25		35	
6 1	SL-224-SA5A-SB-4.0-5.0	16		26		36	
7 2	TB-032411 W	17		27		37	
8 1	SL-223-SA5A-SB-4.0-5.0MS S	18		28		38	
9 1	SL-223-SA5A-SB-4.0-5.0MSD	19		29		39	
10		20		30		40	

Notes:

LDC #: 591147
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Page: 1 of 2
Reviewer: [illegible]
2nd Reviewer: [illegible]

Method: ✓ GC ____ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation?		✓		
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?			✓	
Were the RT windows properly established?	✓			
IV. Continuing calibration				
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20%.0 or percent recoveries 80-120%?	✓			
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?	✓			
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	

LDC #: 25914U7
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Reviewer: FJ
2nd Reviewer: [illegible]

Validation Area	Yes	No	NA	Findings/Comments
X. Target compound identification				
Were the retention times of reported detects within the RT windows?	✓			
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.	✓			
Target compounds were detected in the field duplicates.		✓		
XV. Field blanks				
Field blanks were identified in this SDG.	✓			
Target compounds were detected in the field blanks.		✓		

LDC #: 591147
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC ✓ HPLC ____

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

4

#	Standard ID	Calibration Date	Compound	Reported CF (550 std)	Recalculated CF (550 std)	Reported Average CF (initial)	Recalculated Average CF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL 110028	5/14/10	GRO	8420	8420	8050	8050	5.2	5.2
				(320)	(320)				
2	ICAL 053988	11/29/10	GRO	35488	35488	37329	37329	12.7	12.7
3									
4									

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25911A7
SDG #: pw cover

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: FJ
2nd Reviewer: A

METHOD: GC ✓ HPLC_____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF - CF)/ave. CF
CF = A/C

Where: ave. CF = Initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(Ical)/ CCV Conc.	Reported CF/Conc. CCV	Recalculated CF/Conc. CCV	Reported %D	Recalculated %D
1	CCV	4/4/11	GRO	550.0	568.18	568.18	3.3	3.3
	11:39							
	110020							
2	CCV	3/28/11	GRO	220.0	215.47	215.47	2.1	2.1
	18:24							
	05398F							
3								
4								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25714 /
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Page: 1 of 1
Reviewer: FT
2nd reviewer: A

METHOD: ✓ GC ___ HPLC

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
TFT	NS	619	457.8706	74	74	0

Sample ID:

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Sample ID:

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

LDC #: 25911/1
SDG #: per cover

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Reviewer: FT
2nd Reviewer: [illegible]

METHOD: ✓ GC ___HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

%Recovery = 100 * (SSC - SC)/SA

RPD =(((SSCMS - SSCMSD} * 2) / (SSCMS + SSCMSD))*100

Where SSC = Spiked sample concentration; SA = Spike added; MS = Matrix spike; SC = Sample concentration; MSD = Matrix spike duplicate

MS/MSD samples: 8 + 9

Compound	Spike Added (mg/kg)		Sample Conc. (mg/kg)	Spike Sample Concentration (mg/kg)		Matrix spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	—	MS	MSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)	9.28	9.28	ND	6.42	6.36	69	69	70	70	1	1
Diesel (8015)											
Benzene (8021B)											
Methane (RSK-175)											
2,4-D (8151)											
Dinoseb (8151)											
Naphthalene (8310)											
Anthracene (8310)											
HMX (8330)											
2,4,6-Trinitrotoluene (8330)											

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25911A7
SDG #: µ covers

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

Reviewer: F
2nd Reviewer: C

METHOD: ✓ GC __ HPLC

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100* (SSC-SC)/SA
RPD = I LCS - LCSD I * 2/(LCS + LCSD)

Where: SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory control sample percent recovery
SC = Concentration
LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: LCS/D water

Compound	Spike Added (ug/L)		Spiked Sample Concentration (ug/L)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)	1100	1100	1100	1200	100	100	109	109	9	9
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)										
2,4,6-Trinitrotoluene (8330)										

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 259L147
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: ✓ GC __ HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= $\frac{(A)(Fv)(Df)}{(RF)(Vs \text{ or } Ws)(\%S/100)}$

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound in the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID._____ Compound Name _____

Concentration =_____

ND

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications

Comments: _____

SAMPCALew.wpd

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	March 24, 2011
LDC Report Date:	August 9, 2011
Matrix:	Soil
Parameters:	Total Petroleum Hydrocarbons as Extractables
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE112

Sample Identification

SL-223-SA5A-SB-4.0-5.0
SL-223-SA5A-SB-8.5-9.5
DUP10-SA5A-QC-032411
SL-226-SA5A-SB-4.0-5.0
SL-225-SA5A-SB-4.0-5.0
SL-224-SA5A-SB-4.0-5.0
SL-223-SA5A-SB-4.0-5.0MS
SL-223-SA5A-SB-4.0-5.0MSD

Introduction

This data review covers 8 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8015B for Total Petroleum Hydrocarbons (TPH) as Extractables.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0% .

III. Calibration Verification

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 20.0% QC limits.

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No total petroleum hydrocarbons as extractable contaminants were found in the method blanks.

No field blanks were identified in this SDG.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VI. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
SL-223-SA5A-SB-4.0-5.0MS/MSD (SL-223-SA5A-SB-4.0-5.0)	EFH (C15-C20)	234 (49-123)	-	69 (≤20)	J (all detects)	A
SL-223-SA5A-SB-4.0-5.0MS/MSD (SL-223-SA5A-SB-4.0-5.0)	EFH (C21-C30)	1671 (49-123)	-112 (49-123)	167 (≤20)	J (all detects) R (all non-detects)	A

VII. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE112	All compounds reported below the RL.	J (all detects)	A

X. System Performance

The system performance was acceptable.

XI. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XII. Field Duplicates

Samples SL-223-SA5A-SB-4.0-5.0 and DUP10-SA5A-QC-032411 were identified as field duplicates. No total petroleum hydrocarbons as extractables were detected in any of the samples with the following exceptions:

Compound	Concentration (mg/Kg)		RPD (Limits)	Flags	A or P
	SL-223-SA5A-SB-4.0-5.0	DUP10-SA5A-QC-032411			
EFH (C30-C40)	16	19	17 (≤50)	-	-
EFH (C21-C30)	6.8	12	55 (≤50)	J (all detects)	A
EFH (C8-C11)	0.48	0.52	8 (≤50)	-	-
EFH (C15-C20)	0.45U	0.76	200 (≤50)	J (all detects) UJ (all non-detects)	A

Santa Susana Field Laboratory
Total Petroleum Hydrocarbons as Extractables - Data Qualification Summary - SDG DE112

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE112	SL-223-SA5A-SB-4.0-5.0	EFH (C15-C20)	J (all detects)	A	Matrix spike/Matrix spike duplicate (%R)(RPD) (Q)
DE112	SL-223-SA5A-SB-4.0-5.0	EFH (C21-C30)	J (all detects) R (all non-detects)	A	Matrix spike/Matrix spike duplicate (%R)(RPD) (Q)
DE112	SL-223-SA5A-SB-4.0-5.0 SL-223-SA5A-SB-8.5-9.5 DUP10-SA5A-QC-032411 SL-226-SA5A-SB-4.0-5.0 SL-225-SA5A-SB-4.0-5.0 SL-224-SA5A-SB-4.0-5.0	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)
DE112	SL-223-SA5A-SB-4.0-5.0 DUP10-SA5A-QC-032411	EFH (C21-C30)	J (all detects)	A	Field duplicates (RPD) (FD)
DE112	SL-223-SA5A-SB-4.0-5.0 DUP10-SA5A-QC-032411	EFH (C15-C20)	J (all detects) UJ (all non-detects)	A	Field duplicates (RPD) (FD)

Santa Susana Field Laboratory
Total Petroleum Hydrocarbons as Extractables - Laboratory Blank Data Qualification Summary - SDG DE112

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Total Petroleum Hydrocarbons as Extractables - Field Blank Data Qualification Summary - SDG DE112

No Sample Data Qualified in this SDG

LDC #: 25911U8 **VALIDATION COMPLETENESS WORKSHEET** Date: 8/9/11
SDG #: DE112 Level IV Page: 1 of 7
Laboratory: Lancaster Laboratories Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC TPH as Extractables (EPA SW 846 Method 8015B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 3/24/11
II	Initial calibration	A	% RSD ≤ 20
III.	Calibration verification/ICV	A	ICV/CCV ≤ 20
IV.	Blanks	A	
V	Surrogate recovery	A	
VI.	Matrix spike/Matrix spike duplicates	SW	
VII.	Laboratory control samples	A	LCS
VIII.	Target compound identification	A	
IX.	Compound Quantitation and CRQLs	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	SW	D = 1,3
XIII.	Field blanks	N	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: SOIL

1†	SL-223-SA5A-SB-4.0-5.0	11	PBLK 35090	21		31	
2†	SL-223-SA5A-SB-8.5-9.5	12		22		32	
3	DUP10-SA5A-QC-032411	13		23		33	
4	SL-226-SA5A-SB-4.0-5.0	14		24		34	
5	SL-225-SA5A-SB-4.0-5.0	15		25		35	
6	SL-224-SA5A-SB-4.0-5.0	16		26		36	
7	SL-223-SA5A-SB-4.0-5.0MS	17		27		37	
8	SL-223-SA5A-SB-4.0-5.0MSD	18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

LDC #: 29118

SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Reviewer: [illegible]

2nd Reviewer: [illegible]

Method: ✓ GC ____ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation?		✓		
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?			✓	
Were the RT windows properly established?	✓			
IV. Continuing calibration				
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20%.0 or percent recoveries 80-120%?	✓			
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?		✓		
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	

LDC #: 759114B
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Reviewer: FJ
2nd Reviewer: A

Validation Area	Yes	No	NA	Findings/Comments
X. Target compound identification				
Were the retention times of reported detects within the RT windows?	✓			
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.	✓			
Target compounds were detected in the field duplicates.	✓			
XV. Field blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

LDC #: 25911U8

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Reviewer: FT
2nd Reviewer: [illegible]

METHOD: ___ GC ___ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG?
Y N N/A Was an MS/MSD analyzed every 20 samples for each matrix or whenever a sample extraction was performed?
Y N N/A Were the MS/MSD percent recoveries (%R) and relative percent differences (RPD) within QC limits?

#	MS/MSD ID	Compound	MS %R (Limits)	MSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
	~~7+8~~	~~EFH (C15-C20)~~	~~167 (49-123)~~	~~-112 (49-123)~~	~~167 (20)~~		
			( )	( )	( )		
			( )	( )	( )		
	7+8	EFH (C15-C20)	234 (49-123)	( )	69 (20)	#1 (Q)	J/A dit
		EFH (C21-C30)	167 (49-123)	-112 (49-123)	167 (↓)	↓ (Q)	J/R/A
		EFH (C30-C40)	242 (↓)	-308 (↓)	168 (↓)	↓	no qual parent
			( )	( )	( )		74% spike Amt
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
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			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		

LDC #: 259114B

SDG #: See cover

VALIDATION FINDINGS WORKSHEET
Field Duplicates

Page: 1 of 1

Reviewer: FT

2nd reviewer: C

METHOD: ✓ GC __ HPLC

Y N N/A Were field duplicate pairs identified in this SDG?

Y N N/A Were target compounds detected in the field duplicate pairs?

(FD)(FD)

Compound	Concentration (mg/kg)		%RPD Limit ≤50	Qualification Parent only / All Samples
	1	3		
EFH (C30-C40)	16	19	17	
EFH (C21-C30)	6.8	12	55	J/A dit
EFH (CX-C11)	0.48	0.52	8	
EFH (C15-C20)	0.454	0.76	200	J/W/A

Compound	Concentration ( )		%RPD Limit _____	Qualification Parent only / All Samples

FLDUPNew.wpd

LDC #: 25911/48
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC ✓ HPLC ____

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

#	Standard ID	Calibration Date	Compound	Reported CF (std)	Recalculated CF (std)	Reported Average CF (initial)	Recalculated Average CF (initial)	Reported %RSD	Recalculated %RSD
1	1CAL 285	3/25/11	CX-CHO	22389	22389	22222	22222	0.7	0.7
2									
3									
4									

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25911U8
SDG #: pw cover

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: EJ
2nd Reviewer: [illegible]

METHOD: GC ✓ HPLC ____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF - CF)/ave. CF
CF = A/C

Where: ave. CF = initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(Ical)/ CCV Conc.	Reported CF/Conc. CCV	Recalculated CF/Conc. CCV	Reported %D	Recalculated %D
1	CCV 3:12	4/2/11	C8-C40	143.99	147.01	147.01	2.1	2.1
	CCV 10:27	4/2/11	↓	287.98	307.61	307.61	6.8	6.8
2								
	CCV 16:56	4/4/11	↓	~~80~~ 143.99	148.16	148.16	2.9	2.9
3								
4								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25 7 1148
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT
2nd reviewer: A

METHOD: ✓ GC ___ HPLC

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: # 1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
chlorobenzene	ZB-5	1.0	0.867071	87	87	0
orthoterphenyl	↓	↓	0.946957	95	95	0

Sample ID: ___

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Sample ID: ___

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

LDC #: 45 1 11W8
SDG #: per cover

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Page: 1 of 1
Reviewer: EF
2nd Reviewer: [illegible]

METHOD: ✓ GC __HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

%Recovery = 100 * (SSC - SC)/SA Where SSC = Spiked sample concentration SC = Sample concentration
SA = Spike added
RPD =(((SSCMS - SSCMSD) * 2) / (SSCMS + SSCMSD))*100 MS = Matrix spike MSD = Matrix spike duplicate

MS/MSD samples: 7+8

Compound	Spike Added (mg/kg)		Sample Conc. (mg/kg)	Spike Sample Concentration (mg/kg)		Matrix spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	---	MS	MSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)											
Diesel (8015)											
Benzene (8021B)											
Methane (RSK-175)											
2,4-D (8151)											
Dinoseb (8151)											
Naphthalene (8310)											
Anthracene (8310)											
HMX (8330)											
2,4,6-Trinitrotoluene (8330)											
EFH (C8-C11)	0.84	0.84	0.42	1.08	0.90	79	79	67	67	10	10

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25 91/48
SDG #: pu cover

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: ✓ GC __ HPLC

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100* (SSC-SC)/SA
RPD = I LCS - LCSD I * 2/(LCS + LCSD)

Where: SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory control sample percent recovery
SC = Concentration
LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: LCS

Compound	Spike Added (mg/kg)		Spiked Sample Concentration (mg/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)										
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)										
2,4,6-Trinitrotoluene (8330)										
EFH (C8-C11)	0.84	NA	0.71	NA	85	85	NA			

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25911U8
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: ✓ GC __ HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= (A)(Fv)(Df) / (RF)(Vs or Ws)(%S/100)

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound in the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID. #1 Compound Name C21-C30

Concentration = 7996269 (1000) / 22222 (60) (0.88) (1000)

6.8 mg/kg

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications

Comments:

SAMPCALew.wpd

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	March 24, 2011
LDC Report Date:	August 11, 2011
Matrix:	Soil
Parameters:	Explosives
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE112

Sample Identification

SL-223-SA5A-SB-4.0-5.0
SL-223-SA5A-SB-8.5-9.5
DUP10-SA5A-QC-032411
SL-226-SA5A-SB-4.0-5.0
SL-225-SA5A-SB-4.0-5.0
SL-224-SA5A-SB-4.0-5.0
SL-223-SA5A-SB-4.0-5.0MS
SL-223-SA5A-SB-4.0-5.0MSD

Introduction

This data review covers 8 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8330A for Explosives.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration of compounds was performed for the primary (quantitation) column and confirmation column as required by the method.

The percent relative standard deviations (%RSD) were less than or equal to 20.0% for all compounds.

In the case where the laboratory used a calibration curve to evaluate the compounds, all coefficients of determination (r^2) were greater than or equal to 0.990 .

Retention time windows were evaluated and considered technically acceptable.

III. Calibration Verification

Calibration verification was performed at the required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 20.0% QC limits.

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

Retention times (RT) of all compounds in the calibration standards were within QC limits.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No explosive contaminants were found in the method blanks.

No field blanks were identified in this SDG.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VI. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VII. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE112	All compounds reported below the RL.	J (all detects)	A

X. System Performance

The system performance was acceptable.

XI. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XII. Field Duplicates

Samples SL-223-SA5A-SB-4.0-5.0 and DUP10-SA5A-QC-032411 were identified as field duplicates. No explosives were detected in any of the samples.

Santa Susana Field Laboratory
Explosives - Data Qualification Summary - SDG DE112

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE112	SL-223-SA5A-SB-4.0-5.0 SL-223-SA5A-SB-8.5-9.5 DUP10-SA5A-QC-032411 SL-226-SA5A-SB-4.0-5.0 SL-225-SA5A-SB-4.0-5.0 SL-224-SA5A-SB-4.0-5.0	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
Explosives - Laboratory Blank Data Qualification Summary - SDG DE112

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Explosives - Field Blank Data Qualification Summary - SDG DE112

No Sample Data Qualified in this SDG

LDC #: 25911U40

SDG #: DE112

Laboratory: Lancaster Laboratories

VALIDATION COMPLETENESS WORKSHEET

Level IV

Date: 8/9/11

Page: 1 of 1

Reviewer: [illegible]

2nd Reviewer: [illegible]

METHOD: HPLC Explosives (EPA SW 846 Method 8330A)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 3/24/11
II	Initial calibration	A	% RSD ≤ 20, r²
III.	Calibration verification/ICV	A	ICV/CCV ≤ 20
IV.	Blanks	A	
V	Surrogate recovery	A	
VI.	Matrix spike/Matrix spike duplicates	A	
VII.	Laboratory control samples	A	LCS
VIII.	Target compound identification	A	
IX.	Compound Quantitation and CRQLs	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	ND	D = 1,3
XIII.	Field blanks	N	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: SOIL

1	SL-223-SA5A-SB-4.0-5.0	11	PBLK49090	21		31	
2	SL-223-SA5A-SB-8.5-9.5	12		22		32	
3	DUP10-SA5A-QC-032411	13		23		33	
4	SL-226-SA5A-SB-4.0-5.0	14		24		34	
5	SL-225-SA5A-SB-4.0-5.0	15		25		35	
6	SL-224-SA5A-SB-4.0-5.0	16		26		36	
7	SL-223-SA5A-SB-4.0-5.0MS	17		27		37	
8	SL-223-SA5A-SB-4.0-5.0MSD	18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

LDC #: 25911 U4U
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Page: 1 of 2
Reviewer: FT
2nd Reviewer: A

Method: ____ GC ✓ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation?	✓			
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?	✓			
Were the RT windows properly established?	✓			
IV. Continuing calibration				
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20%.0 or percent recoveries 80-120%?	✓			
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?	✓			
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	

LDC #:_____
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Reviewer: FJ
2nd Reviewer: C

Validation Area	Yes	No	NA	Findings/Comments
X. Target compound identification				
Were the retention times of reported detects within the RT windows?			✓	
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.	✓			
Target compounds were detected in the field duplicates.		✓		
XV. Field blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

LDC #: 25911440
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC ✓ HPLC ✓

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

#	Standard ID	Calibration Date	Compound	Reported 498.5/501.0 CF (std)	Recalculated 498.5/501.0 CF (std)	Reported Average CF (initial)	Recalculated Average CF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL X6329A chrompack	3/25/11	RDX	6.56×10^1	6.56×10^1	7.13×10^1	7.13×10^1	12.6	12.6
			1,3,5-TNB	1.94×10^2	1.94×10^2	1.98×10^2	1.98×10^2	2.1	2.1
				500/499.5	500/499.5				
2	ICAL X6329A ~~chrompack~~ Capcell	~~3/4/11~~ 3/25/11	~~RDX~~ HMX	8.95×10^1	8.95×10^1	9.24×10^1	9.24×10^1	4.7	4.7
			~~1,3,5-TNB~~ Nitrobenzene	1.70×10^2	1.70×10^2	1.75×10^2	1.75×10^2	4.4	4.4
3									
4									

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 91140
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC ✓ HPLC ✓

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF - CF)/ave. CF
CF = A/C

Where: ave. CF = initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(Ical)/ CCV Conc.	Reported CF/Conc. CCV	Recalculated CF/Conc. CCV	Reported %D	Recalculated %D
1	ccv 22:21	4/4/11	RDX	98700	1105.05	1105.05	12.0	12.0
	chrompack		1,3,5-TNB	1001.00	1004.33	1004.33	0.3	0.3
2	ccv 6:49	4/5/11	↓	493.50	489.27	489.27	0.9	0.9
	chrompack		↓	502.50	491.97	491.97	1.7	1.7
3	ccv 22:21	4/4/11	HMX	1000.0	974.09	974.09	2.6	2.6
	Capcell CN		nitrobenzene	999.0	983.65	983.65	1.5	1.5
4	ccv 6:49	4/05/11	↓	500.0	486.35	486.35	2.7	2.7
	Capcell CN		↓	493.50	495.61	495.61	0.4	0.4

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25971440

SDG #: see cover

METHOD: ✓ GC ✓ HPLC

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT

2nd reviewer: C

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: # 1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
2-Nitro-m-xylene	chrompack	2000	2222.02636	111	111	0

Sample ID:

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Sample ID:

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

LDC #: 25 71/4 4U
SDG #: per cover

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Page: 1 of 1
Reviewer: FZ
2nd Reviewer: [illegible]

METHOD: ✓ GC ___ HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

%Recovery = 100 * (SSC - SC)/SA Where SSC = Spiked sample concentration SC = Sample concentration
SA = Spike added
RPD =(((SSCMS - SSCMSD) * 2) / (SSCMS + SSCMSD))*100 MS = Matrix spike MSD = Matrix spike duplicate

MS/MSD samples: 7+8

Compound	Spike Added (ug/kg)		Sample Conc. (ug/kg)	Spike Sample Concentration (ug/kg)		Matrix spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	—	MS	MSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)											
Diesel (8015)											
Benzene (8021B)											
Methane (RSK-175)											
2,4-D (8151)											
Dinoseb (8151)											
Naphthalene (8310)											
Anthracene (8310)											
HMX (8330)											
2,4,6-Trinitrotoluene (8330)											
HMX	2000.25	2000.25	ND	1917.36	1875.75	96	96	94	94	2	2
RDX	2000	2000	ND	1978.5	1989.12	99	99	99	99	1	1

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25911148U
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: ✓ GC ✓ HPLC

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100* (SSC-SC)/SA
RPD = I LCS - LCSD I * 2/(LCS + LCSD)

Where: SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory control sample percent recovery
SC = Concentration
LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: LCS

Compound	Spike Added (ug/kg)		Spiked Sample Concentration (ug/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
[redacted]	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
~~Gasoline (8015)~~ HMX	2000.25	NA	1939.04	NA	97	97				
~~Diesel (8015)~~ RDX	2000	↓	1913.14	↓	96	96	NA			
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)										
2,4,6-Trinitrotoluene (8330)										

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25911 4W
SDG #: pu [illegible]

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: ___ GC ✓ HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= (A)(Fv)(Df) / (RF)(Vs or Ws)(%S/100)

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound in the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID._____ Compound Name _____

Concentration = _____

ND

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications

Comments: _____

SAMPCALew.wpd

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	March 24, 2011
LDC Report Date:	August 9, 2011
Matrix:	Soil
Parameters:	Terphenyls
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE112

Sample Identification

SL-223-SA5A-SB-4.0-5.0
SL-223-SA5A-SB-8.5-9.5
DUP10-SA5A-QC-032411
SL-226-SA5A-SB-4.0-5.0
SL-225-SA5A-SB-4.0-5.0
SL-224-SA5A-SB-4.0-5.0
SL-223-SA5A-SB-4.0-5.0MS
SL-223-SA5A-SB-4.0-5.0MSD

Introduction

This data review covers 8 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8015B for Terphenyls.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0% .

III. Calibration Verification

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 20.0% QC limits.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No terphenyl contaminants were found in the method blanks.

No field blanks were identified in this SDG.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VI. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
SL-223-SA5A-SB-4.0-5.0MS/MSD (SL-223-SA5A-SB-4.0-5.0)	m-Terphenyl	72 (75-125)	-	-	J (all detects) UJ (all non-detects)	A
	p-Terphenyl	71 (75-125)	-	-	J (all detects) UJ (all non-detects)	

VII. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE112	All compounds reported below the RL.	J (all detects)	A

X. System Performance

The system performance was acceptable.

XI. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XII. Field Duplicates

Samples SL-223-SA5A-SB-4.0-5.0 and DUP10-SA5A-QC-032411 were identified as field duplicates. No terphenyls were detected in any of the samples.

Santa Susana Field Laboratory
Terphenyls - Data Qualification Summary - SDG DE112

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE112	SL-223-SA5A-SB-4.0-5.0	m-Terphenyl p-Terphenyl	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicate (%R) (Q)
DE112	SL-223-SA5A-SB-4.0-5.0 SL-223-SA5A-SB-8.5-9.5 DUP10-SA5A-QC-032411 SL-226-SA5A-SB-4.0-5.0 SL-225-SA5A-SB-4.0-5.0 SL-224-SA5A-SB-4.0-5.0	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
Terphenyls - Laboratory Blank Data Qualification Summary - SDG DE112

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Terphenyls - Field Blank Data Qualification Summary - SDG DE112

No Sample Data Qualified in this SDG

LDC #: 25911U41

SDG #: DE112

Laboratory: Lancaster Laboratories

VALIDATION COMPLETENESS WORKSHEET

Level IV

Date: 8/9/11

Page: 1 of 1

Reviewer: [illegible]

2nd Reviewer: [illegible]

METHOD: GC Terphenyls (EPA SW 846 Method 8015B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 3/24/11
II	Initial calibration	A	% RSD ≤ 20
III.	Calibration verification/~~IV~~	A	CCV ≤ 20
IV.	Blanks	A	
V	Surrogate recovery	A	
VI.	Matrix spike/Matrix spike duplicates	SW	
VII.	Laboratory control samples	A	LCS
VIII.	Target compound identification	A	
IX.	Compound Quantitation and CRQLs	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	ND	D = 1,3
XIII.	Field blanks	N	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:

Soil

1	SL-223-SA5A-SB-4.0-5.0 D	11	PBLK03092	21		31	
2	SL-223-SA5A-SB-8.5-9.5	12		22		32	
3	DUP10-SA5A-QC-032411 D	13		23		33	
4	SL-226-SA5A-SB-4.0-5.0	14		24		34	
5	SL-225-SA5A-SB-4.0-5.0	15		25		35	
6	SL-224-SA5A-SB-4.0-5.0	16		26		36	
7	SL-223-SA5A-SB-4.0-5.0MS	17		27		37	
8	SL-223-SA5A-SB-4.0-5.0MSD	18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

LDC #: 25911141
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Page: 1 of 2
Reviewer: [illegible]
2nd Reviewer: [illegible]

Method: ✓ GC ____ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation?		✓		
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?			✓	
Were the RT windows properly established?	✓			
IV. Continuing calibration				
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20%.0 or percent recoveries 80-120%?	✓			
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?		✓		
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	

LDC #: 25911441
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer: A

Validation Area	Yes	No	NA	Findings/Comments
X. Target compound identification				
Were the retention times of reported detects within the RT windows?			✓	
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.	✓			
Target compounds were detected in the field duplicates.		✓		
XV. Field blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

LDC #: 259 11441

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Reviewer: FT
2nd Reviewer: A

METHOD: ___ GC ___ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG?
Y N N/A Was an MS/MSD analyzed every 20 samples for each matrix or whenever a sample extraction was performed?
Y N N/A Were the MS/MSD percent recoveries (%R) and relative percent differences (RPD) within QC limits?

#	MS/MSD ID	Compound	MS %R (Limits)	MSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
	7+8	m-Terphenyl	72 (75-125)	( )	( )	#1	J/UJ/A (Q)
		p-Terphenyl	71 (75-125)	( )	( )	↓	↓ (Q)
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
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			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		

LDC #: 25911441
SDG #: per cover

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC ✓ HPLC ____

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

level 3

#	Standard ID	Calibration Date	Compound	Reported 17-741 CF (std)	Recalculated 17-741 CF (std)	Reported Average CF (Initial)	Recalculated Average CF (Initial)	Reported %RSD	Recalculated %RSD
1			o-Terphenyl	2.59×10^4	2.59×10^4	2.54×10^4	2.54×10^4	2.1	2.1
2									
3									
4									

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25911441
SDG #: per cover

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: EJ
2nd Reviewer: C

METHOD: GC ✓ HPLC_____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF - CF)/ave. CF
CF = A/C

Where: ave. CF = initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(ical)/ CCV Conc.	Reported CF/Conc. CCV	Recalculated CF/Conc. CCV	Reported %D	Recalculated %D
1	CCV	4/4/11	o-Terphenyl	35.48	37.13	37.13	4.7	4.7
	16:46							
2								
3								
4								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25491144/
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT
2nd reviewer: C

METHOD: ✓ GC ___ HPLC

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: 1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
n-Triacontane-d62	NS	0.33	0.236007	~~76~~ 71	~~76~~ 71	0

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

LDC #: 53114 41
SDG #: per cover

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Reviewer: FZ
2nd Reviewer: A

METHOD: ✓ GC __ HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

%Recovery = 100 * (SSC - SC)/SA Where SSC = Spiked sample concentration SC = Sample concentration
SA = Spike added
RPD =(((SSCMS - SSCMSD} * 2) / (SSCMS + SSCMSD))*100 MS = Matrix spike MSD = Matrix spike duplicate

MS/MSD samples: 7+8

Compound	Spike Added (mg/kg)		Sample Conc. (mg/kg)	Spike Sample Concentration (mg/kg)		Matrix spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	—	MS	MSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)											
Diesel (8015)											
Benzene (8021B)											
Methane (RSK-175)											
2,4-D (8151)											
Dinoseb (8151)											
Naphthalene (8310)											
Anthracene (8310)											
HMX (8330)											
2,4,6-Trinitrotoluene (8330)											
m-Terphenyl	1.68	1.68	ND	1.21	1.34	72	72	80	80	10	10

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25911441
SDG #: µ cones

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: ✓ GC __HPLC

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100* (SSC-SC)/SA
RPD = I LCS - LCSD I * 2/(LCS + LCSD)

Where: SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory control sample percent recovery
SC = Concentration
LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: LC>

Compound	Spike Added (mg/kg)		Spiked Sample Concentration (mg/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)										
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)										
2,4,6-Trinitrotoluene (8330)										
m-Terphenyl	1.68	NA	1.37	NA	82	82	NA			

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25911441
SDG #: pu water

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: B
2nd Reviewer: A

METHOD: ✓ GC ___ HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= $\frac{(A)(Fv)(Df)}{(RF)(Vs \text{ or } Ws)(\%S/100)}$

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound in the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID._____ Compound Name _____

Concentration =_____

NP

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications

Comments: _____

SAMPCALew.wpd

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	March 24, 2011
LDC Report Date:	August 9, 2011
Matrix:	Soil
Parameters:	Alcohols
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE112

Sample Identification

SL-223-SA5A-SB-4.0-5.0
SL-223-SA5A-SB-8.5-9.5
DUP10-SA5A-QC-032411
SL-226-SA5A-SB-4.0-5.0
SL-225-SA5A-SB-4.0-5.0
SL-224-SA5A-SB-4.0-5.0
SL-223-SA5A-SB-4.0-5.0MS
SL-223-SA5A-SB-4.0-5.0MSD

Introduction

This data review covers 8 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8015B for Alcohols.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0% .

Retention time windows were evaluated and considered technically acceptable.

III. Calibration Verification

Calibration verification was performed at required frequencies.

The percent differences (%D) of calibration factors in continuing standard mixtures were within the 20.0% QC limits.

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

Retention times (RT) of all compounds in the calibration standards were within QC limits.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No alcohol contaminants were found in the method blanks.

No field blanks were identified in this SDG.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VI. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VII. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE112	All compounds reported below the RL.	J (all detects)	A

X. System Performance

The system performance was acceptable.

XI. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XII. Field Duplicates

Samples SL-223-SA5A-SB-4.0-5.0 and DUP10-SA5A-QC-032411 were identified as field duplicates. No alcohols were detected in any of the samples.

Santa Susana Field Laboratory
Alcohols - Data Qualification Summary - SDG DE112

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE112	SL-223-SA5A-SB-4.0-5.0 SL-223-SA5A-SB-8.5-9.5 DUP10-SA5A-QC-032411 SL-226-SA5A-SB-4.0-5.0 SL-225-SA5A-SB-4.0-5.0 SL-224-SA5A-SB-4.0-5.0	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
Alcohols - Laboratory Blank Data Qualification Summary - SDG DE112

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Alcohols - Field Blank Data Qualification Summary - SDG DE112

No Sample Data Qualified in this SDG

LDC #: 25911U43 **VALIDATION COMPLETENESS WORKSHEET** Date: 8/9/11
SDG #: DE112 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC Alcohols (EPA SW 846 Method 8015B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 3/24/11
II	Initial calibration	A	% RSD ≤ 20
III.	Calibration verification/ICV	A	ICV/CCV ≤ 20
IV.	Blanks	A	
V	Surrogate recovery	A	
VI.	Matrix spike/Matrix spike duplicates	A	
VII.	Laboratory control samples	A	LCS
VIII.	Target compound identification	A	
IX.	Compound Quantitation and CRQLs	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	ND	D= 1,3
XIII.	Field blanks	N	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:
SOIL

1	SL-223-SA5A-SB-4.0-5.0	11	PBLK 31088	21		31	
2	SL-223-SA5A-SB-8.5-9.5	12		22		32	
3	DUP10-SA5A-QC-032411	13		23		33	
4	SL-226-SA5A-SB-4.0-5.0	14		24		34	
5	SL-225-SA5A-SB-4.0-5.0	15		25		35	
6	SL-224-SA5A-SB-4.0-5.0	16		26		36	
7	SL-223-SA5A-SB-4.0-5.0MS	17		27		37	
8	SL-223-SA5A-SB-4.0-5.0MSD	18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

LDC #: 25911443
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer: C

Method: ✓ GC ____ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation?		✓		
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?			✓	
Were the RT windows properly established?	✓			
IV. Continuing calibration				
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20%.0 or percent recoveries 80-120%?	✓			
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?	✓			
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	

LDC #: 25911443
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer: [illegible]

Validation Area	Yes	No	NA	Findings/Comments
X. Target compound identification				
Were the retention times of reported detects within the RT windows?			✓	
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.	✓			
Target compounds were detected in the field duplicates.		✓		
XV. Field blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

LDC #: 25911443
SDG #: per narr

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: FJ
2nd Reviewer: [illegible]

METHOD: GC ✓ HPLC ____

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

#	Standard ID	Calibration Date	Compound	Reported CF (5000 std)	Recalculated CF (5000 std)	Reported Average CF (initial)	Recalculated Average CF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	3/18/11	methanol	3.05	3.05	3.27	3.27	9.3	9.3
2	ICAL	2/23/11	methanol	8.50	8.50	8.50	8.50	3.0	3.0
3									
4									

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 35 911443
SDG #: pw cover

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: FD
2nd Reviewer: [illegible]

METHOD: GC ✓ HPLC ____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF - CF)/ave. CF
CF = A/C

Where: ave. CF = initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(Ical)/ CCV Conc.	Reported CF/Conc. CCV	Recalculated CF/Conc. CCV	Reported %D	Recalculated %D
1	ccv 19:33	3/29/11	methanol	5000.0	4824.03	4824.03	3.5	3.5
	ccv 22:30	3/29/11	methanol	5000.0	4961.24	4961.24	0.8	0.8
2								
3								
4								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 45711493
SDG #: see cover

METHOD: ✓ GC ___ HPLC

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT
2nd reviewer: [illegible]

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
Acetone	NS	2500	1894.6376	76	76	0

Sample ID: ___

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Sample ID: ___

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

LDC #: 15 11147

SDG #: per cover

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Reviewer: FZ

2nd Reviewer: A

METHOD: ✓ GC __HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

%Recovery = 100 * (SSC - SC)/SA Where SSC = Spiked sample concentration SC = Sample concentration
SA = Spike added

RPD =(((SSCMS - SSCMSD) * 2) / (SSCMS + SSCMSD))*100 MS = Matrix spike MSD = Matrix spike duplicate

MS/MSD samples: 7+8

Compound	Spike Added (ug/kg)		Sample Conc. (ug/kg)	Spike Sample Concentration (ug/kg)		Matrix spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	—	MS	MSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)											
Diesel (8015)											
Benzene (8021B)											
Methane (RSK-175)											
2,4-D (8151)											
Dinoseb (8151)											
Naphthalene (8310)											
Anthracene (8310)											
HMX (8330)											
2,4,6-Trinitrotoluene (8330)											
Methane	2500	2500	ND	1945.87	2020.81	78	78	81	81	4	4

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 2597/443
SDG #: µl cover

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: ✓ GC __HPLC

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100* (SSC-SC)/SA
RPD = I LCS - LCSD I * 2/(LCS + LCSD)

Where: SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory control sample percent recovery
SC = Concentration
LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: lcs

Compound	Spike Added (ug/kg)		Spiked Sample Concentration (ug/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)										
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)										
2,4,6-Trinitrotoluene (8330)										
Methanol	2500	NA	2311.28	NA	92	92	NA			

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25911443
SDG #: pu gamer

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: ✓ GC __ HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= (A)(Fv)(Df) / (RF)(Vs or Ws)(%S/100)

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound in the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID._____ Compound Name _____

Concentration = _____

np

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications

Comments: _____

SAMPCALew.wpd

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	March 24, 2011
LDC Report Date:	August 9, 2011
Matrix:	Soil
Parameters:	Glycols
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE112

Sample Identification

SL-223-SA5A-SB-4.0-5.0
SL-223-SA5A-SB-8.5-9.5
DUP10-SA5A-QC-032411
SL-226-SA5A-SB-4.0-5.0
SL-225-SA5A-SB-4.0-5.0
SL-224-SA5A-SB-4.0-5.0
SL-223-SA5A-SB-4.0-5.0MS
SL-223-SA5A-SB-4.0-5.0MSD

Introduction

This data review covers 8 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8015B for Glycols.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0%.

Retention time windows were evaluated and considered technically acceptable.

III. Calibration Verification

Calibration verification was performed at required frequencies.

The percent differences (%D) of calibration factors in continuing standard mixtures were within the 20.0% QC limits.

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

Retention times (RT) of all compounds in the calibration standards were within QC limits.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No glycol contaminants were found in the method blanks.

No field blanks were identified in this SDG.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VI. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VII. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE112	All compounds reported below the RL.	J (all detects)	A

X. System Performance

The system performance was acceptable.

XI. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XII. Field Duplicates

Samples SL-223-SA5A-SB-4.0-5.0 and DUP10-SA5A-QC-032411 were identified as field duplicates. No glycols were detected in any of the samples.

Santa Susana Field Laboratory
Glycols - Data Qualification Summary - SDG DE112

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE112	SL-223-SA5A-SB-4.0-5.0 SL-223-SA5A-SB-8.5-9.5 DUP10-SA5A-QC-032411 SL-226-SA5A-SB-4.0-5.0 SL-225-SA5A-SB-4.0-5.0 SL-224-SA5A-SB-4.0-5.0	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
Glycols - Laboratory Blank Data Qualification Summary - SDG DE112

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Glycols - Field Blank Data Qualification Summary - SDG DE112

No Sample Data Qualified in this SDG

LDC #: 25911U45 **VALIDATION COMPLETENESS WORKSHEET** Date: 8/8/11
SDG #: DE112 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC Glycols (EPA SW 846 Method 8015B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 3/24/11
II	Initial calibration	A	% RSD ≤ 20
III.	Calibration verification/ICV	A	ICV/CCV ≤ 20
IV.	Blanks	A	
V	Surrogate recovery	A	
VI.	Matrix spike/Matrix spike duplicates	A	
VII.	Laboratory control samples	A	LCS
VIII.	Target compound identification	A	
IX.	Compound Quantitation and CRQLs	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	ND	D = 1, 3
XIII.	Field blanks	N	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:

1	SL-223-SA5A-SB-4.0-5.0 D	11	PBLK01087	21		31	
2	SL-223-SA5A-SB-8.5-9.5	12		22		32	
3	DUP10-SA5A-QC-032411 D	13		23		33	
4	SL-226-SA5A-SB-4.0-5.0	14		24		34	
5	SL-225-SA5A-SB-4.0-5.0	15		25		35	
6	SL-224-SA5A-SB-4.0-5.0	16		26		36	
7	SL-223-SA5A-SB-4.0-5.0MS	17		27		37	
8	SL-223-SA5A-SB-4.0-5.0MSD	18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

LDC #: 25911U45
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Page: 1 of 2
Reviewer: [illegible]
2nd Reviewer: [illegible]

Method: ✓ GC ____ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation?		✓		
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?			✓	
Were the RT windows properly established?		✓		
IV. Continuing calibration				
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20%.0 or percent recoveries 80-120%?	✓			
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?	✓			
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	

LDC #: 25911145
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Reviewer: FJ
2nd Reviewer: [illegible]

Validation Area	Yes	No	NA	Findings/Comments
X. Target compound identification				
Were the retention times of reported detects within the RT windows?	✓			
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.	✓			
Target compounds were detected in the field duplicates.		✓		
XV. Field blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

LDC #: 25911L45
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC ✓ HPLC ____

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

level 4

#	Standard ID	Calibration Date	Compound	Reported 2002.5164 CF (std)	Recalculated 2002.5164 CF (std)	Reported Average CF (initial)	Recalculated Average CF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	3/28/11	Propylene Glycol	5.94×10^2	5.94×10^2	5.65×10^2	5.65×10^2	17.6	17.6
2									
3									
4									

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25911145
SDG #: w conv

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: EJ
2nd Reviewer: A

METHOD: GC ✓ HPLC_____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF - CF)/ave. CF
CF = A/C

Where: ave. CF = Initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(Ical)/ CCV Conc.	Reported CF/Conc. CCV	Recalculated CF/Conc. CCV	Reported %D	Recalculated %D
1	F087.0013	3/28/11	Propylene Glycol	302.97	323.59	323.59	6.8	6.8
2	F087.0024	3/28/11	↓	100.26	93.90	93.90	6.3	6.3
3								
4								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 45 7 / 44 3
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT
2nd reviewer: [illegible]

METHOD: ✓ GC ___ HPLC

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: # 1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
Tetramethylene glycol	NS	197	157.484	80	80	0

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

LDC #: 57144S
SDG #: per cover

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Reviewer: FT
2nd Reviewer: A

METHOD: ✓ GC __HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

%Recovery = 100 * (SSC - SC)/SA Where SSC = Spiked sample concentration SC = Sample concentration
SA = Spike added
RPD =(((SSCMS - SSCMSD) * 2) / (SSCMS + SSCMSD))*100 MS = Matrix spike MSD = Matrix spike duplicate

MS/MSD samples: 7 + 8

Compound	Spike Added (mg/kg)		Sample Conc. (mg/kg)	Spike Sample Concentration (mg/kg)		Matrix spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	—	MS	MSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)											
Diesel (8015)											
Benzene (8021B)											
Methane (RSK-175)											
2,4-D (8151)											
Dinoseb (8151)											
Naphthalene (8310)											
Anthracene (8310)											
HMX (8330)											
2,4,6-Trinitrotoluene (8330)											
Ethylene glycol	198.16	198.16	ND	161.46	176.26	81	81	89	89	9	9

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25911445
SDG #: pu cones

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: ✓ GC __HPLC

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100* (SSC-SC)/SA
RPD = I LCS - LCSD I * 2/(LCS + LCSD)

Where: SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory control sample percent recovery
SC = Concentration
LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: LCS

Compound	Spike Added (mg/kg)		Spiked Sample Concentration (mg/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)										
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)										
2,4,6-Trinitrotoluene (8330)										
Ethylene Glycol	198.16	NA	230.54	NA	116	116	NA			

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25911145
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: ✓ GC __ HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= $\frac{(A)(Fv)(Df)}{(RF)(Vs \text{ or } Ws)(\%S/100)}$

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound in the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID._____ Compound Name _____

Concentration =_____

ND

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications

Comments: _____

SAMPCALew.wpd

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	March 24, 2011
LDC Report Date:	August 9, 2011
Matrix:	Soil
Parameters:	Formaldehyde
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE112

Sample Identification

SL-223-SA5A-SB-4.0-5.0
SL-223-SA5A-SB-8.5-9.5
DUP10-SA5A-QC-032411
SL-226-SA5A-SB-4.0-5.0
SL-225-SA5A-SB-4.0-5.0
SL-224-SA5A-SB-4.0-5.0
SL-223-SA5A-SB-4.0-5.0MS
SL-223-SA5A-SB-4.0-5.0MSD

Introduction

This data review covers 8 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8315A for Formaldehyde.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0% .

III. Calibration Verification

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 20.0% QC limits.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No formaldehyde was found in the method blanks.

No field blanks were identified in this SDG.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VI. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VII. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE112	All compounds reported below the RL.	J (all detects)	A

X. System Performance

The system performance was acceptable.

XI. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XII. Field Duplicates

Samples SL-223-SA5A-SB-4.0-5.0 and DUP10-SA5A-QC-032411 were identified as field duplicates. No formaldehyde was detected in any of the samples.

Santa Susana Field Laboratory
Formaldehyde - Data Qualification Summary - SDG DE112

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE112	SL-223-SA5A-SB-4.0-5.0 SL-223-SA5A-SB-8.5-9.5 DUP10-SA5A-QC-032411 SL-226-SA5A-SB-4.0-5.0 SL-225-SA5A-SB-4.0-5.0 SL-224-SA5A-SB-4.0-5.0	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
Formaldehyde - Laboratory Blank Data Qualification Summary - SDG DE112

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Formaldehyde - Field Blank Data Qualification Summary - SDG DE112

No Sample Data Qualified in this SDG

LDC #: 25911U71 **VALIDATION COMPLETENESS WORKSHEET** Date: 8/9/11
SDG #: DE112 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: PM
2nd Reviewer: A

METHOD: HPLC Formaldehyde (EPA SW 846 Method 8315A)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 3/24/11
II	Initial calibration	A	% RSD ≤20
III.	Calibration verification/~~ICV~~	A	CCV ≤20
IV.	Blanks	A	
V	Surrogate recovery	A	
VI.	Matrix spike/Matrix spike duplicates	A	
VII.	Laboratory control samples	A	LCS
VIII.	Target compound identification	A	
IX.	Compound Quantitation and CRQLs	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	ND	D = 1, 3
XIII.	Field blanks	N	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:

	SOIL						
1	SL-223-SA5A-SB-4.0-5.0	11	PBLK04087	21		31	
2	SL-223-SA5A-SB-8.5-9.5	12		22		32	
3	DUP10-SA5A-QC-032411	13		23		33	
4	SL-226-SA5A-SB-4.0-5.0	14		24		34	
5	SL-225-SA5A-SB-4.0-5.0	15		25		35	
6	SL-224-SA5A-SB-4.0-5.0	16		26		36	
7	SL-223-SA5A-SB-4.0-5.0MS	17		27		37	
8	SL-223-SA5A-SB-4.0-5.0MSD	18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

LDC #: 25911471
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Page: 1 of 2
Reviewer: [illegible]
2nd Reviewer: [illegible]

Method: ✓ GC _____ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation?		✓		
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?			✓	
Were the RT windows properly established?	✓			
IV. Continuing calibration				
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20%.0 or percent recoveries 80-120%?	✓			
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?	✓			
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	

LDC #: 25911471
SDG #: see cover

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer: C

Validation Area	Yes	No	NA	Findings/Comments
X. Target compound identification				
Were the retention times of reported detects within the RT windows?			✓	
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.	✓			
Target compounds were detected in the field duplicates.		✓		
XV. Field blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

LDC #: 25911471
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC ✓ HPLC ____

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

level 3

#	Standard ID	Calibration Date	Compound	Reported 200.2 CF (std)	Recalculated 200.2 CF (std)	Reported Average CF (Initial)	Recalculated Average CF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL F6259A	3/30/11	Formaldehyde	5.97×10^1	5.97×10^1	5.97×10^1	5.97×10^1	1.9	1.9
2									
3									
4									

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25911471
SDG #: w conv

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: FT
2nd Reviewer: C

METHOD: GC ✓ HPLC ____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF - CF)/ave. CF
CF = A/C

Where: ave. CF = Initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(Ical)/ CCV Conc.	Reported CF/Conc. CCV	Recalculated CF/Conc. CCV	Reported %D	Recalculated %D
1	CCV	3/30/11	formaldehyde	2002.00	1993.02	1993.02	0.4	0.4
	21:49							
2								
3								
4								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25711 41

SDG #: see cover

METHOD: ✓ GC ___ HPLC

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT

2nd reviewer: C

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
Butyraldehyde	NS	3958.12	3839.37793	97	97	0

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

LDC #: 25711411
SDG #: per cover

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Reviewer: FT
2nd Reviewer: A

METHOD: ✓ GC ___ HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

%Recovery = 100 * (SSC - SC)/SA Where SSC = Spiked sample concentration SC = Sample concentration
SA = Spike added
RPD =(((SSCMS - SSCMSD) * 2) / (SSCMS + SSCMSD))*100 MS = Matrix spike MSD = Matrix spike duplicate

MS/MSD samples: 7+8

Compound	Spike Added (ug/kg)		Sample Conc. (ug/kg)	Spike Sample Concentration (ug/kg)		Matrix spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	--	MS	MSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)											
Diesel (8015)											
Benzene (8021B)											
Methane (RSK-175)											
2,4-D (8151)											
Dinoseb (8151)											
Naphthalene (8310)											
Anthracene (8310)											
HMX (8330)											
2,4,6-Trinitrotoluene (8330)											
Formaldehyde	5010	5010	ND	4914.96	5293.68	98	98	106	106	7	7

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25971/47/
SDG #: µu cover

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

Page: 1 of 1
Reviewer: F
2nd Reviewer: C

METHOD: ✓ GC __HPLC

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100* (SSC-SC)/SA
RPD = I LCS - LCSD I * 2/(LCS + LCSD)

Where: SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory control sample percent recovery
SC = Concentration
LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: LCS

Compound	Spike Added (ug/Kg)		Spiked Sample Concentration (ug/Kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)										
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)										
2,4,6-Trinitrotoluene (8330)										
Formaldehyde	5010	NA	4874.16	NA	97	97	NA			

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25911471
SDG #: pu gener

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: ✓ GC __ HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= $\frac{(A)(Fv)(Df)}{(RF)(Vs \text{ or } Ws)(\%S/100)}$

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound in the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID._____ Compound Name _____

Concentration =_____

NP

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications

Comments: _____

SAMPCALew.wpd

SAMPLE DELIVERY GROUP

DE113

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
28-Mar-2011	TB-032811	6241852	TB	5030B	8015M	III
28-Mar-2011	TB-032811	6241852	TB	5030B	8260B	III
28-Mar-2011	TB-032811	6241852	TB	5030B	8260B SIM	III
28-Mar-2011	SL-211-SA5A-SB-2.5-3.5	6241847	N	3050B	6010B	III
28-Mar-2011	SL-211-SA5A-SB-2.5-3.5	6241847	N	3050B	6020	III
28-Mar-2011	SL-211-SA5A-SB-2.5-3.5	6241847	N	3060A	7199	III
28-Mar-2011	SL-211-SA5A-SB-2.5-3.5	6241847	N	3546	1625C	III
28-Mar-2011	SL-211-SA5A-SB-2.5-3.5	6241847	N	3550B	8015B	III
28-Mar-2011	SL-211-SA5A-SB-2.5-3.5	6241847	N	3550B	8015M	III
28-Mar-2011	SL-211-SA5A-SB-2.5-3.5	6241847	N	3550B	8082	III
28-Mar-2011	SL-211-SA5A-SB-2.5-3.5	6241847	N	3550B	8270C	III
28-Mar-2011	SL-211-SA5A-SB-2.5-3.5	6241847	N	3550B	8270C SIM	III
28-Mar-2011	SL-211-SA5A-SB-2.5-3.5	6241847	N	5035	8015M	III
28-Mar-2011	SL-211-SA5A-SB-2.5-3.5	6241847	N	5035	8260B	III
28-Mar-2011	SL-211-SA5A-SB-2.5-3.5	6241847	N	5035	8260B SIM	III
28-Mar-2011	SL-211-SA5A-SB-2.5-3.5	6241847	N	8330	8330A	III
28-Mar-2011	SL-211-SA5A-SB-2.5-3.5	6241847	N	Gen Prep	300.0	III
28-Mar-2011	SL-211-SA5A-SB-2.5-3.5	6241847	N	Gen Prep	9045M	III
28-Mar-2011	SL-211-SA5A-SB-2.5-3.5	6241847	N	METHOD	314.0	III
28-Mar-2011	SL-211-SA5A-SB-2.5-3.5	6241847	N	METHOD	7471A	III
28-Mar-2011	SL-211-SA5A-SB-2.5-3.5	6241847	N	METHOD	8015B	III
28-Mar-2011	SL-211-SA5A-SB-2.5-3.5	6241847	N	METHOD	8015M	III
28-Mar-2011	SL-211-SA5A-SB-2.5-3.5	6241847	N	METHOD	8315A	III
28-Mar-2011	SL-211-SA5A-SB-2.5-3.5	6241847	N	METHOD	9012B	III
28-Mar-2011	SL-216-SA5A-SB-4.0-5.0	6241851	N	3050B	6010B	III
28-Mar-2011	SL-216-SA5A-SB-4.0-5.0	6241851	N	3050B	6020	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
28-Mar-2011	SL-216-SA5A-SB-4.0-5.0	6241851	N	3060A	7199	III
28-Mar-2011	SL-216-SA5A-SB-4.0-5.0	6241851	N	3546	1625C	III
28-Mar-2011	SL-216-SA5A-SB-4.0-5.0	6241851	N	3550B	8015B	III
28-Mar-2011	SL-216-SA5A-SB-4.0-5.0	6241851	N	3550B	8015M	III
28-Mar-2011	SL-216-SA5A-SB-4.0-5.0	6241851	N	3550B	8082	III
28-Mar-2011	SL-216-SA5A-SB-4.0-5.0	6241851	N	3550B	8270C	III
28-Mar-2011	SL-216-SA5A-SB-4.0-5.0	6241851	N	3550B	8270C SIM	III
28-Mar-2011	SL-216-SA5A-SB-4.0-5.0	6241851	N	5035	8015M	III
28-Mar-2011	SL-216-SA5A-SB-4.0-5.0	6241851	N	5035	8260B	III
28-Mar-2011	SL-216-SA5A-SB-4.0-5.0	6241851	N	5035	8260B SIM	III
28-Mar-2011	SL-216-SA5A-SB-4.0-5.0	6241851	N	8330	8330A	III
28-Mar-2011	SL-216-SA5A-SB-4.0-5.0	6241851	N	Gen Prep	300.0	III
28-Mar-2011	SL-216-SA5A-SB-4.0-5.0	6241851	N	Gen Prep	9045M	III
28-Mar-2011	SL-216-SA5A-SB-4.0-5.0	6241851	N	METHOD	314.0	III
28-Mar-2011	SL-216-SA5A-SB-4.0-5.0	6241851	N	METHOD	7471A	III
28-Mar-2011	SL-216-SA5A-SB-4.0-5.0	6241851	N	METHOD	8015B	III
28-Mar-2011	SL-216-SA5A-SB-4.0-5.0	6241851	N	METHOD	8015M	III
28-Mar-2011	SL-216-SA5A-SB-4.0-5.0	6241851	N	METHOD	8315A	III
28-Mar-2011	SL-216-SA5A-SB-4.0-5.0	6241851	N	METHOD	9012B	III
28-Mar-2011	SL-214-SA5A-SB-4.0-5.0	6241848	N	3050B	6010B	III
28-Mar-2011	SL-214-SA5A-SB-4.0-5.0	6241848	N	3050B	6020	III
28-Mar-2011	SL-214-SA5A-SB-4.0-5.0	6241848	N	3060A	7199	III
28-Mar-2011	SL-214-SA5A-SB-4.0-5.0	6241848	N	3550B	8082	III
28-Mar-2011	SL-214-SA5A-SB-4.0-5.0	6241848	N	3550B	8270C	III
28-Mar-2011	SL-214-SA5A-SB-4.0-5.0	6241848	N	3550B	8270C SIM	III
28-Mar-2011	SL-214-SA5A-SB-4.0-5.0	6241848	N	5035	8260B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
28-Mar-2011	SL-214-SA5A-SB-4.0-5.0	6241848	N	5035	8260B SIM	III
28-Mar-2011	SL-214-SA5A-SB-4.0-5.0	6241848	N	Gen Prep	300.0	III
28-Mar-2011	SL-214-SA5A-SB-4.0-5.0	6241848	N	Gen Prep	9045M	III
28-Mar-2011	SL-214-SA5A-SB-4.0-5.0	6241848	N	METHOD	314.0	III
28-Mar-2011	SL-214-SA5A-SB-4.0-5.0	6241848	N	METHOD	6850	III
28-Mar-2011	SL-214-SA5A-SB-4.0-5.0	6241848	N	METHOD	7471A	III
28-Mar-2011	SL-214-SA5A-SB-8.5-9.5	6241849	N	3050B	6010B	III
28-Mar-2011	SL-214-SA5A-SB-8.5-9.5	6241849	N	3050B	6020	III
28-Mar-2011	SL-214-SA5A-SB-8.5-9.5	6241849	N	3060A	7199	III
28-Mar-2011	SL-214-SA5A-SB-8.5-9.5	6241849	N	3550B	8082	III
28-Mar-2011	SL-214-SA5A-SB-8.5-9.5	6241849	N	3550B	8270C	III
28-Mar-2011	SL-214-SA5A-SB-8.5-9.5	6241849	N	3550B	8270C SIM	III
28-Mar-2011	SL-214-SA5A-SB-8.5-9.5	6241849	N	Gen Prep	9045M	III
28-Mar-2011	SL-214-SA5A-SB-8.5-9.5	6241849	N	METHOD	300.0	III
28-Mar-2011	SL-214-SA5A-SB-8.5-9.5	6241849	N	METHOD	314.0	III
28-Mar-2011	SL-214-SA5A-SB-8.5-9.5	6241849	N	METHOD	6850	III
28-Mar-2011	SL-214-SA5A-SB-8.5-9.5	6241849	N	METHOD	7471A	III
28-Mar-2011	SL-215-SA5A-SB-4.0-5.0	6241850	N	3050B	6010B	III
28-Mar-2011	SL-215-SA5A-SB-4.0-5.0	6241850	N	3050B	6020	III
28-Mar-2011	SL-215-SA5A-SB-4.0-5.0	6241850	N	3060A	7199	III
28-Mar-2011	SL-215-SA5A-SB-4.0-5.0	6241850	N	3550B	8082	III
28-Mar-2011	SL-215-SA5A-SB-4.0-5.0	6241850	N	3550B	8270C	III
28-Mar-2011	SL-215-SA5A-SB-4.0-5.0	6241850	N	3550B	8270C SIM	III
28-Mar-2011	SL-215-SA5A-SB-4.0-5.0	6241850	N	5035	8260B	III
28-Mar-2011	SL-215-SA5A-SB-4.0-5.0	6241850	N	5035	8260B SIM	III
28-Mar-2011	SL-215-SA5A-SB-4.0-5.0	6241850	N	Gen Prep	300.0	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
28-Mar-2011	SL-215-SA5A-SB-4.0-5.0	6241850	N	Gen Prep	9045M	III
28-Mar-2011	SL-215-SA5A-SB-4.0-5.0	6241850	N	METHOD	314.0	III
28-Mar-2011	SL-215-SA5A-SB-4.0-5.0	6241850	N	METHOD	6850	III
28-Mar-2011	SL-215-SA5A-SB-4.0-5.0	6241850	N	METHOD	7471A	III
28-Mar-2011	SL-209-SA5A-SB-4.0-5.0	6241846	N	3050B	6010B	III
28-Mar-2011	SL-209-SA5A-SB-4.0-5.0	6241846	N	3050B	6020	III
28-Mar-2011	SL-209-SA5A-SB-4.0-5.0	6241846	N	3060A	7199	III
28-Mar-2011	SL-209-SA5A-SB-4.0-5.0	6241846	N	3546	1625C	III
28-Mar-2011	SL-209-SA5A-SB-4.0-5.0	6241846	N	3550B	8015B	III
28-Mar-2011	SL-209-SA5A-SB-4.0-5.0	6241846	N	3550B	8015M	III
28-Mar-2011	SL-209-SA5A-SB-4.0-5.0	6241846	N	3550B	8082	III
28-Mar-2011	SL-209-SA5A-SB-4.0-5.0	6241846	N	3550B	8270C	III
28-Mar-2011	SL-209-SA5A-SB-4.0-5.0	6241846	N	3550B	8270C SIM	III
28-Mar-2011	SL-209-SA5A-SB-4.0-5.0	6241846	N	5035	8015M	III
28-Mar-2011	SL-209-SA5A-SB-4.0-5.0	6241846	N	5035	8260B	III
28-Mar-2011	SL-209-SA5A-SB-4.0-5.0	6241846	N	5035	8260B SIM	III
28-Mar-2011	SL-209-SA5A-SB-4.0-5.0	6241846	N	8330	8330A	III
28-Mar-2011	SL-209-SA5A-SB-4.0-5.0	6241846	N	Gen Prep	300.0	III
28-Mar-2011	SL-209-SA5A-SB-4.0-5.0	6241846	N	Gen Prep	9045M	III
28-Mar-2011	SL-209-SA5A-SB-4.0-5.0	6241846	N	METHOD	314.0	III
28-Mar-2011	SL-209-SA5A-SB-4.0-5.0	6241846	N	METHOD	7471A	III
28-Mar-2011	SL-209-SA5A-SB-4.0-5.0	6241846	N	METHOD	8015B	III
28-Mar-2011	SL-209-SA5A-SB-4.0-5.0	6241846	N	METHOD	8015M	III
28-Mar-2011	SL-209-SA5A-SB-4.0-5.0	6241846	N	METHOD	8315A	III
28-Mar-2011	SL-209-SA5A-SB-4.0-5.0	6241846	N	METHOD	9012B	III
28-Mar-2011	SL-209-SA5A-SB-4.0-5.0DUP	P241846D271759A	DUP	Gen Prep	300.0	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
28-Mar-2011	SL-209-SA5A-SB-4.0-5.0MSD	P241846M242014A	MSD	METHOD	8315A	III
28-Mar-2011	SL-209-SA5A-SB-4.0-5.0MSD	P241846M321902A	MSD	METHOD	8015M	III
28-Mar-2011	SL-209-SA5A-SB-4.0-5.0MS	P241846R242004A	MS	METHOD	8315A	III
28-Mar-2011	SL-209-SA5A-SB-4.0-5.0MS	P241846R271813A	MS	Gen Prep	300.0	III
28-Mar-2011	SL-209-SA5A-SB-4.0-5.0MS	P241846R321845A	MS	METHOD	8015M	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE113 **Laboratory: LL**

EDD Filename: DE113_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **GENCHEM**

Method: **300.0** ***Matrix:*** **SO**

Sample ID: **SL-209-SA5A-SB-4.0-5.0** ***Collected:*** **3/28/2011 3:48:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.1		0.90	MDL	1.1	PQL	mg/Kg	J	Q
Nitrate-NO3	1.2	J	0.90	MDL	1.7	PQL	mg/Kg	J	Z

Sample ID: **SL-211-SA5A-SB-2.5-3.5** ***Collected:*** **3/28/2011 9:50:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	3.6		0.87	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: **SL-214-SA5A-SB-4.0-5.0** ***Collected:*** **3/28/2011 12:03:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	0.89	U	0.89	MDL	1.1	PQL	mg/Kg	UJ	Q

Sample ID: **SL-215-SA5A-SB-4.0-5.0** ***Collected:*** **3/28/2011 2:52:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.2		0.89	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: **SL-216-SA5A-SB-4.0-5.0** ***Collected:*** **3/28/2011 11:30:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	0.90	U	0.90	MDL	1.1	PQL	mg/Kg	UJ	Q
Nitrate-NO3	1.6	J	0.90	MDL	1.7	PQL	mg/Kg	J	Z

Method Category: **METALS**

Method: **6010B** ***Matrix:*** **SO**

Sample ID: **SL-209-SA5A-SB-4.0-5.0** ***Collected:*** **3/28/2011 3:48:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	319		0.616	MDL	11.0	PQL	mg/Kg	J	E
SODIUM	108	J	41.0	MDL	110	PQL	mg/Kg	J	Z
TIN	4.05	J	1.10	MDL	11.0	PQL	mg/Kg	U	B
Zirconium	2.12	J	0.924	MDL	5.50	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE113 **Laboratory: LL**

EDD Filename: DE113_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6010B** ***Matrix:*** **SO**

Sample ID: **SL-211-SA5A-SB-2.5-3.5** ***Collected:*** **3/28/2011 9:50:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	285		0.611	MDL	10.9	PQL	mg/Kg	J	E
TIN	4.41	J	1.09	MDL	10.9	PQL	mg/Kg	U	B
Zirconium	1.14	J	0.916	MDL	5.45	PQL	mg/Kg	J	Z

Sample ID: **SL-214-SA5A-SB-4.0-5.0** ***Collected:*** **3/28/2011 12:03:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	276		0.616	MDL	11.0	PQL	mg/Kg	J	E
TIN	3.34	J	1.10	MDL	11.0	PQL	mg/Kg	U	B
Zirconium	2.07	J	0.924	MDL	5.50	PQL	mg/Kg	J	Z

Sample ID: **SL-214-SA5A-SB-8.5-9.5** ***Collected:*** **3/28/2011 12:05:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	125		0.614	MDL	11.0	PQL	mg/Kg	J	E
TIN	3.85	J	1.10	MDL	11.0	PQL	mg/Kg	U	B
Zirconium	1.85	J	0.921	MDL	5.48	PQL	mg/Kg	J	Z

Sample ID: **SL-215-SA5A-SB-4.0-5.0** ***Collected:*** **3/28/2011 2:52:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	561		0.622	MDL	11.1	PQL	mg/Kg	J	E
TIN	3.13	J	1.11	MDL	11.1	PQL	mg/Kg	U	B
Zirconium	2.18	J	0.932	MDL	5.55	PQL	mg/Kg	J	Z

Sample ID: **SL-216-SA5A-SB-4.0-5.0** ***Collected:*** **3/28/2011 11:30:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	309		0.618	MDL	11.0	PQL	mg/Kg	J	E
SODIUM	93.5	J	41.2	MDL	110	PQL	mg/Kg	J	Z
TIN	3.28	J	1.10	MDL	11.0	PQL	mg/Kg	U	B
Zirconium	2.08	J	0.927	MDL	5.52	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE113 **Laboratory: LL**

EDD Filename: DE113_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 ***Matrix:*** SO

Sample ID: SL-209-SA5A-SB-4.0-5.0 ***Collected:*** 3/28/2011 3:48:00 ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0926	J	0.0444	MDL	0.444	PQL	mg/Kg	J	Z

Sample ID: SL-209-SA5A-SB-4.0-5.0 ***Collected:*** 3/28/2011 3:48:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.592		0.0556	MDL	0.111	PQL	mg/Kg	J	Q, E, A

Sample ID: SL-209-SA5A-SB-4.0-5.0 ***Collected:*** 3/28/2011 3:48:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	127		0.120	MDL	0.444	PQL	mg/Kg	J	E, A

Sample ID: SL-209-SA5A-SB-4.0-5.0 ***Collected:*** 3/28/2011 3:48:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0883	J	0.0667	MDL	0.222	PQL	mg/Kg	J	Z, Q, E
ARSENIC	6.95		0.0889	MDL	0.444	PQL	mg/Kg	J	A
BERYLLIUM	0.947		0.0178	MDL	0.111	PQL	mg/Kg	J	Q
CADMIUM	0.118		0.0444	MDL	0.111	PQL	mg/Kg	J	E, E, A
CHROMIUM	26.5		0.133	MDL	0.444	PQL	mg/Kg	J	E, E, A
COBALT	8.29		0.0222	MDL	0.111	PQL	mg/Kg	J	E, E, A
COPPER	11.9		0.0733	MDL	0.444	PQL	mg/Kg	J	E
LEAD	8.94		0.0116	MDL	0.222	PQL	mg/Kg	J	E, E
NICKEL	19.6		0.111	MDL	0.444	PQL	mg/Kg	J	E, A
SILVER	0.0535	J	0.0133	MDL	0.111	PQL	mg/Kg	J	Z, Q, E, A
THALLIUM	0.333		0.0333	MDL	0.111	PQL	mg/Kg	J	Q
VANADIUM	49.5		0.0244	MDL	0.111	PQL	mg/Kg	J	Q, A
ZINC	59.9		0.622	MDL	3.33	PQL	mg/Kg	J	E

Sample ID: SL-211-SA5A-SB-2.5-3.5 ***Collected:*** 3/28/2011 9:50:00 ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0725	J	0.0432	MDL	0.432	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE113 **Laboratory: LL**

EDD Filename: DE113_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 ***Matrix:*** SO

Sample ID: SL-211-SA5A-SB-2.5-3.5 ***Collected:*** 3/28/2011 9:50:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.436		0.0540	MDL	0.108	PQL	mg/Kg	J	Q, E, A

Sample ID: SL-211-SA5A-SB-2.5-3.5 ***Collected:*** 3/28/2011 9:50:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	116		0.117	MDL	0.432	PQL	mg/Kg	J	E, A

Sample ID: SL-211-SA5A-SB-2.5-3.5 ***Collected:*** 3/28/2011 9:50:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0648	U	0.0648	MDL	0.216	PQL	mg/Kg	UJ	E
ARSENIC	7.56		0.0864	MDL	0.432	PQL	mg/Kg	J	A
BERYLLIUM	0.885		0.0173	MDL	0.108	PQL	mg/Kg	J	Q
CADMIUM	0.0766	J	0.0432	MDL	0.108	PQL	mg/Kg	J	Z, E, E, A
CHROMIUM	25.5		0.130	MDL	0.432	PQL	mg/Kg	J	E, E, A
COBALT	6.18		0.0216	MDL	0.108	PQL	mg/Kg	J	E, E, A
COPPER	12.8		0.0713	MDL	0.432	PQL	mg/Kg	J	E
LEAD	7.46		0.0112	MDL	0.216	PQL	mg/Kg	J	E, E
NICKEL	20.6		0.108	MDL	0.432	PQL	mg/Kg	J	E, A
SILVER	0.0237	J	0.0130	MDL	0.108	PQL	mg/Kg	J	Z, Q, E, A
THALLIUM	0.329		0.0324	MDL	0.108	PQL	mg/Kg	J	Q
VANADIUM	46.6		0.0238	MDL	0.108	PQL	mg/Kg	J	Q, A
ZINC	58.5		0.605	MDL	3.24	PQL	mg/Kg	J	E

Sample ID: SL-214-SA5A-SB-4.0-5.0 ***Collected:*** 3/28/2011 12:03:00 ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.167	J	0.0436	MDL	0.436	PQL	mg/Kg	J	Z

Sample ID: SL-214-SA5A-SB-4.0-5.0 ***Collected:*** 3/28/2011 12:03:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.551		0.0545	MDL	0.109	PQL	mg/Kg	J	Q, E, A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE113 **Laboratory: LL**

EDD Filename: DE113_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6020** ***Matrix:*** **SO**

Sample ID: **SL-214-SA5A-SB-4.0-5.0** ***Collected:*** **3/28/2011 12:03:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	130		0.118	MDL	0.436	PQL	mg/Kg	J	E, A

Sample ID: **SL-214-SA5A-SB-4.0-5.0** ***Collected:*** **3/28/2011 12:03:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0654	U	0.0654	MDL	0.218	PQL	mg/Kg	UJ	E
ARSENIC	4.48		0.0871	MDL	0.436	PQL	mg/Kg	J	A
BERYLLIUM	0.699		0.0174	MDL	0.109	PQL	mg/Kg	J	Q
CADMIUM	0.211		0.0436	MDL	0.109	PQL	mg/Kg	J	E, E, A
CHROMIUM	20.9		0.131	MDL	0.436	PQL	mg/Kg	J	E, E, A
COBALT	5.79		0.0218	MDL	0.109	PQL	mg/Kg	J	E, E, A
COPPER	11.2		0.0719	MDL	0.436	PQL	mg/Kg	J	E
LEAD	6.02		0.0113	MDL	0.218	PQL	mg/Kg	J	E, E
NICKEL	15.5		0.109	MDL	0.436	PQL	mg/Kg	J	E, A
SILVER	0.0354	J	0.0131	MDL	0.109	PQL	mg/Kg	J	Z, Q, E, A
THALLIUM	0.299		0.0327	MDL	0.109	PQL	mg/Kg	J	Q
VANADIUM	38.7		0.0240	MDL	0.109	PQL	mg/Kg	J	Q, A
ZINC	58.8		0.610	MDL	3.27	PQL	mg/Kg	J	E

Sample ID: **SL-214-SA5A-SB-8.5-9.5** ***Collected:*** **3/28/2011 12:05:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.141	J	0.0430	MDL	0.430	PQL	mg/Kg	J	Z

Sample ID: **SL-214-SA5A-SB-8.5-9.5** ***Collected:*** **3/28/2011 12:05:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.552		0.0538	MDL	0.108	PQL	mg/Kg	J	Q, E, A

Sample ID: **SL-214-SA5A-SB-8.5-9.5** ***Collected:*** **3/28/2011 12:05:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	98.4		0.116	MDL	0.430	PQL	mg/Kg	J	E, A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE113 **Laboratory: LL**

EDD Filename: DE113_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 ***Matrix:*** SO

Sample ID: SL-214-SA5A-SB-8.5-9.5 ***Collected:*** 3/28/2011 12:05:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0859	J	0.0645	MDL	0.215	PQL	mg/Kg	J	Z, Q, E
ARSENIC	9.45		0.0860	MDL	0.430	PQL	mg/Kg	J	A
BERYLLIUM	1.19		0.0172	MDL	0.108	PQL	mg/Kg	J	Q
CADMIUM	0.0430	U	0.0430	MDL	0.108	PQL	mg/Kg	UJ	E, E
CHROMIUM	28.0		0.129	MDL	0.430	PQL	mg/Kg	J	E, E, A
COBALT	6.79		0.0215	MDL	0.108	PQL	mg/Kg	J	E, E, A
COPPER	13.0		0.0710	MDL	0.430	PQL	mg/Kg	J	E
LEAD	10.6		0.0112	MDL	0.215	PQL	mg/Kg	J	E, E
NICKEL	15.5		0.108	MDL	0.430	PQL	mg/Kg	J	E, A
SILVER	0.0333	J	0.0129	MDL	0.108	PQL	mg/Kg	J	Z, Q, E, A
THALLIUM	0.357		0.0323	MDL	0.108	PQL	mg/Kg	J	Q
VANADIUM	56.8		0.0237	MDL	0.108	PQL	mg/Kg	J	Q, A
ZINC	55.4		0.602	MDL	3.23	PQL	mg/Kg	J	E

Sample ID: SL-215-SA5A-SB-4.0-5.0 ***Collected:*** 3/28/2011 2:52:00 ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.183	J	0.0444	MDL	0.444	PQL	mg/Kg	J	Z

Sample ID: SL-215-SA5A-SB-4.0-5.0 ***Collected:*** 3/28/2011 2:52:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.728		0.0555	MDL	0.111	PQL	mg/Kg	J	Q, E, A

Sample ID: SL-215-SA5A-SB-4.0-5.0 ***Collected:*** 3/28/2011 2:52:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	138		0.120	MDL	0.444	PQL	mg/Kg	J	E, A

Sample ID: SL-215-SA5A-SB-4.0-5.0 ***Collected:*** 3/28/2011 2:52:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0967	J	0.0666	MDL	0.222	PQL	mg/Kg	J	Z, Q, E
ARSENIC	5.68		0.0888	MDL	0.444	PQL	mg/Kg	J	A
BERYLLIUM	0.770		0.0178	MDL	0.111	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE113 **Laboratory: LL**

EDD Filename: DE113_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 ***Matrix:*** SO

Sample ID: SL-215-SA5A-SB-4.0-5.0 ***Collected:*** 3/28/2011 2:52:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.262		0.0444	MDL	0.111	PQL	mg/Kg	J	E, E, A
CHROMIUM	23.5		0.133	MDL	0.444	PQL	mg/Kg	J	E, E, A
COBALT	6.32		0.0222	MDL	0.111	PQL	mg/Kg	J	E, E, A
COPPER	75.1		0.0733	MDL	0.444	PQL	mg/Kg	J	E
LEAD	9.16		0.0115	MDL	0.222	PQL	mg/Kg	J	E, E
NICKEL	17.7		0.111	MDL	0.444	PQL	mg/Kg	J	E, A
SILVER	0.0416	J	0.0133	MDL	0.111	PQL	mg/Kg	J	Z, Q, E, A
THALLIUM	0.362		0.0333	MDL	0.111	PQL	mg/Kg	J	Q
VANADIUM	42.3		0.0244	MDL	0.111	PQL	mg/Kg	J	Q, A
ZINC	104		0.622	MDL	3.33	PQL	mg/Kg	J	E

Sample ID: SL-216-SA5A-SB-4.0-5.0 ***Collected:*** 3/28/2011 11:30:00 ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.150	J	0.0446	MDL	0.446	PQL	mg/Kg	J	Z

Sample ID: SL-216-SA5A-SB-4.0-5.0 ***Collected:*** 3/28/2011 11:30:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.702		0.0557	MDL	0.111	PQL	mg/Kg	J	Q, E, A

Sample ID: SL-216-SA5A-SB-4.0-5.0 ***Collected:*** 3/28/2011 11:30:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	162		0.120	MDL	0.446	PQL	mg/Kg	J	E, A

Sample ID: SL-216-SA5A-SB-4.0-5.0 ***Collected:*** 3/28/2011 11:30:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0669	U	0.0669	MDL	0.223	PQL	mg/Kg	UJ	E
ARSENIC	4.98		0.0892	MDL	0.446	PQL	mg/Kg	J	A
BERYLLIUM	0.784		0.0178	MDL	0.111	PQL	mg/Kg	J	Q
CADMIUM	0.282		0.0446	MDL	0.111	PQL	mg/Kg	J	E, E, A
CHROMIUM	22.4		0.134	MDL	0.446	PQL	mg/Kg	J	E, E, A
COBALT	6.53		0.0223	MDL	0.111	PQL	mg/Kg	J	E, E, A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE113 **Laboratory: LL**

EDD Filename: DE113_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-216-SA5A-SB-4.0-5.0 *Collected:* 3/28/2011 11:30:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	12.9		0.0736	MDL	0.446	PQL	mg/Kg	J	E
LEAD	6.34		0.0116	MDL	0.223	PQL	mg/Kg	J	E, E
NICKEL	17.1		0.111	MDL	0.446	PQL	mg/Kg	J	E, A
SILVER	0.0221	J	0.0134	MDL	0.111	PQL	mg/Kg	J	Z, Q, E, A
THALLIUM	0.315		0.0334	MDL	0.111	PQL	mg/Kg	J	Q
VANADIUM	42.3		0.0245	MDL	0.111	PQL	mg/Kg	J	Q, A
ZINC	63.8		0.624	MDL	3.34	PQL	mg/Kg	J	E

Method Category: METALS

Method: 7199 **Matrix:** SO

Sample ID: SL-209-SA5A-SB-4.0-5.0 *Collected:* 3/28/2011 3:48:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.84	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-211-SA5A-SB-2.5-3.5 *Collected:* 3/28/2011 9:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.87	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-214-SA5A-SB-4.0-5.0 *Collected:* 3/28/2011 12:03:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.42	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-215-SA5A-SB-4.0-5.0 *Collected:* 3/28/2011 2:52:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.46	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-216-SA5A-SB-4.0-5.0 *Collected:* 3/28/2011 11:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.50	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE113 **Laboratory: LL**

EDD Filename: DE113_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 7471A **Matrix: SO**

Sample ID: SL-209-SA5A-SB-4.0-5.0 *Collected:* 3/28/2011 3:48:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0030	U	0.0030	MDL	0.106	PQL	mg/Kg	R	Q

Sample ID: SL-211-SA5A-SB-2.5-3.5 *Collected:* 3/28/2011 9:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0112	J	0.0030	MDL	0.105	PQL	mg/Kg	J	Z, Q, Q

Sample ID: SL-214-SA5A-SB-4.0-5.0 *Collected:* 3/28/2011 12:03:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0031	U	0.0031	MDL	0.107	PQL	mg/Kg	R	Q

Sample ID: SL-214-SA5A-SB-8.5-9.5 *Collected:* 3/28/2011 12:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0052	J	0.0031	MDL	0.107	PQL	mg/Kg	J	Z, Q, Q

Sample ID: SL-215-SA5A-SB-4.0-5.0 *Collected:* 3/28/2011 2:52:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0036	J	0.0030	MDL	0.103	PQL	mg/Kg	J	Z, Q, Q

Sample ID: SL-216-SA5A-SB-4.0-5.0 *Collected:* 3/28/2011 11:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0030	U	0.0030	MDL	0.104	PQL	mg/Kg	R	Q

Method Category: SVOA

Method: 1625C **Matrix: SO**

Sample ID: SL-211-SA5A-SB-2.5-3.5 *Collected:* 3/28/2011 9:50:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	46.4		18.2	MDL	36.4	PQL	ng/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE113 **Laboratory: LL**

EDD Filename: DE113_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1625C **Matrix: SO**

Sample ID: SL-216-SA5A-SB-4.0-5.0 *Collected:* 3/28/2011 11:30:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	76.1		18.8	MDL	37.5	PQL	ng/Kg	U	B

Method Category: SVOA

Method: 8015M **Matrix: SO**

Sample ID: SL-209-SA5A-SB-4.0-5.0 *Collected:* 3/28/2011 3:48:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DIETHYLENE GLYCOL	5.6	U	5.6	MDL	14	PQL	mg/Kg	UJ	Q

Sample ID: SL-209-SA5A-SB-4.0-5.0 *Collected:* 3/28/2011 3:48:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	0.52	J	0.45	MDL	1.3	PQL	mg/Kg	J	Z
EFH (C8-C11)	0.46	J	0.45	MDL	1.3	PQL	mg/Kg	J	Z

Sample ID: SL-211-SA5A-SB-2.5-3.5 *Collected:* 3/28/2011 9:50:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	0.53	J	0.44	MDL	1.3	PQL	mg/Kg	J	Z
EFH (C30-C40)	0.60	J	0.44	MDL	1.3	PQL	mg/Kg	J	Z

Sample ID: SL-216-SA5A-SB-4.0-5.0 *Collected:* 3/28/2011 11:30:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	0.52	J	0.45	MDL	1.4	PQL	mg/Kg	J	Z
EFH (C8-C11)	0.46	J	0.45	MDL	1.4	PQL	mg/Kg	J	Z

Method Category: SVOA

Method: 8270C **Matrix: SO**

Sample ID: SL-209-SA5A-SB-4.0-5.0 *Collected:* 3/28/2011 3:48:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-CHLOROISOPROPYL) ETHER	18	U	18	MDL	180	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE113 **Laboratory: LL**

EDD Filename: DE113_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **8270C** ***Matrix:*** **SO**

Sample ID: **SL-209-SA5A-SB-4.0-5.0** ***Collected:*** **3/28/2011 3:48:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NITROBENZENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L

Sample ID: **SL-211-SA5A-SB-2.5-3.5** ***Collected:*** **3/28/2011 9:50:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-CHLOROISOPROPYL) ETHER	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
NITROBENZENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L

Sample ID: **SL-214-SA5A-SB-4.0-5.0** ***Collected:*** **3/28/2011 12:03:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-CHLOROISOPROPYL) ETHER	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
NITROBENZENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L

Sample ID: **SL-214-SA5A-SB-8.5-9.5** ***Collected:*** **3/28/2011 12:05:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-CHLOROISOPROPYL) ETHER	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
NITROBENZENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L

Sample ID: **SL-215-SA5A-SB-4.0-5.0** ***Collected:*** **3/28/2011 2:52:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-CHLOROISOPROPYL) ETHER	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
NITROBENZENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L

Sample ID: **SL-216-SA5A-SB-4.0-5.0** ***Collected:*** **3/28/2011 11:30:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-CHLOROISOPROPYL) ETHER	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
NITROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE113 **Laboratory: LL**

EDD Filename: DE113_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C SIM **Matrix:** SO

Sample ID: SL-211-SA5A-SB-2.5-3.5 *Collected:* 3/28/2011 9:50:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Di-n-octylphthalate	11	J	6.5	MDL	20	PQL	ug/Kg	J	Z

Sample ID: SL-214-SA5A-SB-4.0-5.0 *Collected:* 3/28/2011 12:03:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHRYSENE	1.2	J	0.37	MDL	1.8	PQL	ug/Kg	J	Z
Di-n-octylphthalate	12	J	6.6	MDL	20	PQL	ug/Kg	J	Z
NAPHTHALENE	0.84	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-214-SA5A-SB-8.5-9.5 *Collected:* 3/28/2011 12:05:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Di-n-octylphthalate	11	J	6.7	MDL	20	PQL	ug/Kg	J	Z

Sample ID: SL-215-SA5A-SB-4.0-5.0 *Collected:* 3/28/2011 2:52:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHRYSENE	0.57	J	0.37	MDL	1.8	PQL	ug/Kg	J	Z
Di-n-octylphthalate	11	J	6.6	MDL	20	PQL	ug/Kg	J	Z

Sample ID: SL-216-SA5A-SB-4.0-5.0 *Collected:* 3/28/2011 11:30:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Di-n-octylphthalate	11	J	6.7	MDL	20	PQL	ug/Kg	J	Z

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: SL-209-SA5A-SB-4.0-5.0 *Collected:* 3/28/2011 3:48:00 *Analysis Type:* RES *Dilution:* 0.91

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	2.7	J	0.25	MDL	4.1	PQL	ug/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE113 **Laboratory: LL**

EDD Filename: DE113_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **VOA**

Method: **8260B** ***Matrix:*** **SO**

Sample ID: **SL-211-SA5A-SB-2.5-3.5** ***Collected:*** **3/28/2011 9:50:00** ***Analysis Type:*** **RES** ***Dilution:*** **1.03**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	2.5	J	0.27	MDL	4.5	PQL	ug/Kg	U	B

Sample ID: **SL-214-SA5A-SB-4.0-5.0** ***Collected:*** **3/28/2011 12:03:00** ***Analysis Type:*** **RES** ***Dilution:*** **0.96**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	2.6	J	0.25	MDL	4.2	PQL	ug/Kg	U	B

Sample ID: **SL-215-SA5A-SB-4.0-5.0** ***Collected:*** **3/28/2011 2:52:00** ***Analysis Type:*** **RES** ***Dilution:*** **0.88**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	2.6	J	0.23	MDL	3.9	PQL	ug/Kg	U	B

Sample ID: **SL-216-SA5A-SB-4.0-5.0** ***Collected:*** **3/28/2011 11:30:00** ***Analysis Type:*** **RES** ***Dilution:*** **0.87**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	3.4	J	0.23	MDL	3.9	PQL	ug/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE113 **Laboratory: LL**

EDD Filename: DE113_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
*#	Professional Judgment
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Verification Correlation Coefficient
C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE113 **Laboratory: LL**

EDD Filename: DE113_v1 **eQAPP Name: CDM_SSFL_110509**

F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation
L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery Lower Estimation

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE113 **Laboratory: LL**

EDD Filename: DE113_v1 **eQAPP Name: CDM_SSFL_110509**

R	Continuing Calibration Verification Percent Recovery Lower Rejection
R	Continuing Calibration Verification Percent Recovery Upper Estimation
R	Continuing Calibration Verification Percent Recovery Upper Rejection
R	Continuing Calibration Verification Relative Response Factor
R	Initial Calibration Relative Response Factor
R	Initial Calibration Verification Percent Recovery Lower Estimation
R	Initial Calibration Verification Percent Recovery Lower Rejection
R	Initial Calibration Verification Percent Recovery Upper Estimation
R	Initial Calibration Verification Percent Recovery Upper Rejection
R	Initial Calibration Verification Relative Response Factor
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control Outlier Reports

DE113

Method Blank Outlier Report

Lab Reporting Batch ID: DE113 **Laboratory: LL**

EDD Filename: DE113_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1625C
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKLB09B261132	4/11/2011 11:32:00 AM	N-NITROSODIMETHYLAMINE	21.5 ng/Kg	SL-209-SA5A-SB-4.0-5.0 SL-211-SA5A-SB-2.5-3.5 SL-216-SA5A-SB-4.0-5.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-211-SA5A-SB-2.5-3.5(RES)	N-NITROSODIMETHYLAMINE	46.4 ng/Kg	46.4U ng/Kg
SL-216-SA5A-SB-4.0-5.0(RES)	N-NITROSODIMETHYLAMINE	76.1 ng/Kg	76.1U ng/Kg

Method: 6010B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P08908CB220126	4/7/2011 1:26:00 AM	PHOSPHORUS TIN	1.48 mg/Kg 2.21 mg/Kg	SL-209-SA5A-SB-4.0-5.0 SL-211-SA5A-SB-2.5-3.5 SL-214-SA5A-SB-4.0-5.0 SL-214-SA5A-SB-8.5-9.5 SL-215-SA5A-SB-4.0-5.0 SL-216-SA5A-SB-4.0-5.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-209-SA5A-SB-4.0-5.0(RES)	TIN	4.05 mg/Kg	4.05U mg/Kg
SL-211-SA5A-SB-2.5-3.5(RES)	TIN	4.41 mg/Kg	4.41U mg/Kg
SL-214-SA5A-SB-4.0-5.0(RES)	TIN	3.34 mg/Kg	3.34U mg/Kg
SL-214-SA5A-SB-8.5-9.5(RES)	TIN	3.85 mg/Kg	3.85U mg/Kg
SL-215-SA5A-SB-4.0-5.0(RES)	TIN	3.13 mg/Kg	3.13U mg/Kg
SL-216-SA5A-SB-4.0-5.0(RES)	TIN	3.28 mg/Kg	3.28U mg/Kg

Method: 6020
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P08926CB221237A	4/4/2011 12:37:00 PM	COPPER	0.218 mg/Kg	SL-209-SA5A-SB-4.0-5.0 SL-211-SA5A-SB-2.5-3.5 SL-214-SA5A-SB-4.0-5.0 SL-214-SA5A-SB-8.5-9.5 SL-215-SA5A-SB-4.0-5.0 SL-216-SA5A-SB-4.0-5.0
P08926CB222315A	4/5/2011 11:15:00 PM	LEAD	0.0131 mg/Kg	SL-209-SA5A-SB-4.0-5.0 SL-211-SA5A-SB-2.5-3.5 SL-214-SA5A-SB-4.0-5.0 SL-214-SA5A-SB-8.5-9.5 SL-215-SA5A-SB-4.0-5.0 SL-216-SA5A-SB-4.0-5.0

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Method Blank Outlier Report

Lab Reporting Batch ID: DE113 **Laboratory: LL**

EDD Filename: DE113_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **6020**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

Method: **8260B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB09B211346A	3/31/2011 1:46:00 PM	METHYLENE CHLORIDE	0.55 ug/Kg	SL-209-SA5A-SB-4.0-5.0
VBLKB10B210308A	4/1/2011 3:08:00 AM	METHYLENE CHLORIDE	0.83 ug/Kg	SL-211-SA5A-SB-2.5-3.5 SL-214-SA5A-SB-4.0-5.0 SL-215-SA5A-SB-4.0-5.0 SL-216-SA5A-SB-4.0-5.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-209-SA5A-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	2.7 ug/Kg	4.1U ug/Kg
SL-211-SA5A-SB-2.5-3.5(RES)	METHYLENE CHLORIDE	2.5 ug/Kg	4.5U ug/Kg
SL-214-SA5A-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	2.6 ug/Kg	4.2U ug/Kg
SL-215-SA5A-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	2.6 ug/Kg	3.9U ug/Kg
SL-216-SA5A-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	3.4 ug/Kg	3.9U ug/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE113 **Laboratory: LL**

EDD Filename: DE113_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 300.0
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-209-SA5A-SB-4.0-5.0MS (SL-209-SA5A-SB-4.0-5.0 SL-211-SA5A-SB-2.5-3.5 SL-214-SA5A-SB-4.0-5.0 SL-215-SA5A-SB-4.0-5.0 SL-216-SA5A-SB-4.0-5.0)	FLUORIDE	57	-	80.00-120.00	-	FLUORIDE	J (all detects) UJ (all non-detects)

Method: 8015M
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-209-SA5A-SB-4.0-5.0MS SL-209-SA5A-SB-4.0-5.0MSD (SL-209-SA5A-SB-4.0-5.0)	DIETHYLENE GLYCOL	46	-	59.00-109.00	47 (20.00)	DIETHYLENE GLYCOL	J(all detects) UJ(all non-detects)

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE113 **Laboratory: LL**

EDD Filename: DE113_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 300.0
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-209-SA5A-SB-4.0-5.0DUP (SL-209-SA5A-SB-4.0-5.0 SL -211-SA5A-SB-2.5-3.5 SL -214-SA5A-SB-4.0-5.0 SL -215-SA5A-SB-4.0-5.0 SL -216-SA5A-SB-4.0-5.0)	FLUORIDE	32	20.00	No Qual OK by difference

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE113 **Laboratory: LL**

EDD Filename: DE113_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8260B
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
LCSY78Q211734A LCSY78Y211755A (TB-032811)	BROMOMETHANE TRICHLOROFLUOROMETHANE	- 137	123 131	44.00-120.00 64.00-129.00	- -	BROMOMETHANE TRICHLOROFLUOROMETHAN	J(all detects)

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P08926CQ221240A (SL-209-SA5A-SB-4.0-5.0 SL -211-SA5A-SB-2.5-3.5 SL -214-SA5A-SB-4.0-5.0 SL -214-SA5A-SB-8.5-9.5 SL -215-SA5A-SB-4.0-5.0 SL -216-SA5A-SB-4.0-5.0)	ANTIMONY	60	-	80.00-120.00	-	ANTIMONY	No Qual SRM within QC limits

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P1LCLCSQ261146 (SL-209-SA5A-SB-4.0-5.0 SL -211-SA5A-SB-2.5-3.5 SL -214-SA5A-SB-4.0-5.0 SL -214-SA5A-SB-8.5-9.5 SL -215-SA5A-SB-4.0-5.0 SL -216-SA5A-SB-4.0-5.0)	BIS(2-CHLOROISOPROPYL) ET NITROBENZENE	64 70	- -	68.00-131.00 71.00-104.00	- -	BIS(2-CHLOROISOPROPYL) E NITROBENZENE	J(all detects) UJ(all non-detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE113 **Laboratory: LL**

EDD Filename: DE113_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 300.0

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-209-SA5A-SB-4.0-5.0	Nitrate-NO3	J	1.2	1.7	PQL	mg/Kg	J (all detects)
SL-216-SA5A-SB-4.0-5.0	Nitrate-NO3	J	1.6	1.7	PQL	mg/Kg	J (all detects)

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-209-SA5A-SB-4.0-5.0	SODIUM	J	108	110	PQL	mg/Kg	J (all detects)
	TIN	J	4.05	11.0	PQL	mg/Kg	
	Zirconium	J	2.12	5.50	PQL	mg/Kg	
SL-211-SA5A-SB-2.5-3.5	TIN	J	4.41	10.9	PQL	mg/Kg	J (all detects)
	Zirconium	J	1.14	5.45	PQL	mg/Kg	
SL-214-SA5A-SB-4.0-5.0	TIN	J	3.34	11.0	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.07	5.50	PQL	mg/Kg	
SL-214-SA5A-SB-8.5-9.5	TIN	J	3.85	11.0	PQL	mg/Kg	J (all detects)
	Zirconium	J	1.85	5.48	PQL	mg/Kg	
SL-215-SA5A-SB-4.0-5.0	TIN	J	3.13	11.1	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.18	5.55	PQL	mg/Kg	
SL-216-SA5A-SB-4.0-5.0	SODIUM	J	93.5	110	PQL	mg/Kg	J (all detects)
	TIN	J	3.28	11.0	PQL	mg/Kg	
	Zirconium	J	2.08	5.52	PQL	mg/Kg	

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-209-SA5A-SB-4.0-5.0	ANTIMONY	J	0.0883	0.222	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0926	0.444	PQL	mg/Kg	
	SILVER	J	0.0535	0.111	PQL	mg/Kg	
SL-211-SA5A-SB-2.5-3.5	CADMIUM	J	0.0766	0.108	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0725	0.432	PQL	mg/Kg	
	SILVER	J	0.0237	0.108	PQL	mg/Kg	
SL-214-SA5A-SB-4.0-5.0	SELENIUM	J	0.167	0.436	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0354	0.109	PQL	mg/Kg	
SL-214-SA5A-SB-8.5-9.5	ANTIMONY	J	0.0859	0.215	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.141	0.430	PQL	mg/Kg	
	SILVER	J	0.0333	0.108	PQL	mg/Kg	
SL-215-SA5A-SB-4.0-5.0	ANTIMONY	J	0.0967	0.222	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.183	0.444	PQL	mg/Kg	
	SILVER	J	0.0416	0.111	PQL	mg/Kg	
SL-216-SA5A-SB-4.0-5.0	SELENIUM	J	0.150	0.446	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0221	0.111	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE113 **Laboratory: LL**

EDD Filename: DE113_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-209-SA5A-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.84	1.1	PQL	mg/Kg	J (all detects)
SL-211-SA5A-SB-2.5-3.5	HEXAVALENT CHROMIUM	J	0.87	1.1	PQL	mg/Kg	J (all detects)
SL-214-SA5A-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.42	1.1	PQL	mg/Kg	J (all detects)
SL-215-SA5A-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.46	1.1	PQL	mg/Kg	J (all detects)
SL-216-SA5A-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.50	1.1	PQL	mg/Kg	J (all detects)

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-211-SA5A-SB-2.5-3.5	MERCURY	J	0.0112	0.105	PQL	mg/Kg	J (all detects)
SL-214-SA5A-SB-8.5-9.5	MERCURY	J	0.0052	0.107	PQL	mg/Kg	J (all detects)
SL-215-SA5A-SB-4.0-5.0	MERCURY	J	0.0036	0.103	PQL	mg/Kg	J (all detects)

Method: 8015M

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-209-SA5A-SB-4.0-5.0	EFH (C30-C40) EFH (C8-C11)	J J	0.52 0.46	1.3 1.3	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-211-SA5A-SB-2.5-3.5	EFH (C15-C20) EFH (C30-C40)	J J	0.53 0.60	1.3 1.3	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-216-SA5A-SB-4.0-5.0	EFH (C30-C40) EFH (C8-C11)	J J	0.52 0.46	1.4 1.4	PQL PQL	mg/Kg mg/Kg	J (all detects)

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-209-SA5A-SB-4.0-5.0	METHYLENE CHLORIDE	J	2.7	4.1	PQL	ug/Kg	J (all detects)
SL-211-SA5A-SB-2.5-3.5	METHYLENE CHLORIDE	J	2.5	4.5	PQL	ug/Kg	J (all detects)
SL-214-SA5A-SB-4.0-5.0	METHYLENE CHLORIDE	J	2.6	4.2	PQL	ug/Kg	J (all detects)
SL-215-SA5A-SB-4.0-5.0	METHYLENE CHLORIDE	J	2.6	3.9	PQL	ug/Kg	J (all detects)
SL-216-SA5A-SB-4.0-5.0	METHYLENE CHLORIDE	J	3.4	3.9	PQL	ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE113 **Laboratory: LL**

EDD Filename: DE113_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8270C SIM**

Matrix: **SO**

SampleID	*Analyte*	*Lab Qual*	*Result*	*Reporting Limit*	*RL Type*	*Units*	*Flag*
SL-211-SA5A-SB-2.5-3.5	Di-n-octylphthalate	J	11	20	PQL	ug/Kg	J (all detects)
SL-214-SA5A-SB-4.0-5.0	CHRYSENE Di-n-octylphthalate NAPHTHALENE	J J J	1.2 12 0.84	1.8 20 1.8	PQL PQL PQL	ug/Kg ug/Kg ug/Kg	J (all detects)
SL-214-SA5A-SB-8.5-9.5	Di-n-octylphthalate	J	11	20	PQL	ug/Kg	J (all detects)
SL-215-SA5A-SB-4.0-5.0	CHRYSENE Di-n-octylphthalate	J J	0.57 11	1.8 20	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-216-SA5A-SB-4.0-5.0	Di-n-octylphthalate	J	11	20	PQL	ug/Kg	J (all detects)

LDC #: 25911V4 **VALIDATION COMPLETENESS WORKSHEET** Date: 8-3-11

SDG #: DE113 ADR

Laboratory: Lancaster Laboratories

Reviewer: CR

2nd Reviewer: A

METHOD: Metals (EPA SW 846 Method 6010B/6020A/7000)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	N	Sampling dates:
II.	ICP/MS Tune	—	
III.	Calibration	—	
IV.	Blanks	A	No Quals
V.	ICP Interference Check Sample (ICS) Analysis	N	
VI.	Matrix Spike Analysis	N	MS/D (SDG: DE114)
VII.	Duplicate Sample Analysis	N	DUP ↓
VIII.	Laboratory Control Samples (LCS)	A	LCS
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	—	(SDG: DE114)
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	—	
XV	Field Blanks	—	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:

1	SL-209-SA5A-SB-4.0-5.0	11		21		31	
2	SL-211-SA5A-SB-2.5-3.5	12		22		32	
3	SL-214-SA5A-SB-4.0-5.0	13		23		33	
4	SL-214-SA5A-SB-8.5-9.5	14		24		34	
5	SL-215-SA5A-SB-4.0-5.0	15		25		35	
6	SL-215-SA5A-SB-4.0-5.0	16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

SAMPLE DELIVERY GROUP

DE114

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
29-Mar-2011	TB-032911	6242772	TB	5030B	8015M	III
29-Mar-2011	TB-032911	6242772	TB	5030B	8260B	III
29-Mar-2011	TB-032911	6242772	TB	5030B	8260B SIM	III
29-Mar-2011	SL-208-SA5A-SB-4.0-5.0	6242768	N	3050B	6010B	III
29-Mar-2011	SL-208-SA5A-SB-4.0-5.0	6242768	N	3050B	6020	III
29-Mar-2011	SL-208-SA5A-SB-4.0-5.0	6242768	N	3060A	7199	III
29-Mar-2011	SL-208-SA5A-SB-4.0-5.0	6242768	N	3546	1625C	III
29-Mar-2011	SL-208-SA5A-SB-4.0-5.0	6242768	N	3550B	8015B	III
29-Mar-2011	SL-208-SA5A-SB-4.0-5.0	6242768	N	3550B	8015M	III
29-Mar-2011	SL-208-SA5A-SB-4.0-5.0	6242768	N	3550B	8082	III
29-Mar-2011	SL-208-SA5A-SB-4.0-5.0	6242768	N	3550B	8270C	III
29-Mar-2011	SL-208-SA5A-SB-4.0-5.0	6242768	N	3550B	8270C SIM	III
29-Mar-2011	SL-208-SA5A-SB-4.0-5.0	6242768	N	5035	8015M	III
29-Mar-2011	SL-208-SA5A-SB-4.0-5.0	6242768	N	5035	8260B	III
29-Mar-2011	SL-208-SA5A-SB-4.0-5.0	6242768	N	5035	8260B SIM	III
29-Mar-2011	SL-208-SA5A-SB-4.0-5.0	6242768	N	8330	8330A	III
29-Mar-2011	SL-208-SA5A-SB-4.0-5.0	6242768	N	Gen Prep	300.0	III
29-Mar-2011	SL-208-SA5A-SB-4.0-5.0	6242768	N	Gen Prep	9045M	III
29-Mar-2011	SL-208-SA5A-SB-4.0-5.0	6242768	N	METHOD	314.0	III
29-Mar-2011	SL-208-SA5A-SB-4.0-5.0	6242768	N	METHOD	7471A	III
29-Mar-2011	SL-208-SA5A-SB-4.0-5.0	6242768	N	METHOD	8015B	III
29-Mar-2011	SL-208-SA5A-SB-4.0-5.0	6242768	N	METHOD	8015M	III
29-Mar-2011	SL-208-SA5A-SB-4.0-5.0	6242768	N	METHOD	8315A	III
29-Mar-2011	SL-208-SA5A-SB-4.0-5.0	6242768	N	METHOD	9012B	III
29-Mar-2011	SL-208-SA5A-SB-7.5-8.5	6242769	N	3050B	6010B	III
29-Mar-2011	SL-208-SA5A-SB-7.5-8.5	6242769	N	3050B	6020	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
29-Mar-2011	SL-208-SA5A-SB-7.5-8.5	6242769	N	3060A	7199	III
29-Mar-2011	SL-208-SA5A-SB-7.5-8.5	6242769	N	3546	1625C	III
29-Mar-2011	SL-208-SA5A-SB-7.5-8.5	6242769	N	3550B	8015B	III
29-Mar-2011	SL-208-SA5A-SB-7.5-8.5	6242769	N	3550B	8015M	III
29-Mar-2011	SL-208-SA5A-SB-7.5-8.5	6242769	N	3550B	8082	III
29-Mar-2011	SL-208-SA5A-SB-7.5-8.5	6242769	N	3550B	8270C	III
29-Mar-2011	SL-208-SA5A-SB-7.5-8.5	6242769	N	3550B	8270C SIM	III
29-Mar-2011	SL-208-SA5A-SB-7.5-8.5	6242769	N	5035	8015M	III
29-Mar-2011	SL-208-SA5A-SB-7.5-8.5	6242769	N	5035	8260B	III
29-Mar-2011	SL-208-SA5A-SB-7.5-8.5	6242769	N	5035	8260B SIM	III
29-Mar-2011	SL-208-SA5A-SB-7.5-8.5	6242769	N	8330	8330A	III
29-Mar-2011	SL-208-SA5A-SB-7.5-8.5	6242769	N	Gen Prep	300.0	III
29-Mar-2011	SL-208-SA5A-SB-7.5-8.5	6242769	N	Gen Prep	9045M	III
29-Mar-2011	SL-208-SA5A-SB-7.5-8.5	6242769	N	METHOD	314.0	III
29-Mar-2011	SL-208-SA5A-SB-7.5-8.5	6242769	N	METHOD	7471A	III
29-Mar-2011	SL-208-SA5A-SB-7.5-8.5	6242769	N	METHOD	8015B	III
29-Mar-2011	SL-208-SA5A-SB-7.5-8.5	6242769	N	METHOD	8015M	III
29-Mar-2011	SL-208-SA5A-SB-7.5-8.5	6242769	N	METHOD	8315A	III
29-Mar-2011	SL-208-SA5A-SB-7.5-8.5	6242769	N	METHOD	9012B	III
29-Mar-2011	EB10-SA5A-032911	6242771	EB	3005A	6010B	III
29-Mar-2011	EB10-SA5A-032911	6242771	EB	3020A	6020	III
29-Mar-2011	EB10-SA5A-032911	6242771	EB	3510C	8015B	III
29-Mar-2011	EB10-SA5A-032911	6242771	EB	3510C	8015M	III
29-Mar-2011	EB10-SA5A-032911	6242771	EB	3510C	8082	III
29-Mar-2011	EB10-SA5A-032911	6242771	EB	3510C	8270C	III
29-Mar-2011	EB10-SA5A-032911	6242771	EB	3510C	8270C SIM	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
29-Mar-2011	EB10-SA5A-032911	6242771	EB	3520C	1625C	III
29-Mar-2011	EB10-SA5A-032911	6242771	EB	5030B	8015M	III
29-Mar-2011	EB10-SA5A-032911	6242771	EB	5030B	8260B	III
29-Mar-2011	EB10-SA5A-032911	6242771	EB	5030B	8260B SIM	III
29-Mar-2011	EB10-SA5A-032911	6242771	EB	8330	8330A	III
29-Mar-2011	EB10-SA5A-032911	6242771	EB	Gen Prep	300.0	III
29-Mar-2011	EB10-SA5A-032911	6242771	EB	Gen Prep	314.0	III
29-Mar-2011	EB10-SA5A-032911	6242771	EB	Gen Prep	7199	III
29-Mar-2011	EB10-SA5A-032911	6242771	EB	Gen Prep	8015B	III
29-Mar-2011	EB10-SA5A-032911	6242771	EB	Gen Prep	8015M	III
29-Mar-2011	EB10-SA5A-032911	6242771	EB	Gen Prep	9040B	III
29-Mar-2011	EB10-SA5A-032911	6242771	EB	METHOD	7470A	III
29-Mar-2011	EB10-SA5A-032911	6242771	EB	METHOD	8315A	III
29-Mar-2011	EB10-SA5A-032911	6242771	EB	METHOD	9012B	III
29-Mar-2011	EB10-SA5A-032911MSD	P242771M321724A	MSD	Gen Prep	8015M	III
29-Mar-2011	EB10-SA5A-032911MS	P242771R321706A	MS	Gen Prep	8015M	III
29-Mar-2011	SL-091-SA5A-SB-3.0-4.0	6242767	N	3050B	6010B	III
29-Mar-2011	SL-091-SA5A-SB-3.0-4.0	6242767	N	3050B	6020	III
29-Mar-2011	SL-091-SA5A-SB-3.0-4.0	6242767	N	3060A	7199	III
29-Mar-2011	SL-091-SA5A-SB-3.0-4.0	6242767	N	3546	1625C	III
29-Mar-2011	SL-091-SA5A-SB-3.0-4.0	6242767	N	3550B	8015B	III
29-Mar-2011	SL-091-SA5A-SB-3.0-4.0	6242767	N	3550B	8015M	III
29-Mar-2011	SL-091-SA5A-SB-3.0-4.0	6242767	N	3550B	8082	III
29-Mar-2011	SL-091-SA5A-SB-3.0-4.0	6242767	N	3550B	8270C	III
29-Mar-2011	SL-091-SA5A-SB-3.0-4.0	6242767	N	3550B	8270C SIM	III
29-Mar-2011	SL-091-SA5A-SB-3.0-4.0	6242767	N	5035	8015M	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
29-Mar-2011	SL-091-SA5A-SB-3.0-4.0	6242767	N	5035	8260B	III
29-Mar-2011	SL-091-SA5A-SB-3.0-4.0	6242767	N	5035	8260B SIM	III
29-Mar-2011	SL-091-SA5A-SB-3.0-4.0	6242767	N	8330	8330A	III
29-Mar-2011	SL-091-SA5A-SB-3.0-4.0	6242767	N	Gen Prep	300.0	III
29-Mar-2011	SL-091-SA5A-SB-3.0-4.0	6242767	N	Gen Prep	9045M	III
29-Mar-2011	SL-091-SA5A-SB-3.0-4.0	6242767	N	METHOD	314.0	III
29-Mar-2011	SL-091-SA5A-SB-3.0-4.0	6242767	N	METHOD	7471A	III
29-Mar-2011	SL-091-SA5A-SB-3.0-4.0	6242767	N	METHOD	8015B	III
29-Mar-2011	SL-091-SA5A-SB-3.0-4.0	6242767	N	METHOD	8015M	III
29-Mar-2011	SL-091-SA5A-SB-3.0-4.0	6242767	N	METHOD	8315A	III
29-Mar-2011	SL-091-SA5A-SB-3.0-4.0	6242767	N	METHOD	9012B	III
29-Mar-2011	SL-091-SA5A-SB-3.0-4.0DUP	P242767D270308A	DUP	METHOD	314.0	III
29-Mar-2011	SL-091-SA5A-SB-3.0-4.0MS	P242767R270330A	MS	METHOD	314.0	III
29-Mar-2011	SL-221-SA5A-SB-3.0-4.0	6242770	N	3050B	6010B	III
29-Mar-2011	SL-221-SA5A-SB-3.0-4.0	6242770	N	3050B	6020	III
29-Mar-2011	SL-221-SA5A-SB-3.0-4.0	6242770	N	3060A	7199	III
29-Mar-2011	SL-221-SA5A-SB-3.0-4.0	6242770	N	3546	1625C	III
29-Mar-2011	SL-221-SA5A-SB-3.0-4.0	6242770	N	3550B	8015B	III
29-Mar-2011	SL-221-SA5A-SB-3.0-4.0	6242770	N	3550B	8015M	III
29-Mar-2011	SL-221-SA5A-SB-3.0-4.0	6242770	N	3550B	8082	III
29-Mar-2011	SL-221-SA5A-SB-3.0-4.0	6242770	N	3550B	8270C	III
29-Mar-2011	SL-221-SA5A-SB-3.0-4.0	6242770	N	3550B	8270C SIM	III
29-Mar-2011	SL-221-SA5A-SB-3.0-4.0	6242770	N	5035	8015M	III
29-Mar-2011	SL-221-SA5A-SB-3.0-4.0	6242770	N	5035	8260B	III
29-Mar-2011	SL-221-SA5A-SB-3.0-4.0	6242770	N	5035	8260B SIM	III
29-Mar-2011	SL-221-SA5A-SB-3.0-4.0	6242770	N	8330	8330A	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
29-Mar-2011	SL-221-SA5A-SB-3.0-4.0	6242770	N	Gen Prep	300.0	III
29-Mar-2011	SL-221-SA5A-SB-3.0-4.0	6242770	N	Gen Prep	9045M	III
29-Mar-2011	SL-221-SA5A-SB-3.0-4.0	6242770	N	METHOD	314.0	III
29-Mar-2011	SL-221-SA5A-SB-3.0-4.0	6242770	N	METHOD	7471A	III
29-Mar-2011	SL-221-SA5A-SB-3.0-4.0	6242770	N	METHOD	8015B	III
29-Mar-2011	SL-221-SA5A-SB-3.0-4.0	6242770	N	METHOD	8015M	III
29-Mar-2011	SL-221-SA5A-SB-3.0-4.0	6242770	N	METHOD	8315A	III
29-Mar-2011	SL-221-SA5A-SB-3.0-4.0	6242770	N	METHOD	9012B	III
29-Mar-2011	SL-221-SA5A-SB-3.0-4.0DUP	P242770D220146	DUP	3050B	6010B	III
29-Mar-2011	SL-221-SA5A-SB-3.0-4.0DUP	P242770D220841	DUP	METHOD	7471A	III
29-Mar-2011	SL-221-SA5A-SB-3.0-4.0DUP	P242770D221249A	DUP	3050B	6020	III
29-Mar-2011	SL-221-SA5A-SB-3.0-4.0DUP	P242770D221249B	DUP	3050B	6020	III
29-Mar-2011	SL-221-SA5A-SB-3.0-4.0DUP	P242770D221249C	DUP	3050B	6020	III
29-Mar-2011	SL-221-SA5A-SB-3.0-4.0DUP	P242770D221249D	DUP	3050B	6020	III
29-Mar-2011	SL-221-SA5A-SB-3.0-4.0DUP	P242770D221410A	DUP	3050B	6020	III
29-Mar-2011	SL-221-SA5A-SB-3.0-4.0DUP	P242770D221434A	DUP	3050B	6020	III
29-Mar-2011	SL-221-SA5A-SB-3.0-4.0DUP	P242770D221806	DUP	3050B	6010B	III
29-Mar-2011	SL-221-SA5A-SB-3.0-4.0DUP	P242770D222142	DUP	3050B	6010B	III
29-Mar-2011	SL-221-SA5A-SB-3.0-4.0DUP	P242770D271919B	DUP	METHOD	9012B	III
29-Mar-2011	SL-221-SA5A-SB-3.0-4.0MSD	P242770M220154	MSD	3050B	6010B	III
29-Mar-2011	SL-221-SA5A-SB-3.0-4.0MSD	P242770M220844	MSD	METHOD	7471A	III
29-Mar-2011	SL-221-SA5A-SB-3.0-4.0MSD	P242770M221255A	MSD	3050B	6020	III
29-Mar-2011	SL-221-SA5A-SB-3.0-4.0MSD	P242770M221255B	MSD	3050B	6020	III
29-Mar-2011	SL-221-SA5A-SB-3.0-4.0MSD	P242770M221255C	MSD	3050B	6020	III
29-Mar-2011	SL-221-SA5A-SB-3.0-4.0MSD	P242770M221255D	MSD	3050B	6020	III
29-Mar-2011	SL-221-SA5A-SB-3.0-4.0MSD	P242770M221416A	MSD	3050B	6020	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
29-Mar-2011	SL-221-SA5A-SB-3.0-4.0MSD	P242770M221814	MSD	3050B	6010B	III
29-Mar-2011	SL-221-SA5A-SB-3.0-4.0MSD	P242770M222149	MSD	3050B	6010B	III
29-Mar-2011	SL-221-SA5A-SB-3.0-4.0MS	P242770R220150	MS	3050B	6010B	III
29-Mar-2011	SL-221-SA5A-SB-3.0-4.0MS	P242770R220842	MS	METHOD	7471A	III
29-Mar-2011	SL-221-SA5A-SB-3.0-4.0MS	P242770R221252A	MS	3050B	6020	III
29-Mar-2011	SL-221-SA5A-SB-3.0-4.0MS	P242770R221252B	MS	3050B	6020	III
29-Mar-2011	SL-221-SA5A-SB-3.0-4.0MS	P242770R221252C	MS	3050B	6020	III
29-Mar-2011	SL-221-SA5A-SB-3.0-4.0MS	P242770R221252D	MS	3050B	6020	III
29-Mar-2011	SL-221-SA5A-SB-3.0-4.0MS	P242770R221413A	MS	3050B	6020	III
29-Mar-2011	SL-221-SA5A-SB-3.0-4.0MS	P242770R221810	MS	3050B	6010B	III
29-Mar-2011	SL-221-SA5A-SB-3.0-4.0MS	P242770R222145	MS	3050B	6010B	III
29-Mar-2011	SL-221-SA5A-SB-3.0-4.0MS	P242770R271920B	MS	METHOD	9012B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE114 **Laboratory: LL**

EDD Filename: DE114_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: GENCHEM

Method: 300.0 **Matrix: SO**

Sample ID: SL-091-SA5A-SB-3.0-4.0 *Collected:* 3/29/2011 10:59:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Nitrate-NO3	1.1	J	0.89	MDL	1.7	PQL	mg/Kg	J	Z

Sample ID: SL-208-SA5A-SB-7.5-8.5 *Collected:* 3/29/2011 9:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Nitrate-NO3	1.2	J	0.92	MDL	1.7	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-091-SA5A-SB-3.0-4.0 *Collected:* 3/29/2011 10:59:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	353		0.609	MDL	10.9	PQL	mg/Kg	J	E
SODIUM	91.1	J	40.6	MDL	109	PQL	mg/Kg	J	Z
TIN	3.29	J	1.09	MDL	10.9	PQL	mg/Kg	U	B
Zirconium	1.30	J	0.914	MDL	5.44	PQL	mg/Kg	J	Z

Sample ID: SL-208-SA5A-SB-4.0-5.0 *Collected:* 3/29/2011 8:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	206		0.627	MDL	11.2	PQL	mg/Kg	J	E
SODIUM	85.3	J	41.8	MDL	112	PQL	mg/Kg	J	Z
TIN	3.76	J	1.12	MDL	11.2	PQL	mg/Kg	U	B
Zirconium	1.99	J	0.941	MDL	5.60	PQL	mg/Kg	J	Z

Sample ID: SL-208-SA5A-SB-7.5-8.5 *Collected:* 3/29/2011 9:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	129		0.646	MDL	11.5	PQL	mg/Kg	J	E
TIN	3.82	J	1.15	MDL	11.5	PQL	mg/Kg	U	B
Zirconium	2.42	J	0.969	MDL	5.77	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE114 **Laboratory: LL**

EDD Filename: DE114_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS
Method: 6010B **Matrix:** SO

Sample ID: SL-221-SA5A-SB-3.0-4.0 *Collected:* 3/29/2011 2:19:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	677		0.647	MDL	11.6	PQL	mg/Kg	J	E
Zirconium	3.50	J	0.971	MDL	5.78	PQL	mg/Kg	J	Z

Method Category: METALS
Method: 6020 **Matrix:** SO

Sample ID: SL-091-SA5A-SB-3.0-4.0 *Collected:* 3/29/2011 10:59:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.236	J	0.0440	MDL	0.440	PQL	mg/Kg	J	Z

Sample ID: SL-091-SA5A-SB-3.0-4.0 *Collected:* 3/29/2011 10:59:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.512		0.0549	MDL	0.110	PQL	mg/Kg	J	Q, E, A

Sample ID: SL-091-SA5A-SB-3.0-4.0 *Collected:* 3/29/2011 10:59:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	108		0.119	MDL	0.440	PQL	mg/Kg	J	E, A

Sample ID: SL-091-SA5A-SB-3.0-4.0 *Collected:* 3/29/2011 10:59:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0828	J	0.0659	MDL	0.220	PQL	mg/Kg	J	Z, Q, E
ARSENIC	4.52		0.0879	MDL	0.440	PQL	mg/Kg	J	A
BERYLLIUM	0.649		0.0176	MDL	0.110	PQL	mg/Kg	J	Q
CADMIUM	0.195		0.0440	MDL	0.110	PQL	mg/Kg	J	E, E, A
CHROMIUM	20.1		0.132	MDL	0.440	PQL	mg/Kg	J	E, E, A
COBALT	6.50		0.0220	MDL	0.110	PQL	mg/Kg	J	E, E, A
COPPER	8.71		0.0725	MDL	0.440	PQL	mg/Kg	J	E
LEAD	5.42		0.0114	MDL	0.220	PQL	mg/Kg	J	E, E
NICKEL	13.8		0.110	MDL	0.440	PQL	mg/Kg	J	E, A
SILVER	0.0413	J	0.0132	MDL	0.110	PQL	mg/Kg	J	Z, Q, E, A
THALLIUM	0.291		0.0330	MDL	0.110	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE114 **Laboratory: LL**

EDD Filename: DE114_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 ***Matrix:*** SO

Sample ID: SL-091-SA5A-SB-3.0-4.0 ***Collected:*** 3/29/2011 10:59:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
VANADIUM	39.7		0.0242	MDL	0.110	PQL	mg/Kg	J	Q, A
ZINC	57.7		0.615	MDL	3.30	PQL	mg/Kg	J	E

Sample ID: SL-208-SA5A-SB-4.0-5.0 ***Collected:*** 3/29/2011 8:50:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.221	J	0.0440	MDL	0.440	PQL	mg/Kg	J	Z

Sample ID: SL-208-SA5A-SB-4.0-5.0 ***Collected:*** 3/29/2011 8:50:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.761		0.0549	MDL	0.110	PQL	mg/Kg	J	Q, E, A

Sample ID: SL-208-SA5A-SB-4.0-5.0 ***Collected:*** 3/29/2011 8:50:00 ***Analysis Type:*** REA5 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	144		0.119	MDL	0.440	PQL	mg/Kg	J	E, A

Sample ID: SL-208-SA5A-SB-4.0-5.0 ***Collected:*** 3/29/2011 8:50:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.105	J	0.0659	MDL	0.220	PQL	mg/Kg	J	Z, Q, E
ARSENIC	6.64		0.0879	MDL	0.440	PQL	mg/Kg	J	A
BERYLLIUM	1.06		0.0176	MDL	0.110	PQL	mg/Kg	J	Q
CADMIUM	0.173		0.0440	MDL	0.110	PQL	mg/Kg	J	E, E, A
CHROMIUM	29.0		0.132	MDL	0.440	PQL	mg/Kg	J	E, E, A
COBALT	9.85		0.0220	MDL	0.110	PQL	mg/Kg	J	E, E, A
COPPER	11.8		0.0725	MDL	0.440	PQL	mg/Kg	J	E
LEAD	8.91		0.0114	MDL	0.220	PQL	mg/Kg	J	E, E
NICKEL	22.2		0.110	MDL	0.440	PQL	mg/Kg	J	E, A
SILVER	0.0461	J	0.0132	MDL	0.110	PQL	mg/Kg	J	Z, Q, E, A
THALLIUM	0.401		0.0330	MDL	0.110	PQL	mg/Kg	J	Q
VANADIUM	55.3		0.0242	MDL	0.110	PQL	mg/Kg	J	Q, A
ZINC	72.6		0.615	MDL	3.30	PQL	mg/Kg	J	E

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE114 **Laboratory: LL**

EDD Filename: DE114_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6020** ***Matrix:*** **SO**

Sample ID: **SL-208-SA5A-SB-7.5-8.5** ***Collected:*** **3/29/2011 9:00:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.113	J	0.0457	MDL	0.457	PQL	mg/Kg	J	Z

Sample ID: **SL-208-SA5A-SB-7.5-8.5** ***Collected:*** **3/29/2011 9:00:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.663		0.0571	MDL	0.114	PQL	mg/Kg	J	Q, E, A

Sample ID: **SL-208-SA5A-SB-7.5-8.5** ***Collected:*** **3/29/2011 9:00:00** ***Analysis Type:*** **REA5** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	94.4		0.123	MDL	0.457	PQL	mg/Kg	J	E, A

Sample ID: **SL-208-SA5A-SB-7.5-8.5** ***Collected:*** **3/29/2011 9:00:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0760	J	0.0685	MDL	0.228	PQL	mg/Kg	J	Z, Q, E
ARSENIC	6.93		0.0914	MDL	0.457	PQL	mg/Kg	J	A
BERYLLIUM	0.918		0.0183	MDL	0.114	PQL	mg/Kg	J	Q
CADMIUM	0.0967	J	0.0457	MDL	0.114	PQL	mg/Kg	J	Z, E, E, A
CHROMIUM	25.2		0.137	MDL	0.457	PQL	mg/Kg	J	E, E, A
COBALT	4.38		0.0228	MDL	0.114	PQL	mg/Kg	J	E, E, A
COPPER	11.6		0.0754	MDL	0.457	PQL	mg/Kg	J	E
LEAD	6.63		0.0119	MDL	0.228	PQL	mg/Kg	J	E, E
NICKEL	15.9		0.114	MDL	0.457	PQL	mg/Kg	J	E, A
SILVER	0.0568	J	0.0137	MDL	0.114	PQL	mg/Kg	J	Z, Q, E, A
THALLIUM	0.293		0.0343	MDL	0.114	PQL	mg/Kg	J	Q
VANADIUM	48.4		0.0251	MDL	0.114	PQL	mg/Kg	J	Q, A
ZINC	48.7		0.640	MDL	3.43	PQL	mg/Kg	J	E

Sample ID: **SL-221-SA5A-SB-3.0-4.0** ***Collected:*** **3/29/2011 2:19:00** ***Analysis Type:*** **REA** ***Dilution:*** **10**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHROMIUM	693		0.687	MDL	2.29	PQL	mg/Kg	J	E, E, A
COPPER	699		0.378	MDL	2.29	PQL	mg/Kg	J	E
NICKEL	538		0.572	MDL	2.29	PQL	mg/Kg	J	E, A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE114 **Laboratory: LL**

EDD Filename: DE114_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 ***Matrix:*** SO

Sample ID: SL-221-SA5A-SB-3.0-4.0 ***Collected:*** 3/29/2011 2:19:00 ***Analysis Type:*** REA ***Dilution:*** 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ZINC	616		3.21	MDL	17.2	PQL	mg/Kg	J	E

Sample ID: SL-221-SA5A-SB-3.0-4.0 ***Collected:*** 3/29/2011 2:19:00 ***Analysis Type:*** REA2 ***Dilution:*** 100

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	2890		0.595	MDL	11.4	PQL	mg/Kg	J	E, E

Sample ID: SL-221-SA5A-SB-3.0-4.0 ***Collected:*** 3/29/2011 2:19:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.327	J	0.0458	MDL	0.458	PQL	mg/Kg	J	Z

Sample ID: SL-221-SA5A-SB-3.0-4.0 ***Collected:*** 3/29/2011 2:19:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	19.5		0.0572	MDL	0.114	PQL	mg/Kg	J	Q, E, A

Sample ID: SL-221-SA5A-SB-3.0-4.0 ***Collected:*** 3/29/2011 2:19:00 ***Analysis Type:*** REA5 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	90.4		0.124	MDL	0.458	PQL	mg/Kg	J	E, A

Sample ID: SL-221-SA5A-SB-3.0-4.0 ***Collected:*** 3/29/2011 2:19:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	1.78		0.0687	MDL	0.229	PQL	mg/Kg	J	Q, E
ARSENIC	12.4		0.0916	MDL	0.458	PQL	mg/Kg	J	A
BERYLLIUM	0.440		0.0183	MDL	0.114	PQL	mg/Kg	J	Q
CADMIUM	18.6		0.0458	MDL	0.114	PQL	mg/Kg	J	E, E, A
COBALT	19.5		0.0229	MDL	0.114	PQL	mg/Kg	J	E, E, A
SILVER	4.45		0.0137	MDL	0.114	PQL	mg/Kg	J	Q, E, A
VANADIUM	34.3		0.0252	MDL	0.114	PQL	mg/Kg	J	Q, A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE114 **Laboratory: LL**

EDD Filename: DE114_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS
Method: 7199 **Matrix:** AQ

Sample ID: EB10-SA5A-032911 *Collected:* 3/29/2011 9:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	5.0	U	5.0	MDL	10.0	PQL	ug/L	UJ	H

Method Category: METALS
Method: 7199 **Matrix:** SO

Sample ID: SL-091-SA5A-SB-3.0-4.0 *Collected:* 3/29/2011 10:59:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.40	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-208-SA5A-SB-4.0-5.0 *Collected:* 3/29/2011 8:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.36	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Method Category: METALS
Method: 7471A **Matrix:** SO

Sample ID: SL-091-SA5A-SB-3.0-4.0 *Collected:* 3/29/2011 10:59:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0031	U	0.0031	MDL	0.106	PQL	mg/Kg	R	Q

Sample ID: SL-208-SA5A-SB-4.0-5.0 *Collected:* 3/29/2011 8:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0032	U	0.0032	MDL	0.112	PQL	mg/Kg	R	Q

Sample ID: SL-208-SA5A-SB-7.5-8.5 *Collected:* 3/29/2011 9:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0050	J	0.0031	MDL	0.107	PQL	mg/Kg	J	Z, Q, Q

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE114 **Laboratory: LL**

EDD Filename: DE114_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS
Method: 7471A **Matrix:** SO

Sample ID: SL-221-SA5A-SB-3.0-4.0 *Collected:* 3/29/2011 2:19:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.377		0.0033	MDL	0.116	PQL	mg/Kg	J	Q, Q

Method Category: SVOA
Method: 1625C **Matrix:** AQ

Sample ID: EB10-SA5A-032911 *Collected:* 3/29/2011 9:30:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	1.81		0.505	MDL	1.01	PQL	ng/L	U	B

Method Category: SVOA
Method: 1625C **Matrix:** SO

Sample ID: SL-208-SA5A-SB-7.5-8.5 *Collected:* 3/29/2011 9:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	45.1		19.2	MDL	38.4	PQL	ng/Kg	U	B

Method Category: SVOA
Method: 8015M **Matrix:** SO

Sample ID: SL-091-SA5A-SB-3.0-4.0 *Collected:* 3/29/2011 10:59:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C21-C30)	0.51	J	0.44	MDL	1.3	PQL	mg/Kg	J	Z
EFH (C30-C40)	0.87	J	0.44	MDL	1.3	PQL	mg/Kg	J	Z
EFH (C8-C11)	0.44	J	0.44	MDL	1.3	PQL	mg/Kg	J	Z

Sample ID: SL-208-SA5A-SB-4.0-5.0 *Collected:* 3/29/2011 8:50:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	0.86	J	0.46	MDL	1.4	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE114 **Laboratory: LL**

EDD Filename: DE114_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA
Method: 8015M **Matrix:** SO

Sample ID: SL-208-SA5A-SB-7.5-8.5 *Collected:* 3/29/2011 9:00:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	1.1	J	0.46	MDL	1.4	PQL	mg/Kg	J	Z
EFH (C8-C11)	0.49	J	0.46	MDL	1.4	PQL	mg/Kg	J	Z

Sample ID: SL-221-SA5A-SB-3.0-4.0 *Collected:* 3/29/2011 2:19:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	0.54	J	0.48	MDL	1.4	PQL	mg/Kg	J	Z
EFH (C8-C11)	0.58	J	0.48	MDL	1.4	PQL	mg/Kg	J	Z

Method Category: SVOA
Method: 8270C **Matrix:** SO

Sample ID: SL-221-SA5A-SB-3.0-4.0 *Collected:* 3/29/2011 2:19:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(G,H,I)PERYLENE	22	J	20	MDL	200	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	64	J	20	MDL	390	PQL	ug/Kg	U	B

Method Category: SVOA
Method: 8270C SIM **Matrix:** AQ

Sample ID: EB10-SA5A-032911 *Collected:* 3/29/2011 9:30:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	0.23	J	0.053	MDL	1.1	PQL	ug/L	U	B
Diethylphthalate	0.091	J	0.053	MDL	1.1	PQL	ug/L	J	Z
Di-n-butylphthalate	0.44	J	0.053	MDL	1.1	PQL	ug/L	U	B
Di-n-octylphthalate	0.12	J	0.053	MDL	1.1	PQL	ug/L	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE114 **Laboratory: LL**

EDD Filename: DE114_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C SIM **Matrix:** SO

Sample ID: SL-221-SA5A-SB-3.0-4.0 *Collected:* 3/29/2011 2:19:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	1.0	J	0.78	MDL	2.0	PQL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	1.2	J	0.78	MDL	2.0	PQL	ug/Kg	J	Z
ACENAPHTHYLENE	0.95	J	0.39	MDL	2.0	PQL	ug/Kg	J	Z
ANTHRACENE	0.77	J	0.39	MDL	2.0	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	1.5	J	0.78	MDL	2.0	PQL	ug/Kg	J	Z
Di-n-butylphthalate	20	J	7.0	MDL	21	PQL	ug/Kg	U	B

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: SL-091-SA5A-SB-3.0-4.0 *Collected:* 3/29/2011 10:59:00 *Analysis Type:* RES *Dilution:* 0.94

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	3.2	J	0.25	MDL	4.2	PQL	ug/Kg	U	B

Sample ID: SL-208-SA5A-SB-4.0-5.0 *Collected:* 3/29/2011 8:50:00 *Analysis Type:* RES *Dilution:* 0.92

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	3.2	J	0.25	MDL	4.2	PQL	ug/Kg	U	B

Sample ID: SL-208-SA5A-SB-7.5-8.5 *Collected:* 3/29/2011 9:00:00 *Analysis Type:* RES *Dilution:* 0.96

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	2.7	J	0.27	MDL	4.4	PQL	ug/Kg	U	B

Sample ID: SL-221-SA5A-SB-3.0-4.0 *Collected:* 3/29/2011 2:19:00 *Analysis Type:* RES *Dilution:* 0.95

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	2.7	J	0.27	MDL	4.5	PQL	ug/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE114 **Laboratory: LL**

EDD Filename: DE114_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
*#	Professional Judgment
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Verification Correlation Coefficient
C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE114 **Laboratory: LL**

EDD Filename: DE114_v1 **eQAPP Name: CDM_SSFL_110509**

F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation
L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery Lower Estimation

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE114 **Laboratory: LL**

EDD Filename: DE114_v1 **eQAPP Name: CDM_SSFL_110509**

R	Continuing Calibration Verification Percent Recovery Lower Rejection
R	Continuing Calibration Verification Percent Recovery Upper Estimation
R	Continuing Calibration Verification Percent Recovery Upper Rejection
R	Continuing Calibration Verification Relative Response Factor
R	Initial Calibration Relative Response Factor
R	Initial Calibration Verification Percent Recovery Lower Estimation
R	Initial Calibration Verification Percent Recovery Lower Rejection
R	Initial Calibration Verification Percent Recovery Upper Estimation
R	Initial Calibration Verification Percent Recovery Upper Rejection
R	Initial Calibration Verification Relative Response Factor
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control Outlier Reports

DE114

QC Outlier Report: HoldingTimes

Lab Reporting Batch ID: DE114 **Laboratory: LL**
EDD Filename: DE114_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7199 **Preparation Method: Gen Prep**
Matrix: AQ

Sample ID	Type	Actual	Criteria	Units	Flag
EB10-SA5A-032911 (RES)	Sampling To Analysis	25.00	24.00	HOURS	J (all detects) UJ (all non-detects)

Method Blank Outlier Report

Lab Reporting Batch ID: DE114 **Laboratory: LL**

EDD Filename: DE114_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1625C
Matrix: AQ

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKWD09B260818	4/6/2011 8:18:00 AM	N-NITROSODIMETHYLAMINE	2.09 ng/L	EB10-SA5A-032911

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
EB10-SA5A-032911(RES)	N-NITROSODIMETHYLAMINE	1.81 ng/L	1.81U ng/L

Method: 1625C
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKLB09B261132	4/11/2011 11:32:00 AM	N-NITROSODIMETHYLAMINE	21.5 ng/Kg	SL-091-SA5A-SB-3.0-4.0 SL-208-SA5A-SB-4.0-5.0 SL-208-SA5A-SB-7.5-8.5 SL-221-SA5A-SB-3.0-4.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-208-SA5A-SB-7.5-8.5(RES)	N-NITROSODIMETHYLAMINE	45.1 ng/Kg	45.1U ng/Kg

Method: 6010B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P08908CB220126	4/7/2011 1:26:00 AM	PHOSPHORUS TIN	1.48 mg/Kg 2.21 mg/Kg	SL-091-SA5A-SB-3.0-4.0 SL-208-SA5A-SB-4.0-5.0 SL-208-SA5A-SB-7.5-8.5 SL-221-SA5A-SB-3.0-4.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-091-SA5A-SB-3.0-4.0(RES)	TIN	3.29 mg/Kg	3.29U mg/Kg
SL-208-SA5A-SB-4.0-5.0(RES)	TIN	3.76 mg/Kg	3.76U mg/Kg
SL-208-SA5A-SB-7.5-8.5(RES)	TIN	3.82 mg/Kg	3.82U mg/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE114 **Laboratory: LL**

EDD Filename: DE114_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **6020**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P08926CB221237A	4/4/2011 12:37:00 PM	COPPER	0.218 mg/Kg	SL-091-SA5A-SB-3.0-4.0 SL-208-SA5A-SB-4.0-5.0 SL-208-SA5A-SB-7.5-8.5 SL-221-SA5A-SB-3.0-4.0
P08926CB222315A	4/5/2011 11:15:00 PM	LEAD	0.0131 mg/Kg	SL-091-SA5A-SB-3.0-4.0 SL-208-SA5A-SB-4.0-5.0 SL-208-SA5A-SB-7.5-8.5 SL-221-SA5A-SB-3.0-4.0

Method: **8260B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB10B210308A	4/1/2011 3:08:00 AM	METHYLENE CHLORIDE	0.83 ug/Kg	SL-091-SA5A-SB-3.0-4.0 SL-208-SA5A-SB-4.0-5.0 SL-208-SA5A-SB-7.5-8.5 SL-221-SA5A-SB-3.0-4.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-091-SA5A-SB-3.0-4.0(RES)	METHYLENE CHLORIDE	3.2 ug/Kg	4.2U ug/Kg
SL-208-SA5A-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	3.2 ug/Kg	4.2U ug/Kg
SL-208-SA5A-SB-7.5-8.5(RES)	METHYLENE CHLORIDE	2.7 ug/Kg	4.4U ug/Kg
SL-221-SA5A-SB-3.0-4.0(RES)	METHYLENE CHLORIDE	2.7 ug/Kg	4.5U ug/Kg

Method: **8270C**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKLA09B262257	4/7/2011 10:57:00 PM	BIS(2-ETHYLHEXYL)PHTHALATE	17 ug/Kg	SL-091-SA5A-SB-3.0-4.0 SL-208-SA5A-SB-4.0-5.0 SL-208-SA5A-SB-7.5-8.5 SL-221-SA5A-SB-3.0-4.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-221-SA5A-SB-3.0-4.0(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	64 ug/Kg	390U ug/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE114 **Laboratory: LL**

EDD Filename: DE114_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8270C SIM**
Matrix: **AQ**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKWG09B261901	4/3/2011 7:01:00 PM	BIS(2-ETHYLHEXYL)PHTHALATE Di-n-butylphthalate	0.074 ug/L 0.12 ug/L	EB10-SA5A-032911

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
EB10-SA5A-032911(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	0.23 ug/L	1.1U ug/L
EB10-SA5A-032911(RES)	Di-n-butylphthalate	0.44 ug/L	1.1U ug/L

Method: **8270C SIM**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKLC09B261905	4/5/2011 7:05:00 PM	Di-n-butylphthalate	11 ug/Kg	SL-091-SA5A-SB-3.0-4.0 SL-208-SA5A-SB-4.0-5.0 SL-208-SA5A-SB-7.5-8.5 SL-221-SA5A-SB-3.0-4.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-221-SA5A-SB-3.0-4.0(RES)	Di-n-butylphthalate	20 ug/Kg	21U ug/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE114 | Laboratory: LL

EDD Filename: DE114_v1 | eQAPP Name: CDM_SSFL_110509

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-221-SA5A-SB-3.0-4.0MS SL-221-SA5A-SB-3.0-4.0MSD (SL-091-SA5A-SB-3.0-4.0 SL -208-SA5A-SB-4.0-5.0 SL -208-SA5A-SB-7.5-8.5 SL -221-SA5A-SB-3.0-4.0)	ANTIMONY ARSENIC BERYLLIUM COPPER SILVER THALLIUM VANADIUM	197 251 137 408 168 146 134	252 414 173 321 162 132 201	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	- - - - - - -	ANTIMONY ARSENIC BERYLLIUM COPPER SILVER THALLIUM VANADIUM	J (all detects) As, Cu No Qual, >4x
SL-221-SA5A-SB-3.0-4.0MS SL-221-SA5A-SB-3.0-4.0MSD (SL-091-SA5A-SB-3.0-4.0 SL -208-SA5A-SB-4.0-5.0 SL -208-SA5A-SB-7.5-8.5 SL -221-SA5A-SB-3.0-4.0)	CADMIUM CHROMIUM LEAD NICKEL ZINC	-555 -4689 -72455 -2148 -188	-83 -4474 -68079 -2361 382	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	38 (20.00) 24 (20.00) 51 (20.00) - -	CADMIUM CHROMIUM LEAD NICKEL ZINC	J(all detects) UJ(all non-detects) No Qual %R, >4x
SL-221-SA5A-SB-3.0-4.0MSD (SL-091-SA5A-SB-3.0-4.0 SL -208-SA5A-SB-4.0-5.0 SL -208-SA5A-SB-7.5-8.5 SL -221-SA5A-SB-3.0-4.0)	COBALT	-	-	75.00-125.00	22 (20.00)	COBALT	J(all detects) UJ(all non-detects)
SL-221-SA5A-SB-3.0-4.0MS SL-221-SA5A-SB-3.0-4.0MSD (SL-091-SA5A-SB-3.0-4.0 SL -208-SA5A-SB-4.0-5.0 SL -208-SA5A-SB-7.5-8.5 SL -221-SA5A-SB-3.0-4.0)	MOLYBDENUM	160	373	75.00-125.00	48 (20.00)	MOLYBDENUM	J(all detects) UJ(all non-detects)
SL-221-SA5A-SB-3.0-4.0MS SL-221-SA5A-SB-3.0-4.0MSD (SL-091-SA5A-SB-3.0-4.0 SL -208-SA5A-SB-4.0-5.0 SL -208-SA5A-SB-7.5-8.5 SL -221-SA5A-SB-3.0-4.0)	BARIUM	558	761	75.00-125.00	-	BARIUM	No Qual, >4x

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-221-SA5A-SB-3.0-4.0MS SL-221-SA5A-SB-3.0-4.0MSD (SL-091-SA5A-SB-3.0-4.0 SL -208-SA5A-SB-4.0-5.0 SL -208-SA5A-SB-7.5-8.5 SL -221-SA5A-SB-3.0-4.0)	ALUMINUM IRON MAGNESIUM MANGANESE TITANIUM	1238 11127 1343 150 126	890 10148 572 145 262	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	- - - - -	ALUMINUM IRON MAGNESIUM MANGANESE TITANIUM	No Qual, >4x
SL-221-SA5A-SB-3.0-4.0MS SL-221-SA5A-SB-3.0-4.0MSD (SL-091-SA5A-SB-3.0-4.0 SL -208-SA5A-SB-4.0-5.0 SL -208-SA5A-SB-7.5-8.5 SL -221-SA5A-SB-3.0-4.0)	CALCIUM PHOSPHORUS	-188 -57	365 -22	75.00-125.00 75.00-125.00	- -	CALCIUM PHOSPHORUS	No Qual, >4x

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE114 **Laboratory: LL**

EDD Filename: DE114_v1 **eQAPP Name: CDM_SSFL_110509**

***Method:* 7471A**
***Matrix:* SO**

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-221-SA5A-SB-3.0-4.0MS SL-221-SA5A-SB-3.0-4.0MSD (SL-091-SA5A-SB-3.0-4.0 SL -208-SA5A-SB-4.0-5.0 SL -208-SA5A-SB-7.5-8.5 SL -221-SA5A-SB-3.0-4.0)	MERCURY	39	21	65.00-135.00	-	MERCURY	J(all detects) R(all non-detects)

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE114 **Laboratory: LL**

EDD Filename: DE114_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-221-SA5A-SB-3.0-4.0DUP (SL-091-SA5A-SB-3.0-4.0 SL -208-SA5A-SB-4.0-5.0 SL -208-SA5A-SB-7.5-8.5 SL -221-SA5A-SB-3.0-4.0)	PHOSPHORUS	34	20.00	J (all detects) UJ (all non-detects)
	Zirconium	55	20.00	Zr No Qual OK by difference

Method: 6020
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-221-SA5A-SB-3.0-4.0DUP (SL-091-SA5A-SB-3.0-4.0 SL -208-SA5A-SB-4.0-5.0 SL -208-SA5A-SB-7.5-8.5 SL -221-SA5A-SB-3.0-4.0)	ANTIMONY	57	20.00	J(all detects) UJ(all non-detects)
	BARIUM	27	20.00	
	CADMIUM	23	20.00	
	CHROMIUM	151	20.00	
	COBALT	30	20.00	
	COPPER	135	20.00	
	LEAD	141	20.00	
	NICKEL	91	20.00	
	SILVER	48	20.00	
	ZINC	24	20.00	

Method: 7471A
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-221-SA5A-SB-3.0-4.0DUP (SL-091-SA5A-SB-3.0-4.0 SL -208-SA5A-SB-4.0-5.0 SL -208-SA5A-SB-7.5-8.5 SL -221-SA5A-SB-3.0-4.0)	MERCURY	40	20.00	No Qual OK by difference

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE114 **Laboratory: LL**

EDD Filename: DE114_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7470A
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P09013CY220928 (EB10-SA5A-032911)	MERCURY	-	87	90.00-115.00	-	MERCURY	No Qual SRM within QC limits

Method: 8260B
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
LCSY86Q211425A (EB10-SA5A-032911 TB-032911)	TRICHLOROFLUOROMETHANE	134	-	64.00-129.00	-	TRICHLOROFLUOROMETHAN	J(all detects)

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P08926CQ221240A (SL-091-SA5A-SB-3.0-4.0 SL-208-SA5A-SB-4.0-5.0 SL-208-SA5A-SB-7.5-8.5 SL-221-SA5A-SB-3.0-4.0)	ANTIMONY	60	-	80.00-120.00	-	ANTIMONY	No Qual SRM within QC limits

Reporting Limit Outliers

Lab Reporting Batch ID: DE114 **Laboratory: LL**

EDD Filename: DE114_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C SIM

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB10-SA5A-032911	BIS(2-ETHYLHEXYL)PHTHALATE	J	0.23	1.1	PQL	ug/L	J (all detects)
	Diethylphthalate	J	0.091	1.1	PQL	ug/L	
	Di-n-butylphthalate	J	0.44	1.1	PQL	ug/L	
	Di-n-octylphthalate	J	0.12	1.1	PQL	ug/L	

Method: 300.0

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-091-SA5A-SB-3.0-4.0	Nitrate-NO3	J	1.1	1.7	PQL	mg/Kg	J (all detects)
SL-208-SA5A-SB-7.5-8.5	Nitrate-NO3	J	1.2	1.7	PQL	mg/Kg	J (all detects)

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-091-SA5A-SB-3.0-4.0	SODIUM	J	91.1	109	PQL	mg/Kg	J (all detects)
	TIN	J	3.29	10.9	PQL	mg/Kg	
	Zirconium	J	1.30	5.44	PQL	mg/Kg	
SL-208-SA5A-SB-4.0-5.0	SODIUM	J	85.3	112	PQL	mg/Kg	J (all detects)
	TIN	J	3.76	11.2	PQL	mg/Kg	
	Zirconium	J	1.99	5.60	PQL	mg/Kg	
SL-208-SA5A-SB-7.5-8.5	TIN	J	3.82	11.5	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.42	5.77	PQL	mg/Kg	
SL-221-SA5A-SB-3.0-4.0	Zirconium	J	3.50	5.78	PQL	mg/Kg	J (all detects)

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-091-SA5A-SB-3.0-4.0	ANTIMONY	J	0.0828	0.220	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.236	0.440	PQL	mg/Kg	
	SILVER	J	0.0413	0.110	PQL	mg/Kg	
SL-208-SA5A-SB-4.0-5.0	ANTIMONY	J	0.105	0.220	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.221	0.440	PQL	mg/Kg	
	SILVER	J	0.0461	0.110	PQL	mg/Kg	
SL-208-SA5A-SB-7.5-8.5	ANTIMONY	J	0.0760	0.228	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0967	0.114	PQL	mg/Kg	
	SELENIUM	J	0.113	0.457	PQL	mg/Kg	
	SILVER	J	0.0568	0.114	PQL	mg/Kg	
SL-221-SA5A-SB-3.0-4.0	SELENIUM	J	0.327	0.458	PQL	mg/Kg	J (all detects)

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Reporting Limit Outliers

Lab Reporting Batch ID: DE114 **Laboratory: LL**

EDD Filename: DE114_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-091-SA5A-SB-3.0-4.0	HEXAVALENT CHROMIUM	J	0.40	1.1	PQL	mg/Kg	J (all detects)
SL-208-SA5A-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.36	1.1	PQL	mg/Kg	J (all detects)

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-208-SA5A-SB-7.5-8.5	MERCURY	J	0.0050	0.107	PQL	mg/Kg	J (all detects)

Method: 8015M

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-091-SA5A-SB-3.0-4.0	EFH (C21-C30) EFH (C30-C40) EFH (C8-C11)	J J J	0.51 0.87 0.44	1.3 1.3 1.3	PQL PQL PQL	mg/Kg mg/Kg mg/Kg	J (all detects)
SL-208-SA5A-SB-4.0-5.0	EFH (C30-C40)	J	0.86	1.4	PQL	mg/Kg	J (all detects)
SL-208-SA5A-SB-7.5-8.5	EFH (C30-C40) EFH (C8-C11)	J J	1.1 0.49	1.4 1.4	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-221-SA5A-SB-3.0-4.0	EFH (C15-C20) EFH (C8-C11)	J J	0.54 0.58	1.4 1.4	PQL PQL	mg/Kg mg/Kg	J (all detects)

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-091-SA5A-SB-3.0-4.0	METHYLENE CHLORIDE	J	3.2	4.2	PQL	ug/Kg	J (all detects)
SL-208-SA5A-SB-4.0-5.0	METHYLENE CHLORIDE	J	3.2	4.2	PQL	ug/Kg	J (all detects)
SL-208-SA5A-SB-7.5-8.5	METHYLENE CHLORIDE	J	2.7	4.4	PQL	ug/Kg	J (all detects)
SL-221-SA5A-SB-3.0-4.0	METHYLENE CHLORIDE	J	2.7	4.5	PQL	ug/Kg	J (all detects)

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-221-SA5A-SB-3.0-4.0	BENZO(G,H,I)PERYLENE BIS(2-ETHYLHEXYL)PHTHALATE	J J	22 64	200 390	PQL PQL	ug/Kg ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE114 **Laboratory: LL**

EDD Filename: DE114_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8270C SIM**

Matrix: **SO**

SampleID	*Analyte*	*Lab Qual*	*Result*	*Reporting Limit*	*RL Type*	*Units*	*Flag*
SL-221-SA5A-SB-3.0-4.0	1-METHYLNAPHTHALENE	J	1.0	2.0	PQL	ug/Kg	J (all detects)
	2-METHYLNAPHTHALENE	J	1.2	2.0	PQL	ug/Kg	
	ACENAPHTHYLENE	J	0.95	2.0	PQL	ug/Kg	
	ANTHRACENE	J	0.77	2.0	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	1.5	2.0	PQL	ug/Kg	
	Di-n-butylphthalate	J	20	21	PQL	ug/Kg	

LDC #: 25911W4 **VALIDATION COMPLETENESS WORKSHEET** Date: 5-3-11

SDG #: DE114 ADR

Laboratory: Lancaster Laboratories

Reviewer: CR

2nd Reviewer: A

METHOD: Metals (EPA SW 846 Method 6010B/6020A/7000)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	N	Sampling dates:
II.	ICP/MS Tune	—	
III.	Calibration	—	
IV.	Blanks	A	No Quals
V.	ICP Interference Check Sample (ICS) Analysis	N	
VI.	Matrix Spike Analysis	N	MS/D (Al, As, Ba, Cd, Ca, Cr, Cu, Fe, Pb, Mg, Mn, Ni, K, Ti, Zn >4x)
VII.	Duplicate Sample Analysis	N	Dup (Hg, Zr <5x RL)
VIII.	Laboratory Control Samples (LCS)	A	LCS
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	SW	J/UJ
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates		
XV	Field Blanks	ND	EB=5

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:

1	SL-091-SA5A-SB-3.0-4.0	11		21		31	
2	SL-208-SA5A-SB-4.0-5.0	12		22		32	
3	SL-208-SA5A-SB-7.5-8.5	13		23		33	
4	SL-221-SA5A-SB-3.0-4.0	14		24		34	
5	EB10-SA5A-032911	15		25		35	
6	(ALL) MS	16		26		36	
7	MSD	17		27		37	
8	DUP	18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 9
SERIAL DILUTIONS
SDG No.: DE114
Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: 6242770BKG Serial Dilution Lab Sample ID: 6242770L
Batch ID(s): P08908C, P08926C
Concentration Units: UG/L

Analyte	Mass	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Diff.	Q	M
Aluminum		84442.5200		80123.5000		5		P
Antimony	121	7.7930		12.3550		59		MS
Arsenic	75	54.0000		76.1500		41	E	MS
Barium	137	394.7000		557.5000		41	E	MS
Beryllium	9	1.9220		2.2445	B	17		MS
Boron		239.5600		268.4500		12		P
Cadmium	111	81.3800		115.4000		42	E	MS
Calcium		529135.4900		532327.6500		1		P
Chromium	52	605.3000		502.5000		17	E	MS
Cobalt	59	85.0800		106.2000		25	E	MS
Copper	63	610.4000		550.0000		10		MS
Iron		75337.4000		77592.9500		3		P
Lead	208	252.3000		245.8500		3		MS
Lithium		168.6800		182.5500		8		P
Magnesium		60040.4900		59845.7500		0		P
Manganese		4973.7600		5369.7000		8		P
Molybdenum	98	85.0100		122.1500		44	E	MS
Nickel	60	470.2000		411.1000		13	E	MS
Phosphorus		5855.8900		5809.0000		1		P
Potassium		20882.8400		20537.3000		2		P
Selenium	78	1.4300	B	1.8155	B	27		MS
Silver	107	19.4300		28.9100		49	E	MS
Sodium		3130.0100		2967.7500	B	5		P
Strontium		851.7300		895.8500		5		P
Thallium	203	0.1500	U	0.7500	U			MS
Tin		370.2200		401.4000	B	8		P
Titanium		6976.2100		7359.0500		5		P
Vanadium	51	149.7000		181.2000		21	E	MS
Zinc	66	538.0000		485.8000		10		MS
Zirconium		30.2600	B	42.0000	U	100		P

NOTE: An E in column Q indicates the presence of a chemical or physical interference in the matrix when the % difference is greater than 10%. This applies only when (I) is greater than or equal to 50x MDL for ICP, 100x MDL for ICP-MS (6020), 50x MDL for ICP-MS (200.8), or 25x MDL for GFAA.

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry

CONCENTRATION QUALIFIERS: DE114 3305
U= Below MDL
B= Below LOQ
FLAGS:
E = Matrix Effects exist as proven by Serial Dilution or Spiked Dilution

SAMPLE DELIVERY GROUP

DE115

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
30-Mar-2011	TB-033011	6244301	TB	5030B	8015M	III
30-Mar-2011	TB-033011	6244301	TB	5030B	8260B	III
30-Mar-2011	TB-033011	6244301	TB	5030B	8260B SIM	III
30-Mar-2011	SL-257-SA5A-SB-2.5-3.5	6244300	N	3050B	6010B	III
30-Mar-2011	SL-257-SA5A-SB-2.5-3.5	6244300	N	3050B	6020	III
30-Mar-2011	SL-257-SA5A-SB-2.5-3.5	6244300	N	3060A	7199	III
30-Mar-2011	SL-257-SA5A-SB-2.5-3.5	6244300	N	3546	1625C	III
30-Mar-2011	SL-257-SA5A-SB-2.5-3.5	6244300	N	3550B	8015B	III
30-Mar-2011	SL-257-SA5A-SB-2.5-3.5	6244300	N	3550B	8015M	III
30-Mar-2011	SL-257-SA5A-SB-2.5-3.5	6244300	N	3550B	8082	III
30-Mar-2011	SL-257-SA5A-SB-2.5-3.5	6244300	N	3550B	8270C	III
30-Mar-2011	SL-257-SA5A-SB-2.5-3.5	6244300	N	3550B	8270C SIM	III
30-Mar-2011	SL-257-SA5A-SB-2.5-3.5	6244300	N	5035	8015M	III
30-Mar-2011	SL-257-SA5A-SB-2.5-3.5	6244300	N	5035	8260B	III
30-Mar-2011	SL-257-SA5A-SB-2.5-3.5	6244300	N	5035	8260B SIM	III
30-Mar-2011	SL-257-SA5A-SB-2.5-3.5	6244300	N	8330	8330A	III
30-Mar-2011	SL-257-SA5A-SB-2.5-3.5	6244300	N	Gen Prep	9045M	III
30-Mar-2011	SL-257-SA5A-SB-2.5-3.5	6244300	N	METHOD	300.0	III
30-Mar-2011	SL-257-SA5A-SB-2.5-3.5	6244300	N	METHOD	314.0	III
30-Mar-2011	SL-257-SA5A-SB-2.5-3.5	6244300	N	METHOD	7471A	III
30-Mar-2011	SL-257-SA5A-SB-2.5-3.5	6244300	N	METHOD	8015B	III
30-Mar-2011	SL-257-SA5A-SB-2.5-3.5	6244300	N	METHOD	8015M	III
30-Mar-2011	SL-257-SA5A-SB-2.5-3.5	6244300	N	METHOD	8315A	III
30-Mar-2011	SL-257-SA5A-SB-2.5-3.5	6244300	N	METHOD	9012B	III
30-Mar-2011	SL-222-SA5A-SB-3.5-4.5	6244296	N	3050B	6010B	III
30-Mar-2011	SL-222-SA5A-SB-3.5-4.5	6244296	N	3050B	6020	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
30-Mar-2011	SL-222-SA5A-SB-3.5-4.5	6244296	N	3060A	7199	III
30-Mar-2011	SL-222-SA5A-SB-3.5-4.5	6244296	N	3546	1625C	III
30-Mar-2011	SL-222-SA5A-SB-3.5-4.5	6244296	N	3550B	8015B	III
30-Mar-2011	SL-222-SA5A-SB-3.5-4.5	6244296	N	3550B	8015M	III
30-Mar-2011	SL-222-SA5A-SB-3.5-4.5	6244296	N	3550B	8082	III
30-Mar-2011	SL-222-SA5A-SB-3.5-4.5	6244296	N	3550B	8270C	III
30-Mar-2011	SL-222-SA5A-SB-3.5-4.5	6244296	N	3550B	8270C SIM	III
30-Mar-2011	SL-222-SA5A-SB-3.5-4.5	6244296	N	5035	8015M	III
30-Mar-2011	SL-222-SA5A-SB-3.5-4.5	6244296	N	5035	8260B	III
30-Mar-2011	SL-222-SA5A-SB-3.5-4.5	6244296	N	5035	8260B SIM	III
30-Mar-2011	SL-222-SA5A-SB-3.5-4.5	6244296	N	8330	8330A	III
30-Mar-2011	SL-222-SA5A-SB-3.5-4.5	6244296	N	Gen Prep	9045M	III
30-Mar-2011	SL-222-SA5A-SB-3.5-4.5	6244296	N	METHOD	300.0	III
30-Mar-2011	SL-222-SA5A-SB-3.5-4.5	6244296	N	METHOD	314.0	III
30-Mar-2011	SL-222-SA5A-SB-3.5-4.5	6244296	N	METHOD	7471A	III
30-Mar-2011	SL-222-SA5A-SB-3.5-4.5	6244296	N	METHOD	8015B	III
30-Mar-2011	SL-222-SA5A-SB-3.5-4.5	6244296	N	METHOD	8015M	III
30-Mar-2011	SL-222-SA5A-SB-3.5-4.5	6244296	N	METHOD	8315A	III
30-Mar-2011	SL-222-SA5A-SB-3.5-4.5	6244296	N	METHOD	9012B	III
30-Mar-2011	SL-222-SA5A-SB-3.5-4.5MS	6244297	MS	3050B	6010B	III
30-Mar-2011	SL-222-SA5A-SB-3.5-4.5MS	6244297	MS	3050B	6020	III
30-Mar-2011	SL-222-SA5A-SB-3.5-4.5MS	6244297	MS	3060A	7199	III
30-Mar-2011	SL-222-SA5A-SB-3.5-4.5MS	6244297	MS	3546	1625C	III
30-Mar-2011	SL-222-SA5A-SB-3.5-4.5MS	6244297	MS	3550B	8015B	III
30-Mar-2011	SL-222-SA5A-SB-3.5-4.5MS	6244297	MS	3550B	8015M	III
30-Mar-2011	SL-222-SA5A-SB-3.5-4.5MS	6244297	MS	3550B	8082	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
30-Mar-2011	SL-222-SA5A-SB-3.5-4.5MS	6244297	MS	3550B	8270C	III
30-Mar-2011	SL-222-SA5A-SB-3.5-4.5MS	6244297	MS	3550B	8270C SIM	III
30-Mar-2011	SL-222-SA5A-SB-3.5-4.5MS	6244297	MS	5035	8015M	III
30-Mar-2011	SL-222-SA5A-SB-3.5-4.5MS	6244297	MS	5035	8260B	III
30-Mar-2011	SL-222-SA5A-SB-3.5-4.5MS	6244297	MS	5035	8260B SIM	III
30-Mar-2011	SL-222-SA5A-SB-3.5-4.5MS	6244297	MS	8330	8330A	III
30-Mar-2011	SL-222-SA5A-SB-3.5-4.5MS	6244297	MS	METHOD	300.0	III
30-Mar-2011	SL-222-SA5A-SB-3.5-4.5MS	6244297	MS	METHOD	314.0	III
30-Mar-2011	SL-222-SA5A-SB-3.5-4.5MS	6244297	MS	METHOD	7471A	III
30-Mar-2011	SL-222-SA5A-SB-3.5-4.5MS	6244297	MS	METHOD	8015B	III
30-Mar-2011	SL-222-SA5A-SB-3.5-4.5MS	6244297	MS	METHOD	8015M	III
30-Mar-2011	SL-222-SA5A-SB-3.5-4.5MS	6244297	MS	METHOD	8315A	III
30-Mar-2011	SL-222-SA5A-SB-3.5-4.5MS	6244297	MS	METHOD	9012B	III
30-Mar-2011	SL-222-SA5A-SB-3.5-4.5MSD	6244298	MSD	3050B	6010B	III
30-Mar-2011	SL-222-SA5A-SB-3.5-4.5MSD	6244298	MSD	3050B	6020	III
30-Mar-2011	SL-222-SA5A-SB-3.5-4.5MSD	6244298	MSD	3546	1625C	III
30-Mar-2011	SL-222-SA5A-SB-3.5-4.5MSD	6244298	MSD	3550B	8015B	III
30-Mar-2011	SL-222-SA5A-SB-3.5-4.5MSD	6244298	MSD	3550B	8015M	III
30-Mar-2011	SL-222-SA5A-SB-3.5-4.5MSD	6244298	MSD	3550B	8082	III
30-Mar-2011	SL-222-SA5A-SB-3.5-4.5MSD	6244298	MSD	3550B	8270C	III
30-Mar-2011	SL-222-SA5A-SB-3.5-4.5MSD	6244298	MSD	3550B	8270C SIM	III
30-Mar-2011	SL-222-SA5A-SB-3.5-4.5MSD	6244298	MSD	5035	8015M	III
30-Mar-2011	SL-222-SA5A-SB-3.5-4.5MSD	6244298	MSD	5035	8260B	III
30-Mar-2011	SL-222-SA5A-SB-3.5-4.5MSD	6244298	MSD	5035	8260B SIM	III
30-Mar-2011	SL-222-SA5A-SB-3.5-4.5MSD	6244298	MSD	8330	8330A	III
30-Mar-2011	SL-222-SA5A-SB-3.5-4.5MSD	6244298	MSD	METHOD	7471A	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
30-Mar-2011	SL-222-SA5A-SB-3.5-4.5MSD	6244298	MSD	METHOD	8015B	III
30-Mar-2011	SL-222-SA5A-SB-3.5-4.5MSD	6244298	MSD	METHOD	8015M	III
30-Mar-2011	SL-222-SA5A-SB-3.5-4.5MSD	6244298	MSD	METHOD	8315A	III
30-Mar-2011	SL-222-SA5A-SB-3.5-4.5DUP	6244299	DUP	3050B	6010B	III
30-Mar-2011	SL-222-SA5A-SB-3.5-4.5DUP	6244299	DUP	3050B	6020	III
30-Mar-2011	SL-222-SA5A-SB-3.5-4.5DUP	6244299	DUP	3060A	7199	III
30-Mar-2011	SL-222-SA5A-SB-3.5-4.5DUP	6244299	DUP	Gen Prep	9045M	III
30-Mar-2011	SL-222-SA5A-SB-3.5-4.5DUP	6244299	DUP	METHOD	300.0	III
30-Mar-2011	SL-222-SA5A-SB-3.5-4.5DUP	6244299	DUP	METHOD	314.0	III
30-Mar-2011	SL-222-SA5A-SB-3.5-4.5DUP	6244299	DUP	METHOD	7471A	III
30-Mar-2011	SL-222-SA5A-SB-3.5-4.5DUP	6244299	DUP	METHOD	9012B	III
30-Mar-2011	DUP-11-SA5A-QC-033011	6244289	FD	3050B	6010B	III
30-Mar-2011	DUP-11-SA5A-QC-033011	6244289	FD	3050B	6020	III
30-Mar-2011	DUP-11-SA5A-QC-033011	6244289	FD	3060A	7199	III
30-Mar-2011	DUP-11-SA5A-QC-033011	6244289	FD	3546	1625C	III
30-Mar-2011	DUP-11-SA5A-QC-033011	6244289	FD	3550B	8015B	III
30-Mar-2011	DUP-11-SA5A-QC-033011	6244289	FD	3550B	8015M	III
30-Mar-2011	DUP-11-SA5A-QC-033011	6244289	FD	3550B	8082	III
30-Mar-2011	DUP-11-SA5A-QC-033011	6244289	FD	3550B	8270C	III
30-Mar-2011	DUP-11-SA5A-QC-033011	6244289	FD	3550B	8270C SIM	III
30-Mar-2011	DUP-11-SA5A-QC-033011	6244289	FD	5035	8015M	III
30-Mar-2011	DUP-11-SA5A-QC-033011	6244289	FD	5035	8260B	III
30-Mar-2011	DUP-11-SA5A-QC-033011	6244289	FD	5035	8260B SIM	III
30-Mar-2011	DUP-11-SA5A-QC-033011	6244289	FD	8330	8330A	III
30-Mar-2011	DUP-11-SA5A-QC-033011	6244289	FD	Gen Prep	9045M	III
30-Mar-2011	DUP-11-SA5A-QC-033011	6244289	FD	METHOD	300.0	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
30-Mar-2011	DUP-11-SA5A-QC-033011	6244289	FD	METHOD	314.0	III
30-Mar-2011	DUP-11-SA5A-QC-033011	6244289	FD	METHOD	7471A	III
30-Mar-2011	DUP-11-SA5A-QC-033011	6244289	FD	METHOD	8015B	III
30-Mar-2011	DUP-11-SA5A-QC-033011	6244289	FD	METHOD	8015M	III
30-Mar-2011	DUP-11-SA5A-QC-033011	6244289	FD	METHOD	8315A	III
30-Mar-2011	DUP-11-SA5A-QC-033011	6244289	FD	METHOD	9012B	III
30-Mar-2011	SL-090-SA5A-SB-4.0-5.0	6244294	N	3050B	6010B	III
30-Mar-2011	SL-090-SA5A-SB-4.0-5.0	6244294	N	3050B	6020	III
30-Mar-2011	SL-090-SA5A-SB-4.0-5.0	6244294	N	3060A	7199	III
30-Mar-2011	SL-090-SA5A-SB-4.0-5.0	6244294	N	3546	1625C	III
30-Mar-2011	SL-090-SA5A-SB-4.0-5.0	6244294	N	3550B	8015B	III
30-Mar-2011	SL-090-SA5A-SB-4.0-5.0	6244294	N	3550B	8015M	III
30-Mar-2011	SL-090-SA5A-SB-4.0-5.0	6244294	N	3550B	8082	III
30-Mar-2011	SL-090-SA5A-SB-4.0-5.0	6244294	N	3550B	8270C	III
30-Mar-2011	SL-090-SA5A-SB-4.0-5.0	6244294	N	3550B	8270C SIM	III
30-Mar-2011	SL-090-SA5A-SB-4.0-5.0	6244294	N	5035	8015M	III
30-Mar-2011	SL-090-SA5A-SB-4.0-5.0	6244294	N	5035	8260B	III
30-Mar-2011	SL-090-SA5A-SB-4.0-5.0	6244294	N	5035	8260B SIM	III
30-Mar-2011	SL-090-SA5A-SB-4.0-5.0	6244294	N	8330	8330A	III
30-Mar-2011	SL-090-SA5A-SB-4.0-5.0	6244294	N	Gen Prep	9045M	III
30-Mar-2011	SL-090-SA5A-SB-4.0-5.0	6244294	N	METHOD	300.0	III
30-Mar-2011	SL-090-SA5A-SB-4.0-5.0	6244294	N	METHOD	314.0	III
30-Mar-2011	SL-090-SA5A-SB-4.0-5.0	6244294	N	METHOD	7471A	III
30-Mar-2011	SL-090-SA5A-SB-4.0-5.0	6244294	N	METHOD	8015B	III
30-Mar-2011	SL-090-SA5A-SB-4.0-5.0	6244294	N	METHOD	8015M	III
30-Mar-2011	SL-090-SA5A-SB-4.0-5.0	6244294	N	METHOD	8315A	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
30-Mar-2011	SL-090-SA5A-SB-4.0-5.0	6244294	N	METHOD	9012B	III
30-Mar-2011	DUP-12-SA5A-QC-033011	6244290	FD	3050B	6010B	III
30-Mar-2011	DUP-12-SA5A-QC-033011	6244290	FD	3050B	6020	III
30-Mar-2011	DUP-12-SA5A-QC-033011	6244290	FD	3060A	7199	III
30-Mar-2011	DUP-12-SA5A-QC-033011	6244290	FD	3550B	8082	III
30-Mar-2011	DUP-12-SA5A-QC-033011	6244290	FD	3550B	8270C	III
30-Mar-2011	DUP-12-SA5A-QC-033011	6244290	FD	3550B	8270C SIM	III
30-Mar-2011	DUP-12-SA5A-QC-033011	6244290	FD	5035	8260B	III
30-Mar-2011	DUP-12-SA5A-QC-033011	6244290	FD	5035	8260B SIM	III
30-Mar-2011	DUP-12-SA5A-QC-033011	6244290	FD	Gen Prep	9045M	III
30-Mar-2011	DUP-12-SA5A-QC-033011	6244290	FD	METHOD	300.0	III
30-Mar-2011	DUP-12-SA5A-QC-033011	6244290	FD	METHOD	314.0	III
30-Mar-2011	DUP-12-SA5A-QC-033011	6244290	FD	METHOD	6850	III
30-Mar-2011	DUP-12-SA5A-QC-033011	6244290	FD	METHOD	7471A	III
30-Mar-2011	SL-093-SA5A-SB-3.5-4.5	6244295	N	3050B	6010B	III
30-Mar-2011	SL-093-SA5A-SB-3.5-4.5	6244295	N	3050B	6020	III
30-Mar-2011	SL-093-SA5A-SB-3.5-4.5	6244295	N	3060A	7199	III
30-Mar-2011	SL-093-SA5A-SB-3.5-4.5	6244295	N	3546	1625C	III
30-Mar-2011	SL-093-SA5A-SB-3.5-4.5	6244295	N	3550B	8015B	III
30-Mar-2011	SL-093-SA5A-SB-3.5-4.5	6244295	N	3550B	8015M	III
30-Mar-2011	SL-093-SA5A-SB-3.5-4.5	6244295	N	3550B	8082	III
30-Mar-2011	SL-093-SA5A-SB-3.5-4.5	6244295	N	3550B	8270C	III
30-Mar-2011	SL-093-SA5A-SB-3.5-4.5	6244295	N	3550B	8270C SIM	III
30-Mar-2011	SL-093-SA5A-SB-3.5-4.5	6244295	N	5035	8015M	III
30-Mar-2011	SL-093-SA5A-SB-3.5-4.5	6244295	N	5035	8260B	III
30-Mar-2011	SL-093-SA5A-SB-3.5-4.5	6244295	N	5035	8260B SIM	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
30-Mar-2011	SL-093-SA5A-SB-3.5-4.5	6244295	N	8330	8330A	III
30-Mar-2011	SL-093-SA5A-SB-3.5-4.5	6244295	N	Gen Prep	9045M	III
30-Mar-2011	SL-093-SA5A-SB-3.5-4.5	6244295	N	METHOD	300.0	III
30-Mar-2011	SL-093-SA5A-SB-3.5-4.5	6244295	N	METHOD	314.0	III
30-Mar-2011	SL-093-SA5A-SB-3.5-4.5	6244295	N	METHOD	7471A	III
30-Mar-2011	SL-093-SA5A-SB-3.5-4.5	6244295	N	METHOD	8015B	III
30-Mar-2011	SL-093-SA5A-SB-3.5-4.5	6244295	N	METHOD	8015M	III
30-Mar-2011	SL-093-SA5A-SB-3.5-4.5	6244295	N	METHOD	8315A	III
30-Mar-2011	SL-093-SA5A-SB-3.5-4.5	6244295	N	METHOD	9012B	III
30-Mar-2011	SL-083-SA5A-SB-4.0-5.0	6244292	N	3050B	6010B	III
30-Mar-2011	SL-083-SA5A-SB-4.0-5.0	6244292	N	3050B	6020	III
30-Mar-2011	SL-083-SA5A-SB-4.0-5.0	6244292	N	3060A	7199	III
30-Mar-2011	SL-083-SA5A-SB-4.0-5.0	6244292	N	3546	1625C	III
30-Mar-2011	SL-083-SA5A-SB-4.0-5.0	6244292	N	3550B	8015B	III
30-Mar-2011	SL-083-SA5A-SB-4.0-5.0	6244292	N	3550B	8015M	III
30-Mar-2011	SL-083-SA5A-SB-4.0-5.0	6244292	N	3550B	8082	III
30-Mar-2011	SL-083-SA5A-SB-4.0-5.0	6244292	N	3550B	8270C	III
30-Mar-2011	SL-083-SA5A-SB-4.0-5.0	6244292	N	3550B	8270C SIM	III
30-Mar-2011	SL-083-SA5A-SB-4.0-5.0	6244292	N	5035	8015M	III
30-Mar-2011	SL-083-SA5A-SB-4.0-5.0	6244292	N	5035	8260B	III
30-Mar-2011	SL-083-SA5A-SB-4.0-5.0	6244292	N	5035	8260B SIM	III
30-Mar-2011	SL-083-SA5A-SB-4.0-5.0	6244292	N	8330	8330A	III
30-Mar-2011	SL-083-SA5A-SB-4.0-5.0	6244292	N	Gen Prep	9045M	III
30-Mar-2011	SL-083-SA5A-SB-4.0-5.0	6244292	N	METHOD	300.0	III
30-Mar-2011	SL-083-SA5A-SB-4.0-5.0	6244292	N	METHOD	314.0	III
30-Mar-2011	SL-083-SA5A-SB-4.0-5.0	6244292	N	METHOD	7471A	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
30-Mar-2011	SL-083-SA5A-SB-4.0-5.0	6244292	N	METHOD	8015B	III
30-Mar-2011	SL-083-SA5A-SB-4.0-5.0	6244292	N	METHOD	8015M	III
30-Mar-2011	SL-083-SA5A-SB-4.0-5.0	6244292	N	METHOD	8315A	III
30-Mar-2011	SL-083-SA5A-SB-4.0-5.0	6244292	N	METHOD	9012B	III
30-Mar-2011	SL-083-SA5A-SB-9.0-10.0	6244293	N	3050B	6010B	III
30-Mar-2011	SL-083-SA5A-SB-9.0-10.0	6244293	N	3050B	6020	III
30-Mar-2011	SL-083-SA5A-SB-9.0-10.0	6244293	N	3060A	7199	III
30-Mar-2011	SL-083-SA5A-SB-9.0-10.0	6244293	N	3546	1625C	III
30-Mar-2011	SL-083-SA5A-SB-9.0-10.0	6244293	N	3550B	8015B	III
30-Mar-2011	SL-083-SA5A-SB-9.0-10.0	6244293	N	3550B	8015M	III
30-Mar-2011	SL-083-SA5A-SB-9.0-10.0	6244293	N	3550B	8082	III
30-Mar-2011	SL-083-SA5A-SB-9.0-10.0	6244293	N	3550B	8270C	III
30-Mar-2011	SL-083-SA5A-SB-9.0-10.0	6244293	N	3550B	8270C SIM	III
30-Mar-2011	SL-083-SA5A-SB-9.0-10.0	6244293	N	5035	8015M	III
30-Mar-2011	SL-083-SA5A-SB-9.0-10.0	6244293	N	5035	8260B	III
30-Mar-2011	SL-083-SA5A-SB-9.0-10.0	6244293	N	5035	8260B SIM	III
30-Mar-2011	SL-083-SA5A-SB-9.0-10.0	6244293	N	8330	8330A	III
30-Mar-2011	SL-083-SA5A-SB-9.0-10.0	6244293	N	Gen Prep	9045M	III
30-Mar-2011	SL-083-SA5A-SB-9.0-10.0	6244293	N	METHOD	300.0	III
30-Mar-2011	SL-083-SA5A-SB-9.0-10.0	6244293	N	METHOD	314.0	III
30-Mar-2011	SL-083-SA5A-SB-9.0-10.0	6244293	N	METHOD	7471A	III
30-Mar-2011	SL-083-SA5A-SB-9.0-10.0	6244293	N	METHOD	8015B	III
30-Mar-2011	SL-083-SA5A-SB-9.0-10.0	6244293	N	METHOD	8015M	III
30-Mar-2011	SL-083-SA5A-SB-9.0-10.0	6244293	N	METHOD	8315A	III
30-Mar-2011	SL-083-SA5A-SB-9.0-10.0	6244293	N	METHOD	9012B	III
30-Mar-2011	SL-082-SA5A-SB-4.0-5.0	6244291	N	3050B	6010B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
30-Mar-2011	SL-082-SA5A-SB-4.0-5.0	6244291	N	3050B	6020	III
30-Mar-2011	SL-082-SA5A-SB-4.0-5.0	6244291	N	3060A	7199	III
30-Mar-2011	SL-082-SA5A-SB-4.0-5.0	6244291	N	3546	1625C	III
30-Mar-2011	SL-082-SA5A-SB-4.0-5.0	6244291	N	3550B	8015B	III
30-Mar-2011	SL-082-SA5A-SB-4.0-5.0	6244291	N	3550B	8015M	III
30-Mar-2011	SL-082-SA5A-SB-4.0-5.0	6244291	N	3550B	8082	III
30-Mar-2011	SL-082-SA5A-SB-4.0-5.0	6244291	N	3550B	8270C	III
30-Mar-2011	SL-082-SA5A-SB-4.0-5.0	6244291	N	3550B	8270C SIM	III
30-Mar-2011	SL-082-SA5A-SB-4.0-5.0	6244291	N	5035	8015M	III
30-Mar-2011	SL-082-SA5A-SB-4.0-5.0	6244291	N	5035	8260B	III
30-Mar-2011	SL-082-SA5A-SB-4.0-5.0	6244291	N	5035	8260B SIM	III
30-Mar-2011	SL-082-SA5A-SB-4.0-5.0	6244291	N	8330	8330A	III
30-Mar-2011	SL-082-SA5A-SB-4.0-5.0	6244291	N	Gen Prep	9045M	III
30-Mar-2011	SL-082-SA5A-SB-4.0-5.0	6244291	N	METHOD	300.0	III
30-Mar-2011	SL-082-SA5A-SB-4.0-5.0	6244291	N	METHOD	314.0	III
30-Mar-2011	SL-082-SA5A-SB-4.0-5.0	6244291	N	METHOD	7471A	III
30-Mar-2011	SL-082-SA5A-SB-4.0-5.0	6244291	N	METHOD	8015B	III
30-Mar-2011	SL-082-SA5A-SB-4.0-5.0	6244291	N	METHOD	8015M	III
30-Mar-2011	SL-082-SA5A-SB-4.0-5.0	6244291	N	METHOD	8315A	III
30-Mar-2011	SL-082-SA5A-SB-4.0-5.0	6244291	N	METHOD	9012B	III
30-Mar-2011	SL-082-SA5A-SB-4.0-5.0DUP	P244291D291115A	DUP	Gen Prep	9045M	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE115 **Laboratory: LL**

EDD Filename: PrepDE115_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: GENCHEM

Method: 300.0 **Matrix: SO**

Sample ID: DUP-11-SA5A-QC-033011 *Collected:* 3/30/2011 10:02:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Nitrate-NO3	1.3	J	0.89	MDL	1.7	PQL	mg/Kg	J	Z

Sample ID: SL-082-SA5A-SB-4.0-5.0 *Collected:* 3/30/2011 4:03:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Nitrate-NO3	1.0	J	0.90	MDL	1.7	PQL	mg/Kg	J	Z

Sample ID: SL-083-SA5A-SB-9.0-10.0 *Collected:* 3/30/2011 3:13:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Nitrate-NO3	1.0	J	0.83	MDL	1.6	PQL	mg/Kg	J	Z

Sample ID: SL-090-SA5A-SB-4.0-5.0 *Collected:* 3/30/2011 11:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Nitrate-NO3	1.2	J	0.89	MDL	1.7	PQL	mg/Kg	J	Z

Sample ID: SL-222-SA5A-SB-3.5-4.5 *Collected:* 3/30/2011 9:57:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Nitrate-NO3	1.5	J	0.87	MDL	1.6	PQL	mg/Kg	J	Z

Sample ID: SL-257-SA5A-SB-2.5-3.5 *Collected:* 3/30/2011 8:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Nitrate-NO3	1.1	J	0.86	MDL	1.6	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: DUP-11-SA5A-QC-033011 *Collected:* 3/30/2011 10:02:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	4.56	J	0.959	MDL	5.39	PQL	mg/Kg	J	Z
CALCIUM	3590		6.61	MDL	21.6	PQL	mg/Kg	J	E

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE115 **Laboratory: LL**

EDD Filename: PrepDE115_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6010B** ***Matrix:*** **SO**

Sample ID: **DUP-11-SA5A-QC-033011** ***Collected:*** **3/30/2011 10:02:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	328		0.0840	MDL	0.539	PQL	mg/Kg	J	E
SODIUM	88.4	J	40.2	MDL	108	PQL	mg/Kg	J	Z
TIN	3.29	J	1.08	MDL	10.8	PQL	mg/Kg	UJ	B, E
Zirconium	3.65	J	0.905	MDL	5.39	PQL	mg/Kg	J	Z

Sample ID: **DUP-12-SA5A-QC-033011** ***Collected:*** **3/30/2011 11:11:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	4.01	J	0.990	MDL	5.56	PQL	mg/Kg	J	Z
CALCIUM	3290		6.82	MDL	22.2	PQL	mg/Kg	J	E
MANGANESE	283		0.0868	MDL	0.556	PQL	mg/Kg	J	E
SODIUM	97.4	J	41.5	MDL	111	PQL	mg/Kg	J	Z
TIN	3.19	J	1.11	MDL	11.1	PQL	mg/Kg	UJ	B, E
Zirconium	3.25	J	0.934	MDL	5.56	PQL	mg/Kg	J	Z

Sample ID: **SL-082-SA5A-SB-4.0-5.0** ***Collected:*** **3/30/2011 4:03:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.62	J	0.978	MDL	5.50	PQL	mg/Kg	J	Z
CALCIUM	5900		6.74	MDL	22.0	PQL	mg/Kg	J	E
MANGANESE	305		0.0857	MDL	0.550	PQL	mg/Kg	J	E
SODIUM	106	J	41.0	MDL	110	PQL	mg/Kg	J	Z
TIN	3.24	J	1.10	MDL	11.0	PQL	mg/Kg	UJ	B, E
Zirconium	3.13	J	0.923	MDL	5.50	PQL	mg/Kg	J	Z

Sample ID: **SL-083-SA5A-SB-4.0-5.0** ***Collected:*** **3/30/2011 3:08:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.76	J	0.938	MDL	5.27	PQL	mg/Kg	J	Z
CALCIUM	6480		6.46	MDL	21.1	PQL	mg/Kg	J	E
MANGANESE	275		0.0822	MDL	0.527	PQL	mg/Kg	J	E
TIN	3.08	J	1.05	MDL	10.5	PQL	mg/Kg	UJ	B, E
Zirconium	2.90	J	0.886	MDL	5.27	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE115 **Laboratory: LL**

EDD Filename: PrepDE115_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B ***Matrix:*** SO

Sample ID: SL-083-SA5A-SB-9.0-10.0 ***Collected:*** 3/30/2011 3:13:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	3530		6.32	MDL	20.6	PQL	mg/Kg	J	E
MANGANESE	320		0.0804	MDL	0.516	PQL	mg/Kg	J	E
TIN	3.37	J	1.03	MDL	10.3	PQL	mg/Kg	UJ	B, E
Zirconium	3.37	J	0.866	MDL	5.16	PQL	mg/Kg	J	Z

Sample ID: SL-090-SA5A-SB-4.0-5.0 ***Collected:*** 3/30/2011 11:05:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.32	J	0.967	MDL	5.43	PQL	mg/Kg	J	Z
CALCIUM	4050		6.66	MDL	21.7	PQL	mg/Kg	J	E
MANGANESE	300		0.0848	MDL	0.543	PQL	mg/Kg	J	E
SODIUM	77.1	J	40.5	MDL	109	PQL	mg/Kg	J	Z
TIN	3.19	J	1.09	MDL	10.9	PQL	mg/Kg	UJ	B, E
Zirconium	3.74	J	0.913	MDL	5.43	PQL	mg/Kg	J	Z

Sample ID: SL-093-SA5A-SB-3.5-4.5 ***Collected:*** 3/30/2011 12:20:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	22700		6.77	MDL	22.1	PQL	mg/Kg	J	E
MANGANESE	333		0.0862	MDL	0.552	PQL	mg/Kg	J	E
TIN	6.89	J	1.10	MDL	11.0	PQL	mg/Kg	UJ	B, E
Zirconium	3.38	J	0.928	MDL	5.52	PQL	mg/Kg	J	Z

Sample ID: SL-222-SA5A-SB-3.5-4.5 ***Collected:*** 3/30/2011 9:57:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	4580		6.43	MDL	21.0	PQL	mg/Kg	J	E
MANGANESE	432		0.0819	MDL	0.525	PQL	mg/Kg	J	E
SODIUM	104	J	39.2	MDL	105	PQL	mg/Kg	J	Z
TIN	3.95	J	1.05	MDL	10.5	PQL	mg/Kg	UJ	B, E
Zirconium	4.51	J	0.882	MDL	5.25	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE115 **Laboratory: LL**

EDD Filename: PrepDE115_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS
Method: 6010B **Matrix:** SO

Sample ID: SL-257-SA5A-SB-2.5-3.5 *Collected:* 3/30/2011 8:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.43	J	0.915	MDL	5.14	PQL	mg/Kg	J	Z
CALCIUM	3220		6.30	MDL	20.6	PQL	mg/Kg	J	E
MANGANESE	281		0.0802	MDL	0.514	PQL	mg/Kg	J	E
TIN	3.23	J	1.03	MDL	10.3	PQL	mg/Kg	UJ	B, E
Zirconium	1.40	J	0.864	MDL	5.14	PQL	mg/Kg	J	Z

Method Category: METALS
Method: 6020 **Matrix:** SO

Sample ID: DUP-11-SA5A-QC-033011 *Collected:* 3/30/2011 10:02:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.105	J	0.0431	MDL	0.431	PQL	mg/Kg	J	Z, FD

Sample ID: DUP-11-SA5A-QC-033011 *Collected:* 3/30/2011 10:02:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.379		0.0539	MDL	0.108	PQL	mg/Kg	J	Q, FD

Sample ID: DUP-11-SA5A-QC-033011 *Collected:* 3/30/2011 10:02:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	74.0		0.116	MDL	0.431	PQL	mg/Kg	J	FD

Sample ID: DUP-11-SA5A-QC-033011 *Collected:* 3/30/2011 10:02:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
VANADIUM	34.3		0.0237	MDL	0.108	PQL	mg/Kg	J	Q, A

Sample ID: DUP-11-SA5A-QC-033011 *Collected:* 3/30/2011 10:02:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.112	J	0.0647	MDL	0.216	PQL	mg/Kg	J	Z, Q, Q, E, FD
ARSENIC	4.68		0.0862	MDL	0.431	PQL	mg/Kg	J	Q
CADMIUM	0.145		0.0431	MDL	0.108	PQL	mg/Kg	J	FD

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE115 **Laboratory: LL**

EDD Filename: PrepDE115_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6020** ***Matrix:*** **SO**

Sample ID: **DUP-11-SA5A-QC-033011** ***Collected:*** **3/30/2011 10:02:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHROMIUM	14.4		0.129	MDL	0.431	PQL	mg/Kg	J	Q, Q, E, FD, A
COPPER	8.97		0.0711	MDL	0.431	PQL	mg/Kg	J	E, FD
LEAD	4.65		0.0112	MDL	0.216	PQL	mg/Kg	J	FD
NICKEL	8.94		0.108	MDL	0.431	PQL	mg/Kg	J	FD
SILVER	0.0313	J	0.0129	MDL	0.108	PQL	mg/Kg	J	Z, E, FD
ZINC	57.2		0.603	MDL	3.23	PQL	mg/Kg	J	FD

Sample ID: **DUP-12-SA5A-QC-033011** ***Collected:*** **3/30/2011 11:11:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0916	J	0.0432	MDL	0.432	PQL	mg/Kg	J	Z

Sample ID: **DUP-12-SA5A-QC-033011** ***Collected:*** **3/30/2011 11:11:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.436		0.0540	MDL	0.108	PQL	mg/Kg	J	Q

Sample ID: **DUP-12-SA5A-QC-033011** ***Collected:*** **3/30/2011 11:11:00** ***Analysis Type:*** **REA5** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
VANADIUM	33.7		0.0242	MDL	0.110	PQL	mg/Kg	J	Q, A

Sample ID: **DUP-12-SA5A-QC-033011** ***Collected:*** **3/30/2011 11:11:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.190	J	0.0648	MDL	0.216	PQL	mg/Kg	J	Z, Q, Q, E
ARSENIC	4.09		0.0864	MDL	0.432	PQL	mg/Kg	J	Q
CHROMIUM	15.1		0.130	MDL	0.432	PQL	mg/Kg	J	Q, Q, E, A
COPPER	10.7		0.0713	MDL	0.432	PQL	mg/Kg	J	E
SILVER	0.0262	J	0.0130	MDL	0.108	PQL	mg/Kg	J	Z, E

Sample ID: **SL-082-SA5A-SB-4.0-5.0** ***Collected:*** **3/30/2011 4:03:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.111	J	0.0444	MDL	0.444	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE115 | Laboratory: LL

EDD Filename: PrepDE115_v1 | eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-082-SA5A-SB-4.0-5.0 *Collected:* 3/30/2011 4:03:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.568		0.0555	MDL	0.111	PQL	mg/Kg	J	Q

Sample ID: SL-082-SA5A-SB-4.0-5.0 *Collected:* 3/30/2011 4:03:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
VANADIUM	34.0		0.0244	MDL	0.111	PQL	mg/Kg	J	Q, A

Sample ID: SL-082-SA5A-SB-4.0-5.0 *Collected:* 3/30/2011 4:03:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.297		0.0666	MDL	0.222	PQL	mg/Kg	J	Q, Q, E
ARSENIC	5.34		0.0888	MDL	0.444	PQL	mg/Kg	J	Q
CHROMIUM	19.2		0.133	MDL	0.444	PQL	mg/Kg	J	Q, Q, E, A
COPPER	10.9		0.0733	MDL	0.444	PQL	mg/Kg	J	E
SILVER	0.0464	J	0.0133	MDL	0.111	PQL	mg/Kg	J	Z, E

Sample ID: SL-083-SA5A-SB-4.0-5.0 *Collected:* 3/30/2011 3:08:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.114	J	0.0422	MDL	0.422	PQL	mg/Kg	J	Z

Sample ID: SL-083-SA5A-SB-4.0-5.0 *Collected:* 3/30/2011 3:08:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	2.03		0.0527	MDL	0.105	PQL	mg/Kg	J	Q

Sample ID: SL-083-SA5A-SB-4.0-5.0 *Collected:* 3/30/2011 3:08:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
VANADIUM	37.1		0.0234	MDL	0.106	PQL	mg/Kg	J	Q, A

Sample ID: SL-083-SA5A-SB-4.0-5.0 *Collected:* 3/30/2011 3:08:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.114	J	0.0633	MDL	0.211	PQL	mg/Kg	J	Z, Q, Q, E
ARSENIC	5.57		0.0843	MDL	0.422	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE115 **Laboratory: LL**

EDD Filename: PrepDE115_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6020** ***Matrix:*** **SO**

Sample ID: **SL-083-SA5A-SB-4.0-5.0** ***Collected:*** **3/30/2011 3:08:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHROMIUM	18.0		0.127	MDL	0.422	PQL	mg/Kg	J	Q, Q, E, A
COPPER	7.90		0.0696	MDL	0.422	PQL	mg/Kg	J	E
SILVER	0.0398	J	0.0127	MDL	0.105	PQL	mg/Kg	J	Z, E

Sample ID: **SL-083-SA5A-SB-9.0-10.0** ***Collected:*** **3/30/2011 3:13:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.130	J	0.0413	MDL	0.413	PQL	mg/Kg	J	Z

Sample ID: **SL-083-SA5A-SB-9.0-10.0** ***Collected:*** **3/30/2011 3:13:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.516		0.0516	MDL	0.103	PQL	mg/Kg	J	Q

Sample ID: **SL-083-SA5A-SB-9.0-10.0** ***Collected:*** **3/30/2011 3:13:00** ***Analysis Type:*** **REA5** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
VANADIUM	34.4		0.0222	MDL	0.101	PQL	mg/Kg	J	Q, A

Sample ID: **SL-083-SA5A-SB-9.0-10.0** ***Collected:*** **3/30/2011 3:13:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.159	J	0.0619	MDL	0.206	PQL	mg/Kg	J	Z, Q, Q, E
ARSENIC	6.37		0.0825	MDL	0.413	PQL	mg/Kg	J	Q
CHROMIUM	21.9		0.124	MDL	0.413	PQL	mg/Kg	J	Q, Q, E, A
COPPER	10.8		0.0681	MDL	0.413	PQL	mg/Kg	J	E
SILVER	0.0422	J	0.0124	MDL	0.103	PQL	mg/Kg	J	Z, E

Sample ID: **SL-090-SA5A-SB-4.0-5.0** ***Collected:*** **3/30/2011 11:05:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.108	J	0.0439	MDL	0.439	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE115 **Laboratory: LL**

EDD Filename: PrepDE115_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-090-SA5A-SB-4.0-5.0 *Collected:* 3/30/2011 11:05:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.548		0.0549	MDL	0.110	PQL	mg/Kg	J	Q

Sample ID: SL-090-SA5A-SB-4.0-5.0 *Collected:* 3/30/2011 11:05:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
VANADIUM	33.8		0.0239	MDL	0.109	PQL	mg/Kg	J	Q, A

Sample ID: SL-090-SA5A-SB-4.0-5.0 *Collected:* 3/30/2011 11:05:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.212	J	0.0659	MDL	0.220	PQL	mg/Kg	J	Z, Q, Q, E
ARSENIC	5.19		0.0878	MDL	0.439	PQL	mg/Kg	J	Q
CHROMIUM	16.5		0.132	MDL	0.439	PQL	mg/Kg	J	Q, Q, E, A
COPPER	9.72		0.0724	MDL	0.439	PQL	mg/Kg	J	E
SILVER	0.0322	J	0.0132	MDL	0.110	PQL	mg/Kg	J	Z, E

Sample ID: SL-093-SA5A-SB-3.5-4.5 *Collected:* 3/30/2011 12:20:00 *Analysis Type:* REA *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	204		0.186	MDL	1.13	PQL	mg/Kg	J	E

Sample ID: SL-093-SA5A-SB-3.5-4.5 *Collected:* 3/30/2011 12:20:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.151	J	0.0451	MDL	0.451	PQL	mg/Kg	J	Z

Sample ID: SL-093-SA5A-SB-3.5-4.5 *Collected:* 3/30/2011 12:20:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.38		0.0563	MDL	0.113	PQL	mg/Kg	J	Q

Sample ID: SL-093-SA5A-SB-3.5-4.5 *Collected:* 3/30/2011 12:20:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
VANADIUM	38.2		0.0243	MDL	0.110	PQL	mg/Kg	J	Q, A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE115 **Laboratory: LL**

EDD Filename: PrepDE115_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6020** ***Matrix:*** **SO**

Sample ID: **SL-093-SA5A-SB-3.5-4.5** ***Collected:*** **3/30/2011 12:20:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	2.45		0.0676	MDL	0.225	PQL	mg/Kg	J	Q, Q, E
ARSENIC	8.83		0.0901	MDL	0.451	PQL	mg/Kg	J	Q
CHROMIUM	27.1		0.135	MDL	0.451	PQL	mg/Kg	J	Q, Q, E, A
SILVER	1.48		0.0135	MDL	0.113	PQL	mg/Kg	J	E

Sample ID: **SL-222-SA5A-SB-3.5-4.5** ***Collected:*** **3/30/2011 9:57:00** ***Analysis Type:*** **REA** ***Dilution:*** **5**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	82.9		0.0278	MDL	0.535	PQL	mg/Kg	J	FD
ZINC	151		1.50	MDL	8.03	PQL	mg/Kg	J	FD

Sample ID: **SL-222-SA5A-SB-3.5-4.5** ***Collected:*** **3/30/2011 9:57:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.185	J	0.0428	MDL	0.428	PQL	mg/Kg	J	Z, FD

Sample ID: **SL-222-SA5A-SB-3.5-4.5** ***Collected:*** **3/30/2011 9:57:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.35		0.0535	MDL	0.107	PQL	mg/Kg	J	Q, FD

Sample ID: **SL-222-SA5A-SB-3.5-4.5** ***Collected:*** **3/30/2011 9:57:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	140		0.116	MDL	0.428	PQL	mg/Kg	J	FD

Sample ID: **SL-222-SA5A-SB-3.5-4.5** ***Collected:*** **3/30/2011 9:57:00** ***Analysis Type:*** **REA5** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
VANADIUM	31.7		0.0238	MDL	0.108	PQL	mg/Kg	J	Q, A

Sample ID: **SL-222-SA5A-SB-3.5-4.5** ***Collected:*** **3/30/2011 9:57:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	1.52		0.0642	MDL	0.214	PQL	mg/Kg	J	Q, Q, E, FD
ARSENIC	4.83		0.0856	MDL	0.428	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE115 **Laboratory: LL**

EDD Filename: PrepDE115_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-222-SA5A-SB-3.5-4.5 **Collected:** 3/30/2011 9:57:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.742		0.0428	MDL	0.107	PQL	mg/Kg	J	FD
CHROMIUM	29.9		0.128	MDL	0.428	PQL	mg/Kg	J	Q, Q, E, FD, A
COPPER	44.7		0.0706	MDL	0.428	PQL	mg/Kg	J	E, FD
NICKEL	21.4		0.107	MDL	0.428	PQL	mg/Kg	J	FD
SILVER	1.70		0.0128	MDL	0.107	PQL	mg/Kg	J	E, FD

Sample ID: SL-257-SA5A-SB-2.5-3.5 **Collected:** 3/30/2011 8:45:00 **Analysis Type:** REA2 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.103	J	0.0411	MDL	0.411	PQL	mg/Kg	J	Z

Sample ID: SL-257-SA5A-SB-2.5-3.5 **Collected:** 3/30/2011 8:45:00 **Analysis Type:** REA3 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.739		0.0514	MDL	0.103	PQL	mg/Kg	J	Q

Sample ID: SL-257-SA5A-SB-2.5-3.5 **Collected:** 3/30/2011 8:45:00 **Analysis Type:** REA5 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
VANADIUM	38.0		0.0231	MDL	0.105	PQL	mg/Kg	J	Q, A

Sample ID: SL-257-SA5A-SB-2.5-3.5 **Collected:** 3/30/2011 8:45:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.221		0.0617	MDL	0.206	PQL	mg/Kg	J	Q, Q, E
ARSENIC	7.46		0.0823	MDL	0.411	PQL	mg/Kg	J	Q
CADMIUM	0.0806	J	0.0411	MDL	0.103	PQL	mg/Kg	J	Z
CHROMIUM	32.3		0.123	MDL	0.411	PQL	mg/Kg	J	Q, Q, E, A
COPPER	8.81		0.0679	MDL	0.411	PQL	mg/Kg	J	E
SILVER	0.0426	J	0.0123	MDL	0.103	PQL	mg/Kg	J	Z, E

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE115 **Laboratory: LL**

EDD Filename: PrepDE115_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **7471A** ***Matrix:*** **SO**

Sample ID: **DUP-11-SA5A-QC-033011** ***Collected:*** **3/30/2011 10:02:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0030	U	0.0030	MDL	0.103	PQL	mg/Kg	UJ	FD

Sample ID: **DUP-12-SA5A-QC-033011** ***Collected:*** **3/30/2011 11:11:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0197	J	0.0031	MDL	0.108	PQL	mg/Kg	J	Z, FD

Sample ID: **SL-082-SA5A-SB-4.0-5.0** ***Collected:*** **3/30/2011 4:03:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0041	J	0.0031	MDL	0.107	PQL	mg/Kg	J	Z

Sample ID: **SL-083-SA5A-SB-9.0-10.0** ***Collected:*** **3/30/2011 3:13:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0040	J	0.0029	MDL	0.100	PQL	mg/Kg	J	Z

Sample ID: **SL-090-SA5A-SB-4.0-5.0** ***Collected:*** **3/30/2011 11:05:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0556	J	0.0031	MDL	0.107	PQL	mg/Kg	J	Z, FD

Sample ID: **SL-093-SA5A-SB-3.5-4.5** ***Collected:*** **3/30/2011 12:20:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0142	J	0.0032	MDL	0.110	PQL	mg/Kg	J	Z

Sample ID: **SL-222-SA5A-SB-3.5-4.5** ***Collected:*** **3/30/2011 9:57:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0057	J	0.0030	MDL	0.104	PQL	mg/Kg	J	Z, FD

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE115 **Laboratory: LL**

EDD Filename: PrepDE115_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA
Method: 1625C **Matrix:** SO

Sample ID: SL-093-SA5A-SB-3.5-4.5 *Collected:* 3/30/2011 12:20:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	25.8	J	18.8	MDL	37.5	PQL	ng/Kg	J	Z

Method Category: SVOA
Method: 8015M **Matrix:** SO

Sample ID: DUP-11-SA5A-QC-033011 *Collected:* 3/30/2011 10:02:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	0.44	U	0.44	MDL	1.3	PQL	mg/Kg	UJ	FD
EFH (C21-C30)	3.4		0.44	MDL	1.3	PQL	mg/Kg	J	FD
EFH (C30-C40)	13		0.44	MDL	1.3	PQL	mg/Kg	J	FD
EFH (C8-C11)	0.73	J	0.44	MDL	1.3	PQL	mg/Kg	UJ	B, FD

Sample ID: SL-082-SA5A-SB-4.0-5.0 *Collected:* 3/30/2011 4:03:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C8-C11)	0.54	J	0.45	MDL	1.3	PQL	mg/Kg	U	B

Sample ID: SL-083-SA5A-SB-4.0-5.0 *Collected:* 3/30/2011 3:08:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C8-C11)	0.54	J	0.43	MDL	1.3	PQL	mg/Kg	U	B

Sample ID: SL-083-SA5A-SB-9.0-10.0 *Collected:* 3/30/2011 3:13:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	1.6		0.42	MDL	1.3	PQL	mg/Kg	U	B
EFH (C8-C11)	0.73	J	0.42	MDL	1.3	PQL	mg/Kg	U	B

Sample ID: SL-090-SA5A-SB-4.0-5.0 *Collected:* 3/30/2011 11:05:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C8-C11)	0.82	J	0.44	MDL	1.3	PQL	mg/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE115 **Laboratory: LL**

EDD Filename: PrepDE115_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8015M **Matrix: SO**

Sample ID: SL-222-SA5A-SB-3.5-4.5 *Collected:* 3/30/2011 9:57:00 *Analysis Type:* REA2 *Dilution:* 20

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	9.4	J	8.7	MDL	26	PQL	mg/Kg	J	Z, FD
EFH (C21-C30)	190		8.7	MDL	26	PQL	mg/Kg	J	FD
EFH (C30-C40)	710		8.7	MDL	26	PQL	mg/Kg	J	FD
EFH (C8-C11)	8.7	U	8.7	MDL	26	PQL	mg/Kg	UJ	FD

Sample ID: SL-257-SA5A-SB-2.5-3.5 *Collected:* 3/30/2011 8:45:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	1.1	J	0.43	MDL	1.3	PQL	mg/Kg	U	B
EFH (C8-C11)	0.61	J	0.43	MDL	1.3	PQL	mg/Kg	U	B

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: DUP-11-SA5A-QC-033011 *Collected:* 3/30/2011 10:02:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	0.43	U	0.43	MDL	1.9	PQL	ug/Kg	UJ	FD
Aroclor 5460	32		1.1	MDL	3.7	PQL	ug/Kg	J	FD

Sample ID: DUP-12-SA5A-QC-033011 *Collected:* 3/30/2011 11:11:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	1.7	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z, FD
Aroclor 5460	1.7	J	1.1	MDL	3.7	PQL	ug/Kg	J	Z

Sample ID: SL-082-SA5A-SB-4.0-5.0 *Collected:* 3/30/2011 4:03:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	14	J	4.4	MDL	19	PQL	ug/Kg	J	Z

Sample ID: SL-090-SA5A-SB-4.0-5.0 *Collected:* 3/30/2011 11:05:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	0.36	U	0.36	MDL	1.9	PQL	ug/Kg	UJ	FD

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE115 **Laboratory: LL**

EDD Filename: PrepDE115_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: SL-090-SA5A-SB-4.0-5.0 *Collected:* 3/30/2011 11:05:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	1.2	J	0.43	MDL	1.9	PQL	ug/Kg	J	Z
Aroclor 5460	2.2	J	1.1	MDL	3.6	PQL	ug/Kg	J	Z

Sample ID: SL-093-SA5A-SB-3.5-4.5 *Collected:* 3/30/2011 12:20:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	1.3	J	0.44	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-222-SA5A-SB-3.5-4.5 *Collected:* 3/30/2011 9:57:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	0.90	J	0.43	MDL	1.9	PQL	ug/Kg	J	Z, FD
Aroclor 5460	3.9		1.1	MDL	3.6	PQL	ug/Kg	J	FD

Method Category: SVOA

Method: 8270C **Matrix: SO**

Sample ID: DUP-11-SA5A-QC-033011 *Collected:* 3/30/2011 10:02:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	30	J	18	MDL	360	PQL	ug/Kg	U	B

Sample ID: DUP-12-SA5A-QC-033011 *Collected:* 3/30/2011 11:11:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	31	J	19	MDL	370	PQL	ug/Kg	U	B

Method Category: SVOA

Method: 8270C SIM **Matrix: SO**

Sample ID: DUP-11-SA5A-QC-033011 *Collected:* 3/30/2011 10:02:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Di-n-octylphthalate	11	J	6.6	MDL	20	PQL	ug/Kg	J	Z, FD
FLUORANTHENE	0.89	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z, FD

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE115 **Laboratory: LL**

EDD Filename: PrepDE115_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **8270C SIM** ***Matrix:*** **SO**

Sample ID: **DUP-11-SA5A-QC-033011** ***Collected:*** **3/30/2011 10:02:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NAPHTHALENE	1.4	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z, FD
PHENANTHRENE	1.3	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z, FD

Sample ID: **DUP-12-SA5A-QC-033011** ***Collected:*** **3/30/2011 11:11:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	0.37	U	0.37	MDL	1.8	PQL	ug/Kg	UJ	FD
BENZO(A)ANTHRACENE	0.74	U	0.74	MDL	1.8	PQL	ug/Kg	UJ	FD
BENZO(A)PYRENE	0.74	U	0.74	MDL	1.8	PQL	ug/Kg	UJ	FD
BENZO(B)FLUORANTHENE	0.74	U	0.74	MDL	1.8	PQL	ug/Kg	UJ	FD
BENZO(G,H,I)PERYLENE	0.74	U	0.74	MDL	1.8	PQL	ug/Kg	UJ	FD
BENZO(K)FLUORANTHENE	0.74	U	0.74	MDL	1.8	PQL	ug/Kg	UJ	FD
CHRYSENE	0.37	U	0.37	MDL	1.8	PQL	ug/Kg	UJ	FD
DIBENZO(A,H)ANTHRACENE	0.74	U	0.74	MDL	1.8	PQL	ug/Kg	UJ	FD
Di-n-octylphthalate	6.7	U	6.7	MDL	20	PQL	ug/Kg	UJ	FD
FLUORANTHENE	0.74	U	0.74	MDL	1.8	PQL	ug/Kg	UJ	FD
FLUORENE	0.74	U	0.74	MDL	1.8	PQL	ug/Kg	UJ	FD
INDENO(1,2,3-CD)PYRENE	0.74	U	0.74	MDL	1.8	PQL	ug/Kg	UJ	FD
PHENANTHRENE	0.74	U	0.74	MDL	1.8	PQL	ug/Kg	UJ	FD
PYRENE	0.74	U	0.74	MDL	1.8	PQL	ug/Kg	UJ	FD

Sample ID: **SL-082-SA5A-SB-4.0-5.0** ***Collected:*** **3/30/2011 4:03:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	0.85	J	0.37	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	1.4	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.2	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	1.4	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	0.94	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.6	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	14	J	6.6	MDL	20	PQL	ug/Kg	J	Z
CHRYSENE	1.6	J	0.37	MDL	1.8	PQL	ug/Kg	J	Z
Di-n-octylphthalate	11	J	6.6	MDL	20	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	0.76	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
PHENANTHRENE	1.1	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE115 **Laboratory: LL**

EDD Filename: PrepDE115_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **8270C SIM** ***Matrix:*** **SO**

Sample ID: **SL-082-SA5A-SB-4.0-5.0** ***Collected:*** **3/30/2011 4:03:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PYRENE	1.4	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: **SL-083-SA5A-SB-4.0-5.0** ***Collected:*** **3/30/2011 3:08:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHRYSENE	0.43	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z
Di-n-octylphthalate	13	J	6.4	MDL	19	PQL	ug/Kg	J	Z

Sample ID: **SL-083-SA5A-SB-9.0-10.0** ***Collected:*** **3/30/2011 3:13:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Di-n-octylphthalate	10	J	6.2	MDL	19	PQL	ug/Kg	J	Z

Sample ID: **SL-090-SA5A-SB-4.0-5.0** ***Collected:*** **3/30/2011 11:05:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	1.9		0.36	MDL	1.8	PQL	ug/Kg	J	FD
BENZO(A)ANTHRACENE	2.1		0.73	MDL	1.8	PQL	ug/Kg	J	FD
BENZO(A)PYRENE	1.7	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z, FD
BENZO(B)FLUORANTHENE	2.0		0.73	MDL	1.8	PQL	ug/Kg	J	FD
BENZO(G,H,I)PERYLENE	1.4	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z, FD
BENZO(K)FLUORANTHENE	1.8	J	0.73	MDL	1.8	PQL	ug/Kg	J	FD
BIS(2-ETHYLHEXYL)PHTHALATE	11	J	6.6	MDL	20	PQL	ug/Kg	J	Z
CHRYSENE	2.1		0.36	MDL	1.8	PQL	ug/Kg	J	FD
DIBENZO(A,H)ANTHRACENE	1.2	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z, FD
Di-n-octylphthalate	25		6.6	MDL	20	PQL	ug/Kg	J	FD
FLUORANTHENE	2.8		0.73	MDL	1.8	PQL	ug/Kg	J	FD
FLUORENE	1.1	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z, FD
INDENO(1,2,3-CD)PYRENE	1.2	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z, FD
PHENANTHRENE	2.3		0.73	MDL	1.8	PQL	ug/Kg	J	FD
PYRENE	2.1		0.73	MDL	1.8	PQL	ug/Kg	J	FD

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE115 **Laboratory: LL**

EDD Filename: PrepDE115_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C SIM **Matrix: SO**

Sample ID: SL-093-SA5A-SB-3.5-4.5 *Collected:* 3/30/2011 12:20:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	1.0	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	0.77	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	0.93	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	13	J	6.8	MDL	20	PQL	ug/Kg	J	Z
PYRENE	1.7	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-222-SA5A-SB-3.5-4.5 *Collected:* 3/30/2011 9:57:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Di-n-octylphthalate	6.5	U	6.5	MDL	20	PQL	ug/Kg	UJ	FD
FLUORANTHENE	0.73	U	0.73	MDL	1.8	PQL	ug/Kg	UJ	FD
NAPHTHALENE	0.73	U	0.73	MDL	1.8	PQL	ug/Kg	UJ	FD
PHENANTHRENE	0.73	U	0.73	MDL	1.8	PQL	ug/Kg	UJ	FD

Sample ID: SL-257-SA5A-SB-2.5-3.5 *Collected:* 3/30/2011 8:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Di-n-octylphthalate	16	J	6.4	MDL	19	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8315A **Matrix: SO**

Sample ID: SL-093-SA5A-SB-3.5-4.5 *Collected:* 3/30/2011 12:20:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FORMALDEHYDE	1200	J	680	MDL	1700	PQL	ug/Kg	J	Z

Method Category: VOA

Method: 8015B **Matrix: SO**

Sample ID: SL-222-SA5A-SB-3.5-4.5 *Collected:* 3/30/2011 9:57:00 *Analysis Type:* REA3 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
m-Terphenyl	1.6	U	1.6	MDL	3.8	PQL	mg/Kg	UJ	Q

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE115 **Laboratory: LL**

EDD Filename: PrepDE115_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: DUP-11-SA5A-QC-033011 *Collected:* 3/30/2011 10:02:00 *Analysis Type:* RES *Dilution:* 0.89

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	2.7	J	0.24	MDL	4.0	PQL	ug/Kg	U	B
TOLUENE	0.09	J	0.08	MDL	4.0	PQL	ug/Kg	J	Z, FD

Sample ID: DUP-12-SA5A-QC-033011 *Collected:* 3/30/2011 11:11:00 *Analysis Type:* RES *Dilution:* 0.98

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	3.2	J	0.27	MDL	4.4	PQL	ug/Kg	U	B

Sample ID: SL-082-SA5A-SB-4.0-5.0 *Collected:* 3/30/2011 4:03:00 *Analysis Type:* RES *Dilution:* 0.88

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	2.9	J	0.24	MDL	3.9	PQL	ug/Kg	U	B
TOLUENE	0.11	J	0.08	MDL	3.9	PQL	ug/Kg	J	Z

Sample ID: SL-083-SA5A-SB-4.0-5.0 *Collected:* 3/30/2011 3:08:00 *Analysis Type:* RES *Dilution:* 0.98

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	2.9	J	0.25	MDL	4.2	PQL	ug/Kg	U	B

Sample ID: SL-083-SA5A-SB-9.0-10.0 *Collected:* 3/30/2011 3:13:00 *Analysis Type:* RES *Dilution:* 0.98

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	2.7	J	0.24	MDL	4.1	PQL	ug/Kg	U	B

Sample ID: SL-090-SA5A-SB-4.0-5.0 *Collected:* 3/30/2011 11:05:00 *Analysis Type:* RES *Dilution:* 0.9

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	2.8	J	0.24	MDL	4.0	PQL	ug/Kg	U	B

Sample ID: SL-093-SA5A-SB-3.5-4.5 *Collected:* 3/30/2011 12:20:00 *Analysis Type:* RES *Dilution:* 1.05

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZENE	0.12	J	0.12	MDL	4.8	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	3.0	J	0.29	MDL	4.8	PQL	ug/Kg	U	B
TOLUENE	0.11	J	0.1	MDL	4.8	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE115 **Laboratory: LL**

EDD Filename: PrepDE115_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: VOA

Method: 8260B ***Matrix:*** SO

Sample ID: SL-222-SA5A-SB-3.5-4.5 ***Collected:*** 3/30/2011 9:57:00 ***Analysis Type:*** RES ***Dilution:*** 0.84

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	2.6	J	0.22	MDL	3.7	PQL	ug/Kg	U	B
TOLUENE	0.07	U	0.07	MDL	3.7	PQL	ug/Kg	UJ	FD

Sample ID: SL-257-SA5A-SB-2.5-3.5 ***Collected:*** 3/30/2011 8:45:00 ***Analysis Type:*** RES ***Dilution:*** 0.95

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	1.2	J	0.24	MDL	4.0	PQL	ug/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE115 **Laboratory: LL**

EDD Filename: PrepDE115_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
*#	Professional Judgment
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Verification Correlation Coefficient
C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE115 **Laboratory: LL**

EDD Filename: PrepDE115_v1 **eQAPP Name: CDM_SSFL_110509**

F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation
L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery Lower Estimation

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE115 **Laboratory: LL**

EDD Filename: PrepDE115_v1 **eQAPP Name: CDM_SSFL_110509**

R	Continuing Calibration Verification Percent Recovery Lower Rejection
R	Continuing Calibration Verification Percent Recovery Upper Estimation
R	Continuing Calibration Verification Percent Recovery Upper Rejection
R	Continuing Calibration Verification Relative Response Factor
R	Initial Calibration Relative Response Factor
R	Initial Calibration Verification Percent Recovery Lower Estimation
R	Initial Calibration Verification Percent Recovery Lower Rejection
R	Initial Calibration Verification Percent Recovery Upper Estimation
R	Initial Calibration Verification Percent Recovery Upper Rejection
R	Initial Calibration Verification Relative Response Factor
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control Outlier Reports

DE115

Method Blank Outlier Report

Lab Reporting Batch ID: DE115 **Laboratory: LL**

EDD Filename: DE115_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **6010B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P09408BB220330	4/13/2011 3:30:00 AM	IRON PHOSPHORUS TIN	4.95 mg/Kg 1.16 mg/Kg 1.99 mg/Kg	DUP-11-SA5A-QC-033011 DUP-12-SA5A-QC-033011 SL-082-SA5A-SB-4.0-5.0 SL-083-SA5A-SB-4.0-5.0 SL-083-SA5A-SB-9.0-10.0 SL-090-SA5A-SB-4.0-5.0 SL-093-SA5A-SB-3.5-4.5 SL-222-SA5A-SB-3.5-4.5 SL-257-SA5A-SB-2.5-3.5

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
DUP-11-SA5A-QC-033011(RES)	TIN	3.29 mg/Kg	3.29U mg/Kg
DUP-12-SA5A-QC-033011(RES)	TIN	3.19 mg/Kg	3.19U mg/Kg
SL-082-SA5A-SB-4.0-5.0(RES)	TIN	3.24 mg/Kg	3.24U mg/Kg
SL-083-SA5A-SB-4.0-5.0(RES)	TIN	3.08 mg/Kg	3.08U mg/Kg
SL-083-SA5A-SB-9.0-10.0(RES)	TIN	3.37 mg/Kg	3.37U mg/Kg
SL-090-SA5A-SB-4.0-5.0(RES)	TIN	3.19 mg/Kg	3.19U mg/Kg
SL-093-SA5A-SB-3.5-4.5(RES)	TIN	6.89 mg/Kg	6.89U mg/Kg
SL-222-SA5A-SB-3.5-4.5(RES)	TIN	3.95 mg/Kg	3.95U mg/Kg
SL-257-SA5A-SB-2.5-3.5(RES)	TIN	3.23 mg/Kg	3.23U mg/Kg

Method: **6020**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P09426AB221050A	4/5/2011 10:50:00 AM	COPPER	0.124 mg/Kg	DUP-11-SA5A-QC-033011 DUP-12-SA5A-QC-033011 SL-082-SA5A-SB-4.0-5.0 SL-083-SA5A-SB-4.0-5.0 SL-083-SA5A-SB-9.0-10.0 SL-090-SA5A-SB-4.0-5.0 SL-093-SA5A-SB-3.5-4.5 SL-222-SA5A-SB-3.5-4.5 SL-257-SA5A-SB-2.5-3.5

Method Blank Outlier Report

Lab Reporting Batch ID: DE115 **Laboratory: LL**

EDD Filename: DE115_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8015M**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P92923AB322323A	4/5/2011 11:23:00 PM	EFH (C30-C40) EFH (C8-C11)	0.57 mg/Kg 0.48 mg/Kg	DUP-11-SA5A-QC-033011 SL-082-SA5A-SB-4.0-5.0 SL-083-SA5A-SB-4.0-5.0 SL-083-SA5A-SB-9.0-10.0 SL-090-SA5A-SB-4.0-5.0 SL-093-SA5A-SB-3.5-4.5 SL-222-SA5A-SB-3.5-4.5 SL-257-SA5A-SB-2.5-3.5

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
DUP-11-SA5A-QC-033011(REA2)	EFH (C8-C11)	0.73 mg/Kg	1.3U mg/Kg
SL-082-SA5A-SB-4.0-5.0(REA2)	EFH (C8-C11)	0.54 mg/Kg	1.3U mg/Kg
SL-083-SA5A-SB-4.0-5.0(REA2)	EFH (C8-C11)	0.54 mg/Kg	1.3U mg/Kg
SL-083-SA5A-SB-9.0-10.0(REA2)	EFH (C30-C40)	1.6 mg/Kg	1.6U mg/Kg
SL-083-SA5A-SB-9.0-10.0(REA2)	EFH (C8-C11)	0.73 mg/Kg	1.3U mg/Kg
SL-090-SA5A-SB-4.0-5.0(REA2)	EFH (C8-C11)	0.82 mg/Kg	1.3U mg/Kg
SL-257-SA5A-SB-2.5-3.5(REA2)	EFH (C30-C40)	1.1 mg/Kg	1.3U mg/Kg
SL-257-SA5A-SB-2.5-3.5(REA2)	EFH (C8-C11)	0.61 mg/Kg	1.3U mg/Kg

Method: **8260B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB11B211510A	4/1/2011 3:10:00 PM	METHYLENE CHLORIDE	0.40 ug/Kg	DUP-11-SA5A-QC-033011 DUP-12-SA5A-QC-033011 SL-082-SA5A-SB-4.0-5.0 SL-083-SA5A-SB-4.0-5.0 SL-083-SA5A-SB-9.0-10.0 SL-090-SA5A-SB-4.0-5.0 SL-093-SA5A-SB-3.5-4.5 SL-222-SA5A-SB-3.5-4.5 SL-257-SA5A-SB-2.5-3.5

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
DUP-11-SA5A-QC-033011(RES)	METHYLENE CHLORIDE	2.7 ug/Kg	4.0U ug/Kg
DUP-12-SA5A-QC-033011(RES)	METHYLENE CHLORIDE	3.2 ug/Kg	4.4U ug/Kg
SL-082-SA5A-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	2.9 ug/Kg	3.9U ug/Kg
SL-083-SA5A-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	2.9 ug/Kg	4.2U ug/Kg
SL-083-SA5A-SB-9.0-10.0(RES)	METHYLENE CHLORIDE	2.7 ug/Kg	4.1U ug/Kg
SL-090-SA5A-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	2.8 ug/Kg	4.0U ug/Kg
SL-093-SA5A-SB-3.5-4.5(RES)	METHYLENE CHLORIDE	3.0 ug/Kg	4.8U ug/Kg
SL-222-SA5A-SB-3.5-4.5(RES)	METHYLENE CHLORIDE	2.6 ug/Kg	3.7U ug/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE115 **Laboratory: LL**

EDD Filename: DE115_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8260B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-257-SA5A-SB-2.5-3.5(RES)	METHYLENE CHLORIDE	1.2 ug/Kg	4.0U ug/Kg

Method: **8270C**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKLA09B262257	4/7/2011 10:57:00 PM	BIS(2-ETHYLHEXYL)PHTHALATE	17 ug/Kg	DUP-11-SA5A-QC-033011 DUP-12-SA5A-QC-033011 SL-082-SA5A-SB-4.0-5.0 SL-083-SA5A-SB-4.0-5.0 SL-083-SA5A-SB-9.0-10.0 SL-090-SA5A-SB-4.0-5.0 SL-093-SA5A-SB-3.5-4.5 SL-222-SA5A-SB-3.5-4.5 SL-257-SA5A-SB-2.5-3.5

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
DUP-11-SA5A-QC-033011(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	30 ug/Kg	360U ug/Kg
DUP-12-SA5A-QC-033011(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	31 ug/Kg	370U ug/Kg

Method: **8270C SIM**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKLC09B261905	4/5/2011 7:05:00 PM	Di-n-butylphthalate	11 ug/Kg	DUP-11-SA5A-QC-033011 DUP-12-SA5A-QC-033011 SL-082-SA5A-SB-4.0-5.0 SL-083-SA5A-SB-4.0-5.0 SL-083-SA5A-SB-9.0-10.0 SL-090-SA5A-SB-4.0-5.0 SL-093-SA5A-SB-3.5-4.5 SL-222-SA5A-SB-3.5-4.5 SL-257-SA5A-SB-2.5-3.5

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE115 **Laboratory: LL**

EDD Filename: DE115_v1 **eQAPP Name: CDM_SSFL_110509**

***Method:* 6020**

***Matrix:* SO**

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-222-SA5A-SB-3.5-4.5MS **SL-222-SA5A-SB-3.5-4.5MSD** (DUP-11-SA5A-QC-033011 DUP -12-SA5A-QC-033011 SL -082-SA5A-SB-4.0-5.0 SL -083-SA5A-SB-4.0-5.0 SL -083-SA5A-SB-9.0-10.0 SL -090-SA5A-SB-4.0-5.0 SL -093-SA5A-SB-3.5-4.5 SL -222-SA5A-SB-3.5-4.5 SL -257-SA5A-SB-2.5-3.5)	ARSENIC	150	140	75.00-125.00	-	ARSENIC	J (all detects)
SL-222-SA5A-SB-3.5-4.5MS **SL-222-SA5A-SB-3.5-4.5MSD** (DUP-11-SA5A-QC-033011 DUP -12-SA5A-QC-033011 SL -082-SA5A-SB-4.0-5.0 SL -083-SA5A-SB-4.0-5.0 SL -083-SA5A-SB-9.0-10.0 SL -090-SA5A-SB-4.0-5.0 SL -093-SA5A-SB-3.5-4.5 SL -222-SA5A-SB-3.5-4.5 SL -257-SA5A-SB-2.5-3.5)	ANTIMONY COPPER LEAD ZINC	17 -10 -109 -4	47 228 136 243	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	- 45 (20.00) - -	ANTIMONY COPPER LEAD ZINC	J(all detects) R(all non-detects) Cu No Qual %R, >4x J(all detects) UJ (all non-detects) Pb, Zn No Qual, >4x
SL-222-SA5A-SB-3.5-4.5MS **SL-222-SA5A-SB-3.5-4.5MSD** (DUP-11-SA5A-QC-033011 DUP -12-SA5A-QC-033011 SL -082-SA5A-SB-4.0-5.0 SL -083-SA5A-SB-4.0-5.0 SL -083-SA5A-SB-9.0-10.0 SL -090-SA5A-SB-4.0-5.0 SL -093-SA5A-SB-3.5-4.5 SL -222-SA5A-SB-3.5-4.5 SL -257-SA5A-SB-2.5-3.5)	CHROMIUM	65	170	75.00-125.00	26 (20.00)	CHROMIUM	J(all detects) UJ(all non-detects)
SL-222-SA5A-SB-3.5-4.5MS **SL-222-SA5A-SB-3.5-4.5MSD** (DUP-11-SA5A-QC-033011 DUP -12-SA5A-QC-033011 SL -082-SA5A-SB-4.0-5.0 SL -083-SA5A-SB-4.0-5.0 SL -083-SA5A-SB-9.0-10.0 SL -090-SA5A-SB-4.0-5.0 SL -093-SA5A-SB-3.5-4.5 SL -222-SA5A-SB-3.5-4.5 SL -257-SA5A-SB-2.5-3.5)	MOLYBDENUM	129	132	75.00-125.00	-	MOLYBDENUM	J(all detects)
SL-222-SA5A-SB-3.5-4.5MS **SL-222-SA5A-SB-3.5-4.5MSD** (DUP-11-SA5A-QC-033011 DUP -12-SA5A-QC-033011 SL -082-SA5A-SB-4.0-5.0 SL -083-SA5A-SB-4.0-5.0 SL -083-SA5A-SB-9.0-10.0 SL -090-SA5A-SB-4.0-5.0 SL -093-SA5A-SB-3.5-4.5 SL -222-SA5A-SB-3.5-4.5 SL -257-SA5A-SB-2.5-3.5)	BARIUM	5	8	75.00-125.00	-	BARIUM	No Qual, >4x

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE115 **Laboratory: LL**

EDD Filename: DE115_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-222-SA5A-SB-3.5-4.5MS SL-222-SA5A-SB-3.5-4.5MSD (DUP-11-SA5A-QC-033011 DUP -12-SA5A-QC-033011 SL -082-SA5A-SB-4.0-5.0 SL -083-SA5A-SB-4.0-5.0 SL -083-SA5A-SB-9.0-10.0 SL -090-SA5A-SB-4.0-5.0 SL -093-SA5A-SB-3.5-4.5 SL -222-SA5A-SB-3.5-4.5 SL -257-SA5A-SB-2.5-3.5)	ALUMINUM IRON MAGNESIUM TITANIUM	1171 181 - 209	941 2560 175 176	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	- - - -	ALUMINUM IRON MAGNESIUM TITANIUM	No Qual, >4x
SL-222-SA5A-SB-3.5-4.5MS SL-222-SA5A-SB-3.5-4.5MSD (DUP-11-SA5A-QC-033011 DUP -12-SA5A-QC-033011 SL -082-SA5A-SB-4.0-5.0 SL -083-SA5A-SB-4.0-5.0 SL -083-SA5A-SB-9.0-10.0 SL -090-SA5A-SB-4.0-5.0 SL -093-SA5A-SB-3.5-4.5 SL -222-SA5A-SB-3.5-4.5 SL -257-SA5A-SB-2.5-3.5)	MANGANESE	28	-80	75.00-125.00	-	MANGANESE	No Qual, >4x
SL-222-SA5A-SB-3.5-4.5MS SL-222-SA5A-SB-3.5-4.5MSD (DUP-11-SA5A-QC-033011 DUP -12-SA5A-QC-033011 SL -082-SA5A-SB-4.0-5.0 SL -083-SA5A-SB-4.0-5.0 SL -083-SA5A-SB-9.0-10.0 SL -090-SA5A-SB-4.0-5.0 SL -093-SA5A-SB-3.5-4.5 SL -222-SA5A-SB-3.5-4.5 SL -257-SA5A-SB-2.5-3.5)	CALCIUM	52	1050	75.00-125.00	62 (20.00)	CALCIUM	J(all detects) UJ(all non-detects) No Qual %R, >4x

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-222-SA5A-SB-3.5-4.5MS SL-222-SA5A-SB-3.5-4.5MSD (DUP-11-SA5A-QC-033011 DUP -12-SA5A-QC-033011 SL -082-SA5A-SB-4.0-5.0 SL -083-SA5A-SB-4.0-5.0 SL -083-SA5A-SB-9.0-10.0 SL -090-SA5A-SB-4.0-5.0 SL -093-SA5A-SB-3.5-4.5 SL -222-SA5A-SB-3.5-4.5 SL -257-SA5A-SB-2.5-3.5)	VANADIUM	149	166	75.00-125.00	-	VANADIUM	J(all detects)

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE115 **Laboratory: LL**

EDD Filename: DE115_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8015M
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-222-SA5A-SB-3.5-4.5MS SL-222-SA5A-SB-3.5-4.5MSD (SL-222-SA5A-SB-3.5-4.5)	EFH (C8-C11)	127	135	49.00-123.00	-	EFH (C8-C11)	No Qual, Diluted Out
SL-222-SA5A-SB-3.5-4.5MS SL-222-SA5A-SB-3.5-4.5MSD (SL-222-SA5A-SB-3.5-4.5)	EFH (C15-C20) EFH (C21-C30) EFH (C30-C40)	-568 -7904 -25284	-558 -8067 -25600	49.00-123.00 49.00-123.00 49.00-123.00	- 64 (20.00) 78 (20.00)	EFH (C15-C20) EFH (C21-C30) EFH (C30-C40)	No Qual Diluted Out

Method: 8015B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-222-SA5A-SB-3.5-4.5MS (SL-222-SA5A-SB-3.5-4.5)	m-Terphenyl	73	-	75.00-125.00	-	m-Terphenyl	J(all detects) UJ(all non-detects)

Method: 8260B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-222-SA5A-SB-3.5-4.5MS SL-222-SA5A-SB-3.5-4.5MSD (SL-222-SA5A-SB-3.5-4.5)	1,1,2,2-TETRACHLOROETHANE	160	-	40.00-152.00	48 (30.00)	1,1,2,2-TETRACHLOROETHAN	J(all detects)
	1,2,3-TRICHLOROBENZENE	-	-	10.00-140.00	57 (30.00)	1,2,3-TRICHLOROBENZENE	
	1,2,3-TRICHLOROPROPANE	-	-	45.00-154.00	46 (30.00)	1,2,3-TRICHLOROPROPANE	
	1,2,4-TRICHLOROBENZENE	-	-	10.00-136.00	58 (30.00)	1,2,4-TRICHLOROBENZENE	
	2-Chloro-1,1,1-trifluoroethane	141	-	70.00-130.00	35 (30.00)	2-Chloro-1,1,1-trifluoroethane	
	Chlorotrifluoroethylene	143	-	70.00-130.00	45 (30.00)	Chlorotrifluoroethylene	
	STYRENE	-	-	35.00-134.00	38 (30.00)	STYRENE	
	TERT-BUTYLBENZENE	-	-	41.00-152.00	38 (30.00)	TERT-BUTYLBENZENE	

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE115 **Laboratory: LL**

EDD Filename: DE115_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 300.0
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-222-SA5A-SB-3.5-4.5DUP (DUP-11-SA5A-QC-033011 DUP -12-SA5A-QC-033011 SL -082-SA5A-SB-4.0-5.0 SL -083-SA5A-SB-4.0-5.0 SL -083-SA5A-SB-9.0-10.0 SL -090-SA5A-SB-4.0-5.0 SL -093-SA5A-SB-3.5-4.5 SL -222-SA5A-SB-3.5-4.5 SL -257-SA5A-SB-2.5-3.5)	FLUORIDE	27	20.00	No Qual OK by difference

Method: 6010B
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-222-SA5A-SB-3.5-4.5DUP (DUP-11-SA5A-QC-033011 DUP -12-SA5A-QC-033011 SL -082-SA5A-SB-4.0-5.0 SL -083-SA5A-SB-4.0-5.0 SL -083-SA5A-SB-9.0-10.0 SL -090-SA5A-SB-4.0-5.0 SL -093-SA5A-SB-3.5-4.5 SL -222-SA5A-SB-3.5-4.5 SL -257-SA5A-SB-2.5-3.5)	MANGANESE TIN	27 150.3301 mg/Kg	20.00 21.0 mg/Kg	J(all detects) UJ(all non-detects)

Method: 6020
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-222-SA5A-SB-3.5-4.5DUP (DUP-11-SA5A-QC-033011 DUP -12-SA5A-QC-033011 SL -082-SA5A-SB-4.0-5.0 SL -083-SA5A-SB-4.0-5.0 SL -083-SA5A-SB-9.0-10.0 SL -090-SA5A-SB-4.0-5.0 SL -093-SA5A-SB-3.5-4.5 SL -222-SA5A-SB-3.5-4.5 SL -257-SA5A-SB-2.5-3.5)	ANTIMONY SILVER	23 35	20.00 20.00	J(all detects) UJ(all non-detects)

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE115 **Laboratory: LL**

EDD Filename: DE115_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7199
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-222-SA5A-SB-3.5-4.5DUP (DUP-11-SA5A-QC-033011 DUP -12-SA5A-QC-033011 SL -082-SA5A-SB-4.0-5.0 SL -083-SA5A-SB-4.0-5.0 SL -083-SA5A-SB-9.0-10.0 SL -090-SA5A-SB-4.0-5.0 SL -093-SA5A-SB-3.5-4.5 SL -222-SA5A-SB-3.5-4.5 SL -257-SA5A-SB-2.5-3.5)	HEXAVALENT CHROMIUM	200	20.00	No Qual OK by difference

Method: 7471A
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-222-SA5A-SB-3.5-4.5DUP (DUP-11-SA5A-QC-033011 DUP -12-SA5A-QC-033011 SL -082-SA5A-SB-4.0-5.0 SL -083-SA5A-SB-4.0-5.0 SL -083-SA5A-SB-9.0-10.0 SL -090-SA5A-SB-4.0-5.0 SL -093-SA5A-SB-3.5-4.5 SL -222-SA5A-SB-3.5-4.5 SL -257-SA5A-SB-2.5-3.5)	MERCURY	200	20.00	No Qual OK by difference

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE115 **Laboratory: LL**

EDD Filename: DE115_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8260B
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
LCSY90Q211607A (TB-033011)	TRICHLOROFLUOROMETHANE	135	-	64.00-129.00	-	TRICHLOROFLUOROMETHAN	J(all detects)

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P09426AQ221053A (DUP-11-SA5A-QC-033011 DUP -12-SA5A-QC-033011 SL -082-SA5A-SB-4.0-5.0 SL -083-SA5A-SB-4.0-5.0 SL -083-SA5A-SB-9.0-10.0 SL -090-SA5A-SB-4.0-5.0 SL -093-SA5A-SB-3.5-4.5 SL -222-SA5A-SB-3.5-4.5 SL -257-SA5A-SB-2.5-3.5)	ANTIMONY	141	-	80.00-120.00	-	ANTIMONY	No Qual SRM within QC limits

Surrogate Outlier Report

Lab Reporting Batch ID: DE115 **Laboratory: LL**

EDD Filename: DE115_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8082**
Matrix: **SO**

Sample ID	*Surrogate*	*Sample % Recovery*	*% Recovery Limits*	*Affected Compounds*	*Flag*
SL-082-SA5A-SB-4.0-5.0	DECACHLOROBIPHENYL	128	45.00-120.00	All Target Analytes	No Qual, Diluted Out

Field Duplicate RPD Report

Lab Reporting Batch ID: DE115 **Laboratory: LL**

EDD Filename: DE115_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 160.3M
Matrix: SO

Analyte	Concentration (%) SL-222-SA5A-SB-3.5-4.5	Concentration (%) DUP-11-SA5A-QC-033011	Sample RPD	eQAPP RPD	Flag
MOISTURE	8.4	9.9	16		No Qualifiers Applied

Analyte	Concentration (%) SL-090-SA5A-SB-4.0-5.0	Concentration (%) DUP-12-SA5A-QC-033011	Sample RPD	eQAPP RPD	Flag
MOISTURE	9.8	11.0	12		No Qualifiers Applied

Method: 300.0
Matrix: SO

Analyte	Concentration (mg/Kg) SL-222-SA5A-SB-3.5-4.5	Concentration (mg/Kg) DUP-11-SA5A-QC-033011	Sample RPD	eQAPP RPD	Flag
FLUORIDE	1.5	1.5	0	50.00	No Qualifiers Applied
Nitrate-NO3	1.5	1.3	14	50.00	

Analyte	Concentration (mg/Kg) SL-090-SA5A-SB-4.0-5.0	Concentration (mg/Kg) DUP-12-SA5A-QC-033011	Sample RPD	eQAPP RPD	Flag
FLUORIDE	2.1	1.9	10	50.00	No Qualifiers Applied

Method: 6010B
Matrix: SO

Analyte	Concentration (mg/Kg) SL-222-SA5A-SB-3.5-4.5	Concentration (mg/Kg) DUP-11-SA5A-QC-033011	Sample RPD	eQAPP RPD	Flag
ALUMINUM	14700	13300	10	50.00	No Qualifiers Applied
BORON	5.72	4.56	23	50.00	
CALCIUM	4580	3590	24	50.00	
IRON	23600	22200	6	50.00	
LITHIUM	24.3	27.9	14	50.00	
MAGNESIUM	4700	5500	16	50.00	
MANGANESE	432	328	27	50.00	
PHOSPHORUS	390	405	4	50.00	
POTASSIUM	3480	3100	12	50.00	
SODIUM	104	88.4	16	50.00	
STRONTIUM	20.4	13.6	40	50.00	
TIN	3.95	3.29	18	50.00	
TITANIUM	1330	1290	3	50.00	
Zirconium	4.51	3.65	21	50.00	

Analyte	Concentration (mg/Kg) SL-090-SA5A-SB-4.0-5.0	Concentration (mg/Kg) DUP-12-SA5A-QC-033011	Sample RPD	eQAPP RPD	Flag

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Field Duplicate RPD Report

Lab Reporting Batch ID: DE115 **Laboratory: LL**

EDD Filename: DE115_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B
Matrix: SO

ALUMINUM	12000	12600	5	50.00	No Qualifiers Applied
BORON	3.32	4.01	19	50.00	
CALCIUM	4050	3290	21	50.00	
IRON	19800	20600	4	50.00	
LITHIUM	24.5	23.9	2	50.00	
MAGNESIUM	4630	4730	2	50.00	
MANGANESE	300	283	6	50.00	
PHOSPHORUS	371	403	8	50.00	
POTASSIUM	2910	3280	12	50.00	
SODIUM	77.1	97.4	23	50.00	
STRONTIUM	16.1	16.8	4	50.00	
TIN	3.19	3.19	0	50.00	
TITANIUM	1180	1280	8	50.00	
Zirconium	3.74	3.25	14	50.00	

Method: 6020
Matrix: SO

Analyte	Concentration (mg/Kg) SL-222-SA5A-SB-3.5-4.5	Concentration (mg/Kg) DUP-11-SA5A-QC-033011	Sample RPD	eQAPP RPD	Flag
ARSENIC	4.83	4.68	3	50.00	No Qualifiers Applied
BERYLLIUM	0.562	0.456	21	50.00	
COBALT	6.40	5.53	15	50.00	
THALLIUM	0.259	0.229	12	50.00	
VANADIUM	31.7	34.3	8	50.00	
ANTIMONY	1.52	0.112	173	50.00	J(all detects)
BARIUM	140	74.0	62	50.00	
CADMIUM	0.742	0.145	135	50.00	
CHROMIUM	29.9	14.4	70	50.00	
COPPER	44.7	8.97	133	50.00	
LEAD	82.9	4.65	179	50.00	
MOLYBDENUM	1.35	0.379	112	50.00	
NICKEL	21.4	8.94	82	50.00	
SELENIUM	0.185	0.105	55	50.00	
SILVER	1.70	0.0313	193	50.00	
ZINC	151	57.2	90	50.00	

Analyte	Concentration (mg/Kg) SL-090-SA5A-SB-4.0-5.0	Concentration (mg/Kg) DUP-12-SA5A-QC-033011	Sample RPD	eQAPP RPD	Flag
ANTIMONY	0.212	0.190	11	50.00	No Qualifiers Applied
ARSENIC	5.19	4.09	24	50.00	
BARIUM	101	77.6	26	50.00	
BERYLLIUM	0.564	0.463	20	50.00	
CADMIUM	0.219	0.150	37	50.00	
CHROMIUM	16.5	15.1	9	50.00	
COBALT	6.20	5.06	20	50.00	
COPPER	9.72	10.7	10	50.00	
LEAD	8.70	6.69	26	50.00	
MOLYBDENUM	0.548	0.436	23	50.00	
NICKEL	10.7	9.30	14	50.00	
SELENIUM	0.108	0.0916	16	50.00	
SILVER	0.0322	0.0262	21	50.00	
THALLIUM	0.263	0.220	18	50.00	
VANADIUM	33.8	33.7	0	50.00	
ZINC	81.3	64.2	24	50.00	

Field Duplicate RPD Report

Lab Reporting Batch ID: DE115 **Laboratory: LL**

EDD Filename: DE115_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7471A
Matrix: SO

Analyte	Concentration (mg/Kg) SL-222-SA5A-SB-3.5-4.5	Concentration (mg/Kg) DUP-11-SA5A-QC-033011	Sample RPD	eQAPP RPD	Flag
MERCURY	0.0057	0.103 U	200	50.00	J(all detects) UJ(all non-detects)

Analyte	Concentration (mg/Kg) SL-090-SA5A-SB-4.0-5.0	Concentration (mg/Kg) DUP-12-SA5A-QC-033011	Sample RPD	eQAPP RPD	Flag
MERCURY	0.0556	0.0197	95	50.00	J(all detects)

Method: 8015M
Matrix: SO

Analyte	Concentration (mg/Kg) SL-222-SA5A-SB-3.5-4.5	Concentration (mg/Kg) DUP-11-SA5A-QC-033011	Sample RPD	eQAPP RPD	Flag
EFH (C15-C20)	9.4	1.3 U	200	50.00	
EFH (C21-C30)	190	3.4	193	50.00	J(all detects)
EFH (C30-C40)	710	13	193	50.00	UJ(all non-detects)
EFH (C8-C11)	26 U	0.73	200	50.00	

Method: 8082
Matrix: SO

Analyte	Concentration (ug/Kg) SL-222-SA5A-SB-3.5-4.5	Concentration (ug/Kg) DUP-11-SA5A-QC-033011	Sample RPD	eQAPP RPD	Flag
AROCLOR 1260	0.90	1.9 U	200	50.00	J(all detects)
Aroclor 5460	3.9	32	157	50.00	UJ(all non-detects)

Analyte	Concentration (ug/Kg) SL-090-SA5A-SB-4.0-5.0	Concentration (ug/Kg) DUP-12-SA5A-QC-033011	Sample RPD	eQAPP RPD	Flag
AROCLOR 1260	1.2	1.9	45	50.00	No Qualifiers Applied
Aroclor 5460	2.2	1.7	26	50.00	
AROCLOR 1254	1.9 U	1.7	200	50.00	J(all detects) UJ(all non-detects)

Method: 8260B
Matrix: SO

Analyte	Concentration (ug/Kg) SL-222-SA5A-SB-3.5-4.5	Concentration (ug/Kg) DUP-11-SA5A-QC-033011	Sample RPD	eQAPP RPD	Flag
METHYLENE CHLORIDE	2.6	2.7	4	50.00	No Qualifiers Applied
TOLUENE	3.7 U	0.09	200	50.00	J(all detects) UJ(all non-detects)

Analyte	Concentration (ug/Kg) SL-090-SA5A-SB-4.0-5.0	Concentration (ug/Kg) DUP-12-SA5A-QC-033011	Sample RPD	eQAPP RPD	Flag
METHYLENE CHLORIDE	2.8	3.2	13	50.00	No Qualifiers Applied

Field Duplicate RPD Report

Lab Reporting Batch ID: DE115 **Laboratory: LL**

EDD Filename: DE115_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C SIM
Matrix: SO

Analyte	Concentration (ug/Kg) SL-222-SA5A-SB-3.5-4.5	Concentration (ug/Kg) DUP-11-SA5A-QC-033011	Sample RPD	eQAPP RPD	Flag
Di-n-octylphthalate	20 U	11	200	50.00	
FLUORANTHENE	1.8 U	0.89	200	50.00	J(all detects)
NAPHTHALENE	1.8 U	1.4	200	50.00	UJ(all non-detects)
PHENANTHRENE	1.8 U	1.3	200	50.00	

Analyte	Concentration (ug/Kg) SL-090-SA5A-SB-4.0-5.0	Concentration (ug/Kg) DUP-12-SA5A-QC-033011	Sample RPD	eQAPP RPD	Flag
ANTHRACENE	1.9	1.8 U	200	50.00	
BENZO(A)ANTHRACENE	2.1	1.8 U	200	50.00	
BENZO(A)PYRENE	1.7	1.8 U	200	50.00	
BENZO(B)FLUORANTHENE	2.0	1.8 U	200	50.00	
BENZO(G,H,I)PERYLENE	1.4	1.8 U	200	50.00	
BENZO(K)FLUORANTHENE	1.8	1.8 U	200	50.00	
CHRYSENE	2.1	1.8 U	200	50.00	J(all detects)
DIBENZO(A,H)ANTHRACENE	1.2	1.8 U	200	50.00	UJ(all non-detects)
Di-n-octylphthalate	25	20 U	200	50.00	
FLUORANTHENE	2.8	1.8 U	200	50.00	
FLUORENE	1.1	1.8 U	200	50.00	
INDENO(1,2,3-CD)PYRENE	1.2	1.8 U	200	50.00	
PHENANTHRENE	2.3	1.8 U	200	50.00	
PYRENE	2.1	1.8 U	200	50.00	

Method: 9045M
Matrix: SO

Analyte	Concentration (pH unit) SL-222-SA5A-SB-3.5-4.5	Concentration (pH unit) DUP-11-SA5A-QC-033011	Sample RPD	eQAPP RPD	Flag
PH	7.95	7.90	1	50.00	No Qualifiers Applied

Analyte	Concentration (pH unit) SL-090-SA5A-SB-4.0-5.0	Concentration (pH unit) DUP-12-SA5A-QC-033011	Sample RPD	eQAPP RPD	Flag
PH	8.26	8.26	0	50.00	No Qualifiers Applied

Method: ASTM D1498
Matrix: SO

Analyte	Concentration (mV) SL-222-SA5A-SB-3.5-4.5	Concentration (mV) DUP-11-SA5A-QC-033011	Sample RPD	eQAPP RPD	Flag
Oxidation Reduction Potential	405	380	6		No Qualifiers Applied

Analyte	Concentration (mV) SL-090-SA5A-SB-4.0-5.0	Concentration (mV) DUP-12-SA5A-QC-033011	Sample RPD	eQAPP RPD	Flag
Oxidation Reduction Potential	396	384	3		No Qualifiers Applied

Reporting Limit Outliers

Lab Reporting Batch ID: DE115 **Laboratory: LL**

EDD Filename: DE115_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1625C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-093-SA5A-SB-3.5-4.5	N-NITROSODIMETHYLAMINE	J	25.8	37.5	PQL	ng/Kg	J (all detects)

Method: 300.0

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-11-SA5A-QC-033011	Nitrate-NO3	J	1.3	1.7	PQL	mg/Kg	J (all detects)
SL-082-SA5A-SB-4.0-5.0	Nitrate-NO3	J	1.0	1.7	PQL	mg/Kg	J (all detects)
SL-083-SA5A-SB-9.0-10.0	Nitrate-NO3	J	1.0	1.6	PQL	mg/Kg	J (all detects)
SL-090-SA5A-SB-4.0-5.0	Nitrate-NO3	J	1.2	1.7	PQL	mg/Kg	J (all detects)
SL-222-SA5A-SB-3.5-4.5	Nitrate-NO3	J	1.5	1.6	PQL	mg/Kg	J (all detects)
SL-257-SA5A-SB-2.5-3.5	Nitrate-NO3	J	1.1	1.6	PQL	mg/Kg	J (all detects)

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-11-SA5A-QC-033011	BORON	J	4.56	5.39	PQL	mg/Kg	J (all detects)
	SODIUM	J	88.4	108	PQL	mg/Kg	
	TIN	J	3.29	10.8	PQL	mg/Kg	
	Zirconium	J	3.65	5.39	PQL	mg/Kg	
DUP-12-SA5A-QC-033011	BORON	J	4.01	5.56	PQL	mg/Kg	J (all detects)
	SODIUM	J	97.4	111	PQL	mg/Kg	
	TIN	J	3.19	11.1	PQL	mg/Kg	
	Zirconium	J	3.25	5.56	PQL	mg/Kg	
SL-082-SA5A-SB-4.0-5.0	BORON	J	2.62	5.50	PQL	mg/Kg	J (all detects)
	SODIUM	J	106	110	PQL	mg/Kg	
	TIN	J	3.24	11.0	PQL	mg/Kg	
	Zirconium	J	3.13	5.50	PQL	mg/Kg	
SL-083-SA5A-SB-4.0-5.0	BORON	J	2.76	5.27	PQL	mg/Kg	J (all detects)
	TIN	J	3.08	10.5	PQL	mg/Kg	
	Zirconium	J	2.90	5.27	PQL	mg/Kg	
SL-083-SA5A-SB-9.0-10.0	TIN	J	3.37	10.3	PQL	mg/Kg	J (all detects)
	Zirconium	J	3.37	5.16	PQL	mg/Kg	
SL-090-SA5A-SB-4.0-5.0	BORON	J	3.32	5.43	PQL	mg/Kg	J (all detects)
	SODIUM	J	77.1	109	PQL	mg/Kg	
	TIN	J	3.19	10.9	PQL	mg/Kg	
	Zirconium	J	3.74	5.43	PQL	mg/Kg	
SL-093-SA5A-SB-3.5-4.5	TIN	J	6.89	11.0	PQL	mg/Kg	J (all detects)
	Zirconium	J	3.38	5.52	PQL	mg/Kg	
SL-222-SA5A-SB-3.5-4.5	SODIUM	J	104	105	PQL	mg/Kg	J (all detects)
	TIN	J	3.95	10.5	PQL	mg/Kg	
	Zirconium	J	4.51	5.25	PQL	mg/Kg	

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Reporting Limit Outliers

Lab Reporting Batch ID: DE115 **Laboratory: LL**

EDD Filename: DE115_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-257-SA5A-SB-2.5-3.5	BORON	J	1.43	5.14	PQL	mg/Kg	J (all detects)
	TIN	J	3.23	10.3	PQL	mg/Kg	
	Zirconium	J	1.40	5.14	PQL	mg/Kg	

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-11-SA5A-QC-033011	ANTIMONY	J	0.112	0.216	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.105	0.431	PQL	mg/Kg	
	SILVER	J	0.0313	0.108	PQL	mg/Kg	
DUP-12-SA5A-QC-033011	ANTIMONY	J	0.190	0.216	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0916	0.432	PQL	mg/Kg	
	SILVER	J	0.0262	0.108	PQL	mg/Kg	
SL-082-SA5A-SB-4.0-5.0	SELENIUM	J	0.111	0.444	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0464	0.111	PQL	mg/Kg	
SL-083-SA5A-SB-4.0-5.0	ANTIMONY	J	0.114	0.211	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.114	0.422	PQL	mg/Kg	
	SILVER	J	0.0398	0.105	PQL	mg/Kg	
SL-083-SA5A-SB-9.0-10.0	ANTIMONY	J	0.159	0.206	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.130	0.413	PQL	mg/Kg	
	SILVER	J	0.0422	0.103	PQL	mg/Kg	
SL-090-SA5A-SB-4.0-5.0	ANTIMONY	J	0.212	0.220	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.108	0.439	PQL	mg/Kg	
	SILVER	J	0.0322	0.110	PQL	mg/Kg	
SL-093-SA5A-SB-3.5-4.5	SELENIUM	J	0.151	0.451	PQL	mg/Kg	J (all detects)
SL-222-SA5A-SB-3.5-4.5	SELENIUM	J	0.185	0.428	PQL	mg/Kg	J (all detects)
SL-257-SA5A-SB-2.5-3.5	CADMIUM	J	0.0806	0.103	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.103	0.411	PQL	mg/Kg	
	SILVER	J	0.0426	0.103	PQL	mg/Kg	

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-12-SA5A-QC-033011	MERCURY	J	0.0197	0.108	PQL	mg/Kg	J (all detects)
SL-082-SA5A-SB-4.0-5.0	MERCURY	J	0.0041	0.107	PQL	mg/Kg	J (all detects)
SL-083-SA5A-SB-9.0-10.0	MERCURY	J	0.0040	0.100	PQL	mg/Kg	J (all detects)
SL-090-SA5A-SB-4.0-5.0	MERCURY	J	0.0556	0.107	PQL	mg/Kg	J (all detects)
SL-093-SA5A-SB-3.5-4.5	MERCURY	J	0.0142	0.110	PQL	mg/Kg	J (all detects)
SL-222-SA5A-SB-3.5-4.5	MERCURY	J	0.0057	0.104	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE115 **Laboratory: LL**

EDD Filename: DE115_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8015M

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-11-SA5A-QC-033011	EFH (C8-C11)	J	0.73	1.3	PQL	mg/Kg	J (all detects)
SL-082-SA5A-SB-4.0-5.0	EFH (C8-C11)	J	0.54	1.3	PQL	mg/Kg	J (all detects)
SL-083-SA5A-SB-4.0-5.0	EFH (C8-C11)	J	0.54	1.3	PQL	mg/Kg	J (all detects)
SL-083-SA5A-SB-9.0-10.0	EFH (C8-C11)	J	0.73	1.3	PQL	mg/Kg	J (all detects)
SL-090-SA5A-SB-4.0-5.0	EFH (C8-C11)	J	0.82	1.3	PQL	mg/Kg	J (all detects)
SL-222-SA5A-SB-3.5-4.5	EFH (C15-C20)	J	9.4	26	PQL	mg/Kg	J (all detects)
SL-257-SA5A-SB-2.5-3.5	EFH (C30-C40) EFH (C8-C11)	J J	1.1 0.61	1.3 1.3	PQL PQL	mg/Kg mg/Kg	J (all detects)

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-12-SA5A-QC-033011	AROCLOR 1254 Aroclor 5460	J J	1.7 1.7	1.9 3.7	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-082-SA5A-SB-4.0-5.0	AROCLOR 1260	J	14	19	PQL	ug/Kg	J (all detects)
SL-090-SA5A-SB-4.0-5.0	AROCLOR 1260 Aroclor 5460	J J	1.2 2.2	1.9 3.6	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-093-SA5A-SB-3.5-4.5	AROCLOR 1260	J	1.3	1.9	PQL	ug/Kg	J (all detects)
SL-222-SA5A-SB-3.5-4.5	AROCLOR 1260	J	0.90	1.9	PQL	ug/Kg	J (all detects)

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-11-SA5A-QC-033011	METHYLENE CHLORIDE TOLUENE	J J	2.7 0.09	4.0 4.0	PQL PQL	ug/Kg ug/Kg	J (all detects)
DUP-12-SA5A-QC-033011	METHYLENE CHLORIDE	J	3.2	4.4	PQL	ug/Kg	J (all detects)
SL-082-SA5A-SB-4.0-5.0	METHYLENE CHLORIDE TOLUENE	J J	2.9 0.11	3.9 3.9	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-083-SA5A-SB-4.0-5.0	METHYLENE CHLORIDE	J	2.9	4.2	PQL	ug/Kg	J (all detects)
SL-083-SA5A-SB-9.0-10.0	METHYLENE CHLORIDE	J	2.7	4.1	PQL	ug/Kg	J (all detects)
SL-090-SA5A-SB-4.0-5.0	METHYLENE CHLORIDE	J	2.8	4.0	PQL	ug/Kg	J (all detects)
SL-093-SA5A-SB-3.5-4.5	BENZENE METHYLENE CHLORIDE TOLUENE	J J J	0.12 3.0 0.11	4.8 4.8 4.8	PQL PQL PQL	ug/Kg ug/Kg ug/Kg	J (all detects)
SL-222-SA5A-SB-3.5-4.5	METHYLENE CHLORIDE	J	2.6	3.7	PQL	ug/Kg	J (all detects)
SL-257-SA5A-SB-2.5-3.5	METHYLENE CHLORIDE	J	1.2	4.0	PQL	ug/Kg	J (all detects)

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Reporting Limit Outliers

Lab Reporting Batch ID: DE115 **Laboratory: LL**

EDD Filename: DE115_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-11-SA5A-QC-033011	BIS(2-ETHYLHEXYL)PHTHALATE	J	30	360	PQL	ug/Kg	J (all detects)
DUP-12-SA5A-QC-033011	BIS(2-ETHYLHEXYL)PHTHALATE	J	31	370	PQL	ug/Kg	J (all detects)

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-11-SA5A-QC-033011	Di-n-octylphthalate	J	11	20	PQL	ug/Kg	J (all detects)
	FLUORANTHENE	J	0.89	1.8	PQL	ug/Kg	
	NAPHTHALENE	J	1.4	1.8	PQL	ug/Kg	
	PHENANTHRENE	J	1.3	1.8	PQL	ug/Kg	
SL-082-SA5A-SB-4.0-5.0	ANTHRACENE	J	0.85	1.8	PQL	ug/Kg	J (all detects)
	BENZO(A)ANTHRACENE	J	1.4	1.8	PQL	ug/Kg	
	BENZO(A)PYRENE	J	1.2	1.8	PQL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	1.4	1.8	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	0.94	1.8	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	1.6	1.8	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	14	20	PQL	ug/Kg	
	CHRYSENE	J	1.6	1.8	PQL	ug/Kg	
	Di-n-octylphthalate	J	11	20	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	0.76	1.8	PQL	ug/Kg	
	PHENANTHRENE	J	1.1	1.8	PQL	ug/Kg	
	PYRENE	J	1.4	1.8	PQL	ug/Kg	
SL-083-SA5A-SB-4.0-5.0	CHRYSENE	J	0.43	1.8	PQL	ug/Kg	J (all detects)
	Di-n-octylphthalate	J	13	19	PQL	ug/Kg	
SL-083-SA5A-SB-9.0-10.0	Di-n-octylphthalate	J	10	19	PQL	ug/Kg	J (all detects)
SL-090-SA5A-SB-4.0-5.0	BENZO(A)PYRENE	J	1.7	1.8	PQL	ug/Kg	J (all detects)
	BENZO(G,H,I)PERYLENE	J	1.4	1.8	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	11	20	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	1.2	1.8	PQL	ug/Kg	
	FLUORENE	J	1.1	1.8	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.2	1.8	PQL	ug/Kg	
SL-093-SA5A-SB-3.5-4.5	BENZO(A)ANTHRACENE	J	1.0	1.9	PQL	ug/Kg	J (all detects)
	BENZO(G,H,I)PERYLENE	J	0.77	1.9	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	0.93	1.9	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	13	20	PQL	ug/Kg	
	PYRENE	J	1.7	1.9	PQL	ug/Kg	
SL-257-SA5A-SB-2.5-3.5	Di-n-octylphthalate	J	16	19	PQL	ug/Kg	J (all detects)

Method: 8315A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-093-SA5A-SB-3.5-4.5	FORMALDEHYDE	J	1200	1700	PQL	ug/Kg	J (all detects)

LDC #: 25911X4 **VALIDATION COMPLETENESS WORKSHEET** Date: 8-3-11

SDG #: DE115 ADR

Laboratory: Lancaster Laboratories

Reviewer: CR

2nd Reviewer: A

METHOD: Metals (EPA SW 846 Method 6010B/6020A/7000)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	N	Sampling dates:
II.	ICP/MS Tune	—	
III.	Calibration	—	
IV.	Blanks	A	No Quals
V.	ICP Interference Check Sample (ICS) Analysis	N	
VI.	Matrix Spike Analysis	N	MS/D (Al, Ba, Ca, Cu, Fe, Pb, Mg, Mn, Ti, Zn > 4x)
VII.	Duplicate Sample Analysis	N	D (Hg, Sn < 5x RL) Sn difference 150, 33.1 mg/kg (< 5x 10 mg/kg)
VIII.	Laboratory Control Samples (LCS)	A	LCS
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	SW	Cr: 12%, V: 18% (J/UJ)
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	—	
XV	Field Blanks	—	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:

1	DUP-11-SA5A-QC-033011 D1	11	SL-222-SA5A-SB-3.5-4.5MSD	21		31	
2	DUP-12-SA5A-QC-033011 D2	12	SL-222-SA5A-SB-3.5-4.5DUP	22		32	
3	SL-082-SA5A-SB-4.0-5.0	13		23		33	
4	SL-083-SA5A-SB-4.0-5.0	14		24		34	
5	SL-083-SA5A-SB-9.0-10.0	15		25		35	
6	SL-090-SA5A-SB-4.0-5.0 D2	16		26		36	
7	SL-093-SA5A-SB-3.5-4.5	17		27		37	
8	SL-222-SA5A-SB-3.5-4.5 D1	18		28		38	
9	SL-257-SA5A-SB-2.5-3.5	19		29		39	
10	SL-222-SA5A-SB-3.5-4.5MS	20		30		40	

Notes:

SAMPLE DELIVERY GROUP

DE116

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
31-Mar-2011	TB-033111	6245571	TB	5030B	8015M	III
31-Mar-2011	TB-033111	6245571	TB	5030B	8260B	III
31-Mar-2011	TB-033111	6245571	TB	5030B	8260B SIM	III
31-Mar-2011	SL-094-SA5A-SB-4.0-5.0	6245566	N	3050B	6010B	III
31-Mar-2011	SL-094-SA5A-SB-4.0-5.0	6245566	N	3050B	6020	III
31-Mar-2011	SL-094-SA5A-SB-4.0-5.0	6245566	N	3060A	7199	III
31-Mar-2011	SL-094-SA5A-SB-4.0-5.0	6245566	N	3546	1625C	III
31-Mar-2011	SL-094-SA5A-SB-4.0-5.0	6245566	N	3550B	8015B	III
31-Mar-2011	SL-094-SA5A-SB-4.0-5.0	6245566	N	3550B	8015M	III
31-Mar-2011	SL-094-SA5A-SB-4.0-5.0	6245566	N	3550B	8082	III
31-Mar-2011	SL-094-SA5A-SB-4.0-5.0	6245566	N	3550B	8270C	III
31-Mar-2011	SL-094-SA5A-SB-4.0-5.0	6245566	N	3550B	8270C SIM	III
31-Mar-2011	SL-094-SA5A-SB-4.0-5.0	6245566	N	5035	8015M	III
31-Mar-2011	SL-094-SA5A-SB-4.0-5.0	6245566	N	5035	8260B	III
31-Mar-2011	SL-094-SA5A-SB-4.0-5.0	6245566	N	5035	8260B SIM	III
31-Mar-2011	SL-094-SA5A-SB-4.0-5.0	6245566	N	8330	8330A	III
31-Mar-2011	SL-094-SA5A-SB-4.0-5.0	6245566	N	Gen Prep	9045M	III
31-Mar-2011	SL-094-SA5A-SB-4.0-5.0	6245566	N	METHOD	300.0	III
31-Mar-2011	SL-094-SA5A-SB-4.0-5.0	6245566	N	METHOD	314.0	III
31-Mar-2011	SL-094-SA5A-SB-4.0-5.0	6245566	N	METHOD	7471A	III
31-Mar-2011	SL-094-SA5A-SB-4.0-5.0	6245566	N	METHOD	8015B	III
31-Mar-2011	SL-094-SA5A-SB-4.0-5.0	6245566	N	METHOD	8015M	III
31-Mar-2011	SL-094-SA5A-SB-4.0-5.0	6245566	N	METHOD	8315A	III
31-Mar-2011	SL-094-SA5A-SB-4.0-5.0	6245566	N	METHOD	9012B	III
31-Mar-2011	SL-094-SA5A-SB-4.0-5.0DUP	P245566D270907A	DUP	METHOD	300.0	III
31-Mar-2011	SL-094-SA5A-SB-4.0-5.0MSD	P245566M240328A	MSD	3550B	8082	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
31-Mar-2011	SL-094-SA5A-SB-4.0-5.0MSD	P245566M241228A	MSD	8330	8330A	III
31-Mar-2011	SL-094-SA5A-SB-4.0-5.0MSD	P245566M260323	MSD	3550B	8270C	III
31-Mar-2011	SL-094-SA5A-SB-4.0-5.0MSD	P245566M261440	MSD	3550B	8270C SIM	III
31-Mar-2011	SL-094-SA5A-SB-4.0-5.0MSD	P245566M321955A	MSD	METHOD	8015M	III
31-Mar-2011	SL-094-SA5A-SB-4.0-5.0MS	P245566R240310A	MS	3550B	8082	III
31-Mar-2011	SL-094-SA5A-SB-4.0-5.0MS	P245566R241145A	MS	8330	8330A	III
31-Mar-2011	SL-094-SA5A-SB-4.0-5.0MS	P245566R260258	MS	3550B	8270C	III
31-Mar-2011	SL-094-SA5A-SB-4.0-5.0MS	P245566R261409	MS	3550B	8270C SIM	III
31-Mar-2011	SL-094-SA5A-SB-4.0-5.0MS	P245566R270921A	MS	METHOD	300.0	III
31-Mar-2011	SL-094-SA5A-SB-4.0-5.0MS	P245566R321919A	MS	METHOD	8015M	III
31-Mar-2011	SL-094-SA5A-SB-9.0-10.0	6245567	N	3050B	6010B	III
31-Mar-2011	SL-094-SA5A-SB-9.0-10.0	6245567	N	3050B	6020	III
31-Mar-2011	SL-094-SA5A-SB-9.0-10.0	6245567	N	3060A	7199	III
31-Mar-2011	SL-094-SA5A-SB-9.0-10.0	6245567	N	3546	1625C	III
31-Mar-2011	SL-094-SA5A-SB-9.0-10.0	6245567	N	3550B	8015B	III
31-Mar-2011	SL-094-SA5A-SB-9.0-10.0	6245567	N	3550B	8015M	III
31-Mar-2011	SL-094-SA5A-SB-9.0-10.0	6245567	N	3550B	8082	III
31-Mar-2011	SL-094-SA5A-SB-9.0-10.0	6245567	N	3550B	8270C	III
31-Mar-2011	SL-094-SA5A-SB-9.0-10.0	6245567	N	3550B	8270C SIM	III
31-Mar-2011	SL-094-SA5A-SB-9.0-10.0	6245567	N	5035	8015M	III
31-Mar-2011	SL-094-SA5A-SB-9.0-10.0	6245567	N	5035	8260B	III
31-Mar-2011	SL-094-SA5A-SB-9.0-10.0	6245567	N	5035	8260B SIM	III
31-Mar-2011	SL-094-SA5A-SB-9.0-10.0	6245567	N	8330	8330A	III
31-Mar-2011	SL-094-SA5A-SB-9.0-10.0	6245567	N	Gen Prep	9045M	III
31-Mar-2011	SL-094-SA5A-SB-9.0-10.0	6245567	N	METHOD	300.0	III
31-Mar-2011	SL-094-SA5A-SB-9.0-10.0	6245567	N	METHOD	314.0	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
31-Mar-2011	SL-094-SA5A-SB-9.0-10.0	6245567	N	METHOD	7471A	III
31-Mar-2011	SL-094-SA5A-SB-9.0-10.0	6245567	N	METHOD	8015B	III
31-Mar-2011	SL-094-SA5A-SB-9.0-10.0	6245567	N	METHOD	8015M	III
31-Mar-2011	SL-094-SA5A-SB-9.0-10.0	6245567	N	METHOD	8315A	III
31-Mar-2011	SL-094-SA5A-SB-9.0-10.0	6245567	N	METHOD	9012B	III
31-Mar-2011	SL-089-SA5A-SB-4.0-5.0	6245568	N	3050B	6010B	III
31-Mar-2011	SL-089-SA5A-SB-4.0-5.0	6245568	N	3050B	6020	III
31-Mar-2011	SL-089-SA5A-SB-4.0-5.0	6245568	N	3060A	7199	III
31-Mar-2011	SL-089-SA5A-SB-4.0-5.0	6245568	N	3550B	8082	III
31-Mar-2011	SL-089-SA5A-SB-4.0-5.0	6245568	N	3550B	8270C	III
31-Mar-2011	SL-089-SA5A-SB-4.0-5.0	6245568	N	3550B	8270C SIM	III
31-Mar-2011	SL-089-SA5A-SB-4.0-5.0	6245568	N	5035	8260B	III
31-Mar-2011	SL-089-SA5A-SB-4.0-5.0	6245568	N	5035	8260B SIM	III
31-Mar-2011	SL-089-SA5A-SB-4.0-5.0	6245568	N	Gen Prep	9045M	III
31-Mar-2011	SL-089-SA5A-SB-4.0-5.0	6245568	N	METHOD	300.0	III
31-Mar-2011	SL-089-SA5A-SB-4.0-5.0	6245568	N	METHOD	314.0	III
31-Mar-2011	SL-089-SA5A-SB-4.0-5.0	6245568	N	METHOD	6850	III
31-Mar-2011	SL-089-SA5A-SB-4.0-5.0	6245568	N	METHOD	7471A	III
31-Mar-2011	SL-089-SA5A-SB-4.0-5.0DUP	P245568D270216A	DUP	3060A	7199	III
31-Mar-2011	SL-089-SA5A-SB-4.0-5.0MSD	P245568M241701A	MSD	METHOD	6850	III
31-Mar-2011	SL-089-SA5A-SB-4.0-5.0MS	P245568R241655A	MS	METHOD	6850	III
31-Mar-2011	SL-089-SA5A-SB-4.0-5.0MS	P245568R270140A	MS	3060A	7199	III
31-Mar-2011	SL-089-SA5A-SB-9.0-10.0	6245569	N	3050B	6010B	III
31-Mar-2011	SL-089-SA5A-SB-9.0-10.0	6245569	N	3050B	6020	III
31-Mar-2011	SL-089-SA5A-SB-9.0-10.0	6245569	N	3060A	7199	III
31-Mar-2011	SL-089-SA5A-SB-9.0-10.0	6245569	N	3550B	8082	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
31-Mar-2011	SL-089-SA5A-SB-9.0-10.0	6245569	N	3550B	8270C	III
31-Mar-2011	SL-089-SA5A-SB-9.0-10.0	6245569	N	3550B	8270C SIM	III
31-Mar-2011	SL-089-SA5A-SB-9.0-10.0	6245569	N	Gen Prep	9045M	III
31-Mar-2011	SL-089-SA5A-SB-9.0-10.0	6245569	N	METHOD	300.0	III
31-Mar-2011	SL-089-SA5A-SB-9.0-10.0	6245569	N	METHOD	314.0	III
31-Mar-2011	SL-089-SA5A-SB-9.0-10.0	6245569	N	METHOD	6850	III
31-Mar-2011	SL-089-SA5A-SB-9.0-10.0	6245569	N	METHOD	7471A	III
31-Mar-2011	SL-075-SA5A-SB-2.5-3.5	6245570	N	3050B	6010B	III
31-Mar-2011	SL-075-SA5A-SB-2.5-3.5	6245570	N	3050B	6020	III
31-Mar-2011	SL-075-SA5A-SB-2.5-3.5	6245570	N	3060A	7199	III
31-Mar-2011	SL-075-SA5A-SB-2.5-3.5	6245570	N	3546	1625C	III
31-Mar-2011	SL-075-SA5A-SB-2.5-3.5	6245570	N	3550B	8015B	III
31-Mar-2011	SL-075-SA5A-SB-2.5-3.5	6245570	N	3550B	8015M	III
31-Mar-2011	SL-075-SA5A-SB-2.5-3.5	6245570	N	3550B	8082	III
31-Mar-2011	SL-075-SA5A-SB-2.5-3.5	6245570	N	3550B	8270C	III
31-Mar-2011	SL-075-SA5A-SB-2.5-3.5	6245570	N	3550B	8270C SIM	III
31-Mar-2011	SL-075-SA5A-SB-2.5-3.5	6245570	N	5035	8015M	III
31-Mar-2011	SL-075-SA5A-SB-2.5-3.5	6245570	N	5035	8260B	III
31-Mar-2011	SL-075-SA5A-SB-2.5-3.5	6245570	N	5035	8260B SIM	III
31-Mar-2011	SL-075-SA5A-SB-2.5-3.5	6245570	N	8330	8330A	III
31-Mar-2011	SL-075-SA5A-SB-2.5-3.5	6245570	N	Gen Prep	9045M	III
31-Mar-2011	SL-075-SA5A-SB-2.5-3.5	6245570	N	METHOD	300.0	III
31-Mar-2011	SL-075-SA5A-SB-2.5-3.5	6245570	N	METHOD	314.0	III
31-Mar-2011	SL-075-SA5A-SB-2.5-3.5	6245570	N	METHOD	7471A	III
31-Mar-2011	SL-075-SA5A-SB-2.5-3.5	6245570	N	METHOD	8015B	III
31-Mar-2011	SL-075-SA5A-SB-2.5-3.5	6245570	N	METHOD	8015M	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
31-Mar-2011	SL-075-SA5A-SB-2.5-3.5	6245570	N	METHOD	8315A	III
31-Mar-2011	SL-075-SA5A-SB-2.5-3.5	6245570	N	METHOD	9012B	III
31-Mar-2011	SL-075-SA5A-SB-2.5-3.5DUP	P245570D272055B	DUP	METHOD	9012B	III
31-Mar-2011	SL-075-SA5A-SB-2.5-3.5MSD	P245570M321713A	MSD	METHOD	8015M	III
31-Mar-2011	SL-075-SA5A-SB-2.5-3.5MS	P245570R272056B	MS	METHOD	9012B	III
31-Mar-2011	SL-075-SA5A-SB-2.5-3.5MS	P245570R321637A	MS	METHOD	8015M	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE116 **Laboratory: LL**

EDD Filename: PrepDE116_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: GENCHEM

Method: 300.0 **Matrix: SO**

Sample ID: SL-075-SA5A-SB-2.5-3.5 *Collected:* 3/31/2011 2:55:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Nitrate-NO3	1.3	J	0.91	MDL	1.7	PQL	mg/Kg	J	Z, Q

Sample ID: SL-089-SA5A-SB-9.0-10.0 *Collected:* 3/31/2011 11:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.1	J	1.0	MDL	1.3	PQL	mg/Kg	J	Z

Sample ID: SL-094-SA5A-SB-4.0-5.0 *Collected:* 3/31/2011 9:15:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Nitrate-NO3	12.0		0.87	MDL	1.6	PQL	mg/Kg	J	Q

Sample ID: SL-094-SA5A-SB-9.0-10.0 *Collected:* 3/31/2011 9:33:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Nitrate-NO3	12.4		0.85	MDL	1.6	PQL	mg/Kg	J	Q

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-075-SA5A-SB-2.5-3.5 *Collected:* 3/31/2011 2:55:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	3090		6.91	MDL	22.6	PQL	mg/Kg	J	E
MANGANESE	430		0.0880	MDL	0.564	PQL	mg/Kg	J	E
TIN	3.66	J	1.13	MDL	11.3	PQL	mg/Kg	UJ	B, E
Zirconium	5.30	J	0.947	MDL	5.64	PQL	mg/Kg	J	Z

Sample ID: SL-089-SA5A-SB-4.0-5.0 *Collected:* 3/31/2011 10:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.62	J	0.946	MDL	5.32	PQL	mg/Kg	J	Z
CALCIUM	2350		6.52	MDL	21.3	PQL	mg/Kg	J	E
MANGANESE	310		0.0829	MDL	0.532	PQL	mg/Kg	J	E
TIN	3.21	J	1.06	MDL	10.6	PQL	mg/Kg	UJ	B, E

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE116 **Laboratory: LL**

EDD Filename: PrepDE116_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6010B** ***Matrix:*** **SO**

Sample ID: **SL-089-SA5A-SB-4.0-5.0** ***Collected:*** **3/31/2011 10:50:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	2.68	J	0.893	MDL	5.32	PQL	mg/Kg	J	Z

Sample ID: **SL-089-SA5A-SB-9.0-10.0** ***Collected:*** **3/31/2011 11:05:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	2930		7.98	MDL	26.0	PQL	mg/Kg	J	E
MANGANESE	333		0.102	MDL	0.651	PQL	mg/Kg	J	E
SODIUM	116	J	48.6	MDL	130	PQL	mg/Kg	J	Z
TIN	3.53	J	1.30	MDL	13.0	PQL	mg/Kg	UJ	B, E
Zirconium	4.04	J	1.09	MDL	6.51	PQL	mg/Kg	J	Z

Sample ID: **SL-094-SA5A-SB-4.0-5.0** ***Collected:*** **3/31/2011 9:15:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.73	J	0.967	MDL	5.43	PQL	mg/Kg	J	Z
CALCIUM	6190		6.66	MDL	21.7	PQL	mg/Kg	J	E
MANGANESE	299		0.0848	MDL	0.543	PQL	mg/Kg	J	E
TIN	3.39	J	1.09	MDL	10.9	PQL	mg/Kg	UJ	B, E
Zirconium	3.23	J	0.913	MDL	5.43	PQL	mg/Kg	J	Z

Sample ID: **SL-094-SA5A-SB-9.0-10.0** ***Collected:*** **3/31/2011 9:33:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.96	J	0.920	MDL	5.17	PQL	mg/Kg	J	Z
CALCIUM	2610		6.34	MDL	20.7	PQL	mg/Kg	J	E
MANGANESE	326		0.0806	MDL	0.517	PQL	mg/Kg	J	E
TIN	2.85	J	1.03	MDL	10.3	PQL	mg/Kg	UJ	B, E
Zirconium	4.01	J	0.869	MDL	5.17	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE116 **Laboratory: LL**

EDD Filename: PrepDE116_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 ***Matrix:*** SO

Sample ID: SL-075-SA5A-SB-2.5-3.5 ***Collected:*** 3/31/2011 2:55:00 ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.214	J	0.0451	MDL	0.451	PQL	mg/Kg	J	Z

Sample ID: SL-075-SA5A-SB-2.5-3.5 ***Collected:*** 3/31/2011 2:55:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.05		0.0564	MDL	0.113	PQL	mg/Kg	J	Q

Sample ID: SL-075-SA5A-SB-2.5-3.5 ***Collected:*** 3/31/2011 2:55:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
VANADIUM	47.5		0.0248	MDL	0.113	PQL	mg/Kg	J	Q, A

Sample ID: SL-075-SA5A-SB-2.5-3.5 ***Collected:*** 3/31/2011 2:55:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.257		0.0677	MDL	0.226	PQL	mg/Kg	J	Q, Q, E
ARSENIC	9.31		0.0902	MDL	0.451	PQL	mg/Kg	J	Q
CHROMIUM	32.5		0.135	MDL	0.451	PQL	mg/Kg	J	E, Q, Q, A
COPPER	19.7		0.0744	MDL	0.451	PQL	mg/Kg	J	E
SILVER	0.0689	J	0.0135	MDL	0.113	PQL	mg/Kg	J	Z, E

Sample ID: SL-089-SA5A-SB-4.0-5.0 ***Collected:*** 3/31/2011 10:50:00 ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0758	J	0.0421	MDL	0.421	PQL	mg/Kg	J	Z

Sample ID: SL-089-SA5A-SB-4.0-5.0 ***Collected:*** 3/31/2011 10:50:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.382		0.0527	MDL	0.105	PQL	mg/Kg	J	Q

Sample ID: SL-089-SA5A-SB-4.0-5.0 ***Collected:*** 3/31/2011 10:50:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
VANADIUM	42.1		0.0232	MDL	0.105	PQL	mg/Kg	J	Q, A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE116 **Laboratory: LL**

EDD Filename: PrepDE116_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 ***Matrix:*** SO

Sample ID: SL-089-SA5A-SB-4.0-5.0 ***Collected:*** 3/31/2011 10:50:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0980	J	0.0632	MDL	0.211	PQL	mg/Kg	J	Z, Q, Q, E
ARSENIC	5.07		0.0842	MDL	0.421	PQL	mg/Kg	J	Q
CHROMIUM	18.4		0.126	MDL	0.421	PQL	mg/Kg	J	E, Q, Q, A
COPPER	8.03		0.0695	MDL	0.421	PQL	mg/Kg	J	E
SILVER	0.0176	J	0.0126	MDL	0.105	PQL	mg/Kg	J	Z, E

Sample ID: SL-089-SA5A-SB-9.0-10.0 ***Collected:*** 3/31/2011 11:05:00 ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.188	J	0.0516	MDL	0.516	PQL	mg/Kg	J	Z

Sample ID: SL-089-SA5A-SB-9.0-10.0 ***Collected:*** 3/31/2011 11:05:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.828		0.0645	MDL	0.129	PQL	mg/Kg	J	Q

Sample ID: SL-089-SA5A-SB-9.0-10.0 ***Collected:*** 3/31/2011 11:05:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
VANADIUM	39.9		0.0278	MDL	0.126	PQL	mg/Kg	J	Q, A

Sample ID: SL-089-SA5A-SB-9.0-10.0 ***Collected:*** 3/31/2011 11:05:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.174	J	0.0774	MDL	0.258	PQL	mg/Kg	J	Z, Q, Q, E
ARSENIC	5.67		0.103	MDL	0.516	PQL	mg/Kg	J	Q
CHROMIUM	22.1		0.155	MDL	0.516	PQL	mg/Kg	J	E, Q, Q, A
COPPER	12.9		0.0851	MDL	0.516	PQL	mg/Kg	J	E
SILVER	0.0646	J	0.0155	MDL	0.129	PQL	mg/Kg	J	Z, E

Sample ID: SL-094-SA5A-SB-4.0-5.0 ***Collected:*** 3/31/2011 9:15:00 ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.167	J	0.0422	MDL	0.422	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE116 **Laboratory: LL**

EDD Filename: PrepDE116_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 ***Matrix:*** SO

Sample ID: SL-094-SA5A-SB-4.0-5.0 ***Collected:*** 3/31/2011 9:15:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.839		0.0528	MDL	0.106	PQL	mg/Kg	J	Q

Sample ID: SL-094-SA5A-SB-4.0-5.0 ***Collected:*** 3/31/2011 9:15:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
VANADIUM	34.2		0.0237	MDL	0.108	PQL	mg/Kg	J	Q, A

Sample ID: SL-094-SA5A-SB-4.0-5.0 ***Collected:*** 3/31/2011 9:15:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.371		0.0633	MDL	0.211	PQL	mg/Kg	J	Q, Q, E
ARSENIC	7.13		0.0844	MDL	0.422	PQL	mg/Kg	J	Q
CHROMIUM	21.7		0.127	MDL	0.422	PQL	mg/Kg	J	E, Q, Q, A
COPPER	61.0		0.0696	MDL	0.422	PQL	mg/Kg	J	E
SILVER	0.225		0.0127	MDL	0.106	PQL	mg/Kg	J	E

Sample ID: SL-094-SA5A-SB-9.0-10.0 ***Collected:*** 3/31/2011 9:33:00 ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.163	J	0.0414	MDL	0.414	PQL	mg/Kg	J	Z

Sample ID: SL-094-SA5A-SB-9.0-10.0 ***Collected:*** 3/31/2011 9:33:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.494		0.0517	MDL	0.103	PQL	mg/Kg	J	Q

Sample ID: SL-094-SA5A-SB-9.0-10.0 ***Collected:*** 3/31/2011 9:33:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
VANADIUM	40.2		0.0232	MDL	0.105	PQL	mg/Kg	J	Q, A

Sample ID: SL-094-SA5A-SB-9.0-10.0 ***Collected:*** 3/31/2011 9:33:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.151	J	0.0620	MDL	0.207	PQL	mg/Kg	J	Z, Q, Q, E
ARSENIC	5.28		0.0827	MDL	0.414	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE116 **Laboratory: LL**

EDD Filename: PrepDE116_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS
Method: 6020 **Matrix:** SO

Sample ID: SL-094-SA5A-SB-9.0-10.0 *Collected:* 3/31/2011 9:33:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHROMIUM	19.1		0.124	MDL	0.414	PQL	mg/Kg	J	E, Q, Q, A
COPPER	9.19		0.0682	MDL	0.414	PQL	mg/Kg	J	E
SILVER	0.0388	J	0.0124	MDL	0.103	PQL	mg/Kg	J	Z, E

Method Category: METALS
Method: 7199 **Matrix:** SO

Sample ID: SL-075-SA5A-SB-2.5-3.5 *Collected:* 3/31/2011 2:55:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.38	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-089-SA5A-SB-9.0-10.0 *Collected:* 3/31/2011 11:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.47	J	0.26	MDL	1.3	PQL	mg/Kg	J	Z

Sample ID: SL-094-SA5A-SB-4.0-5.0 *Collected:* 3/31/2011 9:15:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.32	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Method Category: METALS
Method: 7471A **Matrix:** SO

Sample ID: SL-089-SA5A-SB-9.0-10.0 *Collected:* 3/31/2011 11:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0043	J	0.0037	MDL	0.128	PQL	mg/Kg	J	Z

Sample ID: SL-094-SA5A-SB-4.0-5.0 *Collected:* 3/31/2011 9:15:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0061	J	0.0031	MDL	0.108	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE116 **Laboratory: LL**

EDD Filename: PrepDE116_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA
Method: 1625C **Matrix:** SO

Sample ID: SL-075-SA5A-SB-2.5-3.5 *Collected:* 3/31/2011 2:55:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	30.6	J	18.7	MDL	37.5	PQL	ng/Kg	J	Z

Method Category: SVOA
Method: 8015M **Matrix:** SO

Sample ID: SL-075-SA5A-SB-2.5-3.5 *Collected:* 3/31/2011 2:55:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	1.3	J	0.46	MDL	1.4	PQL	mg/Kg	U	B
EFH (C8-C11)	0.59	J	0.46	MDL	1.4	PQL	mg/Kg	U	B

Sample ID: SL-094-SA5A-SB-9.0-10.0 *Collected:* 3/31/2011 9:33:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	1.1	J	0.43	MDL	1.3	PQL	mg/Kg	U	B
EFH (C8-C11)	0.54	J	0.43	MDL	1.3	PQL	mg/Kg	U	B

Method Category: SVOA
Method: 8082 **Matrix:** SO

Sample ID: SL-094-SA5A-SB-4.0-5.0 *Collected:* 3/31/2011 9:15:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	1.4	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z
AROCLOR 1260	1.4	J	0.42	MDL	1.8	PQL	ug/Kg	J	Z

Method Category: SVOA
Method: 8270C **Matrix:** SO

Sample ID: SL-075-SA5A-SB-2.5-3.5 *Collected:* 3/31/2011 2:55:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	19	J	19	MDL	380	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE116 **Laboratory: LL**

EDD Filename: PrepDE116_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SL-089-SA5A-SB-4.0-5.0 *Collected:* 3/31/2011 10:50:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	20	J	18	MDL	360	PQL	ug/Kg	J	Z

Sample ID: SL-089-SA5A-SB-9.0-10.0 *Collected:* 3/31/2011 11:05:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	23	J	22	MDL	430	PQL	ug/Kg	J	Z

Sample ID: SL-094-SA5A-SB-4.0-5.0 *Collected:* 3/31/2011 9:15:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZIDINE	1300	U	1300	MDL	3600	PQL	ug/Kg	UJ	Q
BENZO(A)PYRENE	42	J	18	MDL	180	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	22	J	18	MDL	360	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8270C SIM **Matrix:** SO

Sample ID: SL-075-SA5A-SB-2.5-3.5 *Collected:* 3/31/2011 2:55:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHRYSENE	1.2	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z
Di-n-butylphthalate	12	J	6.8	MDL	21	PQL	ug/Kg	J	Z

Sample ID: SL-089-SA5A-SB-4.0-5.0 *Collected:* 3/31/2011 10:50:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHRYSENE	0.84	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z
Di-n-butylphthalate	12	J	6.5	MDL	20	PQL	ug/Kg	J	Z
Di-n-octylphthalate	9.4	J	6.5	MDL	20	PQL	ug/Kg	J	Z

Sample ID: SL-089-SA5A-SB-9.0-10.0 *Collected:* 3/31/2011 11:05:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Di-n-butylphthalate	13	J	7.8	MDL	23	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE116 **Laboratory: LL**

EDD Filename: PrepDE116_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C SIM **Matrix:** SO

Sample ID: SL-094-SA5A-SB-4.0-5.0 *Collected:* 3/31/2011 9:15:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(G,H,I)PERYLENE	0.90	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	0.81	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
Diethylphthalate	7.0	J	6.5	MDL	20	PQL	ug/Kg	J	Z
Di-n-butylphthalate	11	J	6.5	MDL	20	PQL	ug/Kg	J	Z
PYRENE	0.87	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-094-SA5A-SB-9.0-10.0 *Collected:* 3/31/2011 9:33:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Di-n-butylphthalate	11	J	6.4	MDL	19	PQL	ug/Kg	J	Z
Di-n-octylphthalate	8.9	J	6.4	MDL	19	PQL	ug/Kg	J	Z

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: SL-075-SA5A-SB-2.5-3.5 *Collected:* 3/31/2011 2:55:00 *Analysis Type:* RES *Dilution:* 0.86

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.65	J	0.24	MDL	3.9	PQL	ug/Kg	U	B

Sample ID: SL-089-SA5A-SB-4.0-5.0 *Collected:* 3/31/2011 10:50:00 *Analysis Type:* RES *Dilution:* 1.05

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	1.1	J	0.27	MDL	4.6	PQL	ug/Kg	U	B

Sample ID: SL-094-SA5A-SB-4.0-5.0 *Collected:* 3/31/2011 9:15:00 *Analysis Type:* RES *Dilution:* 0.91

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZENE	0.11	J	0.1	MDL	4.0	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	0.68	J	0.24	MDL	4.0	PQL	ug/Kg	U	B

Sample ID: SL-094-SA5A-SB-9.0-10.0 *Collected:* 3/31/2011 9:33:00 *Analysis Type:* RES *Dilution:* 1.01

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROETHANE	2.3	J	0.16	MDL	4.3	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE116 **Laboratory: LL**

EDD Filename: PrepDE116_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **VOA**

Method: **8260B** ***Matrix:*** **SO**

Sample ID: **SL-094-SA5A-SB-9.0-10.0** ***Collected:*** **3/31/2011 9:33:00** ***Analysis Type:*** **RES** ***Dilution:*** **1.01**

Analyte	*Lab Result*	*Lab Qual*	*DL*	*DL Type*	*RL*	*RL Type*	*Units*	*Data Review Qual*	*Reason Code*
METHYLENE CHLORIDE	0.67	J	0.26	MDL	4.3	PQL	ug/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE116 **Laboratory: LL**

EDD Filename: PrepDE116_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
*#	Professional Judgment
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Verification Correlation Coefficient
C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE116 **Laboratory: LL**

EDD Filename: PrepDE116_v1 **eQAPP Name: CDM_SSFL_110509**

F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation
L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery Lower Estimation

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE116 **Laboratory: LL**

EDD Filename: PrepDE116_v1 **eQAPP Name: CDM_SSFL_110509**

R	Continuing Calibration Verification Percent Recovery Lower Rejection
R	Continuing Calibration Verification Percent Recovery Upper Estimation
R	Continuing Calibration Verification Percent Recovery Upper Rejection
R	Continuing Calibration Verification Relative Response Factor
R	Initial Calibration Relative Response Factor
R	Initial Calibration Verification Percent Recovery Lower Estimation
R	Initial Calibration Verification Percent Recovery Lower Rejection
R	Initial Calibration Verification Percent Recovery Upper Estimation
R	Initial Calibration Verification Percent Recovery Upper Rejection
R	Initial Calibration Verification Relative Response Factor
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control Outlier Reports

DE116

Method Blank Outlier Report

Lab Reporting Batch ID: DE116 **Laboratory: LL**

EDD Filename: DE116_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **6010B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P09408BB220330	4/13/2011 3:30:00 AM	IRON PHOSPHORUS TIN	4.95 mg/Kg 1.16 mg/Kg 1.99 mg/Kg	SL-075-SA5A-SB-2.5-3.5 SL-089-SA5A-SB-4.0-5.0 SL-089-SA5A-SB-9.0-10.0 SL-094-SA5A-SB-4.0-5.0 SL-094-SA5A-SB-9.0-10.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-075-SA5A-SB-2.5-3.5(RES)	TIN	3.66 mg/Kg	3.66U mg/Kg
SL-089-SA5A-SB-4.0-5.0(RES)	TIN	3.21 mg/Kg	3.21U mg/Kg
SL-089-SA5A-SB-9.0-10.0(RES)	TIN	3.53 mg/Kg	3.53U mg/Kg
SL-094-SA5A-SB-4.0-5.0(RES)	TIN	3.39 mg/Kg	3.39U mg/Kg
SL-094-SA5A-SB-9.0-10.0(RES)	TIN	2.85 mg/Kg	2.85U mg/Kg

Method: **6020**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P09426AB221050A	4/5/2011 10:50:00 AM	COPPER	0.124 mg/Kg	SL-075-SA5A-SB-2.5-3.5 SL-089-SA5A-SB-4.0-5.0 SL-089-SA5A-SB-9.0-10.0 SL-094-SA5A-SB-4.0-5.0 SL-094-SA5A-SB-9.0-10.0

Method: **8015M**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P92923AB322323A	4/5/2011 11:23:00 PM	EFH (C30-C40) EFH (C8-C11)	0.57 mg/Kg 0.48 mg/Kg	SL-075-SA5A-SB-2.5-3.5 SL-094-SA5A-SB-4.0-5.0 SL-094-SA5A-SB-9.0-10.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-075-SA5A-SB-2.5-3.5(REA2)	EFH (C30-C40)	1.3 mg/Kg	1.4U mg/Kg
SL-075-SA5A-SB-2.5-3.5(REA2)	EFH (C8-C11)	0.59 mg/Kg	1.4U mg/Kg
SL-094-SA5A-SB-9.0-10.0(REA2)	EFH (C30-C40)	1.1 mg/Kg	1.3U mg/Kg
SL-094-SA5A-SB-9.0-10.0(REA2)	EFH (C8-C11)	0.54 mg/Kg	1.3U mg/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE116 **Laboratory: LL**

EDD Filename: DE116_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8260B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB11B211510A	4/1/2011 3:10:00 PM	METHYLENE CHLORIDE	0.40 ug/Kg	SL-075-SA5A-SB-2.5-3.5 SL-089-SA5A-SB-4.0-5.0 SL-094-SA5A-SB-4.0-5.0 SL-094-SA5A-SB-9.0-10.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-075-SA5A-SB-2.5-3.5(RES)	METHYLENE CHLORIDE	0.65 ug/Kg	3.9U ug/Kg
SL-089-SA5A-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.1 ug/Kg	4.6U ug/Kg
SL-094-SA5A-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.68 ug/Kg	4.0U ug/Kg
SL-094-SA5A-SB-9.0-10.0(RES)	METHYLENE CHLORIDE	0.67 ug/Kg	4.3U ug/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE116 **Laboratory: LL**

EDD Filename: DE116_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-094-SA5A-SB-4.0-5.0MSD (SL-094-SA5A-SB-4.0-5.0)	2,4-DINITROPHENOL HEXACHLOROCYCLOPENTADI	- -	- -	20.00-143.00 10.00-153.00	36 (30.00) 40 (30.00)	2,4-DINITROPHENOL HEXACHLOROCYCLOPENTAD	J (all detects)
SL-094-SA5A-SB-4.0-5.0MS SL-094-SA5A-SB-4.0-5.0MSD (SL-094-SA5A-SB-4.0-5.0)	BENZIDINE	27	21	35.00-141.00	-	BENZIDINE	J(all detects) UJ(all non-detects)

Method: 300.0
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-094-SA5A-SB-4.0-5.0MS (SL-075-SA5A-SB-2.5-3.5 SL-089-SA5A-SB-4.0-5.0 SL-089-SA5A-SB-9.0-10.0 SL-094-SA5A-SB-4.0-5.0 SL-094-SA5A-SB-9.0-10.0)	Nitrate-NO3	121	-	80.00-120.00	-	Nitrate-NO3	J(all detects)

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE116 | Laboratory: LL

EDD Filename: DE116_v1 | eQAPP Name: CDM_SSFL_110509

Method: 8260B
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
LCSY90Q211607A (TB-033111)	TRICHLOROFLUOROMETHANE	135	-	64.00-129.00	-	TRICHLOROFLUOROMETHAN	J(all detects)

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P09426AQ221053A (SL-075-SA5A-SB-2.5-3.5 SL -089-SA5A-SB-4.0-5.0 SL -089-SA5A-SB-9.0-10.0 SL -094-SA5A-SB-4.0-5.0 SL -094-SA5A-SB-9.0-10.0)	ANTIMONY	141	-	80.00-120.00	-	ANTIMONY	No Qual SRM within QC limits

Method: 8015M
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11021AQ321510A (SL-075-SA5A-SB-2.5-3.5)	DIETHYLENE GLYCOL	160	-	75.00-125.00	-	DIETHYLENE GLYCOL	J(all detects)
	ETHYLENE GLYCOL	159	-	65.00-122.00	-	ETHYLENE GLYCOL	
	Propylene glycol	187	-	75.00-125.00	-	Propylene glycol	

Reporting Limit Outliers

Lab Reporting Batch ID: DE116 **Laboratory: LL**

EDD Filename: DE116_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1625C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-075-SA5A-SB-2.5-3.5	N-NITROSODIMETHYLAMINE	J	30.6	37.5	PQL	ng/Kg	J (all detects)

Method: 300.0

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-075-SA5A-SB-2.5-3.5	Nitrate-NO3	J	1.3	1.7	PQL	mg/Kg	J (all detects)
SL-089-SA5A-SB-9.0-10.0	FLUORIDE	J	1.1	1.3	PQL	mg/Kg	J (all detects)

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-075-SA5A-SB-2.5-3.5	TIN	J	3.66	11.3	PQL	mg/Kg	J (all detects)
	Zirconium	J	5.30	5.64	PQL	mg/Kg	
SL-089-SA5A-SB-4.0-5.0	BORON	J	1.62	5.32	PQL	mg/Kg	J (all detects)
	TIN	J	3.21	10.6	PQL	mg/Kg	
	Zirconium	J	2.68	5.32	PQL	mg/Kg	
SL-089-SA5A-SB-9.0-10.0	SODIUM	J	116	130	PQL	mg/Kg	J (all detects)
	TIN	J	3.53	13.0	PQL	mg/Kg	
	Zirconium	J	4.04	6.51	PQL	mg/Kg	
SL-094-SA5A-SB-4.0-5.0	BORON	J	3.73	5.43	PQL	mg/Kg	J (all detects)
	TIN	J	3.39	10.9	PQL	mg/Kg	
	Zirconium	J	3.23	5.43	PQL	mg/Kg	
SL-094-SA5A-SB-9.0-10.0	BORON	J	2.96	5.17	PQL	mg/Kg	J (all detects)
	TIN	J	2.85	10.3	PQL	mg/Kg	
	Zirconium	J	4.01	5.17	PQL	mg/Kg	

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-075-SA5A-SB-2.5-3.5	SELENIUM	J	0.214	0.451	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0689	0.113	PQL	mg/Kg	
SL-089-SA5A-SB-4.0-5.0	ANTIMONY	J	0.0980	0.211	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0758	0.421	PQL	mg/Kg	
	SILVER	J	0.0176	0.105	PQL	mg/Kg	
SL-089-SA5A-SB-9.0-10.0	ANTIMONY	J	0.174	0.258	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.188	0.516	PQL	mg/Kg	
	SILVER	J	0.0646	0.129	PQL	mg/Kg	
SL-094-SA5A-SB-4.0-5.0	SELENIUM	J	0.167	0.422	PQL	mg/Kg	J (all detects)

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Reporting Limit Outliers

Lab Reporting Batch ID: DE116 **Laboratory: LL**

EDD Filename: DE116_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-094-SA5A-SB-9.0-10.0	ANTIMONY	J	0.151	0.207	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.163	0.414	PQL	mg/Kg	
	SILVER	J	0.0388	0.103	PQL	mg/Kg	

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-075-SA5A-SB-2.5-3.5	HEXAVALENT CHROMIUM	J	0.38	1.1	PQL	mg/Kg	J (all detects)
SL-089-SA5A-SB-9.0-10.0	HEXAVALENT CHROMIUM	J	0.47	1.3	PQL	mg/Kg	J (all detects)
SL-094-SA5A-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.32	1.1	PQL	mg/Kg	J (all detects)

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-089-SA5A-SB-9.0-10.0	MERCURY	J	0.0043	0.128	PQL	mg/Kg	J (all detects)
SL-094-SA5A-SB-4.0-5.0	MERCURY	J	0.0061	0.108	PQL	mg/Kg	J (all detects)

Method: 8015M

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-075-SA5A-SB-2.5-3.5	EFH (C30-C40)	J	1.3	1.4	PQL	mg/Kg	J (all detects)
	EFH (C8-C11)	J	0.59	1.4	PQL	mg/Kg	
SL-094-SA5A-SB-9.0-10.0	EFH (C30-C40)	J	1.1	1.3	PQL	mg/Kg	J (all detects)
	EFH (C8-C11)	J	0.54	1.3	PQL	mg/Kg	

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-094-SA5A-SB-4.0-5.0	AROCLOR 1254	J	1.4	1.8	PQL	ug/Kg	J (all detects)
	AROCLOR 1260	J	1.4	1.8	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE116 **Laboratory: LL**

EDD Filename: DE116_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-075-SA5A-SB-2.5-3.5	METHYLENE CHLORIDE	J	0.65	3.9	PQL	ug/Kg	J (all detects)
SL-089-SA5A-SB-4.0-5.0	METHYLENE CHLORIDE	J	1.1	4.6	PQL	ug/Kg	J (all detects)
SL-094-SA5A-SB-4.0-5.0	BENZENE METHYLENE CHLORIDE	J J	0.11 0.68	4.0 4.0	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-094-SA5A-SB-9.0-10.0	1,2-DICHLOROETHANE METHYLENE CHLORIDE	J J	2.3 0.67	4.3 4.3	PQL PQL	ug/Kg ug/Kg	J (all detects)

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-075-SA5A-SB-2.5-3.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	19	380	PQL	ug/Kg	J (all detects)
SL-089-SA5A-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	20	360	PQL	ug/Kg	J (all detects)
SL-089-SA5A-SB-9.0-10.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	23	430	PQL	ug/Kg	J (all detects)
SL-094-SA5A-SB-4.0-5.0	BENZO(A)PYRENE BIS(2-ETHYLHEXYL)PHTHALATE	J J	42 22	180 360	PQL PQL	ug/Kg ug/Kg	J (all detects)

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-075-SA5A-SB-2.5-3.5	CHRYSENE Di-n-butylphthalate	J J	1.2 12	1.9 21	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-089-SA5A-SB-4.0-5.0	CHRYSENE Di-n-butylphthalate Di-n-octylphthalate	J J J	0.84 12 9.4	1.8 20 20	PQL PQL PQL	ug/Kg ug/Kg ug/Kg	J (all detects)
SL-089-SA5A-SB-9.0-10.0	Di-n-butylphthalate	J	13	23	PQL	ug/Kg	J (all detects)
SL-094-SA5A-SB-4.0-5.0	BENZO(G,H,I)PERYLENE BENZO(K)FLUORANTHENE Diethylphthalate Di-n-butylphthalate PYRENE	J J J J J	0.90 0.81 7.0 11 0.87	1.8 1.8 20 20 1.8	PQL PQL PQL PQL PQL	ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg	J (all detects)
SL-094-SA5A-SB-9.0-10.0	Di-n-butylphthalate Di-n-octylphthalate	J J	11 8.9	19 19	PQL PQL	ug/Kg ug/Kg	J (all detects)

LDC #: 25911Y4

VALIDATION COMPLETENESS WORKSHEET

Date 5-3-11

SDG #: DE116

ADR

Laboratory: Lancaster Laboratories

Reviewer: CR

2nd Reviewer: ✓

METHOD: Metals (EPA SW 846 Method 6010B/6020A/7000)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	N	Sampling dates:
II.	ICP/MS Tune	—	
III.	Calibration	—	
IV.	Blanks	A	No Quals
V.	ICP Interference Check Sample (ICS) Analysis	N	
VI.	Matrix Spike Analysis	N	MS/D (SDG: DE115)
VII.	Duplicate Sample Analysis	N	D/D ✓
VIII.	Laboratory Control Samples (LCS)	NA	LCS
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	—	(SDG: DE115)
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	—	
XV	Field Blanks	✓	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:

1	SL-094-SA5A-SB-4.0-5.0	11		21		31	
2	SL-094-SA5A-SB-9.0-10.0	12		22		32	
3	SL-089-SA5A-SB-4.0-5.0	13		23		33	
4	SL-089-SA5A-SB-9.0-10.0	14		24		34	
5	SL-075-SA5A-SB-2.5-3.5	15		25		35	
6		16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

SAMPLE DELIVERY GROUP

DE117

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
01-Apr-2011	TB-040111	6247209	TB	5030B	8015M	III
01-Apr-2011	TB-040111	6247209	TB	5030B	8260B	III
01-Apr-2011	TB-040111	6247209	TB	5030B	8260B SIM	III
01-Apr-2011	SL-076-SA5A-SB-4.0-5.0	6247206	N	3050B	6010B	III
01-Apr-2011	SL-076-SA5A-SB-4.0-5.0	6247206	N	3050B	6020	III
01-Apr-2011	SL-076-SA5A-SB-4.0-5.0	6247206	N	3060A	7199	III
01-Apr-2011	SL-076-SA5A-SB-4.0-5.0	6247206	N	3546	1625C	III
01-Apr-2011	SL-076-SA5A-SB-4.0-5.0	6247206	N	3550B	8015B	III
01-Apr-2011	SL-076-SA5A-SB-4.0-5.0	6247206	N	3550B	8015M	III
01-Apr-2011	SL-076-SA5A-SB-4.0-5.0	6247206	N	3550B	8082	III
01-Apr-2011	SL-076-SA5A-SB-4.0-5.0	6247206	N	3550B	8270C	III
01-Apr-2011	SL-076-SA5A-SB-4.0-5.0	6247206	N	3550B	8270C SIM	III
01-Apr-2011	SL-076-SA5A-SB-4.0-5.0	6247206	N	5035	8015M	III
01-Apr-2011	SL-076-SA5A-SB-4.0-5.0	6247206	N	5035	8260B	III
01-Apr-2011	SL-076-SA5A-SB-4.0-5.0	6247206	N	5035	8260B SIM	III
01-Apr-2011	SL-076-SA5A-SB-4.0-5.0	6247206	N	8330	8330A	III
01-Apr-2011	SL-076-SA5A-SB-4.0-5.0	6247206	N	Gen Prep	9045M	III
01-Apr-2011	SL-076-SA5A-SB-4.0-5.0	6247206	N	METHOD	300.0	III
01-Apr-2011	SL-076-SA5A-SB-4.0-5.0	6247206	N	METHOD	314.0	III
01-Apr-2011	SL-076-SA5A-SB-4.0-5.0	6247206	N	METHOD	7471A	III
01-Apr-2011	SL-076-SA5A-SB-4.0-5.0	6247206	N	METHOD	8015B	III
01-Apr-2011	SL-076-SA5A-SB-4.0-5.0	6247206	N	METHOD	8015M	III
01-Apr-2011	SL-076-SA5A-SB-4.0-5.0	6247206	N	METHOD	8315A	III
01-Apr-2011	SL-076-SA5A-SB-4.0-5.0	6247206	N	METHOD	9012B	III
01-Apr-2011	SL-076-SA5A-SB-4.0-5.0DUP	P247206D271841A	DUP	METHOD	314.0	III
01-Apr-2011	SL-076-SA5A-SB-4.0-5.0MSD	P247206M322111A	MSD	METHOD	8015B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
01-Apr-2011	SL-076-SA5A-SB-4.0-5.0MS	P247206R271903A	MS	METHOD	314.0	III
01-Apr-2011	SL-076-SA5A-SB-4.0-5.0MS	P247206R322056A	MS	METHOD	8015B	III
01-Apr-2011	SL-072-SA5A-SB-4.0-5.0	6247207	N	3050B	6010B	III
01-Apr-2011	SL-072-SA5A-SB-4.0-5.0	6247207	N	3050B	6020	III
01-Apr-2011	SL-072-SA5A-SB-4.0-5.0	6247207	N	3060A	7199	III
01-Apr-2011	SL-072-SA5A-SB-4.0-5.0	6247207	N	3546	1625C	III
01-Apr-2011	SL-072-SA5A-SB-4.0-5.0	6247207	N	3550B	8015B	III
01-Apr-2011	SL-072-SA5A-SB-4.0-5.0	6247207	N	3550B	8015M	III
01-Apr-2011	SL-072-SA5A-SB-4.0-5.0	6247207	N	3550B	8082	III
01-Apr-2011	SL-072-SA5A-SB-4.0-5.0	6247207	N	3550B	8270C	III
01-Apr-2011	SL-072-SA5A-SB-4.0-5.0	6247207	N	3550B	8270C SIM	III
01-Apr-2011	SL-072-SA5A-SB-4.0-5.0	6247207	N	5035	8015M	III
01-Apr-2011	SL-072-SA5A-SB-4.0-5.0	6247207	N	5035	8260B	III
01-Apr-2011	SL-072-SA5A-SB-4.0-5.0	6247207	N	5035	8260B SIM	III
01-Apr-2011	SL-072-SA5A-SB-4.0-5.0	6247207	N	8330	8330A	III
01-Apr-2011	SL-072-SA5A-SB-4.0-5.0	6247207	N	Gen Prep	9045M	III
01-Apr-2011	SL-072-SA5A-SB-4.0-5.0	6247207	N	METHOD	300.0	III
01-Apr-2011	SL-072-SA5A-SB-4.0-5.0	6247207	N	METHOD	314.0	III
01-Apr-2011	SL-072-SA5A-SB-4.0-5.0	6247207	N	METHOD	7471A	III
01-Apr-2011	SL-072-SA5A-SB-4.0-5.0	6247207	N	METHOD	8015B	III
01-Apr-2011	SL-072-SA5A-SB-4.0-5.0	6247207	N	METHOD	8015M	III
01-Apr-2011	SL-072-SA5A-SB-4.0-5.0	6247207	N	METHOD	8315A	III
01-Apr-2011	SL-072-SA5A-SB-4.0-5.0	6247207	N	METHOD	9012B	III
01-Apr-2011	SL-071-SA5A-SB-4.0-5.0	6247208	N	3050B	6010B	III
01-Apr-2011	SL-071-SA5A-SB-4.0-5.0	6247208	N	3050B	6020	III
01-Apr-2011	SL-071-SA5A-SB-4.0-5.0	6247208	N	3060A	7199	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
01-Apr-2011	SL-071-SA5A-SB-4.0-5.0	6247208	N	3546	1625C	III
01-Apr-2011	SL-071-SA5A-SB-4.0-5.0	6247208	N	3550B	8015B	III
01-Apr-2011	SL-071-SA5A-SB-4.0-5.0	6247208	N	3550B	8015M	III
01-Apr-2011	SL-071-SA5A-SB-4.0-5.0	6247208	N	3550B	8082	III
01-Apr-2011	SL-071-SA5A-SB-4.0-5.0	6247208	N	3550B	8270C	III
01-Apr-2011	SL-071-SA5A-SB-4.0-5.0	6247208	N	3550B	8270C SIM	III
01-Apr-2011	SL-071-SA5A-SB-4.0-5.0	6247208	N	5035	8015M	III
01-Apr-2011	SL-071-SA5A-SB-4.0-5.0	6247208	N	5035	8260B	III
01-Apr-2011	SL-071-SA5A-SB-4.0-5.0	6247208	N	5035	8260B SIM	III
01-Apr-2011	SL-071-SA5A-SB-4.0-5.0	6247208	N	8330	8330A	III
01-Apr-2011	SL-071-SA5A-SB-4.0-5.0	6247208	N	Gen Prep	9045M	III
01-Apr-2011	SL-071-SA5A-SB-4.0-5.0	6247208	N	METHOD	300.0	III
01-Apr-2011	SL-071-SA5A-SB-4.0-5.0	6247208	N	METHOD	314.0	III
01-Apr-2011	SL-071-SA5A-SB-4.0-5.0	6247208	N	METHOD	7471A	III
01-Apr-2011	SL-071-SA5A-SB-4.0-5.0	6247208	N	METHOD	8015B	III
01-Apr-2011	SL-071-SA5A-SB-4.0-5.0	6247208	N	METHOD	8015M	III
01-Apr-2011	SL-071-SA5A-SB-4.0-5.0	6247208	N	METHOD	8315A	III
01-Apr-2011	SL-071-SA5A-SB-4.0-5.0	6247208	N	METHOD	9012B	III
01-Apr-2011	SL-071-SA5A-SB-4.0-5.0DUP	P247208D291325A	DUP	Gen Prep	9045M	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE117 **Laboratory: LL**

EDD Filename: PrepDE117_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: SL-071-SA5A-SB-4.0-5.0 **Collected:** 4/1/2011 12:55:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Nitrate-NO3	1.4	J	0.88	MDL	1.6	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-071-SA5A-SB-4.0-5.0 **Collected:** 4/1/2011 12:55:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	1960		6.58	MDL	21.5	PQL	mg/Kg	J	E
MANGANESE	164		0.0837	MDL	0.536	PQL	mg/Kg	J	E
TIN	3.50	J	1.07	MDL	10.7	PQL	mg/Kg	UJ	B, E
Zirconium	4.42	J	0.901	MDL	5.36	PQL	mg/Kg	J	Z

Sample ID: SL-072-SA5A-SB-4.0-5.0 **Collected:** 4/1/2011 11:55:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.41	J	0.993	MDL	5.58	PQL	mg/Kg	J	Z
CALCIUM	2970		6.84	MDL	22.3	PQL	mg/Kg	J	E
MANGANESE	382		0.0870	MDL	0.558	PQL	mg/Kg	J	E
SODIUM	84.4	J	41.6	MDL	112	PQL	mg/Kg	J	Z
TIN	3.36	J	1.12	MDL	11.2	PQL	mg/Kg	UJ	B, E
Zirconium	4.27	J	0.937	MDL	5.58	PQL	mg/Kg	J	Z

Sample ID: SL-076-SA5A-SB-4.0-5.0 **Collected:** 4/1/2011 10:55:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.83	J	0.918	MDL	5.15	PQL	mg/Kg	J	Z
CALCIUM	2330		6.32	MDL	20.6	PQL	mg/Kg	J	E
MANGANESE	245		0.0804	MDL	0.515	PQL	mg/Kg	J	E
TIN	3.41	J	1.03	MDL	10.3	PQL	mg/Kg	UJ	B, E
Zirconium	4.02	J	0.866	MDL	5.15	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE117 **Laboratory: LL**

EDD Filename: PrepDE117_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6020** ***Matrix:*** **SO**

Sample ID: **SL-071-SA5A-SB-4.0-5.0** ***Collected:*** **4/1/2011 12:55:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.245	J	0.0429	MDL	0.429	PQL	mg/Kg	J	Z

Sample ID: **SL-071-SA5A-SB-4.0-5.0** ***Collected:*** **4/1/2011 12:55:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.939		0.0536	MDL	0.107	PQL	mg/Kg	J	Q

Sample ID: **SL-071-SA5A-SB-4.0-5.0** ***Collected:*** **4/1/2011 12:55:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
VANADIUM	57.3		0.0238	MDL	0.108	PQL	mg/Kg	J	A, Q

Sample ID: **SL-071-SA5A-SB-4.0-5.0** ***Collected:*** **4/1/2011 12:55:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.188	J	0.0644	MDL	0.215	PQL	mg/Kg	J	Z, Q, Q, E
ARSENIC	10.0		0.0858	MDL	0.429	PQL	mg/Kg	J	Q
CADMIUM	0.0786	J	0.0429	MDL	0.107	PQL	mg/Kg	J	Z
CHROMIUM	26.6		0.129	MDL	0.429	PQL	mg/Kg	J	A, E, Q, Q
COPPER	13.7		0.0708	MDL	0.429	PQL	mg/Kg	J	E
SILVER	0.0777	J	0.0129	MDL	0.107	PQL	mg/Kg	J	Z, E

Sample ID: **SL-072-SA5A-SB-4.0-5.0** ***Collected:*** **4/1/2011 11:55:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.274	J	0.0459	MDL	0.459	PQL	mg/Kg	J	Z

Sample ID: **SL-072-SA5A-SB-4.0-5.0** ***Collected:*** **4/1/2011 11:55:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.09		0.0574	MDL	0.115	PQL	mg/Kg	J	Q

Sample ID: **SL-072-SA5A-SB-4.0-5.0** ***Collected:*** **4/1/2011 11:55:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
VANADIUM	44.9		0.0248	MDL	0.113	PQL	mg/Kg	J	A, Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE117 **Laboratory: LL**

EDD Filename: PrepDE117_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6020** ***Matrix:*** **SO**

Sample ID: **SL-072-SA5A-SB-4.0-5.0** ***Collected:*** **4/1/2011 11:55:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.273		0.0689	MDL	0.230	PQL	mg/Kg	J	Q, Q, E
ARSENIC	9.41		0.0919	MDL	0.459	PQL	mg/Kg	J	Q
CHROMIUM	33.0		0.138	MDL	0.459	PQL	mg/Kg	J	A, E, Q, Q
COPPER	21.4		0.0758	MDL	0.459	PQL	mg/Kg	J	E
SILVER	0.0793	J	0.0138	MDL	0.115	PQL	mg/Kg	J	Z, E

Sample ID: **SL-076-SA5A-SB-4.0-5.0** ***Collected:*** **4/1/2011 10:55:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.150	J	0.0416	MDL	0.416	PQL	mg/Kg	J	Z

Sample ID: **SL-076-SA5A-SB-4.0-5.0** ***Collected:*** **4/1/2011 10:55:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.18		0.0521	MDL	0.104	PQL	mg/Kg	J	Q

Sample ID: **SL-076-SA5A-SB-4.0-5.0** ***Collected:*** **4/1/2011 10:55:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
VANADIUM	44.7		0.0225	MDL	0.102	PQL	mg/Kg	J	A, Q

Sample ID: **SL-076-SA5A-SB-4.0-5.0** ***Collected:*** **4/1/2011 10:55:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.193	J	0.0625	MDL	0.208	PQL	mg/Kg	J	Z, Q, Q, E
ARSENIC	8.28		0.0833	MDL	0.416	PQL	mg/Kg	J	Q
CADMIUM	0.0936	J	0.0416	MDL	0.104	PQL	mg/Kg	J	Z
CHROMIUM	22.2		0.125	MDL	0.416	PQL	mg/Kg	J	A, E, Q, Q
COPPER	11.4		0.0687	MDL	0.416	PQL	mg/Kg	J	E
SILVER	0.0414	J	0.0125	MDL	0.104	PQL	mg/Kg	J	Z, E

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE117 **Laboratory: LL**

EDD Filename: PrepDE117_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 7199 **Matrix: SO**

Sample ID: SL-071-SA5A-SB-4.0-5.0 *Collected:* 4/1/2011 12:55:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.62	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-072-SA5A-SB-4.0-5.0 *Collected:* 4/1/2011 11:55:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.38	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 7471A **Matrix: SO**

Sample ID: SL-071-SA5A-SB-4.0-5.0 *Collected:* 4/1/2011 12:55:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0096	J	0.0029	MDL	0.103	PQL	mg/Kg	J	Z

Sample ID: SL-076-SA5A-SB-4.0-5.0 *Collected:* 4/1/2011 10:55:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0035	J	0.0030	MDL	0.105	PQL	mg/Kg	J	Z

Method Category: SVOA

Method: 1625C **Matrix: SO**

Sample ID: SL-071-SA5A-SB-4.0-5.0 *Collected:* 4/1/2011 12:55:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	33.9	J	18.0	MDL	36.0	PQL	ng/Kg	J	Z

Method Category: SVOA

Method: 8015M **Matrix: SO**

Sample ID: SL-071-SA5A-SB-4.0-5.0 *Collected:* 4/1/2011 12:55:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C21-C30)	1.1	J	0.43	MDL	1.3	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE117 **Laboratory: LL**

EDD Filename: PrepDE117_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8015M **Matrix:** SO

Sample ID: SL-071-SA5A-SB-4.0-5.0 *Collected:* 4/1/2011 12:55:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	4.6		0.43	MDL	1.3	PQL	mg/Kg	U	B
EFH (C8-C11)	0.48	J	0.43	MDL	1.3	PQL	mg/Kg	U	B

Sample ID: SL-072-SA5A-SB-4.0-5.0 *Collected:* 4/1/2011 11:55:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C21-C30)	1.1	J	0.46	MDL	1.4	PQL	mg/Kg	J	Z
EFH (C30-C40)	3.3		0.46	MDL	1.4	PQL	mg/Kg	U	B
EFH (C8-C11)	0.67	J	0.46	MDL	1.4	PQL	mg/Kg	U	B

Sample ID: SL-076-SA5A-SB-4.0-5.0 *Collected:* 4/1/2011 10:55:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	4.1		0.42	MDL	1.3	PQL	mg/Kg	U	B
EFH (C8-C11)	0.47	J	0.42	MDL	1.3	PQL	mg/Kg	U	B

Method Category: SVOA

Method: 8270C SIM **Matrix:** SO

Sample ID: SL-071-SA5A-SB-4.0-5.0 *Collected:* 4/1/2011 12:55:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	14	J	6.6	MDL	20	PQL	ug/Kg	J	Z
Diethylphthalate	9.8	J	6.6	MDL	20	PQL	ug/Kg	J	Z
Di-n-butylphthalate	11	J	6.6	MDL	20	PQL	ug/Kg	J	Z
Di-n-octylphthalate	7.2	J	6.6	MDL	20	PQL	ug/Kg	J	Z

Sample ID: SL-072-SA5A-SB-4.0-5.0 *Collected:* 4/1/2011 11:55:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Diethylphthalate	11	J	7.0	MDL	21	PQL	ug/Kg	J	Z
Di-n-butylphthalate	12	J	7.0	MDL	21	PQL	ug/Kg	J	Z
Di-n-octylphthalate	17	J	7.0	MDL	21	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE117 | Laboratory: LL

EDD Filename: PrepDE117_v1 | eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8270C SIM **Matrix:** SO

Sample ID: SL-076-SA5A-SB-4.0-5.0 *Collected:* 4/1/2011 10:55:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Di-n-butylphthalate	13	J	6.3	MDL	19	PQL	ug/Kg	J	Z
Di-n-octylphthalate	12	J	6.3	MDL	19	PQL	ug/Kg	J	Z

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: SL-071-SA5A-SB-4.0-5.0 *Collected:* 4/1/2011 12:55:00 *Analysis Type:* RES *Dilution:* 0.96

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.65	J	0.25	MDL	4.2	PQL	ug/Kg	U	B

Sample ID: SL-072-SA5A-SB-4.0-5.0 *Collected:* 4/1/2011 11:55:00 *Analysis Type:* RES *Dilution:* 0.82

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	6.7	J	6.4	MDL	7.6	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	0.45	J	0.23	MDL	3.8	PQL	ug/Kg	U	B

Sample ID: SL-076-SA5A-SB-4.0-5.0 *Collected:* 4/1/2011 10:55:00 *Analysis Type:* RES *Dilution:* 1.04

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.57	J	0.26	MDL	4.4	PQL	ug/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE117 **Laboratory: LL**

EDD Filename: PrepDE117_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
*#	Professional Judgment
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Verification Correlation Coefficient
C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE117 **Laboratory: LL**

EDD Filename: PrepDE117_v1 **eQAPP Name: CDM_SSFL_110509**

F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation
L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery Lower Estimation

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE117 **Laboratory: LL**

EDD Filename: PrepDE117_v1 **eQAPP Name: CDM_SSFL_110509**

R	Continuing Calibration Verification Percent Recovery Lower Rejection
R	Continuing Calibration Verification Percent Recovery Upper Estimation
R	Continuing Calibration Verification Percent Recovery Upper Rejection
R	Continuing Calibration Verification Relative Response Factor
R	Initial Calibration Relative Response Factor
R	Initial Calibration Verification Percent Recovery Lower Estimation
R	Initial Calibration Verification Percent Recovery Lower Rejection
R	Initial Calibration Verification Percent Recovery Upper Estimation
R	Initial Calibration Verification Percent Recovery Upper Rejection
R	Initial Calibration Verification Relative Response Factor
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control Outlier Reports

DE117

Method Blank Outlier Report

Lab Reporting Batch ID: DE117 **Laboratory: LL**

EDD Filename: DE117_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **6010B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P09408BB220330	4/13/2011 3:30:00 AM	IRON PHOSPHORUS TIN	4.95 mg/Kg 1.16 mg/Kg 1.99 mg/Kg	SL-071-SA5A-SB-4.0-5.0 SL-072-SA5A-SB-4.0-5.0 SL-076-SA5A-SB-4.0-5.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-071-SA5A-SB-4.0-5.0(RES)	TIN	3.50 mg/Kg	3.50U mg/Kg
SL-072-SA5A-SB-4.0-5.0(RES)	TIN	3.36 mg/Kg	3.36U mg/Kg
SL-076-SA5A-SB-4.0-5.0(RES)	TIN	3.41 mg/Kg	3.41U mg/Kg

Method: **6020**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P09426AB221050A	4/5/2011 10:50:00 AM	COPPER	0.124 mg/Kg	SL-071-SA5A-SB-4.0-5.0 SL-072-SA5A-SB-4.0-5.0 SL-076-SA5A-SB-4.0-5.0

Method: **8015M**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P02021AB320743A	4/14/2011 7:43:00 AM	EFH (C30-C40) EFH (C8-C11)	1.1 mg/Kg 0.59 mg/Kg	SL-071-SA5A-SB-4.0-5.0 SL-072-SA5A-SB-4.0-5.0 SL-076-SA5A-SB-4.0-5.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-071-SA5A-SB-4.0-5.0(REA2)	EFH (C30-C40)	4.6 mg/Kg	4.6U mg/Kg
SL-071-SA5A-SB-4.0-5.0(REA2)	EFH (C8-C11)	0.48 mg/Kg	1.3U mg/Kg
SL-072-SA5A-SB-4.0-5.0(REA2)	EFH (C30-C40)	3.3 mg/Kg	3.3U mg/Kg
SL-072-SA5A-SB-4.0-5.0(REA2)	EFH (C8-C11)	0.67 mg/Kg	1.4U mg/Kg
SL-076-SA5A-SB-4.0-5.0(REA2)	EFH (C30-C40)	4.1 mg/Kg	4.1U mg/Kg
SL-076-SA5A-SB-4.0-5.0(REA2)	EFH (C8-C11)	0.47 mg/Kg	1.3U mg/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE117 **Laboratory: LL**

EDD Filename: DE117_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8260B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB14B211209A	4/5/2011 12:09:00 PM	METHYLENE CHLORIDE	0.42 ug/Kg	SL-071-SA5A-SB-4.0-5.0 SL-072-SA5A-SB-4.0-5.0 SL-076-SA5A-SB-4.0-5.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-071-SA5A-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.65 ug/Kg	4.2U ug/Kg
SL-072-SA5A-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.45 ug/Kg	3.8U ug/Kg
SL-076-SA5A-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.57 ug/Kg	4.4U ug/Kg

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE117 **Laboratory: LL**

EDD Filename: DE117_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8260B
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
LCSY90Q211607A (TB-040111)	TRICHLOROFLUOROMETHANE	135	-	64.00-129.00	-	TRICHLOROFLUOROMETHAN	J(all detects)

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P09426AQ221053A (SL-071-SA5A-SB-4.0-5.0 SL -072-SA5A-SB-4.0-5.0 SL -076-SA5A-SB-4.0-5.0)	ANTIMONY	141	-	80.00-120.00	-	ANTIMONY	No Qual SRM within QC limits

Method: 8015M
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11021AQ321510A (SL-071-SA5A-SB-4.0-5.0 SL -072-SA5A-SB-4.0-5.0 SL -076-SA5A-SB-4.0-5.0)	DIETHYLENE GLYCOL	160	-	75.00-125.00	-	DIETHYLENE GLYCOL	J(all detects)
	ETHYLENE GLYCOL	159	-	65.00-122.00	-	ETHYLENE GLYCOL	
	Propylene glycol	187	-	75.00-125.00	-	Propylene glycol	

Reporting Limit Outliers

Lab Reporting Batch ID: DE117 **Laboratory: LL**

EDD Filename: DE117_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1625C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-071-SA5A-SB-4.0-5.0	N-NITROSODIMETHYLAMINE	J	33.9	36.0	PQL	ng/Kg	J (all detects)

Method: 300.0

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-071-SA5A-SB-4.0-5.0	Nitrate-NO3	J	1.4	1.6	PQL	mg/Kg	J (all detects)

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-071-SA5A-SB-4.0-5.0	TIN	J	3.50	10.7	PQL	mg/Kg	J (all detects)
	Zirconium	J	4.42	5.36	PQL	mg/Kg	
SL-072-SA5A-SB-4.0-5.0	BORON	J	3.41	5.58	PQL	mg/Kg	J (all detects)
	SODIUM	J	84.4	112	PQL	mg/Kg	
	TIN	J	3.36	11.2	PQL	mg/Kg	
	Zirconium	J	4.27	5.58	PQL	mg/Kg	
SL-076-SA5A-SB-4.0-5.0	BORON	J	2.83	5.15	PQL	mg/Kg	J (all detects)
	TIN	J	3.41	10.3	PQL	mg/Kg	
	Zirconium	J	4.02	5.15	PQL	mg/Kg	

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-071-SA5A-SB-4.0-5.0	ANTIMONY	J	0.188	0.215	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0786	0.107	PQL	mg/Kg	
	SELENIUM	J	0.245	0.429	PQL	mg/Kg	
	SILVER	J	0.0777	0.107	PQL	mg/Kg	
SL-072-SA5A-SB-4.0-5.0	SELENIUM	J	0.274	0.459	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0793	0.115	PQL	mg/Kg	
SL-076-SA5A-SB-4.0-5.0	ANTIMONY	J	0.193	0.208	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0936	0.104	PQL	mg/Kg	
	SELENIUM	J	0.150	0.416	PQL	mg/Kg	
	SILVER	J	0.0414	0.104	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE117 **Laboratory: LL**

EDD Filename: DE117_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-071-SA5A-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.62	1.1	PQL	mg/Kg	J (all detects)
SL-072-SA5A-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.38	1.2	PQL	mg/Kg	J (all detects)

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-071-SA5A-SB-4.0-5.0	MERCURY	J	0.0096	0.103	PQL	mg/Kg	J (all detects)
SL-076-SA5A-SB-4.0-5.0	MERCURY	J	0.0035	0.105	PQL	mg/Kg	J (all detects)

Method: 8015M

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-071-SA5A-SB-4.0-5.0	EFH (C21-C30) EFH (C8-C11)	J J	1.1 0.48	1.3 1.3	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-072-SA5A-SB-4.0-5.0	EFH (C21-C30) EFH (C8-C11)	J J	1.1 0.67	1.4 1.4	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-076-SA5A-SB-4.0-5.0	EFH (C8-C11)	J	0.47	1.3	PQL	mg/Kg	J (all detects)

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-071-SA5A-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.65	4.2	PQL	ug/Kg	J (all detects)
SL-072-SA5A-SB-4.0-5.0	ACETONE METHYLENE CHLORIDE	J J	6.7 0.45	7.6 3.8	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-076-SA5A-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.57	4.4	PQL	ug/Kg	J (all detects)

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-071-SA5A-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE Diethylphthalate Di-n-butylphthalate Di-n-octylphthalate	J J J J	14 9.8 11 7.2	20 20 20 20	PQL PQL PQL PQL	ug/Kg ug/Kg ug/Kg ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE117 **Laboratory: LL**

EDD Filename: DE117_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8270C SIM**

Matrix: **SO**

SampleID	*Analyte*	*Lab Qual*	*Result*	*Reporting Limit*	*RL Type*	*Units*	*Flag*
SL-072-SA5A-SB-4.0-5.0	Diethylphthalate	J	11	21	PQL	ug/Kg	J (all detects)
	Di-n-butylphthalate	J	12	21	PQL	ug/Kg	
	Di-n-octylphthalate	J	17	21	PQL	ug/Kg	
SL-076-SA5A-SB-4.0-5.0	Di-n-butylphthalate	J	13	19	PQL	ug/Kg	J (all detects)
	Di-n-octylphthalate	J	12	19	PQL	ug/Kg	

LDC #: 25911Z4 **VALIDATION COMPLETENESS WORKSHEET** Date: 8-3-11

SDG #: DE117 ADR

Laboratory: Lancaster Laboratories

Reviewer: CR

2nd Reviewer: A

METHOD: Metals (EPA SW 846 Method 6010B/6020A/7000)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets. .

	Validation Area		Comments
I.	Technical holding times	N	Sampling dates:
II.	ICP/MS Tune	—	
III.	Calibration	—	
IV.	Blanks	A	No Quals
V.	ICP Interference Check Sample (ICS) Analysis	N	
VI.	Matrix Spike Analysis	N	MS/D (SDG: DE115)
VII.	Duplicate Sample Analysis	N	Qual ✓
VIII.	Laboratory Control Samples (LCS)	A	
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	—	(SDG: DE115)
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	—	
XV	Field Blanks	—	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:

1	SL-076-SA5A-SB-4.0-5.0	11		21		31	
2	SL-072-SA5A-SB-4.0-5.0	12		22		32	
3	SL-071-SA5A-SB-4.0-5.0	13		23		33	
4		14		24		34	
5		15		25		35	
6		16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

SAMPLE DELIVERY GROUP

DE118

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
04-Apr-2011	TB-040411	6248208	TB	5030B	8260B	III
04-Apr-2011	TB-040411	6248208	TB	5030B	8260B SIM	III
04-Apr-2011	SL-085-SA5A-SB-4.0-5.0	6248206	N	3050B	6010B	III
04-Apr-2011	SL-085-SA5A-SB-4.0-5.0	6248206	N	3050B	6020	III
04-Apr-2011	SL-085-SA5A-SB-4.0-5.0	6248206	N	3060A	7199	III
04-Apr-2011	SL-085-SA5A-SB-4.0-5.0	6248206	N	3550B	8082	III
04-Apr-2011	SL-085-SA5A-SB-4.0-5.0	6248206	N	3550B	8270C	III
04-Apr-2011	SL-085-SA5A-SB-4.0-5.0	6248206	N	3550B	8270C SIM	III
04-Apr-2011	SL-085-SA5A-SB-4.0-5.0	6248206	N	5035	8260B	III
04-Apr-2011	SL-085-SA5A-SB-4.0-5.0	6248206	N	5035	8260B SIM	III
04-Apr-2011	SL-085-SA5A-SB-4.0-5.0	6248206	N	Gen Prep	9045M	III
04-Apr-2011	SL-085-SA5A-SB-4.0-5.0	6248206	N	METHOD	300.0	III
04-Apr-2011	SL-085-SA5A-SB-4.0-5.0	6248206	N	METHOD	314.0	III
04-Apr-2011	SL-085-SA5A-SB-4.0-5.0	6248206	N	METHOD	7471A	III
04-Apr-2011	SL-085-SA5A-SB-4.0-5.0DUP	P248206D291400A	DUP	Gen Prep	9045M	III
04-Apr-2011	SL-087-SA5A-SB-2.0-3.0	6248207	N	3050B	6010B	III
04-Apr-2011	SL-087-SA5A-SB-2.0-3.0	6248207	N	3050B	6020	III
04-Apr-2011	SL-087-SA5A-SB-2.0-3.0	6248207	N	3060A	7199	III
04-Apr-2011	SL-087-SA5A-SB-2.0-3.0	6248207	N	3550B	8082	III
04-Apr-2011	SL-087-SA5A-SB-2.0-3.0	6248207	N	3550B	8270C	III
04-Apr-2011	SL-087-SA5A-SB-2.0-3.0	6248207	N	3550B	8270C SIM	III
04-Apr-2011	SL-087-SA5A-SB-2.0-3.0	6248207	N	5035	8260B	III
04-Apr-2011	SL-087-SA5A-SB-2.0-3.0	6248207	N	5035	8260B SIM	III
04-Apr-2011	SL-087-SA5A-SB-2.0-3.0	6248207	N	Gen Prep	9045M	III
04-Apr-2011	SL-087-SA5A-SB-2.0-3.0	6248207	N	METHOD	300.0	III
04-Apr-2011	SL-087-SA5A-SB-2.0-3.0	6248207	N	METHOD	314.0	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
04-Apr-2011	SL-087-SA5A-SB-2.0-3.0	6248207	N	METHOD	7471A	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE118 **Laboratory: LL**

EDD Filename: PrepDE118_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS
Method: 6010B **Matrix:** SO

Sample ID: SL-085-SA5A-SB-4.0-5.0 **Collected:** 4/4/2011 9:54:00 AM **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LITHIUM	26.3		0.24	MDL	2.2	PQL	mg/Kg	J	A
PHOSPHORUS	167		0.616	MDL	11.0	PQL	mg/Kg	J	Q
POTASSIUM	1300		19.8	MDL	55.0	PQL	mg/Kg	J	Q
TIN	3.23	J	1.10	MDL	11.0	PQL	mg/Kg	U	B
Zirconium	4.47	J	0.924	MDL	5.50	PQL	mg/Kg	J	Z

Sample ID: SL-087-SA5A-SB-2.0-3.0 **Collected:** 4/4/2011 10:56:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LITHIUM	22.7		0.24	MDL	2.2	PQL	mg/Kg	J	A
PHOSPHORUS	363		0.603	MDL	10.8	PQL	mg/Kg	J	Q
POTASSIUM	1570		19.4	MDL	53.8	PQL	mg/Kg	J	Q
TIN	2.93	J	1.08	MDL	10.8	PQL	mg/Kg	U	B
Zirconium	1.95	J	0.904	MDL	5.38	PQL	mg/Kg	J	Z

Method Category: METALS
Method: 6020 **Matrix:** SO

Sample ID: SL-085-SA5A-SB-4.0-5.0 **Collected:** 4/4/2011 9:54:00 AM **Analysis Type:** REA **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.117	J	0.0449	MDL	0.449	PQL	mg/Kg	J	Z

Sample ID: SL-085-SA5A-SB-4.0-5.0 **Collected:** 4/4/2011 9:54:00 AM **Analysis Type:** REA3 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	100		0.121	MDL	0.449	PQL	mg/Kg	J	A

Sample ID: SL-085-SA5A-SB-4.0-5.0 **Collected:** 4/4/2011 9:54:00 AM **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.205	J	0.0673	MDL	0.224	PQL	mg/Kg	J	Z, Q
ARSENIC	7.21		0.0898	MDL	0.449	PQL	mg/Kg	J	Q
CADMIUM	0.0883	J	0.0449	MDL	0.112	PQL	mg/Kg	J	Z
CHROMIUM	23.2		0.135	MDL	0.449	PQL	mg/Kg	J	Q, A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE118 **Laboratory: LL**

EDD Filename: PrepDE118_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-085-SA5A-SB-4.0-5.0 **Collected:** 4/4/2011 9:54:00 AM **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COBALT	7.25		0.0224	MDL	0.112	PQL	mg/Kg	J	A
COPPER	8.80		0.0741	MDL	0.449	PQL	mg/Kg	J	Q, A
LEAD	7.99		0.0117	MDL	0.224	PQL	mg/Kg	J	Q, A
NICKEL	16.7		0.112	MDL	0.449	PQL	mg/Kg	J	Q
SILVER	0.0733	J	0.0135	MDL	0.112	PQL	mg/Kg	J	Z
THALLIUM	0.235		0.0337	MDL	0.112	PQL	mg/Kg	J	Q
VANADIUM	46.0		0.0247	MDL	0.112	PQL	mg/Kg	J	Q, A

Sample ID: SL-087-SA5A-SB-2.0-3.0 **Collected:** 4/4/2011 10:56:00 **Analysis Type:** REA **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.135	J	0.0422	MDL	0.422	PQL	mg/Kg	J	Z

Sample ID: SL-087-SA5A-SB-2.0-3.0 **Collected:** 4/4/2011 10:56:00 **Analysis Type:** REA3 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	86.8		0.114	MDL	0.422	PQL	mg/Kg	J	A

Sample ID: SL-087-SA5A-SB-2.0-3.0 **Collected:** 4/4/2011 10:56:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.393		0.0633	MDL	0.211	PQL	mg/Kg	J	Q
ARSENIC	8.10		0.0844	MDL	0.422	PQL	mg/Kg	J	Q
CADMIUM	0.0914	J	0.0422	MDL	0.106	PQL	mg/Kg	J	Z
CHROMIUM	25.0		0.127	MDL	0.422	PQL	mg/Kg	J	Q, A
COBALT	14.5		0.0211	MDL	0.106	PQL	mg/Kg	J	A
COPPER	15.9		0.0696	MDL	0.422	PQL	mg/Kg	J	Q, A
LEAD	8.10		0.0110	MDL	0.211	PQL	mg/Kg	J	Q, A
NICKEL	16.0		0.106	MDL	0.422	PQL	mg/Kg	J	Q
THALLIUM	0.411		0.0317	MDL	0.106	PQL	mg/Kg	J	Q
VANADIUM	45.9		0.0232	MDL	0.106	PQL	mg/Kg	J	Q, A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE118 **Laboratory: LL**

EDD Filename: PrepDE118_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS
Method: 7199 **Matrix:** SO

Sample ID: SL-087-SA5A-SB-2.0-3.0 *Collected:* 4/4/2011 10:56:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.32	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Method Category: SVOA
Method: 8270C SIM **Matrix:** SO

Sample ID: SL-085-SA5A-SB-4.0-5.0 *Collected:* 4/4/2011 9:54:00 AM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	13	J	6.7	MDL	20	PQL	ug/Kg	J	Z
CHRYSENE	0.49	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z
Diethylphthalate	9.1	J	6.7	MDL	20	PQL	ug/Kg	J	Z
Di-n-butylphthalate	11	J	6.7	MDL	20	PQL	ug/Kg	J	Z

Sample ID: SL-087-SA5A-SB-2.0-3.0 *Collected:* 4/4/2011 10:56:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	14	J	6.5	MDL	20	PQL	ug/Kg	J	Z
Diethylphthalate	9.1	J	6.5	MDL	20	PQL	ug/Kg	J	Z
Di-n-butylphthalate	11	J	6.5	MDL	20	PQL	ug/Kg	J	Z
Di-n-octylphthalate	6.6	J	6.5	MDL	20	PQL	ug/Kg	J	Z

Method Category: VOA
Method: 8260B **Matrix:** SO

Sample ID: SL-085-SA5A-SB-4.0-5.0 *Collected:* 4/4/2011 9:54:00 AM *Analysis Type:* RES *Dilution:* 0.95

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	8.1	J	7.1	MDL	8.5	PQL	ug/Kg	J	Z

Sample ID: SL-087-SA5A-SB-2.0-3.0 *Collected:* 4/4/2011 10:56:00 *Analysis Type:* RES *Dilution:* 0.91

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	1.3	J	0.24	MDL	4.0	PQL	ug/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE118

EDD Filename: PrepDE118_v1

Laboratory: LL

eQAPP Name: CDM_SSFL_110509

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE118

EDD Filename: PrepDE118_v1

Laboratory: LL

eQAPP Name: CDM_SSFL_110509

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
*#	Professional Judgment
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Verification Correlation Coefficient
C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE118

Laboratory: LL

EDD Filename: PrepDE118_v1

eQAPP Name: CDM_SSFL_110509

F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation
L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery Lower Estimation

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE118 **Laboratory: LL**

EDD Filename: PrepDE118_v1 **eQAPP Name: CDM_SSFL_110509**

R	Continuing Calibration Verification Percent Recovery Lower Rejection
R	Continuing Calibration Verification Percent Recovery Upper Estimation
R	Continuing Calibration Verification Percent Recovery Upper Rejection
R	Continuing Calibration Verification Relative Response Factor
R	Initial Calibration Relative Response Factor
R	Initial Calibration Verification Percent Recovery Lower Estimation
R	Initial Calibration Verification Percent Recovery Lower Rejection
R	Initial Calibration Verification Percent Recovery Upper Estimation
R	Initial Calibration Verification Percent Recovery Upper Rejection
R	Initial Calibration Verification Relative Response Factor
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control Outlier Reports

DE118

Method Blank Outlier Report

Lab Reporting Batch ID: DE118 **Laboratory: LL**

EDD Filename: DE118_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P10208AB220725	4/16/2011 7:25:00 AM	ALUMINUM LITHIUM PHOSPHORUS TIN	29.3 mg/Kg 0.33 mg/Kg 1.22 mg/Kg 1.28 mg/Kg	SL-085-SA5A-SB-4.0-5.0 SL-087-SA5A-SB-2.0-3.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-085-SA5A-SB-4.0-5.0(RES)	TIN	3.23 mg/Kg	3.23U mg/Kg
SL-087-SA5A-SB-2.0-3.0(RES)	TIN	2.93 mg/Kg	2.93U mg/Kg

Method: 6020
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P10226AB220850A	4/13/2011 8:50:00 AM	COPPER	0.162 mg/Kg	SL-085-SA5A-SB-4.0-5.0 SL-087-SA5A-SB-2.0-3.0

Method: 8260B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB17B211327A	4/7/2011 1:27:00 PM	METHYLENE CHLORIDE TOLUENE	0.52 ug/Kg 0.09 ug/Kg	SL-085-SA5A-SB-4.0-5.0 SL-087-SA5A-SB-2.0-3.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-087-SA5A-SB-2.0-3.0(RES)	METHYLENE CHLORIDE	1.3 ug/Kg	4.0U ug/Kg

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE118 **Laboratory: LL**

EDD Filename: DE118_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8260B
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
LCSY90Q211607A (TB-040411)	TRICHLOROFLUOROMETHANE	135	-	64.00-129.00	-	TRICHLOROFLUOROMETHAN	J(all detects)

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P10226AQ220853A (SL-085-SA5A-SB-4.0-5.0 SL -087-SA5A-SB-2.0-3.0)	ANTIMONY	177	-	80.00-120.00	-	ANTIMONY	No Qual SRM within QC limits

Reporting Limit Outliers

Lab Reporting Batch ID: DE118

Laboratory: LL

EDD Filename: DE118_v1

eQAPP Name: CDM_SSFL_110509

Method: 6010B
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-085-SA5A-SB-4.0-5.0	TIN	J	3.23	11.0	PQL	mg/Kg	J (all detects)
	Zirconium	J	4.47	5.50	PQL	mg/Kg	
SL-087-SA5A-SB-2.0-3.0	TIN	J	2.93	10.8	PQL	mg/Kg	J (all detects)
	Zirconium	J	1.95	5.38	PQL	mg/Kg	

Method: 6020
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-085-SA5A-SB-4.0-5.0	ANTIMONY	J	0.205	0.224	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0883	0.112	PQL	mg/Kg	
	SELENIUM	J	0.117	0.449	PQL	mg/Kg	
	SILVER	J	0.0733	0.112	PQL	mg/Kg	
SL-087-SA5A-SB-2.0-3.0	CADMIUM	J	0.0914	0.106	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.135	0.422	PQL	mg/Kg	

Method: 7199
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-087-SA5A-SB-2.0-3.0	HEXAVALENT CHROMIUM	J	0.32	1.1	PQL	mg/Kg	J (all detects)

Method: 8260B
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-085-SA5A-SB-4.0-5.0	ACETONE	J	8.1	8.5	PQL	ug/Kg	J (all detects)
SL-087-SA5A-SB-2.0-3.0	METHYLENE CHLORIDE	J	1.3	4.0	PQL	ug/Kg	J (all detects)

Method: 8270C SIM
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-085-SA5A-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	13	20	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	0.49	1.9	PQL	ug/Kg	
	Diethylphthalate	J	9.1	20	PQL	ug/Kg	
	Di-n-butylphthalate	J	11	20	PQL	ug/Kg	
SL-087-SA5A-SB-2.0-3.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	14	20	PQL	ug/Kg	J (all detects)
	Diethylphthalate	J	9.1	20	PQL	ug/Kg	
	Di-n-butylphthalate	J	11	20	PQL	ug/Kg	
	Di-n-octylphthalate	J	6.6	20	PQL	ug/Kg	

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

LDC #: 25916A4

SDG #: DE118

Laboratory: Lancaster Laboratories

VALIDATION COMPLETENESS WORKSHEET

ADR

Date: 8-3-11

Reviewer: CR

2nd Reviewer: C

METHOD: Metals (EPA SW 846 Method 6010B/6020A/7000)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	N	Sampling dates:
II.	ICP/MS Tune	—	
III.	Calibration	—	
IV.	Blanks	A	No Quals
V.	ICP Interference Check Sample (ICS) Analysis	N	
VI.	Matrix Spike Analysis	N	MS/D (SDG: DE123)
VII.	Duplicate Sample Analysis	N	Dup ↓
VIII.	Laboratory Control Samples (LCS)	A	LCS
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	—	SDG: DE123
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	—	
XV	Field Blanks	—	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:

1	SL-085-SA5A-SB-4.0-5.0	11		21		31	
2	SL-087-SA5A-SB-2.0-3.0	12		22		32	
3		13		23		33	
4		14		24		34	
5		15		25		35	
6		16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

SAMPLE DELIVERY GROUP

DE119

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
05-Apr-2011	TB-040511	6250045	TB	5030B	8015M	III
05-Apr-2011	TB-040511	6250045	TB	5030B	8260B	III
05-Apr-2011	TB-040511	6250045	TB	5030B	8260B SIM	III
05-Apr-2011	SL-156-SA5A-SB-3.0-4.0	6250043	N	3050B	6010B	III
05-Apr-2011	SL-156-SA5A-SB-3.0-4.0	6250043	N	3050B	6020	III
05-Apr-2011	SL-156-SA5A-SB-3.0-4.0	6250043	N	3060A	7199	III
05-Apr-2011	SL-156-SA5A-SB-3.0-4.0	6250043	N	3546	1625C	III
05-Apr-2011	SL-156-SA5A-SB-3.0-4.0	6250043	N	3550B	8015B	III
05-Apr-2011	SL-156-SA5A-SB-3.0-4.0	6250043	N	3550B	8015M	III
05-Apr-2011	SL-156-SA5A-SB-3.0-4.0	6250043	N	3550B	8082	III
05-Apr-2011	SL-156-SA5A-SB-3.0-4.0	6250043	N	3550B	8270C	III
05-Apr-2011	SL-156-SA5A-SB-3.0-4.0	6250043	N	3550B	8270C SIM	III
05-Apr-2011	SL-156-SA5A-SB-3.0-4.0	6250043	N	5035	8015M	III
05-Apr-2011	SL-156-SA5A-SB-3.0-4.0	6250043	N	5035	8260B	III
05-Apr-2011	SL-156-SA5A-SB-3.0-4.0	6250043	N	5035	8260B SIM	III
05-Apr-2011	SL-156-SA5A-SB-3.0-4.0	6250043	N	8330	8330A	III
05-Apr-2011	SL-156-SA5A-SB-3.0-4.0	6250043	N	Gen Prep	9045M	III
05-Apr-2011	SL-156-SA5A-SB-3.0-4.0	6250043	N	METHOD	300.0	III
05-Apr-2011	SL-156-SA5A-SB-3.0-4.0	6250043	N	METHOD	314.0	III
05-Apr-2011	SL-156-SA5A-SB-3.0-4.0	6250043	N	METHOD	7471A	III
05-Apr-2011	SL-156-SA5A-SB-3.0-4.0	6250043	N	METHOD	8015B	III
05-Apr-2011	SL-156-SA5A-SB-3.0-4.0	6250043	N	METHOD	8015M	III
05-Apr-2011	SL-156-SA5A-SB-3.0-4.0	6250043	N	METHOD	8315A	III
05-Apr-2011	SL-156-SA5A-SB-3.0-4.0	6250043	N	METHOD	9012B	III
05-Apr-2011	SL-154-SA5A-SB-4.0-5.0	6250041	N	3050B	6010B	III
05-Apr-2011	SL-154-SA5A-SB-4.0-5.0	6250041	N	3050B	6020	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
05-Apr-2011	SL-154-SA5A-SB-4.0-5.0	6250041	N	3060A	7199	III
05-Apr-2011	SL-154-SA5A-SB-4.0-5.0	6250041	N	3546	1625C	III
05-Apr-2011	SL-154-SA5A-SB-4.0-5.0	6250041	N	3550B	8015B	III
05-Apr-2011	SL-154-SA5A-SB-4.0-5.0	6250041	N	3550B	8015M	III
05-Apr-2011	SL-154-SA5A-SB-4.0-5.0	6250041	N	3550B	8082	III
05-Apr-2011	SL-154-SA5A-SB-4.0-5.0	6250041	N	3550B	8270C	III
05-Apr-2011	SL-154-SA5A-SB-4.0-5.0	6250041	N	3550B	8270C SIM	III
05-Apr-2011	SL-154-SA5A-SB-4.0-5.0	6250041	N	5035	8015M	III
05-Apr-2011	SL-154-SA5A-SB-4.0-5.0	6250041	N	5035	8260B	III
05-Apr-2011	SL-154-SA5A-SB-4.0-5.0	6250041	N	5035	8260B SIM	III
05-Apr-2011	SL-154-SA5A-SB-4.0-5.0	6250041	N	8330	8330A	III
05-Apr-2011	SL-154-SA5A-SB-4.0-5.0	6250041	N	Gen Prep	9045M	III
05-Apr-2011	SL-154-SA5A-SB-4.0-5.0	6250041	N	METHOD	300.0	III
05-Apr-2011	SL-154-SA5A-SB-4.0-5.0	6250041	N	METHOD	314.0	III
05-Apr-2011	SL-154-SA5A-SB-4.0-5.0	6250041	N	METHOD	7471A	III
05-Apr-2011	SL-154-SA5A-SB-4.0-5.0	6250041	N	METHOD	8015B	III
05-Apr-2011	SL-154-SA5A-SB-4.0-5.0	6250041	N	METHOD	8015M	III
05-Apr-2011	SL-154-SA5A-SB-4.0-5.0	6250041	N	METHOD	8315A	III
05-Apr-2011	SL-154-SA5A-SB-4.0-5.0	6250041	N	METHOD	9012B	III
05-Apr-2011	SL-154-SA5A-SB-4.0-5.0DUP	P250041D271219B	DUP	METHOD	300.0	III
05-Apr-2011	SL-154-SA5A-SB-4.0-5.0MSD	P250041M242239A	MSD	METHOD	8315A	III
05-Apr-2011	SL-154-SA5A-SB-4.0-5.0MSD	P250041M321742A	MSD	3550B	8015B	III
05-Apr-2011	SL-154-SA5A-SB-4.0-5.0MSD	P250041M321748A	MSD	METHOD	8015M	III
05-Apr-2011	SL-154-SA5A-SB-4.0-5.0MS	P250041R242230A	MS	METHOD	8315A	III
05-Apr-2011	SL-154-SA5A-SB-4.0-5.0MS	P250041R271300B	MS	METHOD	300.0	III
05-Apr-2011	SL-154-SA5A-SB-4.0-5.0MS	P250041R321657A	MS	3550B	8015B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
05-Apr-2011	SL-154-SA5A-SB-4.0-5.0MS	P250041R321713A	MS	METHOD	8015M	III
05-Apr-2011	SL-154-SA5A-SB-7.0-8.0	6250042	N	3050B	6010B	III
05-Apr-2011	SL-154-SA5A-SB-7.0-8.0	6250042	N	3050B	6020	III
05-Apr-2011	SL-154-SA5A-SB-7.0-8.0	6250042	N	3060A	7199	III
05-Apr-2011	SL-154-SA5A-SB-7.0-8.0	6250042	N	3546	1625C	III
05-Apr-2011	SL-154-SA5A-SB-7.0-8.0	6250042	N	3550B	8015B	III
05-Apr-2011	SL-154-SA5A-SB-7.0-8.0	6250042	N	3550B	8015M	III
05-Apr-2011	SL-154-SA5A-SB-7.0-8.0	6250042	N	3550B	8082	III
05-Apr-2011	SL-154-SA5A-SB-7.0-8.0	6250042	N	3550B	8270C	III
05-Apr-2011	SL-154-SA5A-SB-7.0-8.0	6250042	N	3550B	8270C SIM	III
05-Apr-2011	SL-154-SA5A-SB-7.0-8.0	6250042	N	5035	8015M	III
05-Apr-2011	SL-154-SA5A-SB-7.0-8.0	6250042	N	5035	8260B	III
05-Apr-2011	SL-154-SA5A-SB-7.0-8.0	6250042	N	5035	8260B SIM	III
05-Apr-2011	SL-154-SA5A-SB-7.0-8.0	6250042	N	8330	8330A	III
05-Apr-2011	SL-154-SA5A-SB-7.0-8.0	6250042	N	Gen Prep	9045M	III
05-Apr-2011	SL-154-SA5A-SB-7.0-8.0	6250042	N	METHOD	300.0	III
05-Apr-2011	SL-154-SA5A-SB-7.0-8.0	6250042	N	METHOD	314.0	III
05-Apr-2011	SL-154-SA5A-SB-7.0-8.0	6250042	N	METHOD	7471A	III
05-Apr-2011	SL-154-SA5A-SB-7.0-8.0	6250042	N	METHOD	8015B	III
05-Apr-2011	SL-154-SA5A-SB-7.0-8.0	6250042	N	METHOD	8015M	III
05-Apr-2011	SL-154-SA5A-SB-7.0-8.0	6250042	N	METHOD	8315A	III
05-Apr-2011	SL-154-SA5A-SB-7.0-8.0	6250042	N	METHOD	9012B	III
05-Apr-2011	EB11-SA5A-SB-040511	6250044	EB	3005A	6010B	III
05-Apr-2011	EB11-SA5A-SB-040511	6250044	EB	3020A	6020	III
05-Apr-2011	EB11-SA5A-SB-040511	6250044	EB	3510C	8082	III
05-Apr-2011	EB11-SA5A-SB-040511	6250044	EB	3510C	8270C	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
05-Apr-2011	EB11-SA5A-SB-040511	6250044	EB	3510C	8270C SIM	III
05-Apr-2011	EB11-SA5A-SB-040511	6250044	EB	5030B	8260B	III
05-Apr-2011	EB11-SA5A-SB-040511	6250044	EB	5030B	8260B SIM	III
05-Apr-2011	EB11-SA5A-SB-040511	6250044	EB	Gen Prep	300.0	III
05-Apr-2011	EB11-SA5A-SB-040511	6250044	EB	Gen Prep	314.0	III
05-Apr-2011	EB11-SA5A-SB-040511	6250044	EB	Gen Prep	7199	III
05-Apr-2011	EB11-SA5A-SB-040511	6250044	EB	METHOD	7470A	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE119 **Laboratory: LL**

EDD Filename: DE119_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: GENCHEM
Method: 300.0 **Matrix:** SO

Sample ID: SL-154-SA5A-SB-4.0-5.0 **Collected:** 4/5/2011 11:15:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.6		0.94	MDL	1.2	PQL	mg/Kg	J	Q
Nitrate-NO3	1.4	J	0.94	MDL	1.8	PQL	mg/Kg	J	Z

Sample ID: SL-154-SA5A-SB-7.0-8.0 **Collected:** 4/5/2011 11:22:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	3.5		0.94	MDL	1.2	PQL	mg/Kg	J	Q
Nitrate-NO3	1.6	J	0.94	MDL	1.8	PQL	mg/Kg	J	Z

Sample ID: SL-156-SA5A-SB-3.0-4.0 **Collected:** 4/5/2011 9:34:00 AM **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	0.91	U	0.91	MDL	1.1	PQL	mg/Kg	UJ	Q
Nitrate-NO3	1.1	J	0.91	MDL	1.7	PQL	mg/Kg	J	Z

Method Category: METALS
Method: 6010B **Matrix:** AQ

Sample ID: EB11-SA5A-SB-040511 **Collected:** 4/5/2011 2:50:00 PM **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
IRON	0.168	J	0.0522	MDL	0.200	PQL	mg/L	U	B
MAGNESIUM	0.0305	J	0.0172	MDL	0.100	PQL	mg/L	J	Z
MANGANESE	0.0014	J	0.00084	MDL	0.0050	PQL	mg/L	U	B

Method Category: METALS
Method: 6010B **Matrix:** SO

Sample ID: SL-154-SA5A-SB-4.0-5.0 **Collected:** 4/5/2011 11:15:00 **Analysis Type:** REA2 **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.44	J	1.04	MDL	5.85	PQL	mg/Kg	J	Z
LITHIUM	23.5		0.26	MDL	2.3	PQL	mg/Kg	J	A
PHOSPHORUS	167		0.655	MDL	11.7	PQL	mg/Kg	J	Q
POTASSIUM	1750		21.1	MDL	58.5	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE119 **Laboratory: LL**

EDD Filename: DE119_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS
Method: 6010B **Matrix:** SO

Sample ID: SL-154-SA5A-SB-4.0-5.0 **Collected:** 4/5/2011 11:15:00 **Analysis Type:** REA2 **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.91	J	1.17	MDL	11.7	PQL	mg/Kg	U	B
Zirconium	2.19	J	0.982	MDL	5.85	PQL	mg/Kg	J	Z

Sample ID: SL-154-SA5A-SB-7.0-8.0 **Collected:** 4/5/2011 11:22:00 **Analysis Type:** REA2 **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LITHIUM	25.8		0.26	MDL	2.3	PQL	mg/Kg	J	A
PHOSPHORUS	168		0.655	MDL	11.7	PQL	mg/Kg	J	Q
POTASSIUM	1900		21.0	MDL	58.4	PQL	mg/Kg	J	Q
SODIUM	113	J	43.6	MDL	117	PQL	mg/Kg	J	Z
TIN	3.15	J	1.17	MDL	11.7	PQL	mg/Kg	U	B
Zirconium	3.95	J	0.982	MDL	5.84	PQL	mg/Kg	J	Z

Sample ID: SL-156-SA5A-SB-3.0-4.0 **Collected:** 4/5/2011 9:34:00 AM **Analysis Type:** REA2 **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LITHIUM	21.2		0.25	MDL	2.2	PQL	mg/Kg	J	A
PHOSPHORUS	278		0.628	MDL	11.2	PQL	mg/Kg	J	Q
POTASSIUM	2690		20.2	MDL	56.1	PQL	mg/Kg	J	Q
SODIUM	74.7	J	41.8	MDL	112	PQL	mg/Kg	J	Z
TIN	2.94	J	1.12	MDL	11.2	PQL	mg/Kg	U	B
Zirconium	2.40	J	0.942	MDL	5.61	PQL	mg/Kg	J	Z

Method Category: METALS
Method: 6020 **Matrix:** SO

Sample ID: SL-154-SA5A-SB-4.0-5.0 **Collected:** 4/5/2011 11:15:00 **Analysis Type:** REA **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0659	J	0.0463	MDL	0.463	PQL	mg/Kg	J	Z

Sample ID: SL-154-SA5A-SB-4.0-5.0 **Collected:** 4/5/2011 11:15:00 **Analysis Type:** REA3 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	105		0.125	MDL	0.463	PQL	mg/Kg	J	A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE119 **Laboratory: LL**

EDD Filename: DE119_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 ***Matrix:*** SO

Sample ID: SL-154-SA5A-SB-4.0-5.0 ***Collected:*** 4/5/2011 11:15:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.201	J	0.0695	MDL	0.232	PQL	mg/Kg	J	Z, Q
ARSENIC	5.53		0.0926	MDL	0.463	PQL	mg/Kg	J	Q
CADMIUM	0.0764	J	0.0463	MDL	0.116	PQL	mg/Kg	J	Z
CHROMIUM	21.0		0.139	MDL	0.463	PQL	mg/Kg	J	A, Q
COBALT	6.21		0.0232	MDL	0.116	PQL	mg/Kg	J	A
COPPER	7.31		0.0764	MDL	0.463	PQL	mg/Kg	J	A, Q
LEAD	6.77		0.0120	MDL	0.232	PQL	mg/Kg	J	A, Q
NICKEL	12.7		0.116	MDL	0.463	PQL	mg/Kg	J	Q
SILVER	0.0624	J	0.0139	MDL	0.116	PQL	mg/Kg	J	Z
THALLIUM	0.308		0.0347	MDL	0.116	PQL	mg/Kg	J	Q
VANADIUM	43.9		0.0255	MDL	0.116	PQL	mg/Kg	J	A, Q

Sample ID: SL-154-SA5A-SB-7.0-8.0 ***Collected:*** 4/5/2011 11:22:00 ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.114	J	0.0463	MDL	0.463	PQL	mg/Kg	J	Z

Sample ID: SL-154-SA5A-SB-7.0-8.0 ***Collected:*** 4/5/2011 11:22:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	101		0.125	MDL	0.463	PQL	mg/Kg	J	A

Sample ID: SL-154-SA5A-SB-7.0-8.0 ***Collected:*** 4/5/2011 11:22:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.269		0.0694	MDL	0.231	PQL	mg/Kg	J	Q
ARSENIC	6.97		0.0926	MDL	0.463	PQL	mg/Kg	J	Q
CADMIUM	0.0659	J	0.0463	MDL	0.116	PQL	mg/Kg	J	Z
CHROMIUM	25.2		0.139	MDL	0.463	PQL	mg/Kg	J	A, Q
COBALT	8.18		0.0231	MDL	0.116	PQL	mg/Kg	J	A
COPPER	9.62		0.0764	MDL	0.463	PQL	mg/Kg	J	A, Q
LEAD	7.52		0.0120	MDL	0.231	PQL	mg/Kg	J	A, Q
NICKEL	15.0		0.116	MDL	0.463	PQL	mg/Kg	J	Q
SILVER	0.0599	J	0.0139	MDL	0.116	PQL	mg/Kg	J	Z
THALLIUM	0.386		0.0347	MDL	0.116	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE119 **Laboratory: LL**

EDD Filename: DE119_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 ***Matrix:*** SO

Sample ID: SL-154-SA5A-SB-7.0-8.0 ***Collected:*** 4/5/2011 11:22:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
VANADIUM	57.4		0.0255	MDL	0.116	PQL	mg/Kg	J	A, Q

Sample ID: SL-156-SA5A-SB-3.0-4.0 ***Collected:*** 4/5/2011 9:34:00 AM ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.151	J	0.0444	MDL	0.444	PQL	mg/Kg	J	Z

Sample ID: SL-156-SA5A-SB-3.0-4.0 ***Collected:*** 4/5/2011 9:34:00 AM ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	95.0		0.120	MDL	0.444	PQL	mg/Kg	J	A

Sample ID: SL-156-SA5A-SB-3.0-4.0 ***Collected:*** 4/5/2011 9:34:00 AM ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.368		0.0666	MDL	0.222	PQL	mg/Kg	J	Q
ARSENIC	6.02		0.0888	MDL	0.444	PQL	mg/Kg	J	Q
CADMIUM	0.0774	J	0.0444	MDL	0.111	PQL	mg/Kg	J	Z
CHROMIUM	18.7		0.133	MDL	0.444	PQL	mg/Kg	J	A, Q
COBALT	11.8		0.0222	MDL	0.111	PQL	mg/Kg	J	A
COPPER	8.38		0.0733	MDL	0.444	PQL	mg/Kg	J	A, Q
LEAD	8.56		0.0115	MDL	0.222	PQL	mg/Kg	J	A, Q
NICKEL	11.4		0.111	MDL	0.444	PQL	mg/Kg	J	Q
THALLIUM	0.360		0.0333	MDL	0.111	PQL	mg/Kg	J	Q
VANADIUM	38.7		0.0244	MDL	0.111	PQL	mg/Kg	J	A, Q

Method Category: METALS

Method: 7199 ***Matrix:*** AQ

Sample ID: EB11-SA5A-SB-040511 ***Collected:*** 4/5/2011 2:50:00 PM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	5.0	U	5.0	MDL	10.0	PQL	ug/L	UJ	H

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE119 **Laboratory: LL**

EDD Filename: DE119_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS
Method: 7199 **Matrix:** SO

Sample ID: SL-156-SA5A-SB-3.0-4.0 **Collected:** 4/5/2011 9:34:00 AM **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.36	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Method Category: METALS
Method: 7471A **Matrix:** SO

Sample ID: SL-156-SA5A-SB-3.0-4.0 **Collected:** 4/5/2011 9:34:00 AM **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0096	J	0.0032	MDL	0.110	PQL	mg/Kg	J	Z

Method Category: SVOA
Method: 1625C **Matrix:** SO

Sample ID: SL-154-SA5A-SB-4.0-5.0 **Collected:** 4/5/2011 11:15:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	35.3	J	19.4	MDL	38.7	PQL	ng/Kg	J	Z

Sample ID: SL-154-SA5A-SB-7.0-8.0 **Collected:** 4/5/2011 11:22:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	27.3	J	19.4	MDL	38.7	PQL	ng/Kg	J	Z

Method Category: SVOA
Method: 8015M **Matrix:** SO

Sample ID: SL-154-SA5A-SB-4.0-5.0 **Collected:** 4/5/2011 11:15:00 **Analysis Type:** REA2 **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C21-C30)	0.51	J	0.47	MDL	1.4	PQL	mg/Kg	J	Z, L
EFH (C30-C40)	0.58	J	0.47	MDL	1.4	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE119 **Laboratory: LL**

EDD Filename: DE119_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA
Method: 8015M **Matrix:** SO

Sample ID: SL-154-SA5A-SB-7.0-8.0 **Collected:** 4/5/2011 11:22:00 **Analysis Type:** REA2 **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	0.63	J	0.47	MDL	1.4	PQL	mg/Kg	J	Z

Sample ID: SL-156-SA5A-SB-3.0-4.0 **Collected:** 4/5/2011 9:34:00 AM **Analysis Type:** REA2 **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	1.2	J	0.45	MDL	1.4	PQL	mg/Kg	J	Z, L
EFH (C21-C30)	4.1		0.45	MDL	1.4	PQL	mg/Kg	J	L

Method Category: SVOA
Method: 8082 **Matrix:** SO

Sample ID: SL-156-SA5A-SB-3.0-4.0 **Collected:** 4/5/2011 9:34:00 AM **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	0.71	J	0.44	MDL	1.9	PQL	ug/Kg	J	Z
Aroclor 5460	2.9	J	1.1	MDL	3.7	PQL	ug/Kg	J	Z

Method Category: SVOA
Method: 8270C SIM **Matrix:** AQ

Sample ID: EB11-SA5A-SB-040511 **Collected:** 4/5/2011 2:50:00 PM **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	0.098	J	0.055	MDL	1.1	PQL	ug/L	J	Z
Diethylphthalate	0.066	J	0.055	MDL	1.1	PQL	ug/L	J	Z
Di-n-butylphthalate	0.62	J	0.055	MDL	1.1	PQL	ug/L	J	Z
NAPHTHALENE	0.036	J	0.033	MDL	0.055	PQL	ug/L	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE119

Laboratory: LL

EDD Filename: DE119_v1

eQAPP Name: CDM_SSFL_110509

Method Category: SVOA
Method: 8270C SIM **Matrix:** SO

Sample ID: SL-154-SA5A-SB-4.0-5.0 **Collected:** 4/5/2011 11:15:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	8.1	J	7.0	MDL	21	PQL	ug/Kg	J	Z
Diethylphthalate	8.7	J	7.0	MDL	21	PQL	ug/Kg	J	Z
Di-n-butylphthalate	10	J	7.0	MDL	21	PQL	ug/Kg	J	Z
N-NITROSODIMETHYLAMINE	0.77	U	0.77	MDL	1.9	PQL	ug/Kg	UJ	L

Sample ID: SL-154-SA5A-SB-7.0-8.0 **Collected:** 4/5/2011 11:22:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	7.7	J	7.0	MDL	21	PQL	ug/Kg	J	Z
Diethylphthalate	8.4	J	7.0	MDL	21	PQL	ug/Kg	J	Z
Di-n-butylphthalate	10	J	7.0	MDL	21	PQL	ug/Kg	J	Z
N-NITROSODIMETHYLAMINE	0.78	U	0.78	MDL	2.0	PQL	ug/Kg	UJ	L

Sample ID: SL-156-SA5A-SB-3.0-4.0 **Collected:** 4/5/2011 9:34:00 AM **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	0.88	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	0.90	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	8.6	J	6.7	MDL	20	PQL	ug/Kg	J	Z
Diethylphthalate	8.1	J	6.7	MDL	20	PQL	ug/Kg	J	Z
Di-n-butylphthalate	13	J	6.7	MDL	20	PQL	ug/Kg	J	Z
NAPHTHALENE	0.84	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
N-NITROSODIMETHYLAMINE	0.75	U	0.75	MDL	1.9	PQL	ug/Kg	UJ	L

Method Category: VOA
Method: 8015B **Matrix:** SO

Sample ID: SL-154-SA5A-SB-4.0-5.0 **Collected:** 4/5/2011 11:15:00 **Analysis Type:** REA3 **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
p-Terphenyl	1.8	U	1.8	MDL	4.1	PQL	mg/Kg	UJ	Q

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE119

Laboratory: LL

EDD Filename: DE119_v1

eQAPP Name: CDM_SSFL_110509

Method Category: VOA

Method: 8260B

Matrix: SO

Sample ID: SL-154-SA5A-SB-4.0-5.0 **Collected:** 4/5/2011 11:15:00 **Analysis Type:** RES **Dilution:** 0.85

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.98	J	0.24	MDL	4.0	PQL	ug/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE119

EDD Filename: DE119_v1

Laboratory: LL

eQAPP Name: CDM_SSFL_110509

Reason Code Legend

Reason Code	Description
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
*#	Professional Judgment
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Verification Correlation Coefficient
C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE119

Laboratory: LL

EDD Filename: DE119_v1

eQAPP Name: CDM_SSFL_110509

F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation
L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery Lower Estimation

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE119

Laboratory: LL

EDD Filename: DE119_v1

eQAPP Name: CDM_SSFL_110509

R	Continuing Calibration Verification Percent Recovery Lower Rejection
R	Continuing Calibration Verification Percent Recovery Upper Estimation
R	Continuing Calibration Verification Percent Recovery Upper Rejection
R	Continuing Calibration Verification Relative Response Factor
R	Initial Calibration Relative Response Factor
R	Initial Calibration Verification Percent Recovery Lower Estimation
R	Initial Calibration Verification Percent Recovery Lower Rejection
R	Initial Calibration Verification Percent Recovery Upper Estimation
R	Initial Calibration Verification Percent Recovery Upper Rejection
R	Initial Calibration Verification Relative Response Factor
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control Outlier Reports

DE119

QC Outlier Report: HoldingTimes

Lab Reporting Batch ID: DE119 **Laboratory: LL**
EDD Filename: DE119_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7199 **Preparation Method: Gen Prep**
Matrix: AQ

Sample ID	Type	Actual	Criteria	Units	Flag
EB11-SA5A-SB-040511 (RES)	Sampling To Analysis	25.00	24.00	HOURS	J (all detects) UJ (all non-detects)

Method Blank Outlier Report

Lab Reporting Batch ID: DE119 **Laboratory: LL**

EDD Filename: DE119_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B
Matrix: AQ

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P10248BB222213	4/17/2011 10:13:00 PM	IRON MANGANESE Zirconium	0.183 mg/L 0.0011 mg/L 0.0209 mg/L	EB11-SA5A-SB-040511

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
EB11-SA5A-SB-040511(RES)	IRON	0.168 mg/L	0.168U mg/L
EB11-SA5A-SB-040511(RES)	MANGANESE	0.0014 mg/L	0.0014U mg/L

Method: 6010B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P10208AB220725	4/16/2011 7:25:00 AM	ALUMINUM LITHIUM PHOSPHORUS TIN	29.3 mg/Kg 0.33 mg/Kg 1.22 mg/Kg 1.28 mg/Kg	SL-154-SA5A-SB-4.0-5.0 SL-154-SA5A-SB-7.0-8.0 SL-156-SA5A-SB-3.0-4.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-154-SA5A-SB-4.0-5.0(REA2)	TIN	2.91 mg/Kg	2.91U mg/Kg
SL-154-SA5A-SB-7.0-8.0(REA2)	TIN	3.15 mg/Kg	3.15U mg/Kg
SL-156-SA5A-SB-3.0-4.0(REA2)	TIN	2.94 mg/Kg	2.94U mg/Kg

Method: 6020
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P10226AB220850A	4/13/2011 8:50:00 AM	COPPER	0.162 mg/Kg	SL-154-SA5A-SB-4.0-5.0 SL-154-SA5A-SB-7.0-8.0 SL-156-SA5A-SB-3.0-4.0

Method: 8260B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB17B211327A	4/7/2011 1:27:00 PM	METHYLENE CHLORIDE TOLUENE	0.52 ug/Kg 0.09 ug/Kg	SL-154-SA5A-SB-4.0-5.0 SL-154-SA5A-SB-7.0-8.0 SL-156-SA5A-SB-3.0-4.0

Method Blank Outlier Report

Lab Reporting Batch ID: DE119 **Laboratory: LL**

EDD Filename: DE119_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8260B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-154-SA5A-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.98 ug/Kg	4.0U ug/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE119 **Laboratory: LL**

EDD Filename: DE119_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 300.0
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-154-SA5A-SB-4.0-5.0MS (SL-154-SA5A-SB-4.0-5.0 SL-154-SA5A-SB-7.0-8.0 SL-156-SA5A-SB-3.0-4.0)	FLUORIDE	67	-	80.00-120.00	-	FLUORIDE	J (all detects) UJ (all non-detects)

Method: 8015B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-154-SA5A-SB-4.0-5.0MS **SL-154-SA5A-SB-4.0-5.0MSD** (SL-154-SA5A-SB-4.0-5.0)	p-Terphenyl	74	74	75.00-125.00	-	p-Terphenyl	J(all detects) UJ(all non-detects)

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE119 **Laboratory: LL**

EDD Filename: DE119_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 300.0
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-154-SA5A-SB-4.0-5.0DUP (SL-154-SA5A-SB-4.0-5.0 SL -154-SA5A-SB-7.0-8.0 SL -156-SA5A-SB-3.0-4.0)	Nitrate-NO3	22	20.00	No Qual OK by difference

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE119 **Laboratory: LL**

EDD Filename: DE119_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C SIM
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P8WKLCSQ261832 **P8WKLCSY261904** (EB11-SA5A-SB-040511)	ACENAPHTHENE	116	112	74.00-109.00	-	ACENAPHTHENE	J (all detects)

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P10226AQ220853A (SL-154-SA5A-SB-4.0-5.0 SL -154-SA5A-SB-7.0-8.0 SL -156-SA5A-SB-3.0-4.0)	ANTIMONY	177	-	80.00-120.00	-	ANTIMONY	No Qual SRM within QC limits

Method: 8270C SIM
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P3LCLCSQ261825 (SL-154-SA5A-SB-4.0-5.0 SL -154-SA5A-SB-7.0-8.0 SL -156-SA5A-SB-3.0-4.0)	N-NITROSODIMETHYLAMINE	47	-	55.00-118.00	-	N-NITROSODIMETHYLAMINE	J(all detects) UJ(all non-detects)

Method: 8015M
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P10986AQ321544A (SL-154-SA5A-SB-4.0-5.0 SL -154-SA5A-SB-7.0-8.0 SL -156-SA5A-SB-3.0-4.0)	DIETHYLENE GLYCOL ETHYLENE GLYCOL Propylene glycol	174 176 181	- - -	75.00-125.00 65.00-122.00 75.00-125.00	- - -	DIETHYLENE GLYCOL ETHYLENE GLYCOL Propylene glycol	J(all detects)
P11045AQ322144A (SL-154-SA5A-SB-4.0-5.0 SL -154-SA5A-SB-7.0-8.0 SL -156-SA5A-SB-3.0-4.0)	EFH (C12-C14) EFH (C15-C20) EFH (C21-C30)	118 126 128	- - -	66.00-113.00 66.00-113.00 66.00-113.00	- - -	EFH (C12-C14) EFH (C15-C20) EFH (C21-C30)	J(all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE119 **Laboratory: LL**

EDD Filename: DE119_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B
Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB11-SA5A-SB-040511	IRON	J	0.168	0.200	PQL	mg/L	J (all detects)
	MAGNESIUM	J	0.0305	0.100	PQL	mg/L	
	MANGANESE	J	0.0014	0.0050	PQL	mg/L	

Method: 8270C SIM
Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB11-SA5A-SB-040511	BIS(2-ETHYLHEXYL)PHTHALATE	J	0.098	1.1	PQL	ug/L	J (all detects)
	Diethylphthalate	J	0.066	1.1	PQL	ug/L	
	Di-n-butylphthalate	J	0.62	1.1	PQL	ug/L	
	NAPHTHALENE	J	0.036	0.055	PQL	ug/L	

Method: 1625C
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-154-SA5A-SB-4.0-5.0	N-NITROSODIMETHYLAMINE	J	35.3	38.7	PQL	ng/Kg	J (all detects)
SL-154-SA5A-SB-7.0-8.0	N-NITROSODIMETHYLAMINE	J	27.3	38.7	PQL	ng/Kg	J (all detects)

Method: 300.0
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-154-SA5A-SB-4.0-5.0	Nitrate-NO3	J	1.4	1.8	PQL	mg/Kg	J (all detects)
SL-154-SA5A-SB-7.0-8.0	Nitrate-NO3	J	1.6	1.8	PQL	mg/Kg	J (all detects)
SL-156-SA5A-SB-3.0-4.0	Nitrate-NO3	J	1.1	1.7	PQL	mg/Kg	J (all detects)

Method: 6010B
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-154-SA5A-SB-4.0-5.0	BORON	J	1.44	5.85	PQL	mg/Kg	J (all detects)
	TIN	J	2.91	11.7	PQL	mg/Kg	
	Zirconium	J	2.19	5.85	PQL	mg/Kg	
SL-154-SA5A-SB-7.0-8.0	SODIUM	J	113	117	PQL	mg/Kg	J (all detects)
	TIN	J	3.15	11.7	PQL	mg/Kg	
	Zirconium	J	3.95	5.84	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE119 **Laboratory: LL**

EDD Filename: DE119_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-156-SA5A-SB-3.0-4.0	SODIUM	J	74.7	112	PQL	mg/Kg	J (all detects)
	TIN	J	2.94	11.2	PQL	mg/Kg	
	Zirconium	J	2.40	5.61	PQL	mg/Kg	

Method: 6020
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-154-SA5A-SB-4.0-5.0	ANTIMONY	J	0.201	0.232	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0764	0.116	PQL	mg/Kg	
	SELENIUM	J	0.0659	0.463	PQL	mg/Kg	
	SILVER	J	0.0624	0.116	PQL	mg/Kg	
SL-154-SA5A-SB-7.0-8.0	CADMIUM	J	0.0659	0.116	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.114	0.463	PQL	mg/Kg	
	SILVER	J	0.0599	0.116	PQL	mg/Kg	
SL-156-SA5A-SB-3.0-4.0	CADMIUM	J	0.0774	0.111	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.151	0.444	PQL	mg/Kg	

Method: 7199
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-156-SA5A-SB-3.0-4.0	HEXAVALENT CHROMIUM	J	0.36	1.1	PQL	mg/Kg	J (all detects)

Method: 7471A
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-156-SA5A-SB-3.0-4.0	MERCURY	J	0.0096	0.110	PQL	mg/Kg	J (all detects)

Method: 8015M
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-154-SA5A-SB-4.0-5.0	EFH (C21-C30)	J	0.51	1.4	PQL	mg/Kg	J (all detects)
	EFH (C30-C40)	J	0.58	1.4	PQL	mg/Kg	
SL-154-SA5A-SB-7.0-8.0	EFH (C30-C40)	J	0.63	1.4	PQL	mg/Kg	J (all detects)
SL-156-SA5A-SB-3.0-4.0	EFH (C15-C20)	J	1.2	1.4	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE119 **Laboratory: LL**

EDD Filename: DE119_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8082
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-156-SA5A-SB-3.0-4.0	AROCLOR 1260	J	0.71	1.9	PQL	ug/Kg	J (all detects)
	Aroclor 5460	J	2.9	3.7	PQL	ug/Kg	

Method: 8260B
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-154-SA5A-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.98	4.0	PQL	ug/Kg	J (all detects)

Method: 8270C SIM
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-154-SA5A-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	8.1	21	PQL	ug/Kg	J (all detects)
	Diethylphthalate	J	8.7	21	PQL	ug/Kg	
	Di-n-butylphthalate	J	10	21	PQL	ug/Kg	
SL-154-SA5A-SB-7.0-8.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	7.7	21	PQL	ug/Kg	J (all detects)
	Diethylphthalate	J	8.4	21	PQL	ug/Kg	
	Di-n-butylphthalate	J	10	21	PQL	ug/Kg	
SL-156-SA5A-SB-3.0-4.0	1-METHYLNAPHTHALENE	J	0.88	1.9	PQL	ug/Kg	J (all detects)
	2-METHYLNAPHTHALENE	J	0.90	1.9	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	8.6	20	PQL	ug/Kg	
	Diethylphthalate	J	8.1	20	PQL	ug/Kg	
	Di-n-butylphthalate	J	13	20	PQL	ug/Kg	
	NAPHTHALENE	J	0.84	1.9	PQL	ug/Kg	

LDC #: 25916B4
SDG #: DE119
Laboratory: Lancaster Laboratories

VALIDATION COMPLETENESS WORKSHEET
ADR

Date: 8-3-4

Reviewer: OR
2nd Reviewer: C

METHOD: Metals (EPA SW 846 Method 6010B/6020A/7000)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	N	Sampling dates:
II.	ICP/MS Tune	—	
III.	Calibration	—	
IV.	Blanks	A	No Quals
V.	ICP Interference Check Sample (ICS) Analysis	N	
VI.	Matrix Spike Analysis	N	MS/D (SDG: DE123)
VII.	Duplicate Sample Analysis	N	DUP ↓
VIII.	Laboratory Control Samples (LCS)	A	LCS
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	—	(SDG: DE123)
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	—	
XV	Field Blanks	—	

Note: A = Acceptable
N = Not provided/applicable
SW = See worksheet

ND = No compounds detected
R = Rinsate
FB = Field blank

D = Duplicate
TB = Trip blank
EB = Equipment blank

Validated Samples:

1	SL-154-SA5A-SB-4.0-5.0	11		21		31	
2	SL-154-SA5A-SB-7.0-8.0	12		22		32	
3	SL-156-SA5A-SB-3.0-4.0	13		23		33	
4	EB11-SA5A-SB-040511	14		24		34	
5		15		25		35	
6		16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

SAMPLE DELIVERY GROUP

DE120

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
06-Apr-2011	TB-040611	6251860	TB	5030B	8015M	III
06-Apr-2011	TB-040611	6251860	TB	5030B	8260B	III
06-Apr-2011	TB-040611	6251860	TB	5030B	8260B SIM	III
06-Apr-2011	SL-151-SA5A-SB-4.0-5.0	6251858	N	3050B	6010B	III
06-Apr-2011	SL-151-SA5A-SB-4.0-5.0	6251858	N	3050B	6020	III
06-Apr-2011	SL-151-SA5A-SB-4.0-5.0	6251858	N	3060A	7199	III
06-Apr-2011	SL-151-SA5A-SB-4.0-5.0	6251858	N	3546	1625C	III
06-Apr-2011	SL-151-SA5A-SB-4.0-5.0	6251858	N	3550B	8015B	III
06-Apr-2011	SL-151-SA5A-SB-4.0-5.0	6251858	N	3550B	8015M	III
06-Apr-2011	SL-151-SA5A-SB-4.0-5.0	6251858	N	3550B	8082	III
06-Apr-2011	SL-151-SA5A-SB-4.0-5.0	6251858	N	3550B	8270C	III
06-Apr-2011	SL-151-SA5A-SB-4.0-5.0	6251858	N	3550B	8270C SIM	III
06-Apr-2011	SL-151-SA5A-SB-4.0-5.0	6251858	N	5035	8015M	III
06-Apr-2011	SL-151-SA5A-SB-4.0-5.0	6251858	N	5035	8260B	III
06-Apr-2011	SL-151-SA5A-SB-4.0-5.0	6251858	N	5035	8260B SIM	III
06-Apr-2011	SL-151-SA5A-SB-4.0-5.0	6251858	N	8330	8330A	III
06-Apr-2011	SL-151-SA5A-SB-4.0-5.0	6251858	N	METHOD	300.0	III
06-Apr-2011	SL-151-SA5A-SB-4.0-5.0	6251858	N	METHOD	314.0	III
06-Apr-2011	SL-151-SA5A-SB-4.0-5.0	6251858	N	METHOD	7471A	III
06-Apr-2011	SL-151-SA5A-SB-4.0-5.0	6251858	N	METHOD	8015B	III
06-Apr-2011	SL-151-SA5A-SB-4.0-5.0	6251858	N	METHOD	8015M	III
06-Apr-2011	SL-151-SA5A-SB-4.0-5.0	6251858	N	METHOD	8315A	III
06-Apr-2011	SL-151-SA5A-SB-4.0-5.0	6251858	N	METHOD	9012B	III
06-Apr-2011	SL-151-SA5A-SB-4.0-5.0MSD	P251858M322235A	MSD	METHOD	8015B	III
06-Apr-2011	SL-151-SA5A-SB-4.0-5.0MS	P251858R322220A	MS	METHOD	8015B	III
06-Apr-2011	EB12-SA5A-SB-040611	6251859	EB	3510C	8015B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
06-Apr-2011	EB12-SA5A-SB-040611	6251859	EB	3510C	8015M	III
06-Apr-2011	EB12-SA5A-SB-040611	6251859	EB	3520C	1625C	III
06-Apr-2011	EB12-SA5A-SB-040611	6251859	EB	5030B	8015M	III
06-Apr-2011	EB12-SA5A-SB-040611	6251859	EB	8330	8330A	III
06-Apr-2011	EB12-SA5A-SB-040611	6251859	EB	Gen Prep	300.0	III
06-Apr-2011	EB12-SA5A-SB-040611	6251859	EB	Gen Prep	8015B	III
06-Apr-2011	EB12-SA5A-SB-040611	6251859	EB	Gen Prep	8015M	III
06-Apr-2011	EB12-SA5A-SB-040611	6251859	EB	METHOD	8315A	III
06-Apr-2011	EB12-SA5A-SB-040611	6251859	EB	METHOD	9012B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE120 **Laboratory: LL**

EDD Filename: DE120_v1. **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6010B** ***Matrix:*** **SO**

Sample ID: SL-151-SA5A-SB-4.0-5.0 ***Collected:*** 4/6/2011 9:20:00 AM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	3.08	J	1.13	MDL	11.3	PQL	mg/Kg	U	B
Zirconium	4.08	J	0.949	MDL	5.65	PQL	mg/Kg	J	Z

Method Category: **METALS**

Method: **6020** ***Matrix:*** **SO**

Sample ID: SL-151-SA5A-SB-4.0-5.0 ***Collected:*** 4/6/2011 9:20:00 AM ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0837	J	0.0435	MDL	0.435	PQL	mg/Kg	J	Z

Sample ID: SL-151-SA5A-SB-4.0-5.0 ***Collected:*** 4/6/2011 9:20:00 AM ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.122	J	0.0652	MDL	0.217	PQL	mg/Kg	J	Z
CADMIUM	0.0565	J	0.0435	MDL	0.109	PQL	mg/Kg	J	Z
SILVER	0.0485	J	0.0130	MDL	0.109	PQL	mg/Kg	J	Z

Method Category: **SVOA**

Method: **1625C** ***Matrix:*** **AQ**

Sample ID: EB12-SA5A-SB-040611 ***Collected:*** 4/6/2011 9:40:00 AM ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	0.730	J	0.514	MDL	1.03	PQL	ng/L	J	Z, S

Method Category: **SVOA**

Method: **8015M** ***Matrix:*** **SO**

Sample ID: SL-151-SA5A-SB-4.0-5.0 ***Collected:*** 4/6/2011 9:20:00 AM ***Analysis Type:*** REA2 ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C21-C30)	0.48	J	0.45	MDL	1.4	PQL	mg/Kg	J	Z, L
EFH (C30-C40)	0.87	J	0.45	MDL	1.4	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE120 **Laboratory: LL**

EDD Filename: DE120_v1. **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **8270C SIM** ***Matrix:*** **SO**

Sample ID: **SL-151-SA5A-SB-4.0-5.0** ***Collected:*** **4/6/2011 9:20:00 AM** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	7.2	J	6.7	MDL	20	PQL	ug/Kg	J	Z
Diethylphthalate	7.9	J	6.7	MDL	20	PQL	ug/Kg	J	Z
Di-n-butylphthalate	9.7	J	6.7	MDL	20	PQL	ug/Kg	J	Z
N-NITROSODIMETHYLAMINE	0.75	U	0.75	MDL	1.9	PQL	ug/Kg	UJ	L

Method Category: **VOA**

Method: **8015B** ***Matrix:*** **AQ**

Sample ID: **EB12-SA5A-SB-040611** ***Collected:*** **4/6/2011 9:40:00 AM** ***Analysis Type:*** **REA3** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
m-Terphenyl	0.085	U	0.085	MDL	0.27	PQL	mg/L	UJ	S
O-TERPHENYL	0.085	U	0.085	MDL	0.27	PQL	mg/L	UJ	S
p-Terphenyl	0.085	U	0.085	MDL	0.27	PQL	mg/L	UJ	L, S

Method Category: **VOA**

Method: **8260B** ***Matrix:*** **SO**

Sample ID: **SL-151-SA5A-SB-4.0-5.0** ***Collected:*** **4/6/2011 9:20:00 AM** ***Analysis Type:*** **RES** ***Dilution:*** **0.83**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	2.1	J	0.23	MDL	3.8	PQL	ug/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE120 **Laboratory: LL**

EDD Filename: DE120_v1. **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Laboratory Triplicate Precision
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
*#	Professional Judgment
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Verification Correlation Coefficient
C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Verification Percent Recovery Upper Rejection
E	Laboratory Control Precision
E	Laboratory Duplicate Precision

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE120 **Laboratory: LL**

EDD Filename: DE120_v1. **eQAPP Name: CDM_SSFL_110509**

E	Matrix Spike Precision
F	Equipment Blank Contamination
F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation
L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Q	Matrix Spike Upper Rejection

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE120 **Laboratory: LL**

EDD Filename: DE120_v1. **eQAPP Name: CDM_SSFL_110509**

R	Continuing Calibration Verification Percent Recovery Lower Estimation
R	Continuing Calibration Verification Percent Recovery Lower Rejection
R	Continuing Calibration Verification Percent Recovery Upper Estimation
R	Continuing Calibration Verification Percent Recovery Upper Rejection
R	Continuing Calibration Verification Relative Response Factor
R	Initial Calibration Relative Response Factor
R	Initial Calibration Verification Percent Recovery Lower Estimation
R	Initial Calibration Verification Percent Recovery Lower Rejection
R	Initial Calibration Verification Percent Recovery Upper Estimation
R	Initial Calibration Verification Percent Recovery Upper Rejection
R	Initial Calibration Verification Relative Response Factor
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

Level III ADR Outliers
(including Manual Review Outliers)

Quality Control Outlier Reports

DE120

Method Blank Outlier Report

Lab Reporting Batch ID: DE120 **Laboratory: LL**

EDD Filename: DE120_v1. **eQAPP Name: CDM_SSFL_110509**

Method: **6010B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P10208AB220725	4/16/2011 7:25:00 AM	ALUMINUM LITHIUM PHOSPHORUS TIN	29.3 mg/Kg 0.33 mg/Kg 1.22 mg/Kg 1.28 mg/Kg	SL-151-SA5A-SB-4.0-5.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-151-SA5A-SB-4.0-5.0(RES)	TIN	3.08 mg/Kg	3.08U mg/Kg

Method: **6020**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P10226AB220850A	4/13/2011 8:50:00 AM	COPPER	0.162 mg/Kg	SL-151-SA5A-SB-4.0-5.0

Method: **8260B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB20B211253A	4/12/2011 12:53:00 PM	METHYLENE CHLORIDE	0.64 ug/Kg	SL-151-SA5A-SB-4.0-5.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-151-SA5A-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	2.1 ug/Kg	3.8U ug/Kg

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE120 **Laboratory: LL**

EDD Filename: DE120_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 8015B
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11028AQ320112A P11028AY320157A (EB12-SA5A-SB-040611)	p-Terphenyl	71	73	75.00-125.00	-	p-Terphenyl	J(all detects) UJ(all non-detects)

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P10226AQ220853A (SL-151-SA5A-SB-4.0-5.0)	ANTIMONY	177	-	80.00-120.00	-	ANTIMONY	No Qual, SRM within QC limits

Method: 8270C SIM
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P3LCLCSQ261825 (SL-151-SA5A-SB-4.0-5.0)	N-NITROSODIMETHYLAMINE	47	-	55.00-118.00	-	N-NITROSODIMETHYLAMINE	J(all detects) UJ(all non-detects)

Method: 8015M
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P10986AQ321544A (SL-151-SA5A-SB-4.0-5.0)	DIETHYLENE GLYCOL ETHYLENE GLYCOL Propylene glycol	174 176 181	- - -	75.00-125.00 65.00-122.00 75.00-125.00	- - -	DIETHYLENE GLYCOL ETHYLENE GLYCOL Propylene glycol	J(all detects)
P11045AQ322144A (SL-151-SA5A-SB-4.0-5.0)	EFH (C12-C14) EFH (C15-C20) EFH (C21-C30)	118 126 128	- - -	66.00-113.00 66.00-113.00 66.00-113.00	- - -	EFH (C12-C14) EFH (C15-C20) EFH (C21-C30)	J(all detects)

Surrogate Outlier Report

Lab Reporting Batch ID: DE120 **Laboratory: LL**

EDD Filename: DE120_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 1625C
Matrix: AQ

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
EB12-SA5A-SB-040611	N-Nitrosodimethylamine-d6	183	50.00-150.00	All Target Analytes	J (all detects)

Method: 8015B
Matrix: AQ

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
EB12-SA5A-SB-040611	n-Triacontane-d62	28	50.00-150.00	All Target Analytes	J(all detects) UJ(all non-detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE120 | Laboratory: LL

EDD Filename: DE120_v1. | eQAPP Name: CDM_SSFL_110509

Method: 1625C
Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB12-SA5A-SB-040611	N-NITROSODIMETHYLAMINE	J	0.730	1.03	PQL	ng/L	J (all detects)

Method: 6010B
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-151-SA5A-SB-4.0-5.0	TIN	J	3.08	11.3	PQL	mg/Kg	J (all detects)
	Zirconium	J	4.08	5.65	PQL	mg/Kg	

Method: 6020
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-151-SA5A-SB-4.0-5.0	ANTIMONY	J	0.122	0.217	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0565	0.109	PQL	mg/Kg	
	SELENIUM	J	0.0837	0.435	PQL	mg/Kg	
	SILVER	J	0.0485	0.109	PQL	mg/Kg	

Method: 8015M
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-151-SA5A-SB-4.0-5.0	EFH (C21-C30)	J	0.48	1.4	PQL	mg/Kg	J (all detects)
	EFH (C30-C40)	J	0.87	1.4	PQL	mg/Kg	

Method: 8260B
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-151-SA5A-SB-4.0-5.0	METHYLENE CHLORIDE	J	2.1	3.8	PQL	ug/Kg	J (all detects)

Method: 8270C SIM
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-151-SA5A-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	7.2	20	PQL	ug/Kg	J (all detects)
	Diethylphthalate	J	7.9	20	PQL	ug/Kg	
	Di-n-butylphthalate	J	9.7	20	PQL	ug/Kg	

LDC #: 26078A4 **VALIDATION COMPLETENESS WORKSHEET** Date: 8/29/11
SDG #: DE120 ADR Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: OC
2nd Reviewer: A

METHOD: Metals (EPA SW 846 Method 6010B/6020A/7000)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	N	Sampling dates:
II.	ICP/MS Tune	—	
III.	Calibration	—	
IV.	Blanks	A	No quals by ICB/CCB
V.	ICP Interference Check Sample (ICS) Analysis	N	
VI.	Matrix Spike Analysis	N	CS
VII.	Duplicate Sample Analysis	N	↓
VIII.	Laboratory Control Samples (LCS)	A	LCS
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	N	Not performed
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	—	
XV	Field Blanks	—	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: 5

1	SL-151-SA5A-SB-4.0-5.0	11		21		31	
2		12		22		32	
3		13		23		33	
4		14		24		34	
5		15		25		35	
6		16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

SAMPLE DELIVERY GROUP

DE121

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
07-Apr-2011	TB-040711	6253030	TB	5030B	8015M	III
07-Apr-2011	TB-040711	6253030	TB	5030B	8260B	III
07-Apr-2011	TB-040711	6253030	TB	5030B	8260B SIM	III
07-Apr-2011	SL-081-SA5A-SB-2.0-3.0	6253027	N	3050B	6010B	III
07-Apr-2011	SL-081-SA5A-SB-2.0-3.0	6253027	N	3050B	6020	III
07-Apr-2011	SL-081-SA5A-SB-2.0-3.0	6253027	N	3060A	7199	III
07-Apr-2011	SL-081-SA5A-SB-2.0-3.0	6253027	N	3550B	8082	III
07-Apr-2011	SL-081-SA5A-SB-2.0-3.0	6253027	N	3550B	8270C	III
07-Apr-2011	SL-081-SA5A-SB-2.0-3.0	6253027	N	3550B	8270C SIM	III
07-Apr-2011	SL-081-SA5A-SB-2.0-3.0	6253027	N	5035	8260B	III
07-Apr-2011	SL-081-SA5A-SB-2.0-3.0	6253027	N	5035	8260B SIM	III
07-Apr-2011	SL-081-SA5A-SB-2.0-3.0	6253027	N	Gen Prep	9045M	III
07-Apr-2011	SL-081-SA5A-SB-2.0-3.0	6253027	N	METHOD	300.0	III
07-Apr-2011	SL-081-SA5A-SB-2.0-3.0	6253027	N	METHOD	314.0	III
07-Apr-2011	SL-081-SA5A-SB-2.0-3.0	6253027	N	METHOD	7471A	III
07-Apr-2011	SL-080-SA5A-SB-3.0-4.0	6253026	N	3050B	6010B	III
07-Apr-2011	SL-080-SA5A-SB-3.0-4.0	6253026	N	3050B	6020	III
07-Apr-2011	SL-080-SA5A-SB-3.0-4.0	6253026	N	3060A	7199	III
07-Apr-2011	SL-080-SA5A-SB-3.0-4.0	6253026	N	3550B	8082	III
07-Apr-2011	SL-080-SA5A-SB-3.0-4.0	6253026	N	3550B	8270C	III
07-Apr-2011	SL-080-SA5A-SB-3.0-4.0	6253026	N	3550B	8270C SIM	III
07-Apr-2011	SL-080-SA5A-SB-3.0-4.0	6253026	N	5035	8260B	III
07-Apr-2011	SL-080-SA5A-SB-3.0-4.0	6253026	N	5035	8260B SIM	III
07-Apr-2011	SL-080-SA5A-SB-3.0-4.0	6253026	N	Gen Prep	9045M	III
07-Apr-2011	SL-080-SA5A-SB-3.0-4.0	6253026	N	METHOD	300.0	III
07-Apr-2011	SL-080-SA5A-SB-3.0-4.0	6253026	N	METHOD	314.0	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
07-Apr-2011	SL-080-SA5A-SB-3.0-4.0	6253026	N	METHOD	7471A	III
07-Apr-2011	SL-080-SA5A-SB-3.0-4.0DUP	P253026D271122B	DUP	METHOD	314.0	III
07-Apr-2011	SL-080-SA5A-SB-3.0-4.0MS	P253026R272357B	MS	METHOD	314.0	III
07-Apr-2011	SL-079-SA5A-SB-4.0-5.0	6253025	N	3050B	6010B	III
07-Apr-2011	SL-079-SA5A-SB-4.0-5.0	6253025	N	3050B	6020	III
07-Apr-2011	SL-079-SA5A-SB-4.0-5.0	6253025	N	3060A	7199	III
07-Apr-2011	SL-079-SA5A-SB-4.0-5.0	6253025	N	3550B	8082	III
07-Apr-2011	SL-079-SA5A-SB-4.0-5.0	6253025	N	3550B	8270C	III
07-Apr-2011	SL-079-SA5A-SB-4.0-5.0	6253025	N	3550B	8270C SIM	III
07-Apr-2011	SL-079-SA5A-SB-4.0-5.0	6253025	N	5035	8260B	III
07-Apr-2011	SL-079-SA5A-SB-4.0-5.0	6253025	N	5035	8260B SIM	III
07-Apr-2011	SL-079-SA5A-SB-4.0-5.0	6253025	N	Gen Prep	9045M	III
07-Apr-2011	SL-079-SA5A-SB-4.0-5.0	6253025	N	METHOD	300.0	III
07-Apr-2011	SL-079-SA5A-SB-4.0-5.0	6253025	N	METHOD	314.0	III
07-Apr-2011	SL-079-SA5A-SB-4.0-5.0	6253025	N	METHOD	7471A	III
07-Apr-2011	SL-079-SA5A-SB-4.0-5.0DUP	P253025D271225A	DUP	METHOD	300.0	III
07-Apr-2011	SL-079-SA5A-SB-4.0-5.0MS	P253025R271240A	MS	METHOD	300.0	III
07-Apr-2011	SL-258-SA5A-SB-4.0-5.0	6253028	N	3050B	6010B	III
07-Apr-2011	SL-258-SA5A-SB-4.0-5.0	6253028	N	3050B	6020	III
07-Apr-2011	SL-258-SA5A-SB-4.0-5.0	6253028	N	3060A	7199	III
07-Apr-2011	SL-258-SA5A-SB-4.0-5.0	6253028	N	3546	1625C	III
07-Apr-2011	SL-258-SA5A-SB-4.0-5.0	6253028	N	3550B	8015B	III
07-Apr-2011	SL-258-SA5A-SB-4.0-5.0	6253028	N	3550B	8015M	III
07-Apr-2011	SL-258-SA5A-SB-4.0-5.0	6253028	N	3550B	8082	III
07-Apr-2011	SL-258-SA5A-SB-4.0-5.0	6253028	N	3550B	8270C	III
07-Apr-2011	SL-258-SA5A-SB-4.0-5.0	6253028	N	3550B	8270C SIM	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
07-Apr-2011	SL-258-SA5A-SB-4.0-5.0	6253028	N	5035	8015M	III
07-Apr-2011	SL-258-SA5A-SB-4.0-5.0	6253028	N	5035	8260B	III
07-Apr-2011	SL-258-SA5A-SB-4.0-5.0	6253028	N	5035	8260B SIM	III
07-Apr-2011	SL-258-SA5A-SB-4.0-5.0	6253028	N	8330	8330A	III
07-Apr-2011	SL-258-SA5A-SB-4.0-5.0	6253028	N	Gen Prep	9045M	III
07-Apr-2011	SL-258-SA5A-SB-4.0-5.0	6253028	N	METHOD	300.0	III
07-Apr-2011	SL-258-SA5A-SB-4.0-5.0	6253028	N	METHOD	314.0	III
07-Apr-2011	SL-258-SA5A-SB-4.0-5.0	6253028	N	METHOD	7471A	III
07-Apr-2011	SL-258-SA5A-SB-4.0-5.0	6253028	N	METHOD	8015B	III
07-Apr-2011	SL-258-SA5A-SB-4.0-5.0	6253028	N	METHOD	8015M	III
07-Apr-2011	SL-258-SA5A-SB-4.0-5.0	6253028	N	METHOD	8315A	III
07-Apr-2011	SL-258-SA5A-SB-4.0-5.0	6253028	N	METHOD	9012B	III
07-Apr-2011	SL-258-SA5A-SB-4.0-5.0DUP	P253028D291400B	DUP	Gen Prep	9045M	III
07-Apr-2011	SL-258-SA5A-SB-4.0-5.0MSD	P253028M322009A	MSD	METHOD	8015M	III
07-Apr-2011	SL-258-SA5A-SB-4.0-5.0MS	P253028R321951A	MS	METHOD	8015M	III
07-Apr-2011	SL-088-SA5A-SB-4.0-5.0	6253029	N	3050B	6010B	III
07-Apr-2011	SL-088-SA5A-SB-4.0-5.0	6253029	N	3050B	6020	III
07-Apr-2011	SL-088-SA5A-SB-4.0-5.0	6253029	N	3060A	7199	III
07-Apr-2011	SL-088-SA5A-SB-4.0-5.0	6253029	N	3550B	8082	III
07-Apr-2011	SL-088-SA5A-SB-4.0-5.0	6253029	N	3550B	8270C	III
07-Apr-2011	SL-088-SA5A-SB-4.0-5.0	6253029	N	3550B	8270C SIM	III
07-Apr-2011	SL-088-SA5A-SB-4.0-5.0	6253029	N	5035	8260B	III
07-Apr-2011	SL-088-SA5A-SB-4.0-5.0	6253029	N	5035	8260B SIM	III
07-Apr-2011	SL-088-SA5A-SB-4.0-5.0	6253029	N	Gen Prep	9045M	III
07-Apr-2011	SL-088-SA5A-SB-4.0-5.0	6253029	N	METHOD	300.0	III
07-Apr-2011	SL-088-SA5A-SB-4.0-5.0	6253029	N	METHOD	314.0	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
07-Apr-2011	SL-088-SA5A-SB-4.0-5.0	6253029	N	METHOD	7471A	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE121 **Laboratory: LL**

EDD Filename: DE121_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B ***Matrix:*** SO

Sample ID: SL-079-SA5A-SB-4.0-5.0 ***Collected:*** 4/7/2011 11:05:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LITHIUM	29.7		0.24	MDL	2.2	PQL	mg/Kg	J	A
PHOSPHORUS	411		0.609	MDL	10.9	PQL	mg/Kg	J	Q
POTASSIUM	2900		19.6	MDL	54.4	PQL	mg/Kg	J	Q
SODIUM	70.6	J	40.6	MDL	109	PQL	mg/Kg	J	Z
TIN	3.37	J	1.09	MDL	10.9	PQL	mg/Kg	U	B
Zirconium	3.75	J	0.914	MDL	5.44	PQL	mg/Kg	J	Z

Sample ID: SL-080-SA5A-SB-3.0-4.0 ***Collected:*** 4/7/2011 9:58:00 AM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LITHIUM	37.9		0.24	MDL	2.2	PQL	mg/Kg	J	A
PHOSPHORUS	523		0.609	MDL	10.9	PQL	mg/Kg	J	Q
POTASSIUM	3000		19.6	MDL	54.3	PQL	mg/Kg	J	Q
TIN	3.57	J	1.09	MDL	10.9	PQL	mg/Kg	U	B
Zirconium	3.60	J	0.913	MDL	5.43	PQL	mg/Kg	J	Z

Sample ID: SL-081-SA5A-SB-2.0-3.0 ***Collected:*** 4/7/2011 9:00:00 AM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LITHIUM	28.8		0.24	MDL	2.2	PQL	mg/Kg	J	A
PHOSPHORUS	424		0.605	MDL	10.8	PQL	mg/Kg	J	Q
POTASSIUM	2700		19.5	MDL	54.1	PQL	mg/Kg	J	Q
SODIUM	89.5	J	40.3	MDL	108	PQL	mg/Kg	J	Z
TIN	2.84	J	1.08	MDL	10.8	PQL	mg/Kg	U	B
Zirconium	2.70	J	0.908	MDL	5.41	PQL	mg/Kg	J	Z

Sample ID: SL-088-SA5A-SB-4.0-5.0 ***Collected:*** 4/7/2011 3:23:00 PM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LITHIUM	27.3		0.25	MDL	2.3	PQL	mg/Kg	J	A
PHOSPHORUS	327		0.640	MDL	11.4	PQL	mg/Kg	J	Q
POTASSIUM	2400		20.6	MDL	57.1	PQL	mg/Kg	J	Q
SODIUM	87.0	J	42.6	MDL	114	PQL	mg/Kg	J	Z
TIN	3.13	J	1.14	MDL	11.4	PQL	mg/Kg	U	B
Zirconium	4.00	J	0.960	MDL	5.71	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE121 **Laboratory: LL**

EDD Filename: DE121_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS
Method: 6010B **Matrix:** SO

Sample ID: SL-258-SA5A-SB-4.0-5.0 **Collected:** 4/7/2011 2:03:00 PM **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	5.88	J	1.09	MDL	6.15	PQL	mg/Kg	J	Z
LITHIUM	26.0		0.27	MDL	2.5	PQL	mg/Kg	J	A
PHOSPHORUS	628		0.689	MDL	12.3	PQL	mg/Kg	J	Q
POTASSIUM	6680		22.1	MDL	61.5	PQL	mg/Kg	J	Q
SODIUM	109	J	45.9	MDL	123	PQL	mg/Kg	J	Z
TIN	3.21	J	1.23	MDL	12.3	PQL	mg/Kg	U	B
Zirconium	4.55	J	1.03	MDL	6.15	PQL	mg/Kg	J	Z

Method Category: METALS
Method: 6020 **Matrix:** SO

Sample ID: SL-079-SA5A-SB-4.0-5.0 **Collected:** 4/7/2011 11:05:00 **Analysis Type:** REA **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.139	J	0.0435	MDL	0.435	PQL	mg/Kg	J	Z

Sample ID: SL-079-SA5A-SB-4.0-5.0 **Collected:** 4/7/2011 11:05:00 **Analysis Type:** REA3 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	75.2		0.118	MDL	0.435	PQL	mg/Kg	J	A

Sample ID: SL-079-SA5A-SB-4.0-5.0 **Collected:** 4/7/2011 11:05:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.134	J	0.0653	MDL	0.218	PQL	mg/Kg	J	Z, Q
ARSENIC	5.20		0.0870	MDL	0.435	PQL	mg/Kg	J	Q
CHROMIUM	17.9		0.131	MDL	0.435	PQL	mg/Kg	J	Q, A
COBALT	6.21		0.0218	MDL	0.109	PQL	mg/Kg	J	A
COPPER	8.73		0.0718	MDL	0.435	PQL	mg/Kg	J	Q, A
LEAD	4.93		0.0113	MDL	0.218	PQL	mg/Kg	J	Q, A
NICKEL	11.8		0.109	MDL	0.435	PQL	mg/Kg	J	Q
SILVER	0.0211	J	0.0131	MDL	0.109	PQL	mg/Kg	J	Z
THALLIUM	0.239		0.0326	MDL	0.109	PQL	mg/Kg	J	Q
VANADIUM	35.0		0.0239	MDL	0.109	PQL	mg/Kg	J	Q, A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE121 **Laboratory: LL**

EDD Filename: DE121_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 ***Matrix:*** SO

Sample ID: SL-080-SA5A-SB-3.0-4.0 ***Collected:*** 4/7/2011 9:58:00 AM ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.161	J	0.0439	MDL	0.439	PQL	mg/Kg	J	Z

Sample ID: SL-080-SA5A-SB-3.0-4.0 ***Collected:*** 4/7/2011 9:58:00 AM ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	84.3		0.119	MDL	0.439	PQL	mg/Kg	J	A

Sample ID: SL-080-SA5A-SB-3.0-4.0 ***Collected:*** 4/7/2011 9:58:00 AM ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.501		0.0659	MDL	0.220	PQL	mg/Kg	J	Q
ARSENIC	10.8		0.0878	MDL	0.439	PQL	mg/Kg	J	Q
CADMIUM	0.0979	J	0.0439	MDL	0.110	PQL	mg/Kg	J	Z
CHROMIUM	30.7		0.132	MDL	0.439	PQL	mg/Kg	J	Q, A
COBALT	14.7		0.0220	MDL	0.110	PQL	mg/Kg	J	A
COPPER	22.3		0.0724	MDL	0.439	PQL	mg/Kg	J	Q, A
LEAD	13.0		0.0114	MDL	0.220	PQL	mg/Kg	J	Q, A
NICKEL	23.6		0.110	MDL	0.439	PQL	mg/Kg	J	Q
SILVER	0.0461	J	0.0132	MDL	0.110	PQL	mg/Kg	J	Z
THALLIUM	0.458		0.0329	MDL	0.110	PQL	mg/Kg	J	Q
VANADIUM	51.9		0.0241	MDL	0.110	PQL	mg/Kg	J	Q, A

Sample ID: SL-081-SA5A-SB-2.0-3.0 ***Collected:*** 4/7/2011 9:00:00 AM ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.166	J	0.0428	MDL	0.428	PQL	mg/Kg	J	Z

Sample ID: SL-081-SA5A-SB-2.0-3.0 ***Collected:*** 4/7/2011 9:00:00 AM ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	122		0.116	MDL	0.428	PQL	mg/Kg	J	A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE121 **Laboratory: LL**

EDD Filename: DE121_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 ***Matrix:*** SO

Sample ID: SL-081-SA5A-SB-2.0-3.0 ***Collected:*** 4/7/2011 9:00:00 AM ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.283		0.0642	MDL	0.214	PQL	mg/Kg	J	Q
ARSENIC	7.25		0.0857	MDL	0.428	PQL	mg/Kg	J	Q
CHROMIUM	24.6		0.128	MDL	0.428	PQL	mg/Kg	J	Q, A
COBALT	8.62		0.0214	MDL	0.107	PQL	mg/Kg	J	A
COPPER	11.4		0.0707	MDL	0.428	PQL	mg/Kg	J	Q, A
LEAD	7.69		0.0111	MDL	0.214	PQL	mg/Kg	J	Q, A
NICKEL	17.2		0.107	MDL	0.428	PQL	mg/Kg	J	Q
SILVER	0.0267	J	0.0128	MDL	0.107	PQL	mg/Kg	J	Z
THALLIUM	0.362		0.0321	MDL	0.107	PQL	mg/Kg	J	Q
VANADIUM	50.6		0.0236	MDL	0.107	PQL	mg/Kg	J	Q, A

Sample ID: SL-088-SA5A-SB-4.0-5.0 ***Collected:*** 4/7/2011 3:23:00 PM ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.163	J	0.0453	MDL	0.453	PQL	mg/Kg	J	Z

Sample ID: SL-088-SA5A-SB-4.0-5.0 ***Collected:*** 4/7/2011 3:23:00 PM ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	78.8		0.122	MDL	0.453	PQL	mg/Kg	J	A

Sample ID: SL-088-SA5A-SB-4.0-5.0 ***Collected:*** 4/7/2011 3:23:00 PM ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0941	J	0.0679	MDL	0.226	PQL	mg/Kg	J	Z, Q
ARSENIC	4.29		0.0905	MDL	0.453	PQL	mg/Kg	J	Q
CADMIUM	0.0758	J	0.0453	MDL	0.113	PQL	mg/Kg	J	Z
CHROMIUM	19.4		0.136	MDL	0.453	PQL	mg/Kg	J	Q, A
COBALT	5.95		0.0226	MDL	0.113	PQL	mg/Kg	J	A
COPPER	6.98		0.0747	MDL	0.453	PQL	mg/Kg	J	Q, A
LEAD	5.28		0.0118	MDL	0.226	PQL	mg/Kg	J	Q, A
NICKEL	11.4		0.113	MDL	0.453	PQL	mg/Kg	J	Q
SILVER	0.0441	J	0.0136	MDL	0.113	PQL	mg/Kg	J	Z
THALLIUM	0.317		0.0339	MDL	0.113	PQL	mg/Kg	J	Q
VANADIUM	39.1		0.0249	MDL	0.113	PQL	mg/Kg	J	Q, A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE121 **Laboratory: LL**

EDD Filename: DE121_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 ***Matrix:*** SO

Sample ID: SL-258-SA5A-SB-4.0-5.0 ***Collected:*** 4/7/2011 2:03:00 PM ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.215	J	0.0487	MDL	0.487	PQL	mg/Kg	J	Z

Sample ID: SL-258-SA5A-SB-4.0-5.0 ***Collected:*** 4/7/2011 2:03:00 PM ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	117		0.132	MDL	0.487	PQL	mg/Kg	J	A

Sample ID: SL-258-SA5A-SB-4.0-5.0 ***Collected:*** 4/7/2011 2:03:00 PM ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.343		0.0731	MDL	0.244	PQL	mg/Kg	J	Q
ARSENIC	6.98		0.0974	MDL	0.487	PQL	mg/Kg	J	Q
CHROMIUM	29.6		0.146	MDL	0.487	PQL	mg/Kg	J	Q, A
COBALT	11.3		0.0244	MDL	0.122	PQL	mg/Kg	J	A
COPPER	20.0		0.0804	MDL	0.487	PQL	mg/Kg	J	Q, A
LEAD	10.8		0.0127	MDL	0.244	PQL	mg/Kg	J	Q, A
NICKEL	23.3		0.122	MDL	0.487	PQL	mg/Kg	J	Q
SILVER	0.0471	J	0.0146	MDL	0.122	PQL	mg/Kg	J	Z
THALLIUM	0.318		0.0365	MDL	0.122	PQL	mg/Kg	J	Q
VANADIUM	56.3		0.0268	MDL	0.122	PQL	mg/Kg	J	Q, A

Method Category: METALS

Method: 7199 ***Matrix:*** SO

Sample ID: SL-081-SA5A-SB-2.0-3.0 ***Collected:*** 4/7/2011 9:00:00 AM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.31	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-088-SA5A-SB-4.0-5.0 ***Collected:*** 4/7/2011 3:23:00 PM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.41	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE121 **Laboratory: LL**

EDD Filename: DE121_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS
Method: 7199 **Matrix:** SO

Sample ID: SL-258-SA5A-SB-4.0-5.0 **Collected:** 4/7/2011 2:03:00 PM **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.56	J	0.25	MDL	1.2	PQL	mg/Kg	J	Z

Method Category: SVOA
Method: 8015M **Matrix:** SO

Sample ID: SL-258-SA5A-SB-4.0-5.0 **Collected:** 4/7/2011 2:03:00 PM **Analysis Type:** REA2S **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	1.2	J	0.49	MDL	1.5	PQL	mg/Kg	J	Z, L
EFH (C21-C30)	3.8		0.49	MDL	1.5	PQL	mg/Kg	J	L

Method Category: SVOA
Method: 8082 **Matrix:** SO

Sample ID: SL-080-SA5A-SB-3.0-4.0 **Collected:** 4/7/2011 9:58:00 AM **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	0.54	J	0.43	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-088-SA5A-SB-4.0-5.0 **Collected:** 4/7/2011 3:23:00 PM **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	1.5	J	0.45	MDL	2.0	PQL	ug/Kg	J	Z

Method Category: SVOA
Method: 8270C SIM **Matrix:** SO

Sample ID: SL-079-SA5A-SB-4.0-5.0 **Collected:** 4/7/2011 11:05:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	1.5	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
Diethylphthalate	7.5	J	6.6	MDL	20	PQL	ug/Kg	J	Z
Di-n-butylphthalate	9.7	J	6.6	MDL	20	PQL	ug/Kg	J	Z
NAPHTHALENE	0.87	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE121 **Laboratory: LL**

EDD Filename: DE121_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **8270C SIM** ***Matrix:*** **SO**

Sample ID: **SL-079-SA5A-SB-4.0-5.0** ***Collected:*** **4/7/2011 11:05:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	0.73	U	0.73	MDL	1.8	PQL	ug/Kg	UJ	L
PHENANTHRENE	0.82	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: **SL-080-SA5A-SB-3.0-4.0** ***Collected:*** **4/7/2011 9:58:00 AM** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	9.5	J	6.6	MDL	20	PQL	ug/Kg	J	Z
Butylbenzylphthalate	6.9	J	6.6	MDL	20	PQL	ug/Kg	J	Z
CHRYSENE	0.38	J	0.37	MDL	1.8	PQL	ug/Kg	J	Z
Diethylphthalate	7.9	J	6.6	MDL	20	PQL	ug/Kg	J	Z
Di-n-butylphthalate	9.5	J	6.6	MDL	20	PQL	ug/Kg	J	Z
N-NITROSODIMETHYLAMINE	0.74	U	0.74	MDL	1.8	PQL	ug/Kg	UJ	L

Sample ID: **SL-081-SA5A-SB-2.0-3.0** ***Collected:*** **4/7/2011 9:00:00 AM** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	8.1	J	6.6	MDL	20	PQL	ug/Kg	J	Z
Diethylphthalate	7.6	J	6.6	MDL	20	PQL	ug/Kg	J	Z
Di-n-butylphthalate	10	J	6.6	MDL	20	PQL	ug/Kg	J	Z
N-NITROSODIMETHYLAMINE	0.74	U	0.74	MDL	1.8	PQL	ug/Kg	UJ	L

Sample ID: **SL-088-SA5A-SB-4.0-5.0** ***Collected:*** **4/7/2011 3:23:00 PM** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Diethylphthalate	8.1	J	6.9	MDL	21	PQL	ug/Kg	J	Z
Di-n-butylphthalate	11	J	6.9	MDL	21	PQL	ug/Kg	J	Z
NAPHTHALENE	0.99	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
N-NITROSODIMETHYLAMINE	0.77	U	0.77	MDL	1.9	PQL	ug/Kg	UJ	L

Sample ID: **SL-258-SA5A-SB-4.0-5.0** ***Collected:*** **4/7/2011 2:03:00 PM** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	12	J	7.3	MDL	22	PQL	ug/Kg	J	Z
Diethylphthalate	7.8	J	7.3	MDL	22	PQL	ug/Kg	J	Z
Di-n-butylphthalate	10	J	7.3	MDL	22	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE121 **Laboratory: LL**

EDD Filename: DE121_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA
Method: 8270C SIM **Matrix:** SO

Sample ID: SL-258-SA5A-SB-4.0-5.0 **Collected:** 4/7/2011 2:03:00 PM **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	0.81	U	0.81	MDL	2.0	PQL	ug/Kg	UJ	L

Method Category: VOA
Method: 8015B **Matrix:** SO

Sample ID: SL-258-SA5A-SB-4.0-5.0 **Collected:** 4/7/2011 2:03:00 PM **Analysis Type:** REA3S **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
m-Terphenyl	1.8	U	1.8	MDL	4.3	PQL	mg/Kg	UJ	S
O-TERPHENYL	1.8	U	1.8	MDL	4.3	PQL	mg/Kg	UJ	S
p-Terphenyl	1.8	U	1.8	MDL	4.3	PQL	mg/Kg	UJ	S

Method Category: VOA
Method: 8260B **Matrix:** SO

Sample ID: SL-079-SA5A-SB-4.0-5.0 **Collected:** 4/7/2011 11:05:00 **Analysis Type:** RES **Dilution:** 0.9

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.43	J	0.24	MDL	4.0	PQL	ug/Kg	U	B
TOLUENE	0.17	J	0.08	MDL	4.0	PQL	ug/Kg	J	Z

Sample ID: SL-080-SA5A-SB-3.0-4.0 **Collected:** 4/7/2011 9:58:00 AM **Analysis Type:** RES **Dilution:** 0.99

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.48	J	0.26	MDL	4.4	PQL	ug/Kg	U	B
TOLUENE	0.13	J	0.09	MDL	4.4	PQL	ug/Kg	J	Z

Sample ID: SL-081-SA5A-SB-2.0-3.0 **Collected:** 4/7/2011 9:00:00 AM **Analysis Type:** RES **Dilution:** 1.03

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.67	J	0.27	MDL	4.6	PQL	ug/Kg	U	B
TOLUENE	0.24	J	0.09	MDL	4.6	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE121 **Laboratory: LL**

EDD Filename: DE121_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **VOA**

Method: **8260B** ***Matrix:*** **SO**

Sample ID: **SL-088-SA5A-SB-4.0-5.0** ***Collected:*** **4/7/2011 3:23:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** **0.86**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.47	J	0.24	MDL	4.0	PQL	ug/Kg	U	B
TOLUENE	0.28	J	0.08	MDL	4.0	PQL	ug/Kg	J	Z

Sample ID: **SL-258-SA5A-SB-4.0-5.0** ***Collected:*** **4/7/2011 2:03:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** **0.9**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.38	J	0.27	MDL	4.4	PQL	ug/Kg	U	B
TOLUENE	0.09	J	0.09	MDL	4.4	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE121 **Laboratory: LL**

EDD Filename: DE121_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
*#	Professional Judgment
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Verification Correlation Coefficient
C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE121 **Laboratory: LL**

EDD Filename: DE121_v1 **eQAPP Name: CDM_SSFL_110509**

F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation
L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery Lower Estimation

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE121 **Laboratory: LL**

EDD Filename: DE121_v1 **eQAPP Name: CDM_SSFL_110509**

R	Continuing Calibration Verification Percent Recovery Lower Rejection
R	Continuing Calibration Verification Percent Recovery Upper Estimation
R	Continuing Calibration Verification Percent Recovery Upper Rejection
R	Continuing Calibration Verification Relative Response Factor
R	Initial Calibration Relative Response Factor
R	Initial Calibration Verification Percent Recovery Lower Estimation
R	Initial Calibration Verification Percent Recovery Lower Rejection
R	Initial Calibration Verification Percent Recovery Upper Estimation
R	Initial Calibration Verification Percent Recovery Upper Rejection
R	Initial Calibration Verification Relative Response Factor
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control Outlier Reports

DE121

Method Blank Outlier Report

Lab Reporting Batch ID: DE121 **Laboratory: LL**

EDD Filename: DE121_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P10208AB220725	4/16/2011 7:25:00 AM	ALUMINUM LITHIUM PHOSPHORUS TIN	29.3 mg/Kg 0.33 mg/Kg 1.22 mg/Kg 1.28 mg/Kg	SL-079-SA5A-SB-4.0-5.0 SL-080-SA5A-SB-3.0-4.0 SL-081-SA5A-SB-2.0-3.0 SL-088-SA5A-SB-4.0-5.0 SL-258-SA5A-SB-4.0-5.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-079-SA5A-SB-4.0-5.0(RES)	TIN	3.37 mg/Kg	3.37U mg/Kg
SL-080-SA5A-SB-3.0-4.0(RES)	TIN	3.57 mg/Kg	3.57U mg/Kg
SL-081-SA5A-SB-2.0-3.0(RES)	TIN	2.84 mg/Kg	2.84U mg/Kg
SL-088-SA5A-SB-4.0-5.0(RES)	TIN	3.13 mg/Kg	3.13U mg/Kg
SL-258-SA5A-SB-4.0-5.0(RES)	TIN	3.21 mg/Kg	3.21U mg/Kg

Method: 6020
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P10226AB220850A	4/13/2011 8:50:00 AM	COPPER	0.162 mg/Kg	SL-079-SA5A-SB-4.0-5.0 SL-080-SA5A-SB-3.0-4.0 SL-081-SA5A-SB-2.0-3.0 SL-088-SA5A-SB-4.0-5.0 SL-258-SA5A-SB-4.0-5.0

Method: 8260B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB20B211253A	4/12/2011 12:53:00 PM	METHYLENE CHLORIDE	0.64 ug/Kg	SL-079-SA5A-SB-4.0-5.0 SL-080-SA5A-SB-3.0-4.0 SL-081-SA5A-SB-2.0-3.0 SL-088-SA5A-SB-4.0-5.0 SL-258-SA5A-SB-4.0-5.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-079-SA5A-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.43 ug/Kg	4.0U ug/Kg
SL-080-SA5A-SB-3.0-4.0(RES)	METHYLENE CHLORIDE	0.48 ug/Kg	4.4U ug/Kg
SL-081-SA5A-SB-2.0-3.0(RES)	METHYLENE CHLORIDE	0.67 ug/Kg	4.6U ug/Kg
SL-088-SA5A-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.47 ug/Kg	4.0U ug/Kg
SL-258-SA5A-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.38 ug/Kg	4.4U ug/Kg

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE121 **Laboratory: LL**

EDD Filename: DE121_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8015M**
Matrix: **SO**

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-258-SA5A-SB-4.0-5.0MSD (SL-258-SA5A-SB-4.0-5.0)	DIETHYLENE GLYCOL	-	-	59.00-109.00	23 (20.00)	DIETHYLENE GLYCOL	J (all detects)

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE121 **Laboratory: LL**

EDD Filename: DE121_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P10226AQ220853A (SL-079-SA5A-SB-4.0-5.0 SL -080-SA5A-SB-3.0-4.0 SL -081-SA5A-SB-2.0-3.0 SL -088-SA5A-SB-4.0-5.0 SL -258-SA5A-SB-4.0-5.0)	ANTIMONY	177	-	80.00-120.00	-	ANTIMONY	No Qual SRM within QC limits

Method: 8270C SIM
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P3LCLCSQ261825 (SL-079-SA5A-SB-4.0-5.0 SL -080-SA5A-SB-3.0-4.0 SL -081-SA5A-SB-2.0-3.0 SL -088-SA5A-SB-4.0-5.0 SL -258-SA5A-SB-4.0-5.0)	N-NITROSODIMETHYLAMINE	47	-	55.00-118.00	-	N-NITROSODIMETHYLAMINE	J(all detects) UJ(all non-detects)

Method: 8015M
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11045AQ322144A (SL-258-SA5A-SB-4.0-5.0)	EFH (C12-C14) EFH (C15-C20) EFH (C21-C30)	118 126 128	- - -	66.00-113.00 66.00-113.00 66.00-113.00	- - -	EFH (C12-C14) EFH (C15-C20) EFH (C21-C30)	J(all detects)

Surrogate Outlier Report

Lab Reporting Batch ID: DE121 **Laboratory: LL**

EDD Filename: DE121_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8015B**
Matrix: **SO**

Sample ID	*Surrogate*	*Sample % Recovery*	*% Recovery Limits*	*Affected Compounds*	*Flag*
SL-258-SA5A-SB-4.0-5.0	n-Triacontane-d62	46	50.00-150.00	All Target Analytes	J (all detects) UJ (all non-detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE121 **Laboratory: LL**

EDD Filename: DE121_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-079-SA5A-SB-4.0-5.0	SODIUM	J	70.6	109	PQL	mg/Kg	J (all detects)
	TIN	J	3.37	10.9	PQL	mg/Kg	
	Zirconium	J	3.75	5.44	PQL	mg/Kg	
SL-080-SA5A-SB-3.0-4.0	TIN	J	3.57	10.9	PQL	mg/Kg	J (all detects)
	Zirconium	J	3.60	5.43	PQL	mg/Kg	
SL-081-SA5A-SB-2.0-3.0	SODIUM	J	89.5	108	PQL	mg/Kg	J (all detects)
	TIN	J	2.84	10.8	PQL	mg/Kg	
	Zirconium	J	2.70	5.41	PQL	mg/Kg	
SL-088-SA5A-SB-4.0-5.0	SODIUM	J	87.0	114	PQL	mg/Kg	J (all detects)
	TIN	J	3.13	11.4	PQL	mg/Kg	
	Zirconium	J	4.00	5.71	PQL	mg/Kg	
SL-258-SA5A-SB-4.0-5.0	BORON	J	5.88	6.15	PQL	mg/Kg	J (all detects)
	SODIUM	J	109	123	PQL	mg/Kg	
	TIN	J	3.21	12.3	PQL	mg/Kg	
	Zirconium	J	4.55	6.15	PQL	mg/Kg	

Method: 6020
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-079-SA5A-SB-4.0-5.0	ANTIMONY	J	0.134	0.218	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.139	0.435	PQL	mg/Kg	
	SILVER	J	0.0211	0.109	PQL	mg/Kg	
SL-080-SA5A-SB-3.0-4.0	CADMIUM	J	0.0979	0.110	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.161	0.439	PQL	mg/Kg	
	SILVER	J	0.0461	0.110	PQL	mg/Kg	
SL-081-SA5A-SB-2.0-3.0	SELENIUM	J	0.166	0.428	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0267	0.107	PQL	mg/Kg	
SL-088-SA5A-SB-4.0-5.0	ANTIMONY	J	0.0941	0.226	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0758	0.113	PQL	mg/Kg	
	SELENIUM	J	0.163	0.453	PQL	mg/Kg	
	SILVER	J	0.0441	0.113	PQL	mg/Kg	
SL-258-SA5A-SB-4.0-5.0	SELENIUM	J	0.215	0.487	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0471	0.122	PQL	mg/Kg	

Method: 7199
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-081-SA5A-SB-2.0-3.0	HEXAVALENT CHROMIUM	J	0.31	1.1	PQL	mg/Kg	J (all detects)
SL-088-SA5A-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.41	1.2	PQL	mg/Kg	J (all detects)
SL-258-SA5A-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.56	1.2	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE121 **Laboratory: LL**

EDD Filename: DE121_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8015M
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-258-SA5A-SB-4.0-5.0	EFH (C15-C20)	J	1.2	1.5	PQL	mg/Kg	J (all detects)

Method: 8082
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-080-SA5A-SB-3.0-4.0	AROCLOR 1260	J	0.54	1.9	PQL	ug/Kg	J (all detects)
SL-088-SA5A-SB-4.0-5.0	AROCLOR 1260	J	1.5	2.0	PQL	ug/Kg	J (all detects)

Method: 8260B
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-079-SA5A-SB-4.0-5.0	METHYLENE CHLORIDE TOLUENE	J J	0.43 0.17	4.0 4.0	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-080-SA5A-SB-3.0-4.0	METHYLENE CHLORIDE TOLUENE	J J	0.48 0.13	4.4 4.4	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-081-SA5A-SB-2.0-3.0	METHYLENE CHLORIDE TOLUENE	J J	0.67 0.24	4.6 4.6	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-088-SA5A-SB-4.0-5.0	METHYLENE CHLORIDE TOLUENE	J J	0.47 0.28	4.0 4.0	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-258-SA5A-SB-4.0-5.0	METHYLENE CHLORIDE TOLUENE	J J	0.38 0.09	4.4 4.4	PQL PQL	ug/Kg ug/Kg	J (all detects)

Method: 8270C SIM
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-079-SA5A-SB-4.0-5.0	1-METHYLNAPHTHALENE Diethylphthalate Di-n-butylphthalate NAPHTHALENE PHENANTHRENE	J J J J J	1.5 7.5 9.7 0.87 0.82	1.8 20 20 1.8 1.8	PQL PQL PQL PQL PQL	ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg	J (all detects)
SL-080-SA5A-SB-3.0-4.0	BIS(2-ETHYLHEXYL)PHTHALATE Butylbenzylphthalate CHRYSENE Diethylphthalate Di-n-butylphthalate	J J J J J	9.5 6.9 0.38 7.9 9.5	20 20 1.8 20 20	PQL PQL PQL PQL PQL	ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg	J (all detects)
SL-081-SA5A-SB-2.0-3.0	BIS(2-ETHYLHEXYL)PHTHALATE Diethylphthalate Di-n-butylphthalate	J J J	8.1 7.6 10	20 20 20	PQL PQL PQL	ug/Kg ug/Kg ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE121 **Laboratory: LL**

EDD Filename: DE121_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8270C SIM**

Matrix: **SO**

SampleID	*Analyte*	*Lab Qual*	*Result*	*Reporting Limit*	*RL Type*	*Units*	*Flag*
SL-088-SA5A-SB-4.0-5.0	Diethylphthalate	J	8.1	21	PQL	ug/Kg	J (all detects)
	Di-n-butylphthalate	J	11	21	PQL	ug/Kg	
	NAPHTHALENE	J	0.99	1.9	PQL	ug/Kg	
SL-258-SA5A-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	12	22	PQL	ug/Kg	J (all detects)
	Diethylphthalate	J	7.8	22	PQL	ug/Kg	
	Di-n-butylphthalate	J	10	22	PQL	ug/Kg	

LDC #: 25916C4

SDG #: DE121

Laboratory: Lancaster Laboratories

VALIDATION COMPLETENESS WORKSHEET

ADR

Date: 8-31-11

Reviewer: OR

2nd Reviewer: C

METHOD: Metals (EPA SW 846 Method 6010B/6020A/7000)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	N	Sampling dates:
II.	ICP/MS Tune	—	
III.	Calibration	—	
IV.	Blanks	A	No Quals
V.	ICP Interference Check Sample (ICS) Analysis	N	
VI.	Matrix Spike Analysis	N	MS/D (SDG: DE123)
VII.	Duplicate Sample Analysis	N	D↓R ↓
VIII.	Laboratory Control Samples (LCS)	A	LCS
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	~~S~~	(SDG: DE123)
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	—	
XV	Field Blanks	—	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:

1	SL-079-SA5A-SB-4.0-5.0	11		21		31	
2	SL-080-SA5A-SB-3.0-4.0	12		22		32	
3	SL-081-SA5A-SB-2.0-3.0	13		23		33	
4	SL-258-SA5A-SB-4.0-5.0	14		24		34	
5	SL-088-SA5A-SB-4.0-5.0	15		25		35	
6		16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

SAMPLE DELIVERY GROUP

DE122

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
25-Mar-2011	TB-032511	6240611	TB	5030B	8015M	III
25-Mar-2011	TB-032511	6240611	TB	5030B	8260B	III
25-Mar-2011	TB-032511	6240611	TB	5030B	8260B SIM	III
25-Mar-2011	SL-213-SA5A-SB-4.0-5.0	6240605	N	3050B	6010B	III
25-Mar-2011	SL-213-SA5A-SB-4.0-5.0	6240605	N	3050B	6020	III
25-Mar-2011	SL-213-SA5A-SB-4.0-5.0	6240605	N	3060A	7199	III
25-Mar-2011	SL-213-SA5A-SB-4.0-5.0	6240605	N	3550B	8082	III
25-Mar-2011	SL-213-SA5A-SB-4.0-5.0	6240605	N	3550B	8270C	III
25-Mar-2011	SL-213-SA5A-SB-4.0-5.0	6240605	N	3550B	8270C SIM	III
25-Mar-2011	SL-213-SA5A-SB-4.0-5.0	6240605	N	5035	8260B	III
25-Mar-2011	SL-213-SA5A-SB-4.0-5.0	6240605	N	5035	8260B SIM	III
25-Mar-2011	SL-213-SA5A-SB-4.0-5.0	6240605	N	Gen Prep	9045M	III
25-Mar-2011	SL-213-SA5A-SB-4.0-5.0	6240605	N	METHOD	300.0	III
25-Mar-2011	SL-213-SA5A-SB-4.0-5.0	6240605	N	METHOD	314.0	III
25-Mar-2011	SL-213-SA5A-SB-4.0-5.0	6240605	N	METHOD	6850	III
25-Mar-2011	SL-213-SA5A-SB-4.0-5.0	6240605	N	METHOD	7471A	III
25-Mar-2011	SL-213-SA5A-SB-8.0-9.0	6240606	N	3050B	6010B	III
25-Mar-2011	SL-213-SA5A-SB-8.0-9.0	6240606	N	3050B	6020	III
25-Mar-2011	SL-213-SA5A-SB-8.0-9.0	6240606	N	3060A	7199	III
25-Mar-2011	SL-213-SA5A-SB-8.0-9.0	6240606	N	3550B	8082	III
25-Mar-2011	SL-213-SA5A-SB-8.0-9.0	6240606	N	3550B	8270C	III
25-Mar-2011	SL-213-SA5A-SB-8.0-9.0	6240606	N	3550B	8270C SIM	III
25-Mar-2011	SL-213-SA5A-SB-8.0-9.0	6240606	N	Gen Prep	9045M	III
25-Mar-2011	SL-213-SA5A-SB-8.0-9.0	6240606	N	METHOD	300.0	III
25-Mar-2011	SL-213-SA5A-SB-8.0-9.0	6240606	N	METHOD	314.0	III
25-Mar-2011	SL-213-SA5A-SB-8.0-9.0	6240606	N	METHOD	7471A	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
25-Mar-2011	SL-143-SA5A-SB-4.0-5.0	6240607	N	3050B	6010B	III
25-Mar-2011	SL-143-SA5A-SB-4.0-5.0	6240607	N	3050B	6020	III
25-Mar-2011	SL-143-SA5A-SB-4.0-5.0	6240607	N	3060A	7199	III
25-Mar-2011	SL-143-SA5A-SB-4.0-5.0	6240607	N	3546	1625C	III
25-Mar-2011	SL-143-SA5A-SB-4.0-5.0	6240607	N	3550B	8015B	III
25-Mar-2011	SL-143-SA5A-SB-4.0-5.0	6240607	N	3550B	8015M	III
25-Mar-2011	SL-143-SA5A-SB-4.0-5.0	6240607	N	3550B	8082	III
25-Mar-2011	SL-143-SA5A-SB-4.0-5.0	6240607	N	3550B	8270C	III
25-Mar-2011	SL-143-SA5A-SB-4.0-5.0	6240607	N	3550B	8270C SIM	III
25-Mar-2011	SL-143-SA5A-SB-4.0-5.0	6240607	N	5035	8015M	III
25-Mar-2011	SL-143-SA5A-SB-4.0-5.0	6240607	N	5035	8260B	III
25-Mar-2011	SL-143-SA5A-SB-4.0-5.0	6240607	N	5035	8260B SIM	III
25-Mar-2011	SL-143-SA5A-SB-4.0-5.0	6240607	N	8330	8330A	III
25-Mar-2011	SL-143-SA5A-SB-4.0-5.0	6240607	N	Gen Prep	9045M	III
25-Mar-2011	SL-143-SA5A-SB-4.0-5.0	6240607	N	METHOD	300.0	III
25-Mar-2011	SL-143-SA5A-SB-4.0-5.0	6240607	N	METHOD	314.0	III
25-Mar-2011	SL-143-SA5A-SB-4.0-5.0	6240607	N	METHOD	7471A	III
25-Mar-2011	SL-143-SA5A-SB-4.0-5.0	6240607	N	METHOD	8015B	III
25-Mar-2011	SL-143-SA5A-SB-4.0-5.0	6240607	N	METHOD	8015M	III
25-Mar-2011	SL-143-SA5A-SB-4.0-5.0	6240607	N	METHOD	8315A	III
25-Mar-2011	SL-143-SA5A-SB-4.0-5.0	6240607	N	METHOD	9012B	III
25-Mar-2011	SL-143-SA5A-SB-4.0-5.0DUP	P240607D271903A	DUP	METHOD	9012B	III
25-Mar-2011	SL-143-SA5A-SB-4.0-5.0MS	P240607R271904A	MS	METHOD	9012B	III
25-Mar-2011	SL-143-SA5A-SB-8.0-9.0	6240608	N	3050B	6010B	III
25-Mar-2011	SL-143-SA5A-SB-8.0-9.0	6240608	N	3050B	6020	III
25-Mar-2011	SL-143-SA5A-SB-8.0-9.0	6240608	N	3060A	7199	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
25-Mar-2011	SL-143-SA5A-SB-8.0-9.0	6240608	N	3546	1625C	III
25-Mar-2011	SL-143-SA5A-SB-8.0-9.0	6240608	N	3550B	8015B	III
25-Mar-2011	SL-143-SA5A-SB-8.0-9.0	6240608	N	3550B	8015M	III
25-Mar-2011	SL-143-SA5A-SB-8.0-9.0	6240608	N	3550B	8082	III
25-Mar-2011	SL-143-SA5A-SB-8.0-9.0	6240608	N	3550B	8270C	III
25-Mar-2011	SL-143-SA5A-SB-8.0-9.0	6240608	N	3550B	8270C SIM	III
25-Mar-2011	SL-143-SA5A-SB-8.0-9.0	6240608	N	5035	8015M	III
25-Mar-2011	SL-143-SA5A-SB-8.0-9.0	6240608	N	5035	8260B	III
25-Mar-2011	SL-143-SA5A-SB-8.0-9.0	6240608	N	5035	8260B SIM	III
25-Mar-2011	SL-143-SA5A-SB-8.0-9.0	6240608	N	8330	8330A	III
25-Mar-2011	SL-143-SA5A-SB-8.0-9.0	6240608	N	Gen Prep	9045M	III
25-Mar-2011	SL-143-SA5A-SB-8.0-9.0	6240608	N	METHOD	300.0	III
25-Mar-2011	SL-143-SA5A-SB-8.0-9.0	6240608	N	METHOD	314.0	III
25-Mar-2011	SL-143-SA5A-SB-8.0-9.0	6240608	N	METHOD	7471A	III
25-Mar-2011	SL-143-SA5A-SB-8.0-9.0	6240608	N	METHOD	8015B	III
25-Mar-2011	SL-143-SA5A-SB-8.0-9.0	6240608	N	METHOD	8015M	III
25-Mar-2011	SL-143-SA5A-SB-8.0-9.0	6240608	N	METHOD	8315A	III
25-Mar-2011	SL-143-SA5A-SB-8.0-9.0	6240608	N	METHOD	9012B	III
25-Mar-2011	SL-143-SA5A-SB-8.0-9.0DUP	P240608D271504B	DUP	METHOD	300.0	III
25-Mar-2011	SL-143-SA5A-SB-8.0-9.0DUP	P240608D272000B	DUP	METHOD	314.0	III
25-Mar-2011	SL-143-SA5A-SB-8.0-9.0MS	P240608R271519B	MS	METHOD	300.0	III
25-Mar-2011	SL-143-SA5A-SB-8.0-9.0MS	P240608R272022B	MS	METHOD	314.0	III
25-Mar-2011	SL-144-SA5A-SB-4.0-5.0	6240609	N	3050B	6010B	III
25-Mar-2011	SL-144-SA5A-SB-4.0-5.0	6240609	N	3050B	6020	III
25-Mar-2011	SL-144-SA5A-SB-4.0-5.0	6240609	N	3060A	7199	III
25-Mar-2011	SL-144-SA5A-SB-4.0-5.0	6240609	N	3546	1625C	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
25-Mar-2011	SL-144-SA5A-SB-4.0-5.0	6240609	N	3550B	8015B	III
25-Mar-2011	SL-144-SA5A-SB-4.0-5.0	6240609	N	3550B	8015M	III
25-Mar-2011	SL-144-SA5A-SB-4.0-5.0	6240609	N	3550B	8082	III
25-Mar-2011	SL-144-SA5A-SB-4.0-5.0	6240609	N	3550B	8270C	III
25-Mar-2011	SL-144-SA5A-SB-4.0-5.0	6240609	N	3550B	8270C SIM	III
25-Mar-2011	SL-144-SA5A-SB-4.0-5.0	6240609	N	5035	8015M	III
25-Mar-2011	SL-144-SA5A-SB-4.0-5.0	6240609	N	5035	8260B	III
25-Mar-2011	SL-144-SA5A-SB-4.0-5.0	6240609	N	5035	8260B SIM	III
25-Mar-2011	SL-144-SA5A-SB-4.0-5.0	6240609	N	8330	8330A	III
25-Mar-2011	SL-144-SA5A-SB-4.0-5.0	6240609	N	Gen Prep	9045M	III
25-Mar-2011	SL-144-SA5A-SB-4.0-5.0	6240609	N	METHOD	300.0	III
25-Mar-2011	SL-144-SA5A-SB-4.0-5.0	6240609	N	METHOD	314.0	III
25-Mar-2011	SL-144-SA5A-SB-4.0-5.0	6240609	N	METHOD	7471A	III
25-Mar-2011	SL-144-SA5A-SB-4.0-5.0	6240609	N	METHOD	8015B	III
25-Mar-2011	SL-144-SA5A-SB-4.0-5.0	6240609	N	METHOD	8015M	III
25-Mar-2011	SL-144-SA5A-SB-4.0-5.0	6240609	N	METHOD	8315A	III
25-Mar-2011	SL-144-SA5A-SB-4.0-5.0	6240609	N	METHOD	9012B	III
25-Mar-2011	SL-144-SA5A-SB-7.0-8.0	6240610	N	3050B	6010B	III
25-Mar-2011	SL-144-SA5A-SB-7.0-8.0	6240610	N	3050B	6020	III
25-Mar-2011	SL-144-SA5A-SB-7.0-8.0	6240610	N	3060A	7199	III
25-Mar-2011	SL-144-SA5A-SB-7.0-8.0	6240610	N	3546	1625C	III
25-Mar-2011	SL-144-SA5A-SB-7.0-8.0	6240610	N	3550B	8015B	III
25-Mar-2011	SL-144-SA5A-SB-7.0-8.0	6240610	N	3550B	8015M	III
25-Mar-2011	SL-144-SA5A-SB-7.0-8.0	6240610	N	3550B	8082	III
25-Mar-2011	SL-144-SA5A-SB-7.0-8.0	6240610	N	3550B	8270C	III
25-Mar-2011	SL-144-SA5A-SB-7.0-8.0	6240610	N	3550B	8270C SIM	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
25-Mar-2011	SL-144-SA5A-SB-7.0-8.0	6240610	N	5035	8015M	III
25-Mar-2011	SL-144-SA5A-SB-7.0-8.0	6240610	N	5035	8260B	III
25-Mar-2011	SL-144-SA5A-SB-7.0-8.0	6240610	N	5035	8260B SIM	III
25-Mar-2011	SL-144-SA5A-SB-7.0-8.0	6240610	N	8330	8330A	III
25-Mar-2011	SL-144-SA5A-SB-7.0-8.0	6240610	N	Gen Prep	9045M	III
25-Mar-2011	SL-144-SA5A-SB-7.0-8.0	6240610	N	METHOD	300.0	III
25-Mar-2011	SL-144-SA5A-SB-7.0-8.0	6240610	N	METHOD	314.0	III
25-Mar-2011	SL-144-SA5A-SB-7.0-8.0	6240610	N	METHOD	7471A	III
25-Mar-2011	SL-144-SA5A-SB-7.0-8.0	6240610	N	METHOD	8015B	III
25-Mar-2011	SL-144-SA5A-SB-7.0-8.0	6240610	N	METHOD	8015M	III
25-Mar-2011	SL-144-SA5A-SB-7.0-8.0	6240610	N	METHOD	8315A	III
25-Mar-2011	SL-144-SA5A-SB-7.0-8.0	6240610	N	METHOD	9012B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE122 **Laboratory: LL**

EDD Filename: DE122_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: SL-143-SA5A-SB-8.0-9.0 **Collected:** 3/25/2011 2:15:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	3.0		0.92	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-144-SA5A-SB-4.0-5.0 **Collected:** 3/25/2011 3:18:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	3.2		0.87	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-144-SA5A-SB-7.0-8.0 **Collected:** 3/25/2011 3:24:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.7		0.84	MDL	1.1	PQL	mg/Kg	J	Q

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-143-SA5A-SB-4.0-5.0 **Collected:** 3/25/2011 2:04:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	124		0.636	MDL	11.4	PQL	mg/Kg	J	Q
POTASSIUM	2020		20.4	MDL	56.8	PQL	mg/Kg	J	Q
TIN	3.27	J	1.14	MDL	11.4	PQL	mg/Kg	U	B

Sample ID: SL-143-SA5A-SB-8.0-9.0 **Collected:** 3/25/2011 2:15:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	5.58	J	1.01	MDL	5.68	PQL	mg/Kg	J	Z
PHOSPHORUS	120		0.636	MDL	11.4	PQL	mg/Kg	J	Q
POTASSIUM	1700		20.4	MDL	56.8	PQL	mg/Kg	J	Q
TIN	3.18	J	1.14	MDL	11.4	PQL	mg/Kg	U	B

Sample ID: SL-144-SA5A-SB-4.0-5.0 **Collected:** 3/25/2011 3:18:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	136		0.611	MDL	10.9	PQL	mg/Kg	J	Q
POTASSIUM	1910		19.7	MDL	54.6	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE122 **Laboratory: LL**

EDD Filename: DE122_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS
Method: 6010B **Matrix:** SO

Sample ID: SL-144-SA5A-SB-4.0-5.0 **Collected:** 3/25/2011 3:18:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	3.37	J	1.09	MDL	10.9	PQL	mg/Kg	U	B

Sample ID: SL-144-SA5A-SB-7.0-8.0 **Collected:** 3/25/2011 3:24:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	127		0.582	MDL	10.4	PQL	mg/Kg	J	Q
POTASSIUM	1920		18.7	MDL	52.0	PQL	mg/Kg	J	Q
TIN	3.04	J	1.04	MDL	10.4	PQL	mg/Kg	U	B

Sample ID: SL-213-SA5A-SB-4.0-5.0 **Collected:** 3/25/2011 10:14:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	299		0.656	MDL	11.7	PQL	mg/Kg	J	Q
POTASSIUM	2560		21.1	MDL	58.6	PQL	mg/Kg	J	Q
SODIUM	115	J	43.7	MDL	117	PQL	mg/Kg	J	Z
TIN	3.39	J	1.17	MDL	11.7	PQL	mg/Kg	U	B
Zirconium	1.10	J	0.984	MDL	5.86	PQL	mg/Kg	J	Z

Sample ID: SL-213-SA5A-SB-8.0-9.0 **Collected:** 3/25/2011 10:18:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	532		0.661	MDL	11.8	PQL	mg/Kg	J	Q
POTASSIUM	4010		21.3	MDL	59.1	PQL	mg/Kg	J	Q
TIN	3.70	J	1.18	MDL	11.8	PQL	mg/Kg	U	B

Method Category: METALS
Method: 6020 **Matrix:** SO

Sample ID: SL-143-SA5A-SB-4.0-5.0 **Collected:** 3/25/2011 2:04:00 **Analysis Type:** REA **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0796	J	0.0675	MDL	0.225	PQL	mg/Kg	J	Z, Q
CADMIUM	0.0458	J	0.0450	MDL	0.112	PQL	mg/Kg	J	Z
CHROMIUM	57.2		0.135	MDL	0.450	PQL	mg/Kg	J	Q, E
COBALT	11.1		0.0225	MDL	0.112	PQL	mg/Kg	J	E, A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE122 **Laboratory: LL**

EDD Filename: DE122_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-143-SA5A-SB-4.0-5.0 **Collected:** 3/25/2011 2:04:00 **Analysis Type:** REA **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	36.3		0.0742	MDL	0.450	PQL	mg/Kg	J	Q, E, A
NICKEL	30.3		0.112	MDL	0.450	PQL	mg/Kg	J	Q
SILVER	0.0190	J	0.0135	MDL	0.112	PQL	mg/Kg	J	Z
ZINC	100		0.630	MDL	3.37	PQL	mg/Kg	J	E

Sample ID: SL-143-SA5A-SB-4.0-5.0 **Collected:** 3/25/2011 2:04:00 **Analysis Type:** REA2 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0686	J	0.0450	MDL	0.450	PQL	mg/Kg	J	Z

Sample ID: SL-143-SA5A-SB-4.0-5.0 **Collected:** 3/25/2011 2:04:00 **Analysis Type:** REA4 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	166		0.121	MDL	0.450	PQL	mg/Kg	J	E, A

Sample ID: SL-143-SA5A-SB-4.0-5.0 **Collected:** 3/25/2011 2:04:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	4.93		0.0117	MDL	0.225	PQL	mg/Kg	J	A

Sample ID: SL-143-SA5A-SB-8.0-9.0 **Collected:** 3/25/2011 2:15:00 **Analysis Type:** REA **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0772	J	0.0681	MDL	0.227	PQL	mg/Kg	J	Z, Q
CHROMIUM	18.6		0.136	MDL	0.454	PQL	mg/Kg	J	Q, E
COBALT	5.60		0.0227	MDL	0.114	PQL	mg/Kg	J	E, A
COPPER	5.30		0.0749	MDL	0.454	PQL	mg/Kg	J	Q, E, A
NICKEL	11.9		0.114	MDL	0.454	PQL	mg/Kg	J	Q
SILVER	0.0451	J	0.0136	MDL	0.114	PQL	mg/Kg	J	Z
ZINC	47.7		0.636	MDL	3.41	PQL	mg/Kg	J	E

Sample ID: SL-143-SA5A-SB-8.0-9.0 **Collected:** 3/25/2011 2:15:00 **Analysis Type:** REA2 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0472	J	0.0454	MDL	0.454	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE122 **Laboratory: LL**

EDD Filename: DE122_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-143-SA5A-SB-8.0-9.0 **Collected:** 3/25/2011 2:15:00 **Analysis Type:** REA4 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	102		0.123	MDL	0.454	PQL	mg/Kg	J	E, A

Sample ID: SL-143-SA5A-SB-8.0-9.0 **Collected:** 3/25/2011 2:15:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	4.61		0.0118	MDL	0.227	PQL	mg/Kg	J	A

Sample ID: SL-144-SA5A-SB-4.0-5.0 **Collected:** 3/25/2011 3:18:00 **Analysis Type:** REA **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0822	J	0.0655	MDL	0.218	PQL	mg/Kg	J	Z, Q
CHROMIUM	13.6		0.131	MDL	0.437	PQL	mg/Kg	J	Q, E
COBALT	3.05		0.0218	MDL	0.109	PQL	mg/Kg	J	E, A
COPPER	5.21		0.0721	MDL	0.437	PQL	mg/Kg	J	Q, E, A
NICKEL	5.79		0.109	MDL	0.437	PQL	mg/Kg	J	Q
SILVER	0.0226	J	0.0131	MDL	0.109	PQL	mg/Kg	J	Z
ZINC	31.3		0.611	MDL	3.28	PQL	mg/Kg	J	E

Sample ID: SL-144-SA5A-SB-4.0-5.0 **Collected:** 3/25/2011 3:18:00 **Analysis Type:** REA2 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0821	J	0.0437	MDL	0.437	PQL	mg/Kg	J	Z

Sample ID: SL-144-SA5A-SB-4.0-5.0 **Collected:** 3/25/2011 3:18:00 **Analysis Type:** REA4 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	57.8		0.118	MDL	0.437	PQL	mg/Kg	J	E, A

Sample ID: SL-144-SA5A-SB-4.0-5.0 **Collected:** 3/25/2011 3:18:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	6.62		0.0114	MDL	0.218	PQL	mg/Kg	J	A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE122 **Laboratory: LL**

EDD Filename: DE122_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-144-SA5A-SB-7.0-8.0 **Collected:** 3/25/2011 3:24:00 **Analysis Type:** REA **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0630	U	0.0630	MDL	0.210	PQL	mg/Kg	UJ	Q
CHROMIUM	16.2		0.126	MDL	0.420	PQL	mg/Kg	J	Q, E
COBALT	12.5		0.0210	MDL	0.105	PQL	mg/Kg	J	E, A
COPPER	6.39		0.0693	MDL	0.420	PQL	mg/Kg	J	Q, E, A
NICKEL	10.7		0.105	MDL	0.420	PQL	mg/Kg	J	Q
SILVER	0.0257	J	0.0126	MDL	0.105	PQL	mg/Kg	J	Z
ZINC	46.5		0.588	MDL	3.15	PQL	mg/Kg	J	E

Sample ID: SL-144-SA5A-SB-7.0-8.0 **Collected:** 3/25/2011 3:24:00 **Analysis Type:** REA2 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0601	J	0.0420	MDL	0.420	PQL	mg/Kg	J	Z

Sample ID: SL-144-SA5A-SB-7.0-8.0 **Collected:** 3/25/2011 3:24:00 **Analysis Type:** REA4 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	72.3		0.113	MDL	0.420	PQL	mg/Kg	J	E, A

Sample ID: SL-144-SA5A-SB-7.0-8.0 **Collected:** 3/25/2011 3:24:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	4.15		0.0109	MDL	0.210	PQL	mg/Kg	J	A

Sample ID: SL-213-SA5A-SB-4.0-5.0 **Collected:** 3/25/2011 10:14:00 **Analysis Type:** REA **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0787	J	0.0710	MDL	0.237	PQL	mg/Kg	J	Z, Q
CHROMIUM	19.3		0.142	MDL	0.473	PQL	mg/Kg	J	Q, E
COBALT	7.00		0.0237	MDL	0.118	PQL	mg/Kg	J	E, A
COPPER	10.2		0.0781	MDL	0.473	PQL	mg/Kg	J	Q, E, A
NICKEL	14.6		0.118	MDL	0.473	PQL	mg/Kg	J	Q
SILVER	0.0451	J	0.0142	MDL	0.118	PQL	mg/Kg	J	Z
ZINC	63.0		0.663	MDL	3.55	PQL	mg/Kg	J	E

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE122 **Laboratory: LL**

EDD Filename: DE122_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-213-SA5A-SB-4.0-5.0 **Collected:** 3/25/2011 10:14:00 **Analysis Type:** REA2 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0875	J	0.0473	MDL	0.473	PQL	mg/Kg	J	Z

Sample ID: SL-213-SA5A-SB-4.0-5.0 **Collected:** 3/25/2011 10:14:00 **Analysis Type:** REA4 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	114		0.128	MDL	0.473	PQL	mg/Kg	J	E, A

Sample ID: SL-213-SA5A-SB-4.0-5.0 **Collected:** 3/25/2011 10:14:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	6.79		0.0123	MDL	0.237	PQL	mg/Kg	J	A

Sample ID: SL-213-SA5A-SB-8.0-9.0 **Collected:** 3/25/2011 10:18:00 **Analysis Type:** REA **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.101	J	0.0702	MDL	0.234	PQL	mg/Kg	J	Z, Q
CHROMIUM	23.8		0.140	MDL	0.468	PQL	mg/Kg	J	Q, E
COBALT	9.62		0.0234	MDL	0.117	PQL	mg/Kg	J	E, A
COPPER	11.1		0.0772	MDL	0.468	PQL	mg/Kg	J	Q, E, A
NICKEL	16.2		0.117	MDL	0.468	PQL	mg/Kg	J	Q
SILVER	0.0731	J	0.0140	MDL	0.117	PQL	mg/Kg	J	Z
ZINC	51.9		0.655	MDL	3.51	PQL	mg/Kg	J	E

Sample ID: SL-213-SA5A-SB-8.0-9.0 **Collected:** 3/25/2011 10:18:00 **Analysis Type:** REA2 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.123	J	0.0468	MDL	0.468	PQL	mg/Kg	J	Z

Sample ID: SL-213-SA5A-SB-8.0-9.0 **Collected:** 3/25/2011 10:18:00 **Analysis Type:** REA4 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	98.0		0.126	MDL	0.468	PQL	mg/Kg	J	E, A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE122 **Laboratory: LL**

EDD Filename: DE122_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS
Method: 6020 **Matrix:** SO

Sample ID: SL-213-SA5A-SB-8.0-9.0 **Collected:** 3/25/2011 10:18:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	11.1		0.0122	MDL	0.234	PQL	mg/Kg	J	A

Method Category: METALS
Method: 7199 **Matrix:** SO

Sample ID: SL-143-SA5A-SB-4.0-5.0 **Collected:** 3/25/2011 2:04:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.37	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-143-SA5A-SB-8.0-9.0 **Collected:** 3/25/2011 2:15:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.41	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-144-SA5A-SB-7.0-8.0 **Collected:** 3/25/2011 3:24:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.40	J	0.21	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-213-SA5A-SB-4.0-5.0 **Collected:** 3/25/2011 10:14:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.38	J	0.24	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-213-SA5A-SB-8.0-9.0 **Collected:** 3/25/2011 10:18:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.57	J	0.24	MDL	1.2	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE122 **Laboratory: LL**

EDD Filename: DE122_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA
Method: 1625C **Matrix:** SO

Sample ID: SL-143-SA5A-SB-4.0-5.0 **Collected:** 3/25/2011 2:04:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	62.8		19.1	MDL	38.2	PQL	ng/Kg	U	B

Sample ID: SL-143-SA5A-SB-8.0-9.0 **Collected:** 3/25/2011 2:15:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	82.4		19.1	MDL	38.2	PQL	ng/Kg	U	B

Sample ID: SL-144-SA5A-SB-4.0-5.0 **Collected:** 3/25/2011 3:18:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	83.3		18.2	MDL	36.4	PQL	ng/Kg	U	B

Sample ID: SL-144-SA5A-SB-7.0-8.0 **Collected:** 3/25/2011 3:24:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	53.6		17.5	MDL	35.0	PQL	ng/Kg	U	B

Method Category: SVOA
Method: 8015M **Matrix:** SO

Sample ID: SL-143-SA5A-SB-4.0-5.0 **Collected:** 3/25/2011 2:04:00 **Analysis Type:** REA2 **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	0.50	J	0.46	MDL	1.4	PQL	mg/Kg	J	Z

Sample ID: SL-143-SA5A-SB-8.0-9.0 **Collected:** 3/25/2011 2:15:00 **Analysis Type:** REA2 **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	0.48	J	0.46	MDL	1.4	PQL	mg/Kg	J	Z
EFH (C8-C11)	0.53	J	0.46	MDL	1.4	PQL	mg/Kg	J	Z

Sample ID: SL-144-SA5A-SB-4.0-5.0 **Collected:** 3/25/2011 3:18:00 **Analysis Type:** REA2 **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	0.56	J	0.44	MDL	1.3	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE122 **Laboratory: LL**

EDD Filename: DE122_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA
Method: 8015M **Matrix:** SO

Sample ID: SL-144-SA5A-SB-7.0-8.0 **Collected:** 3/25/2011 3:24:00 **Analysis Type:** REA2 **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	0.51	J	0.42	MDL	1.3	PQL	mg/Kg	J	Z
EFH (C8-C11)	0.43	J	0.42	MDL	1.3	PQL	mg/Kg	J	Z

Method Category: SVOA
Method: 8270C **Matrix:** SO

Sample ID: SL-143-SA5A-SB-4.0-5.0 **Collected:** 3/25/2011 2:04:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-CHLOROISOPROPYL) ETHER	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
NITROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L

Sample ID: SL-143-SA5A-SB-8.0-9.0 **Collected:** 3/25/2011 2:15:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-CHLOROISOPROPYL) ETHER	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
NITROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L

Sample ID: SL-144-SA5A-SB-4.0-5.0 **Collected:** 3/25/2011 3:18:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-CHLOROISOPROPYL) ETHER	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
NITROBENZENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L

Sample ID: SL-144-SA5A-SB-7.0-8.0 **Collected:** 3/25/2011 3:24:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-CHLOROISOPROPYL) ETHER	17	U	17	MDL	170	PQL	ug/Kg	UJ	L
NITROBENZENE	17	U	17	MDL	170	PQL	ug/Kg	UJ	L

Sample ID: SL-213-SA5A-SB-4.0-5.0 **Collected:** 3/25/2011 10:14:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-CHLOROISOPROPYL) ETHER	20	U	20	MDL	200	PQL	ug/Kg	UJ	L
NITROBENZENE	20	U	20	MDL	200	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE122 **Laboratory: LL**

EDD Filename: DE122_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA
Method: 8270C **Matrix:** SO

Sample ID: SL-213-SA5A-SB-8.0-9.0 **Collected:** 3/25/2011 10:18:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-CHLOROISOPROPYL) ETHER	20	U	20	MDL	200	PQL	ug/Kg	UJ	L
NITROBENZENE	20	U	20	MDL	200	PQL	ug/Kg	UJ	L

Method Category: SVOA
Method: 8270C SIM **Matrix:** SO

Sample ID: SL-143-SA5A-SB-8.0-9.0 **Collected:** 3/25/2011 2:15:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	12	J	6.9	MDL	21	PQL	ug/Kg	J	Z

Sample ID: SL-144-SA5A-SB-4.0-5.0 **Collected:** 3/25/2011 3:18:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	14	J	6.6	MDL	20	PQL	ug/Kg	J	Z

Method Category: VOA
Method: 8260B **Matrix:** SO

Sample ID: SL-143-SA5A-SB-4.0-5.0 **Collected:** 3/25/2011 2:04:00 **Analysis Type:** RES **Dilution:** 0.81

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	2.2	J	0.22	MDL	3.7	PQL	ug/Kg	U	B

Sample ID: SL-143-SA5A-SB-8.0-9.0 **Collected:** 3/25/2011 2:15:00 **Analysis Type:** RES **Dilution:** 0.89

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	2.2	J	0.24	MDL	4.1	PQL	ug/Kg	U	B

Sample ID: SL-144-SA5A-SB-4.0-5.0 **Collected:** 3/25/2011 3:18:00 **Analysis Type:** RES **Dilution:** 0.89

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	2.5	J	0.23	MDL	3.9	PQL	ug/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE122 **Laboratory: LL**

EDD Filename: DE122_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: VOA

Method: 8260B ***Matrix:*** SO

Sample ID: **SL-144-SA5A-SB-7.0-8.0** ***Collected:*** **3/25/2011 3:24:00** ***Analysis Type:*** **RES** ***Dilution:*** **1.06**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	2.5	J	0.27	MDL	4.4	PQL	ug/Kg	U	B

Sample ID: **SL-213-SA5A-SB-4.0-5.0** ***Collected:*** **3/25/2011 10:14:00** ***Analysis Type:*** **RES** ***Dilution:*** **0.89**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	2.6	J	0.25	MDL	4.2	PQL	ug/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE122

EDD Filename: DE122_v1

Laboratory: LL

eQAPP Name: CDM_SSFL_110509

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
*#	Professional Judgment
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Verification Correlation Coefficient
C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE122

Laboratory: LL

EDD Filename: DE122_v1

eQAPP Name: CDM_SSFL_110509

F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation
L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery Lower Estimation

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE122

Laboratory: LL

EDD Filename: DE122_v1

eQAPP Name: CDM_SSFL_110509

R	Continuing Calibration Verification Percent Recovery Lower Rejection
R	Continuing Calibration Verification Percent Recovery Upper Estimation
R	Continuing Calibration Verification Percent Recovery Upper Rejection
R	Continuing Calibration Verification Relative Response Factor
R	Initial Calibration Relative Response Factor
R	Initial Calibration Verification Percent Recovery Lower Estimation
R	Initial Calibration Verification Percent Recovery Lower Rejection
R	Initial Calibration Verification Percent Recovery Upper Estimation
R	Initial Calibration Verification Percent Recovery Upper Rejection
R	Initial Calibration Verification Relative Response Factor
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control Outlier Reports

DE122

Method Blank Outlier Report

Lab Reporting Batch ID: DE122 **Laboratory: LL**

EDD Filename: DE122_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1625C
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKLB09B261132	4/11/2011 11:32:00 AM	N-NITROSODIMETHYLAMINE	21.5 ng/Kg	SL-143-SA5A-SB-4.0-5.0 SL-143-SA5A-SB-8.0-9.0 SL-144-SA5A-SB-4.0-5.0 SL-144-SA5A-SB-7.0-8.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-143-SA5A-SB-4.0-5.0(RES)	N-NITROSODIMETHYLAMINE	62.8 ng/Kg	62.8U ng/Kg
SL-143-SA5A-SB-8.0-9.0(RES)	N-NITROSODIMETHYLAMINE	82.4 ng/Kg	82.4U ng/Kg
SL-144-SA5A-SB-4.0-5.0(RES)	N-NITROSODIMETHYLAMINE	83.3 ng/Kg	83.3U ng/Kg
SL-144-SA5A-SB-7.0-8.0(RES)	N-NITROSODIMETHYLAMINE	53.6 ng/Kg	53.6U ng/Kg

Method: 6010B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P08808DB221821	3/30/2011 6:21:00 PM	CALCIUM PHOSPHORUS TIN	6.36 mg/Kg 1.28 mg/Kg 1.86 mg/Kg	SL-143-SA5A-SB-4.0-5.0 SL-143-SA5A-SB-8.0-9.0 SL-144-SA5A-SB-4.0-5.0 SL-144-SA5A-SB-7.0-8.0 SL-213-SA5A-SB-4.0-5.0 SL-213-SA5A-SB-8.0-9.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-143-SA5A-SB-4.0-5.0(RES)	TIN	3.27 mg/Kg	3.27U mg/Kg
SL-143-SA5A-SB-8.0-9.0(RES)	TIN	3.18 mg/Kg	3.18U mg/Kg
SL-144-SA5A-SB-4.0-5.0(RES)	TIN	3.37 mg/Kg	3.37U mg/Kg
SL-144-SA5A-SB-7.0-8.0(RES)	TIN	3.04 mg/Kg	3.04U mg/Kg
SL-213-SA5A-SB-4.0-5.0(RES)	TIN	3.39 mg/Kg	3.39U mg/Kg
SL-213-SA5A-SB-8.0-9.0(RES)	TIN	3.70 mg/Kg	3.70U mg/Kg

Method: 6020
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P08826BB221251A	4/1/2011 12:51:00 PM	COPPER NICKEL	0.195 mg/Kg 0.125 mg/Kg	SL-143-SA5A-SB-4.0-5.0 SL-143-SA5A-SB-8.0-9.0 SL-144-SA5A-SB-4.0-5.0 SL-144-SA5A-SB-7.0-8.0 SL-213-SA5A-SB-4.0-5.0 SL-213-SA5A-SB-8.0-9.0

Method Blank Outlier Report

Lab Reporting Batch ID: DE122

EDD Filename: DE122_v1

Laboratory: LL

eQAPP Name: CDM_SSFL_110509

Method: **8260B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB06B210202A	3/28/2011 2:02:00 AM	ACETONE METHYLENE CHLORIDE TOLUENE	7.7 ug/Kg 0.95 ug/Kg 0.16 ug/Kg	SL-143-SA5A-SB-4.0-5.0 SL-143-SA5A-SB-8.0-9.0 SL-144-SA5A-SB-4.0-5.0 SL-144-SA5A-SB-7.0-8.0 SL-213-SA5A-SB-4.0-5.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-143-SA5A-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	2.2 ug/Kg	3.7U ug/Kg
SL-143-SA5A-SB-8.0-9.0(RES)	METHYLENE CHLORIDE	2.2 ug/Kg	4.1U ug/Kg
SL-144-SA5A-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	2.5 ug/Kg	3.9U ug/Kg
SL-144-SA5A-SB-7.0-8.0(RES)	METHYLENE CHLORIDE	2.5 ug/Kg	4.4U ug/Kg
SL-213-SA5A-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	2.6 ug/Kg	4.2U ug/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE122

Laboratory: LL

EDD Filename: DE122_v1

eQAPP Name: CDM_SSFL_110509

Method: **300.0**
Matrix: **SO**

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-143-SA5A-SB-8.0-9.0MS (SL-143-SA5A-SB-8.0-9.0 SL-144-SA5A-SB-4.0-5.0 SL-144-SA5A-SB-7.0-8.0)	FLUORIDE	57	-	80.00-120.00	-	FLUORIDE	J (all detects) UJ (all non-detects)

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE122

EDD Filename: DE122_v1

Laboratory: LL

eQAPP Name: CDM_SSFL_110509

Method: 8260B
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
LCSY78Q211734A LCSY78Y211755A (TB-032511)	BROMOMETHANE TRICHLOROFLUOROMETHANE	- 137	123 131	44.00-120.00 64.00-129.00	- -	BROMOMETHANE TRICHLOROFLUOROMETHAN	J(all detects)

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P08826BQ221253A (SL-143-SA5A-SB-4.0-5.0 SL-143-SA5A-SB-8.0-9.0 SL-144-SA5A-SB-4.0-5.0 SL-144-SA5A-SB-7.0-8.0 SL-213-SA5A-SB-4.0-5.0 SL-213-SA5A-SB-8.0-9.0)	ANTIMONY	60	-	80.00-120.00	-	ANTIMONY	No Qual SRM within QC limits

Method: 8270C SIM
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P9LDLCSQ261926 (SL-143-SA5A-SB-4.0-5.0 SL-143-SA5A-SB-8.0-9.0 SL-144-SA5A-SB-4.0-5.0 SL-144-SA5A-SB-7.0-8.0 SL-213-SA5A-SB-4.0-5.0 SL-213-SA5A-SB-8.0-9.0)	Dimethylphthalate	143	-	79.00-121.00	-	Dimethylphthalate	J(all detects)

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P1LCLCSQ261146 (SL-143-SA5A-SB-4.0-5.0 SL-143-SA5A-SB-8.0-9.0 SL-144-SA5A-SB-4.0-5.0 SL-144-SA5A-SB-7.0-8.0 SL-213-SA5A-SB-4.0-5.0 SL-213-SA5A-SB-8.0-9.0)	BIS(2-CHLOROISOPROPYL) ET NITROBENZENE	64 70	- -	68.00-131.00 71.00-104.00	- -	BIS(2-CHLOROISOPROPYL) E NITROBENZENE	J(all detects) UJ(all non-detects)

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE122

Laboratory: LL

EDD Filename: DE122_v1

eQAPP Name: CDM_SSFL_110509

Method: **8260B**
Matrix: **SO**

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
LCSB06Q210323A (SL-143-SA5A-SB-4.0-5.0 SL -143-SA5A-SB-8.0-9.0 SL -144-SA5A-SB-4.0-5.0 SL -144-SA5A-SB-7.0-8.0 SL -213-SA5A-SB-4.0-5.0)	BROMOCHLOROMETHANE	128	-	79.00-124.00	-	BROMOCHLOROMETHANE	J(all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE122

EDD Filename: DE122_v1

Laboratory: LL

eQAPP Name: CDM_SSFL_110509

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag

Method: 8015M

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-143-SA5A-SB-4.0-5.0	EFH (C30-C40)	J	0.50	1.4	PQL	mg/Kg	J (all detects)
SL-143-SA5A-SB-8.0-9.0	EFH (C30-C40) EFH (C8-C11)	J J	0.48 0.53	1.4 1.4	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-144-SA5A-SB-4.0-5.0	EFH (C30-C40)	J	0.56	1.3	PQL	mg/Kg	J (all detects)
SL-144-SA5A-SB-7.0-8.0	EFH (C30-C40) EFH (C8-C11)	J J	0.51 0.43	1.3 1.3	PQL PQL	mg/Kg mg/Kg	J (all detects)

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-143-SA5A-SB-4.0-5.0	METHYLENE CHLORIDE	J	2.2	3.7	PQL	ug/Kg	J (all detects)
SL-143-SA5A-SB-8.0-9.0	METHYLENE CHLORIDE	J	2.2	4.1	PQL	ug/Kg	J (all detects)
SL-144-SA5A-SB-4.0-5.0	METHYLENE CHLORIDE	J	2.5	3.9	PQL	ug/Kg	J (all detects)
SL-144-SA5A-SB-7.0-8.0	METHYLENE CHLORIDE	J	2.5	4.4	PQL	ug/Kg	J (all detects)
SL-213-SA5A-SB-4.0-5.0	METHYLENE CHLORIDE	J	2.6	4.2	PQL	ug/Kg	J (all detects)

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-143-SA5A-SB-8.0-9.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	12	21	PQL	ug/Kg	J (all detects)
SL-144-SA5A-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	14	20	PQL	ug/Kg	J (all detects)

LDC #: 25916D4
SDG #: DE122
Laboratory: Lancaster Laboratories

VALIDATION COMPLETENESS WORKSHEET
ADR

Date: 8-3-11

Reviewer: CR
2nd Reviewer: A

METHOD: Metals (EPA SW 846 Method 6010B/6020A/7000)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	N	Sampling dates:
II.	ICP/MS Tune	—	
III.	Calibration	—	
IV.	Blanks	A	No Quals
V.	ICP Interference Check Sample (ICS) Analysis	N	
VI.	Matrix Spike Analysis	N	MS/D (SDG: DE112)
VII.	Duplicate Sample Analysis	N	Dup ↓
VIII.	Laboratory Control Samples (LCS)	A	LCS
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	—	(SDG: DE112)
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	—	
XV	Field Blanks	✓	

Note: A = Acceptable
N = Not provided/applicable
SW = See worksheet

ND = No compounds detected
R = Rinsate
FB = Field blank

D = Duplicate
TB = Trip blank
EB = Equipment blank

Validated Samples:

1	SL-213-SA5A-SB-4.0-5.0	11		21		31	
2	SL-213-SA5A-SB-8.0-9.0	12		22		32	
3	SL-143-SA5A-SB-4.0-5.0	13		23		33	
4	SL-143-SA5A-SB-8.0-9.0	14		24		34	
5	SL-144-SA5A-SB-4.0-5.0	15		25		35	
6	SL-144-SA5A-SB-7.0-8.0	16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

SAMPLE DELIVERY GROUP

DE123

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
11-Apr-2011	SL-189-SA5A-SB-5.0-6.0	6255766	N	3050B	6010B	III
11-Apr-2011	SL-189-SA5A-SB-5.0-6.0	6255766	N	3050B	6020	III
11-Apr-2011	SL-189-SA5A-SB-5.0-6.0	6255766	N	3060A	7199	III
11-Apr-2011	SL-189-SA5A-SB-5.0-6.0	6255766	N	3546	1625C	III
11-Apr-2011	SL-189-SA5A-SB-5.0-6.0	6255766	N	3550B	8015B	III
11-Apr-2011	SL-189-SA5A-SB-5.0-6.0	6255766	N	3550B	8015M	III
11-Apr-2011	SL-189-SA5A-SB-5.0-6.0	6255766	N	3550B	8082	III
11-Apr-2011	SL-189-SA5A-SB-5.0-6.0	6255766	N	3550B	8270C	III
11-Apr-2011	SL-189-SA5A-SB-5.0-6.0	6255766	N	3550B	8270C SIM	III
11-Apr-2011	SL-189-SA5A-SB-5.0-6.0	6255766	N	5035	8015M	III
11-Apr-2011	SL-189-SA5A-SB-5.0-6.0	6255766	N	5035	8260B	III
11-Apr-2011	SL-189-SA5A-SB-5.0-6.0	6255766	N	5035	8260B SIM	III
11-Apr-2011	SL-189-SA5A-SB-5.0-6.0	6255766	N	8330	8330A	III
11-Apr-2011	SL-189-SA5A-SB-5.0-6.0	6255766	N	Gen Prep	9045M	III
11-Apr-2011	SL-189-SA5A-SB-5.0-6.0	6255766	N	METHOD	300.0	III
11-Apr-2011	SL-189-SA5A-SB-5.0-6.0	6255766	N	METHOD	314.0	III
11-Apr-2011	SL-189-SA5A-SB-5.0-6.0	6255766	N	METHOD	7471A	III
11-Apr-2011	SL-189-SA5A-SB-5.0-6.0	6255766	N	METHOD	8015B	III
11-Apr-2011	SL-189-SA5A-SB-5.0-6.0	6255766	N	METHOD	8015M	III
11-Apr-2011	SL-189-SA5A-SB-5.0-6.0	6255766	N	METHOD	8315A	III
11-Apr-2011	SL-189-SA5A-SB-5.0-6.0	6255766	N	METHOD	9012B	III
11-Apr-2011	SL-189-SA5A-SB-8.5-9.5	6255767	N	3050B	6010B	III
11-Apr-2011	SL-189-SA5A-SB-8.5-9.5	6255767	N	3050B	6020	III
11-Apr-2011	SL-189-SA5A-SB-8.5-9.5	6255767	N	3060A	7199	III
11-Apr-2011	SL-189-SA5A-SB-8.5-9.5	6255767	N	3546	1625C	III
11-Apr-2011	SL-189-SA5A-SB-8.5-9.5	6255767	N	3550B	8015B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
11-Apr-2011	SL-189-SA5A-SB-8.5-9.5	6255767	N	3550B	8015M	III
11-Apr-2011	SL-189-SA5A-SB-8.5-9.5	6255767	N	3550B	8082	III
11-Apr-2011	SL-189-SA5A-SB-8.5-9.5	6255767	N	3550B	8270C	III
11-Apr-2011	SL-189-SA5A-SB-8.5-9.5	6255767	N	3550B	8270C SIM	III
11-Apr-2011	SL-189-SA5A-SB-8.5-9.5	6255767	N	5035	8015M	III
11-Apr-2011	SL-189-SA5A-SB-8.5-9.5	6255767	N	5035	8260B	III
11-Apr-2011	SL-189-SA5A-SB-8.5-9.5	6255767	N	5035	8260B SIM	III
11-Apr-2011	SL-189-SA5A-SB-8.5-9.5	6255767	N	8330	8330A	III
11-Apr-2011	SL-189-SA5A-SB-8.5-9.5	6255767	N	Gen Prep	9045M	III
11-Apr-2011	SL-189-SA5A-SB-8.5-9.5	6255767	N	METHOD	300.0	III
11-Apr-2011	SL-189-SA5A-SB-8.5-9.5	6255767	N	METHOD	314.0	III
11-Apr-2011	SL-189-SA5A-SB-8.5-9.5	6255767	N	METHOD	7471A	III
11-Apr-2011	SL-189-SA5A-SB-8.5-9.5	6255767	N	METHOD	8015B	III
11-Apr-2011	SL-189-SA5A-SB-8.5-9.5	6255767	N	METHOD	8015M	III
11-Apr-2011	SL-189-SA5A-SB-8.5-9.5	6255767	N	METHOD	8315A	III
11-Apr-2011	SL-189-SA5A-SB-8.5-9.5	6255767	N	METHOD	9012B	III
11-Apr-2011	SL-188-SA5A-SB-4.5-5.5	6255765	N	3050B	6010B	III
11-Apr-2011	SL-188-SA5A-SB-4.5-5.5	6255765	N	3050B	6020	III
11-Apr-2011	SL-188-SA5A-SB-4.5-5.5	6255765	N	3060A	7199	III
11-Apr-2011	SL-188-SA5A-SB-4.5-5.5	6255765	N	3546	1625C	III
11-Apr-2011	SL-188-SA5A-SB-4.5-5.5	6255765	N	3550B	8015B	III
11-Apr-2011	SL-188-SA5A-SB-4.5-5.5	6255765	N	3550B	8015M	III
11-Apr-2011	SL-188-SA5A-SB-4.5-5.5	6255765	N	3550B	8082	III
11-Apr-2011	SL-188-SA5A-SB-4.5-5.5	6255765	N	3550B	8270C	III
11-Apr-2011	SL-188-SA5A-SB-4.5-5.5	6255765	N	3550B	8270C SIM	III
11-Apr-2011	SL-188-SA5A-SB-4.5-5.5	6255765	N	5035	8015M	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
11-Apr-2011	SL-188-SA5A-SB-4.5-5.5	6255765	N	5035	8260B	III
11-Apr-2011	SL-188-SA5A-SB-4.5-5.5	6255765	N	5035	8260B SIM	III
11-Apr-2011	SL-188-SA5A-SB-4.5-5.5	6255765	N	8330	8330A	III
11-Apr-2011	SL-188-SA5A-SB-4.5-5.5	6255765	N	Gen Prep	9045M	III
11-Apr-2011	SL-188-SA5A-SB-4.5-5.5	6255765	N	METHOD	300.0	III
11-Apr-2011	SL-188-SA5A-SB-4.5-5.5	6255765	N	METHOD	314.0	III
11-Apr-2011	SL-188-SA5A-SB-4.5-5.5	6255765	N	METHOD	7471A	III
11-Apr-2011	SL-188-SA5A-SB-4.5-5.5	6255765	N	METHOD	8015B	III
11-Apr-2011	SL-188-SA5A-SB-4.5-5.5	6255765	N	METHOD	8015M	III
11-Apr-2011	SL-188-SA5A-SB-4.5-5.5	6255765	N	METHOD	8315A	III
11-Apr-2011	SL-188-SA5A-SB-4.5-5.5	6255765	N	METHOD	9012B	III
11-Apr-2011	SL-186-SA5A-SB-3.5-4.5	6255760	N	3050B	6010B	III
11-Apr-2011	SL-186-SA5A-SB-3.5-4.5	6255760	N	3050B	6020	III
11-Apr-2011	SL-186-SA5A-SB-3.5-4.5	6255760	N	3060A	7199	III
11-Apr-2011	SL-186-SA5A-SB-3.5-4.5	6255760	N	3546	1625C	III
11-Apr-2011	SL-186-SA5A-SB-3.5-4.5	6255760	N	3550B	8015B	III
11-Apr-2011	SL-186-SA5A-SB-3.5-4.5	6255760	N	3550B	8015M	III
11-Apr-2011	SL-186-SA5A-SB-3.5-4.5	6255760	N	3550B	8082	III
11-Apr-2011	SL-186-SA5A-SB-3.5-4.5	6255760	N	3550B	8270C	III
11-Apr-2011	SL-186-SA5A-SB-3.5-4.5	6255760	N	3550B	8270C SIM	III
11-Apr-2011	SL-186-SA5A-SB-3.5-4.5	6255760	N	5035	8015M	III
11-Apr-2011	SL-186-SA5A-SB-3.5-4.5	6255760	N	5035	8260B	III
11-Apr-2011	SL-186-SA5A-SB-3.5-4.5	6255760	N	5035	8260B SIM	III
11-Apr-2011	SL-186-SA5A-SB-3.5-4.5	6255760	N	8330	8330A	III
11-Apr-2011	SL-186-SA5A-SB-3.5-4.5	6255760	N	Gen Prep	9045M	III
11-Apr-2011	SL-186-SA5A-SB-3.5-4.5	6255760	N	METHOD	300.0	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
11-Apr-2011	SL-186-SA5A-SB-3.5-4.5	6255760	N	METHOD	314.0	III
11-Apr-2011	SL-186-SA5A-SB-3.5-4.5	6255760	N	METHOD	7471A	III
11-Apr-2011	SL-186-SA5A-SB-3.5-4.5	6255760	N	METHOD	8015B	III
11-Apr-2011	SL-186-SA5A-SB-3.5-4.5	6255760	N	METHOD	8015M	III
11-Apr-2011	SL-186-SA5A-SB-3.5-4.5	6255760	N	METHOD	8315A	III
11-Apr-2011	SL-186-SA5A-SB-3.5-4.5	6255760	N	METHOD	9012B	III
11-Apr-2011	SL-187-SA5A-SB-4.0-5.0	6255761	N	3050B	6010B	III
11-Apr-2011	SL-187-SA5A-SB-4.0-5.0	6255761	N	3050B	6020	III
11-Apr-2011	SL-187-SA5A-SB-4.0-5.0	6255761	N	3060A	7199	III
11-Apr-2011	SL-187-SA5A-SB-4.0-5.0	6255761	N	3546	1625C	III
11-Apr-2011	SL-187-SA5A-SB-4.0-5.0	6255761	N	3550B	8015B	III
11-Apr-2011	SL-187-SA5A-SB-4.0-5.0	6255761	N	3550B	8015M	III
11-Apr-2011	SL-187-SA5A-SB-4.0-5.0	6255761	N	3550B	8082	III
11-Apr-2011	SL-187-SA5A-SB-4.0-5.0	6255761	N	3550B	8270C	III
11-Apr-2011	SL-187-SA5A-SB-4.0-5.0	6255761	N	3550B	8270C SIM	III
11-Apr-2011	SL-187-SA5A-SB-4.0-5.0	6255761	N	5035	8015M	III
11-Apr-2011	SL-187-SA5A-SB-4.0-5.0	6255761	N	5035	8260B	III
11-Apr-2011	SL-187-SA5A-SB-4.0-5.0	6255761	N	5035	8260B SIM	III
11-Apr-2011	SL-187-SA5A-SB-4.0-5.0	6255761	N	8330	8330A	III
11-Apr-2011	SL-187-SA5A-SB-4.0-5.0	6255761	N	Gen Prep	9045M	III
11-Apr-2011	SL-187-SA5A-SB-4.0-5.0	6255761	N	METHOD	300.0	III
11-Apr-2011	SL-187-SA5A-SB-4.0-5.0	6255761	N	METHOD	314.0	III
11-Apr-2011	SL-187-SA5A-SB-4.0-5.0	6255761	N	METHOD	7471A	III
11-Apr-2011	SL-187-SA5A-SB-4.0-5.0	6255761	N	METHOD	8015B	III
11-Apr-2011	SL-187-SA5A-SB-4.0-5.0	6255761	N	METHOD	8015M	III
11-Apr-2011	SL-187-SA5A-SB-4.0-5.0	6255761	N	METHOD	8315A	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
11-Apr-2011	SL-187-SA5A-SB-4.0-5.0	6255761	N	METHOD	9012B	III
11-Apr-2011	SL-187-SA5A-SB-4.0-5.0MS	6255762	MS	3050B	6010B	III
11-Apr-2011	SL-187-SA5A-SB-4.0-5.0MS	6255762	MS	3050B	6020	III
11-Apr-2011	SL-187-SA5A-SB-4.0-5.0MS	6255762	MS	3060A	7199	III
11-Apr-2011	SL-187-SA5A-SB-4.0-5.0MS	6255762	MS	3546	1625C	III
11-Apr-2011	SL-187-SA5A-SB-4.0-5.0MS	6255762	MS	3550B	8015B	III
11-Apr-2011	SL-187-SA5A-SB-4.0-5.0MS	6255762	MS	3550B	8015M	III
11-Apr-2011	SL-187-SA5A-SB-4.0-5.0MS	6255762	MS	3550B	8082	III
11-Apr-2011	SL-187-SA5A-SB-4.0-5.0MS	6255762	MS	3550B	8270C	III
11-Apr-2011	SL-187-SA5A-SB-4.0-5.0MS	6255762	MS	3550B	8270C SIM	III
11-Apr-2011	SL-187-SA5A-SB-4.0-5.0MS	6255762	MS	5035	8015M	III
11-Apr-2011	SL-187-SA5A-SB-4.0-5.0MS	6255762	MS	5035	8260B	III
11-Apr-2011	SL-187-SA5A-SB-4.0-5.0MS	6255762	MS	5035	8260B SIM	III
11-Apr-2011	SL-187-SA5A-SB-4.0-5.0MS	6255762	MS	8330	8330A	III
11-Apr-2011	SL-187-SA5A-SB-4.0-5.0MS	6255762	MS	METHOD	300.0	III
11-Apr-2011	SL-187-SA5A-SB-4.0-5.0MS	6255762	MS	METHOD	314.0	III
11-Apr-2011	SL-187-SA5A-SB-4.0-5.0MS	6255762	MS	METHOD	7471A	III
11-Apr-2011	SL-187-SA5A-SB-4.0-5.0MS	6255762	MS	METHOD	8015B	III
11-Apr-2011	SL-187-SA5A-SB-4.0-5.0MS	6255762	MS	METHOD	8015M	III
11-Apr-2011	SL-187-SA5A-SB-4.0-5.0MS	6255762	MS	METHOD	8315A	III
11-Apr-2011	SL-187-SA5A-SB-4.0-5.0MS	6255762	MS	METHOD	9012B	III
11-Apr-2011	SL-187-SA5A-SB-4.0-5.0MSD	6255763	MSD	3050B	6010B	III
11-Apr-2011	SL-187-SA5A-SB-4.0-5.0MSD	6255763	MSD	3050B	6020	III
11-Apr-2011	SL-187-SA5A-SB-4.0-5.0MSD	6255763	MSD	3546	1625C	III
11-Apr-2011	SL-187-SA5A-SB-4.0-5.0MSD	6255763	MSD	3550B	8015B	III
11-Apr-2011	SL-187-SA5A-SB-4.0-5.0MSD	6255763	MSD	3550B	8015M	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
11-Apr-2011	SL-187-SA5A-SB-4.0-5.0MSD	6255763	MSD	3550B	8082	III
11-Apr-2011	SL-187-SA5A-SB-4.0-5.0MSD	6255763	MSD	3550B	8270C	III
11-Apr-2011	SL-187-SA5A-SB-4.0-5.0MSD	6255763	MSD	3550B	8270C SIM	III
11-Apr-2011	SL-187-SA5A-SB-4.0-5.0MSD	6255763	MSD	5035	8015M	III
11-Apr-2011	SL-187-SA5A-SB-4.0-5.0MSD	6255763	MSD	5035	8260B	III
11-Apr-2011	SL-187-SA5A-SB-4.0-5.0MSD	6255763	MSD	5035	8260B SIM	III
11-Apr-2011	SL-187-SA5A-SB-4.0-5.0MSD	6255763	MSD	8330	8330A	III
11-Apr-2011	SL-187-SA5A-SB-4.0-5.0MSD	6255763	MSD	METHOD	7471A	III
11-Apr-2011	SL-187-SA5A-SB-4.0-5.0MSD	6255763	MSD	METHOD	8015B	III
11-Apr-2011	SL-187-SA5A-SB-4.0-5.0MSD	6255763	MSD	METHOD	8015M	III
11-Apr-2011	SL-187-SA5A-SB-4.0-5.0MSD	6255763	MSD	METHOD	8315A	III
11-Apr-2011	SL-187-SA5A-SB-4.0-5.0DUP	6255764	DUP	3050B	6010B	III
11-Apr-2011	SL-187-SA5A-SB-4.0-5.0DUP	6255764	DUP	3050B	6020	III
11-Apr-2011	SL-187-SA5A-SB-4.0-5.0DUP	6255764	DUP	3060A	7199	III
11-Apr-2011	SL-187-SA5A-SB-4.0-5.0DUP	6255764	DUP	Gen Prep	9045M	III
11-Apr-2011	SL-187-SA5A-SB-4.0-5.0DUP	6255764	DUP	METHOD	300.0	III
11-Apr-2011	SL-187-SA5A-SB-4.0-5.0DUP	6255764	DUP	METHOD	314.0	III
11-Apr-2011	SL-187-SA5A-SB-4.0-5.0DUP	6255764	DUP	METHOD	7471A	III
11-Apr-2011	SL-187-SA5A-SB-4.0-5.0DUP	6255764	DUP	METHOD	9012B	III
11-Apr-2011	DUP-13-SA5A-QC-041111	6255759	FD	3050B	6010B	III
11-Apr-2011	DUP-13-SA5A-QC-041111	6255759	FD	3050B	6020	III
11-Apr-2011	DUP-13-SA5A-QC-041111	6255759	FD	3060A	7199	III
11-Apr-2011	DUP-13-SA5A-QC-041111	6255759	FD	3546	1625C	III
11-Apr-2011	DUP-13-SA5A-QC-041111	6255759	FD	3550B	8015B	III
11-Apr-2011	DUP-13-SA5A-QC-041111	6255759	FD	3550B	8015M	III
11-Apr-2011	DUP-13-SA5A-QC-041111	6255759	FD	3550B	8082	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
11-Apr-2011	DUP-13-SA5A-QC-041111	6255759	FD	3550B	8270C	III
11-Apr-2011	DUP-13-SA5A-QC-041111	6255759	FD	3550B	8270C SIM	III
11-Apr-2011	DUP-13-SA5A-QC-041111	6255759	FD	5035	8015M	III
11-Apr-2011	DUP-13-SA5A-QC-041111	6255759	FD	5035	8260B	III
11-Apr-2011	DUP-13-SA5A-QC-041111	6255759	FD	5035	8260B SIM	III
11-Apr-2011	DUP-13-SA5A-QC-041111	6255759	FD	8330	8330A	III
11-Apr-2011	DUP-13-SA5A-QC-041111	6255759	FD	Gen Prep	9045M	III
11-Apr-2011	DUP-13-SA5A-QC-041111	6255759	FD	METHOD	300.0	III
11-Apr-2011	DUP-13-SA5A-QC-041111	6255759	FD	METHOD	314.0	III
11-Apr-2011	DUP-13-SA5A-QC-041111	6255759	FD	METHOD	7471A	III
11-Apr-2011	DUP-13-SA5A-QC-041111	6255759	FD	METHOD	8015B	III
11-Apr-2011	DUP-13-SA5A-QC-041111	6255759	FD	METHOD	8015M	III
11-Apr-2011	DUP-13-SA5A-QC-041111	6255759	FD	METHOD	8315A	III
11-Apr-2011	DUP-13-SA5A-QC-041111	6255759	FD	METHOD	9012B	III
11-Apr-2011	TB-041111	6255768	TB	5030B	8015M	III
11-Apr-2011	TB-041111	6255768	TB	5030B	8260B	III
11-Apr-2011	TB-041111	6255768	TB	5030B	8260B SIM	III

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IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE123 **Laboratory: LL**

EDD Filename: PrepDE123_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: GENCHEM

Method: 300.0 ***Matrix:*** SO

Sample ID: DUP-13-SA5A-QC-041111 ***Collected:*** 4/11/2011 3:51:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.6		0.95	MDL	1.2	PQL	mg/Kg	J	FD
Nitrate-NO3	1.3	J	0.95	MDL	1.8	PQL	mg/Kg	J	Z

Sample ID: SL-186-SA5A-SB-3.5-4.5 ***Collected:*** 4/11/2011 1:01:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Nitrate-NO3	1.3	J	0.93	MDL	1.7	PQL	mg/Kg	J	Z

Sample ID: SL-187-SA5A-SB-4.0-5.0 ***Collected:*** 4/11/2011 3:48:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	3.2		0.94	MDL	1.2	PQL	mg/Kg	J	Q, FD
Nitrate-NO3	1.3	J	0.94	MDL	1.8	PQL	mg/Kg	J	Z

Sample ID: SL-188-SA5A-SB-4.5-5.5 ***Collected:*** 4/11/2011 11:54:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Nitrate-NO3	1.5	J	0.91	MDL	1.7	PQL	mg/Kg	J	Z

Sample ID: SL-189-SA5A-SB-5.0-6.0 ***Collected:*** 4/11/2011 10:12:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Nitrate-NO3	1.4	J	0.97	MDL	1.8	PQL	mg/Kg	J	Z

Sample ID: SL-189-SA5A-SB-8.5-9.5 ***Collected:*** 4/11/2011 10:23:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Nitrate-NO3	1.3	J	0.93	MDL	1.7	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE123 **Laboratory: LL**

EDD Filename: PrepDE123_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B ***Matrix:*** SO

Sample ID: DUP-13-SA5A-QC-041111 ***Collected:*** 4/11/2011 3:51:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.03	U	1.03	MDL	5.79	PQL	mg/Kg	UJ	FD
CALCIUM	5470		7.10	MDL	23.2	PQL	mg/Kg	J	FD
LITHIUM	15.0		0.25	MDL	2.3	PQL	mg/Kg	J	A
PHOSPHORUS	858		0.649	MDL	11.6	PQL	mg/Kg	J	Q, FD
POTASSIUM	2490		20.9	MDL	57.9	PQL	mg/Kg	J	Q
SODIUM	286		43.2	MDL	116	PQL	mg/Kg	J	FD
TIN	2.32	J	1.16	MDL	11.6	PQL	mg/Kg	U	B
Zirconium	1.79	J	0.973	MDL	5.79	PQL	mg/Kg	J	Z, FD

Sample ID: SL-186-SA5A-SB-3.5-4.5 ***Collected:*** 4/11/2011 1:01:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.15	J	1.03	MDL	5.76	PQL	mg/Kg	J	Z
LITHIUM	17.8		0.25	MDL	2.3	PQL	mg/Kg	J	A
PHOSPHORUS	372		0.645	MDL	11.5	PQL	mg/Kg	J	Q
POTASSIUM	3770		20.7	MDL	57.6	PQL	mg/Kg	J	Q
TIN	2.97	J	1.15	MDL	11.5	PQL	mg/Kg	U	B
Zirconium	2.15	J	0.968	MDL	5.76	PQL	mg/Kg	J	Z

Sample ID: SL-187-SA5A-SB-4.0-5.0 ***Collected:*** 4/11/2011 3:48:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.73	J	1.02	MDL	5.73	PQL	mg/Kg	J	Z, FD
CALCIUM	2250		7.03	MDL	22.9	PQL	mg/Kg	J	FD
LITHIUM	20.4		0.25	MDL	2.3	PQL	mg/Kg	J	A
PHOSPHORUS	341		0.642	MDL	11.5	PQL	mg/Kg	J	Q, FD
POTASSIUM	3450		20.6	MDL	57.3	PQL	mg/Kg	J	Q
SODIUM	133		42.8	MDL	115	PQL	mg/Kg	J	FD
TIN	2.99	J	1.15	MDL	11.5	PQL	mg/Kg	U	B
Zirconium	4.83	J	0.963	MDL	5.73	PQL	mg/Kg	J	Z, FD

Sample ID: SL-188-SA5A-SB-4.5-5.5 ***Collected:*** 4/11/2011 11:54:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.65	J	0.977	MDL	5.49	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE123 **Laboratory: LL**

EDD Filename: PrepDE123_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS
Method: 6010B **Matrix:** SO

Sample ID: SL-188-SA5A-SB-4.5-5.5 **Collected:** 4/11/2011 11:54:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LITHIUM	23.7		0.24	MDL	2.2	PQL	mg/Kg	J	A
PHOSPHORUS	389		0.615	MDL	11.0	PQL	mg/Kg	J	Q
POTASSIUM	3760		19.8	MDL	54.9	PQL	mg/Kg	J	Q
TIN	2.99	J	1.10	MDL	11.0	PQL	mg/Kg	U	B
Zirconium	4.49	J	0.922	MDL	5.49	PQL	mg/Kg	J	Z

Sample ID: SL-189-SA5A-SB-5.0-6.0 **Collected:** 4/11/2011 10:12:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.32	J	1.06	MDL	5.93	PQL	mg/Kg	J	Z
LITHIUM	21.7		0.26	MDL	2.4	PQL	mg/Kg	J	A
PHOSPHORUS	361		0.665	MDL	11.9	PQL	mg/Kg	J	Q
POTASSIUM	3970		21.4	MDL	59.3	PQL	mg/Kg	J	Q
TIN	3.30	J	1.19	MDL	11.9	PQL	mg/Kg	U	B
Zirconium	4.81	J	0.997	MDL	5.93	PQL	mg/Kg	J	Z

Sample ID: SL-189-SA5A-SB-8.5-9.5 **Collected:** 4/11/2011 10:23:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.57	J	1.01	MDL	5.70	PQL	mg/Kg	J	Z
LITHIUM	19.8		0.25	MDL	2.3	PQL	mg/Kg	J	A
PHOSPHORUS	323		0.638	MDL	11.4	PQL	mg/Kg	J	Q
POTASSIUM	3660		20.5	MDL	57.0	PQL	mg/Kg	J	Q
TIN	3.09	J	1.14	MDL	11.4	PQL	mg/Kg	U	B
Zirconium	2.15	J	0.958	MDL	5.70	PQL	mg/Kg	J	Z

Method Category: METALS
Method: 6020 **Matrix:** SO

Sample ID: DUP-13-SA5A-QC-041111 **Collected:** 4/11/2011 3:51:00 **Analysis Type:** REA **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0459	U	0.0459	MDL	0.459	PQL	mg/Kg	UJ	FD

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE123 **Laboratory: LL**

EDD Filename: PrepDE123_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: DUP-13-SA5A-QC-041111 **Collected:** 4/11/2011 3:51:00 **Analysis Type:** REA3 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	101		0.124	MDL	0.459	PQL	mg/Kg	J	A

Sample ID: DUP-13-SA5A-QC-041111 **Collected:** 4/11/2011 3:51:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.137	J	0.0689	MDL	0.230	PQL	mg/Kg	J	Z, Q
ARSENIC	2.04		0.0918	MDL	0.459	PQL	mg/Kg	J	Q
CADMIUM	0.0601	J	0.0459	MDL	0.115	PQL	mg/Kg	J	Z, FD
CHROMIUM	9.86		0.138	MDL	0.459	PQL	mg/Kg	J	Q, A
COBALT	6.39		0.0230	MDL	0.115	PQL	mg/Kg	J	A
COPPER	14.4		0.0757	MDL	0.459	PQL	mg/Kg	J	Q, A
LEAD	3.24		0.0119	MDL	0.230	PQL	mg/Kg	J	Q, A
NICKEL	6.20		0.115	MDL	0.459	PQL	mg/Kg	J	Q
SILVER	0.292		0.0138	MDL	0.115	PQL	mg/Kg	J	FD
THALLIUM	0.105	J	0.0344	MDL	0.115	PQL	mg/Kg	J	Z, Q, FD
VANADIUM	47.6		0.0252	MDL	0.115	PQL	mg/Kg	J	Q, FD, A

Sample ID: SL-186-SA5A-SB-3.5-4.5 **Collected:** 4/11/2011 1:01:00 **Analysis Type:** REA **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.143	J	0.0448	MDL	0.448	PQL	mg/Kg	J	Z

Sample ID: SL-186-SA5A-SB-3.5-4.5 **Collected:** 4/11/2011 1:01:00 **Analysis Type:** REA3 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	146		0.121	MDL	0.448	PQL	mg/Kg	J	A

Sample ID: SL-186-SA5A-SB-3.5-4.5 **Collected:** 4/11/2011 1:01:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.159	J	0.0672	MDL	0.224	PQL	mg/Kg	J	Z, Q
ARSENIC	3.70		0.0895	MDL	0.448	PQL	mg/Kg	J	Q
CHROMIUM	17.7		0.134	MDL	0.448	PQL	mg/Kg	J	Q, A
COBALT	7.79		0.0224	MDL	0.112	PQL	mg/Kg	J	A
COPPER	13.3		0.0739	MDL	0.448	PQL	mg/Kg	J	Q, A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE123 **Laboratory: LL**

EDD Filename: PrepDE123_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-186-SA5A-SB-3.5-4.5 **Collected:** 4/11/2011 1:01:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	6.07		0.0116	MDL	0.224	PQL	mg/Kg	J	Q, A
NICKEL	13.3		0.112	MDL	0.448	PQL	mg/Kg	J	Q
SILVER	0.0358	J	0.0134	MDL	0.112	PQL	mg/Kg	J	Z
THALLIUM	0.359		0.0336	MDL	0.112	PQL	mg/Kg	J	Q
VANADIUM	33.8		0.0246	MDL	0.112	PQL	mg/Kg	J	Q, A

Sample ID: SL-187-SA5A-SB-4.0-5.0 **Collected:** 4/11/2011 3:48:00 **Analysis Type:** REA **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.123	J	0.0463	MDL	0.463	PQL	mg/Kg	J	Z, FD

Sample ID: SL-187-SA5A-SB-4.0-5.0 **Collected:** 4/11/2011 3:48:00 **Analysis Type:** REA3 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	114		0.125	MDL	0.463	PQL	mg/Kg	J	A

Sample ID: SL-187-SA5A-SB-4.0-5.0 **Collected:** 4/11/2011 3:48:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0988	J	0.0694	MDL	0.231	PQL	mg/Kg	J	Z, Q
ARSENIC	3.06		0.0926	MDL	0.463	PQL	mg/Kg	J	Q
CADMIUM	0.167		0.0463	MDL	0.116	PQL	mg/Kg	J	FD
CHROMIUM	14.9		0.139	MDL	0.463	PQL	mg/Kg	J	Q, A
COBALT	5.37		0.0231	MDL	0.116	PQL	mg/Kg	J	A
COPPER	10.3		0.0764	MDL	0.463	PQL	mg/Kg	J	Q, A
LEAD	4.95		0.0120	MDL	0.231	PQL	mg/Kg	J	Q, A
NICKEL	10.3		0.116	MDL	0.463	PQL	mg/Kg	J	Q
SILVER	0.0283	J	0.0139	MDL	0.116	PQL	mg/Kg	J	Z, FD
THALLIUM	0.254		0.0347	MDL	0.116	PQL	mg/Kg	J	Q, FD
VANADIUM	26.9		0.0255	MDL	0.116	PQL	mg/Kg	J	Q, FD, A

Sample ID: SL-188-SA5A-SB-4.5-5.5 **Collected:** 4/11/2011 11:54:00 **Analysis Type:** REA **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.160	J	0.0457	MDL	0.457	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE123 **Laboratory: LL**

EDD Filename: PrepDE123_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-188-SA5A-SB-4.5-5.5 **Collected:** 4/11/2011 11:54:00 **Analysis Type:** REA3 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	190		0.123	MDL	0.457	PQL	mg/Kg	J	A

Sample ID: SL-188-SA5A-SB-4.5-5.5 **Collected:** 4/11/2011 11:54:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.226	J	0.0685	MDL	0.228	PQL	mg/Kg	J	Z, Q
ARSENIC	6.55		0.0913	MDL	0.457	PQL	mg/Kg	J	Q
CHROMIUM	27.3		0.137	MDL	0.457	PQL	mg/Kg	J	Q, A
COBALT	10.5		0.0228	MDL	0.114	PQL	mg/Kg	J	A
COPPER	20.1		0.0753	MDL	0.457	PQL	mg/Kg	J	Q, A
LEAD	9.13		0.0119	MDL	0.228	PQL	mg/Kg	J	Q, A
NICKEL	20.4		0.114	MDL	0.457	PQL	mg/Kg	J	Q
SILVER	0.0621	J	0.0137	MDL	0.114	PQL	mg/Kg	J	Z
THALLIUM	0.431		0.0342	MDL	0.114	PQL	mg/Kg	J	Q
VANADIUM	47.6		0.0251	MDL	0.114	PQL	mg/Kg	J	Q, A

Sample ID: SL-189-SA5A-SB-5.0-6.0 **Collected:** 4/11/2011 10:12:00 **Analysis Type:** REA **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.133	J	0.0484	MDL	0.484	PQL	mg/Kg	J	Z

Sample ID: SL-189-SA5A-SB-5.0-6.0 **Collected:** 4/11/2011 10:12:00 **Analysis Type:** REA3 **Dilution:** 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	781		0.654	MDL	2.42	PQL	mg/Kg	J	A

Sample ID: SL-189-SA5A-SB-5.0-6.0 **Collected:** 4/11/2011 10:12:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.277		0.0726	MDL	0.242	PQL	mg/Kg	J	Q
ARSENIC	4.72		0.0969	MDL	0.484	PQL	mg/Kg	J	Q
CHROMIUM	20.7		0.145	MDL	0.484	PQL	mg/Kg	J	Q, A
COBALT	8.10		0.0242	MDL	0.121	PQL	mg/Kg	J	A
COPPER	43.9		0.0799	MDL	0.484	PQL	mg/Kg	J	Q, A
LEAD	11.0		0.0126	MDL	0.242	PQL	mg/Kg	J	Q, A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE123 **Laboratory: LL**

EDD Filename: PrepDE123_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-189-SA5A-SB-5.0-6.0 **Collected:** 4/11/2011 10:12:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NICKEL	14.8		0.121	MDL	0.484	PQL	mg/Kg	J	Q
SILVER	0.0495	J	0.0145	MDL	0.121	PQL	mg/Kg	J	Z
THALLIUM	0.398		0.0363	MDL	0.121	PQL	mg/Kg	J	Q
VANADIUM	36.9		0.0266	MDL	0.121	PQL	mg/Kg	J	Q, A

Sample ID: SL-189-SA5A-SB-8.5-9.5 **Collected:** 4/11/2011 10:23:00 **Analysis Type:** REA **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0980	J	0.0465	MDL	0.465	PQL	mg/Kg	J	Z

Sample ID: SL-189-SA5A-SB-8.5-9.5 **Collected:** 4/11/2011 10:23:00 **Analysis Type:** REA3 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	109		0.126	MDL	0.465	PQL	mg/Kg	J	A

Sample ID: SL-189-SA5A-SB-8.5-9.5 **Collected:** 4/11/2011 10:23:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.160	J	0.0698	MDL	0.233	PQL	mg/Kg	J	Z, Q
ARSENIC	3.34		0.0930	MDL	0.465	PQL	mg/Kg	J	Q
CHROMIUM	15.6		0.140	MDL	0.465	PQL	mg/Kg	J	Q, A
COBALT	6.55		0.0233	MDL	0.116	PQL	mg/Kg	J	A
COPPER	12.1		0.0767	MDL	0.465	PQL	mg/Kg	J	Q, A
LEAD	6.08		0.0121	MDL	0.233	PQL	mg/Kg	J	Q, A
NICKEL	11.0		0.116	MDL	0.465	PQL	mg/Kg	J	Q
SILVER	0.0547	J	0.0140	MDL	0.116	PQL	mg/Kg	J	Z
THALLIUM	0.303		0.0349	MDL	0.116	PQL	mg/Kg	J	Q
VANADIUM	29.0		0.0256	MDL	0.116	PQL	mg/Kg	J	Q, A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE123 **Laboratory: LL**

EDD Filename: PrepDE123_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 7199 **Matrix: SO**

Sample ID: DUP-13-SA5A-QC-041111 **Collected:** 4/11/2011 3:51:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.60	J	0.24	MDL	1.2	PQL	mg/Kg	J	Z, FD

Sample ID: SL-186-SA5A-SB-3.5-4.5 **Collected:** 4/11/2011 1:01:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.50	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-187-SA5A-SB-4.0-5.0 **Collected:** 4/11/2011 3:48:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.24	U	0.24	MDL	1.2	PQL	mg/Kg	UJ	FD

Sample ID: SL-188-SA5A-SB-4.5-5.5 **Collected:** 4/11/2011 11:54:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.45	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-189-SA5A-SB-5.0-6.0 **Collected:** 4/11/2011 10:12:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	1.0	J	0.24	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-189-SA5A-SB-8.5-9.5 **Collected:** 4/11/2011 10:23:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	1.1	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 7471A **Matrix: SO**

Sample ID: DUP-13-SA5A-QC-041111 **Collected:** 4/11/2011 3:51:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0077	J	0.0033	MDL	0.115	PQL	mg/Kg	J	Z, FD

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE123 **Laboratory: LL**

EDD Filename: PrepDE123_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS
Method: 7471A **Matrix:** SO

Sample ID: SL-187-SA5A-SB-4.0-5.0 **Collected:** 4/11/2011 3:48:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0033	U	0.0033	MDL	0.115	PQL	mg/Kg	UJ	FD

Method Category: SVOA
Method: 1625C **Matrix:** SO

Sample ID: DUP-13-SA5A-QC-041111 **Collected:** 4/11/2011 3:51:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	19.7	U	19.7	MDL	39.4	PQL	ng/Kg	UJ	FD

Sample ID: SL-187-SA5A-SB-4.0-5.0 **Collected:** 4/11/2011 3:48:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	37.5	J	19.7	MDL	39.4	PQL	ng/Kg	J	Z, Q, Q, FD

Sample ID: SL-188-SA5A-SB-4.5-5.5 **Collected:** 4/11/2011 11:54:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	351	J	190	MDL	381	PQL	ng/Kg	J	Z

Sample ID: SL-189-SA5A-SB-5.0-6.0 **Collected:** 4/11/2011 10:12:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	321	J	202	MDL	404	PQL	ng/Kg	J	Z

Sample ID: SL-189-SA5A-SB-8.5-9.5 **Collected:** 4/11/2011 10:23:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	264	J	194	MDL	388	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE123 **Laboratory: LL**

EDD Filename: PrepDE123_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8015M **Matrix:** SO

Sample ID: DUP-13-SA5A-QC-041111 **Collected:** 4/11/2011 3:51:00 **Analysis Type:** REA2 **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C12-C14)	0.50	J	0.47	MDL	1.4	PQL	mg/Kg	J	Z, FD
EFH (C15-C20)	0.68	J	0.47	MDL	1.4	PQL	mg/Kg	J	Z
EFH (C30-C40)	0.96	J	0.47	MDL	1.4	PQL	mg/Kg	J	Z

Sample ID: DUP-13-SA5A-QC-041111 **Collected:** 4/11/2011 3:51:00 **Analysis Type:** RES **Dilution:** 21.26

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
GASOLINE RANGE ORGANICS (C5-C12)	0.4	J	0.2	MDL	1.0	PQL	mg/Kg	J	Z

Sample ID: SL-186-SA5A-SB-3.5-4.5 **Collected:** 4/11/2011 1:01:00 **Analysis Type:** REA2 **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	1.1	J	0.46	MDL	1.4	PQL	mg/Kg	J	Z

Sample ID: SL-187-SA5A-SB-4.0-5.0 **Collected:** 4/11/2011 3:48:00 **Analysis Type:** REA2 **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C12-C14)	0.47	U	0.47	MDL	1.4	PQL	mg/Kg	UJ	FD
EFH (C15-C20)	0.51	J	0.47	MDL	1.4	PQL	mg/Kg	J	Z, Q

Sample ID: SL-187-SA5A-SB-4.0-5.0 **Collected:** 4/11/2011 3:48:00 **Analysis Type:** RES **Dilution:** 20.03

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
GASOLINE RANGE ORGANICS (C5-C12)	0.3	J	0.2	MDL	0.9	PQL	mg/Kg	J	Z

Sample ID: SL-188-SA5A-SB-4.5-5.5 **Collected:** 4/11/2011 11:54:00 **Analysis Type:** REA2 **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	1.1	J	0.46	MDL	1.4	PQL	mg/Kg	J	Z

Sample ID: SL-189-SA5A-SB-8.5-9.5 **Collected:** 4/11/2011 10:23:00 **Analysis Type:** REA **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Propylene glycol	8.9	J	5.8	MDL	15	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE123 **Laboratory: LL**

EDD Filename: PrepDE123_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA
Method: 8015M **Matrix:** SO

Sample ID: SL-189-SA5A-SB-8.5-9.5 **Collected:** 4/11/2011 10:23:00 **Analysis Type:** REA2 **Dilution:** 200

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C21-C30)	150	J	93	MDL	280	PQL	mg/Kg	J	Z

Method Category: SVOA
Method: 8082 **Matrix:** SO

Sample ID: DUP-13-SA5A-QC-041111 **Collected:** 4/11/2011 3:51:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	0.39	U	0.39	MDL	2.0	PQL	ug/Kg	UJ	FD

Sample ID: SL-187-SA5A-SB-4.0-5.0 **Collected:** 4/11/2011 3:48:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	0.62	J	0.39	MDL	2.0	PQL	ug/Kg	J	Z, FD

Sample ID: SL-189-SA5A-SB-8.5-9.5 **Collected:** 4/11/2011 10:23:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1016	0.38	U	0.38	MDL	2.0	PQL	ug/Kg	UJ	S
AROCLOR 1221	0.38	U	0.38	MDL	2.0	PQL	ug/Kg	UJ	S
AROCLOR 1232	0.38	U	0.38	MDL	2.0	PQL	ug/Kg	UJ	S
AROCLOR 1242	0.38	U	0.38	MDL	2.0	PQL	ug/Kg	UJ	S
AROCLOR 1248	0.38	U	0.38	MDL	2.0	PQL	ug/Kg	UJ	S
AROCLOR 1254	0.38	U	0.38	MDL	2.0	PQL	ug/Kg	UJ	S
AROCLOR 1260	0.64	J	0.45	MDL	2.0	PQL	ug/Kg	J	Z, S
Aroclor 1262	0.38	U	0.38	MDL	2.0	PQL	ug/Kg	UJ	S
Aroclor 1268	0.38	U	0.38	MDL	2.0	PQL	ug/Kg	UJ	S
Aroclor 5432	1.2	U	1.2	MDL	3.8	PQL	ug/Kg	UJ	S
Aroclor 5442	1.2	U	1.2	MDL	3.8	PQL	ug/Kg	UJ	S
Aroclor 5460	1.2	U	1.2	MDL	3.8	PQL	ug/Kg	UJ	S

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE123 **Laboratory: LL**

EDD Filename: PrepDE123_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA
Method: 8270C **Matrix:** SO

Sample ID: DUP-13-SA5A-QC-041111 **Collected:** 4/11/2011 3:51:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(G,H,I)PERYLENE	26	J	20	MDL	200	PQL	ug/Kg	J	Z

Sample ID: SL-187-SA5A-SB-4.0-5.0 **Collected:** 4/11/2011 3:48:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZIDINE	1400	U	1400	MDL	3900	PQL	ug/Kg	UJ	Q
BENZO(G,H,I)PERYLENE	28	J	20	MDL	200	PQL	ug/Kg	J	Z

Sample ID: SL-189-SA5A-SB-5.0-6.0 **Collected:** 4/11/2011 10:12:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	200	J	200	MDL	4000	PQL	ug/Kg	J	Z
FLUORENE	710	J	200	MDL	2000	PQL	ug/Kg	J	Z
NAPHTHALENE	1400	J	200	MDL	2000	PQL	ug/Kg	J	Z

Method Category: SVOA
Method: 8270C SIM **Matrix:** SO

Sample ID: DUP-13-SA5A-QC-041111 **Collected:** 4/11/2011 3:51:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACENAPHTHYLENE	0.39	U	0.39	MDL	2.0	PQL	ug/Kg	UJ	FD
ANTHRACENE	0.95	J	0.39	MDL	2.0	PQL	ug/Kg	J	Z, FD
BENZO(A)ANTHRACENE	2.5		0.79	MDL	2.0	PQL	ug/Kg	J	FD
BENZO(A)PYRENE	0.79	U	0.79	MDL	2.0	PQL	ug/Kg	UJ	FD
BENZO(B)FLUORANTHENE	0.79	U	0.79	MDL	2.0	PQL	ug/Kg	UJ	FD
BIS(2-ETHYLHEXYL)PHTHALATE	13	J	7.1	MDL	21	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	0.79	U	0.79	MDL	2.0	PQL	ug/Kg	UJ	FD
Diethylphthalate	8.3	J	7.1	MDL	21	PQL	ug/Kg	J	Z
Di-n-butylphthalate	10	J	7.1	MDL	21	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	2.3		0.79	MDL	2.0	PQL	ug/Kg	J	FD
N-NITROSODIMETHYLAMINE	0.79	U	0.79	MDL	2.0	PQL	ug/Kg	UJ	L
PHENANTHRENE	0.79	U	0.79	MDL	2.0	PQL	ug/Kg	UJ	FD

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE123

Laboratory: LL

EDD Filename: PrepDE123_v1

eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8270C SIM **Matrix:** SO

Sample ID: SL-186-SA5A-SB-3.5-4.5 **Collected:** 4/11/2011 1:01:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	7.6	J	6.9	MDL	21	PQL	ug/Kg	J	Z
Diethylphthalate	7.6	J	6.9	MDL	21	PQL	ug/Kg	J	Z
Di-n-butylphthalate	9.7	J	6.9	MDL	21	PQL	ug/Kg	J	Z
N-NITROSODIMETHYLAMINE	0.77	U	0.77	MDL	1.9	PQL	ug/Kg	UJ	L

Sample ID: SL-187-SA5A-SB-4.0-5.0 **Collected:** 4/11/2011 3:48:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACENAPHTHYLENE	0.42	J	0.39	MDL	2.0	PQL	ug/Kg	J	Z, FD
ANTHRACENE	2.2		0.39	MDL	2.0	PQL	ug/Kg	J	Q, Q, FD
BENZO(A)ANTHRACENE	4.7		0.78	MDL	2.0	PQL	ug/Kg	J	FD
BENZO(A)PYRENE	1.7	J	0.78	MDL	2.0	PQL	ug/Kg	J	Z, FD
BENZO(B)FLUORANTHENE	1.1	J	0.78	MDL	2.0	PQL	ug/Kg	J	Z, FD
BIS(2-ETHYLHEXYL)PHTHALATE	7.9	J	7.0	MDL	21	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	1.5	J	0.78	MDL	2.0	PQL	ug/Kg	J	Z, FD
Diethylphthalate	8.5	J	7.0	MDL	21	PQL	ug/Kg	J	Z
Di-n-butylphthalate	10	J	7.0	MDL	21	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	11		0.78	MDL	2.0	PQL	ug/Kg	J	FD
N-NITROSODIMETHYLAMINE	0.78	U	0.78	MDL	2.0	PQL	ug/Kg	UJ	L
PHENANTHRENE	1.3	J	0.78	MDL	2.0	PQL	ug/Kg	J	Z, FD

Sample ID: SL-188-SA5A-SB-4.5-5.5 **Collected:** 4/11/2011 11:54:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	7.3	J	6.8	MDL	20	PQL	ug/Kg	J	Z
Diethylphthalate	8.1	J	6.8	MDL	20	PQL	ug/Kg	J	Z
Di-n-butylphthalate	9.5	J	6.8	MDL	20	PQL	ug/Kg	J	Z
N-NITROSODIMETHYLAMINE	0.75	U	0.75	MDL	1.9	PQL	ug/Kg	UJ	L

Sample ID: SL-189-SA5A-SB-5.0-6.0 **Collected:** 4/11/2011 10:12:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 20

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	16	U	16	MDL	40	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE123

EDD Filename: PrepDE123_v1

Laboratory: LL

eQAPP Name: CDM_SSFL_110509

Method Category: SVOA
Method: 8270C SIM **Matrix:** SO

Sample ID: SL-189-SA5A-SB-8.5-9.5 **Collected:** 4/11/2011 10:23:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 20

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	15	U	15	MDL	38	PQL	ug/Kg	UJ	L

Method Category: SVOA
Method: 8315A **Matrix:** SO

Sample ID: DUP-13-SA5A-QC-041111 **Collected:** 4/11/2011 3:51:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FORMALDEHYDE	7300		710	MDL	1800	PQL	ug/Kg	J	FD

Sample ID: SL-187-SA5A-SB-4.0-5.0 **Collected:** 4/11/2011 3:48:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FORMALDEHYDE	15000		1400	MDL	3500	PQL	ug/Kg	J	FD

Method Category: SVOA
Method: 8330A **Matrix:** SO

Sample ID: SL-187-SA5A-SB-4.0-5.0 **Collected:** 4/11/2011 3:48:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,3,5-TRINITROBENZENE	45	U	45	MDL	140	PQL	ug/Kg	UJ	Q
2,4,6-TRINITROTOLUENE	45	U	45	MDL	140	PQL	ug/Kg	UJ	Q
2,4-DINITROTOLUENE	45	U	45	MDL	140	PQL	ug/Kg	UJ	Q
Tetryl	69	U	69	MDL	140	PQL	ug/Kg	UJ	Q

Sample ID: SL-189-SA5A-SB-8.5-9.5 **Collected:** 4/11/2011 10:23:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DIAMINO-6-NITROTOLUENE	98	J	91	MDL	270	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE123 **Laboratory: LL**

EDD Filename: PrepDE123_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: VOA
Method: 8015B **Matrix:** SO

Sample ID: DUP-13-SA5A-QC-041111 **Collected:** 4/11/2011 3:51:00 **Analysis Type:** REA4 **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHANOL	120	U	120	MDL	590	PQL	ug/Kg	UJ	FD

Sample ID: SL-186-SA5A-SB-3.5-4.5 **Collected:** 4/11/2011 1:01:00 **Analysis Type:** REA4 **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHANOL	200	J	120	MDL	580	PQL	ug/Kg	J	Z

Sample ID: SL-187-SA5A-SB-4.0-5.0 **Collected:** 4/11/2011 3:48:00 **Analysis Type:** REA4 **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHANOL	150	J	120	MDL	590	PQL	ug/Kg	J	Z, Q, FD

Sample ID: SL-189-SA5A-SB-5.0-6.0 **Collected:** 4/11/2011 10:12:00 **Analysis Type:** REA4 **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHANOL	300	J	120	MDL	610	PQL	ug/Kg	J	Z

Method Category: VOA
Method: 8260B **Matrix:** SO

Sample ID: DUP-13-SA5A-QC-041111 **Collected:** 4/11/2011 3:51:00 **Analysis Type:** RES **Dilution:** 0.85

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-BUTANONE (MEK)	2.3	J	1.2	MDL	8.1	PQL	ug/Kg	J	Z
ETHYLBENZENE	0.15	J	0.06	MDL	4.0	PQL	ug/Kg	J	Z, FD
ISOPROPYLBENZENE	0.27	J	0.06	MDL	4.0	PQL	ug/Kg	J	Z, FD
METHYLENE CHLORIDE	0.76	J	0.24	MDL	4.0	PQL	ug/Kg	U	B
N-PROPYLBENZENE	0.26	J	0.07	MDL	4.0	PQL	ug/Kg	J	Z, FD
SEC-BUTYLBENZENE	0.85	J	0.06	MDL	4.0	PQL	ug/Kg	J	Z, FD

Sample ID: SL-186-SA5A-SB-3.5-4.5 **Collected:** 4/11/2011 1:01:00 **Analysis Type:** RES **Dilution:** 0.85

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-BUTANONE (MEK)	4.0	J	1.2	MDL	7.9	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	1.5	J	0.24	MDL	3.9	PQL	ug/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE123

Laboratory: LL

EDD Filename: PrepDE123_v1

eQAPP Name: CDM_SSFL_110509

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: SL-187-SA5A-SB-4.0-5.0 **Collected:** 4/11/2011 3:48:00 **Analysis Type:** RES **Dilution:** 0.88

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-BUTANONE (MEK)	1.7	J	1.3	MDL	8.3	PQL	ug/Kg	J	Z
ETHYLBENZENE	0.06	U	0.06	MDL	4.1	PQL	ug/Kg	UJ	FD
ISOPROPYLBENZENE	0.06	U	0.06	MDL	4.1	PQL	ug/Kg	UJ	FD
METHYLENE CHLORIDE	0.51	J	0.25	MDL	4.1	PQL	ug/Kg	U	B
N-PROPYLBENZENE	0.07	U	0.07	MDL	4.1	PQL	ug/Kg	UJ	FD
SEC-BUTYLBENZENE	0.14	J	0.06	MDL	4.1	PQL	ug/Kg	J	Z, FD

Sample ID: SL-188-SA5A-SB-4.5-5.5 **Collected:** 4/11/2011 11:54:00 **Analysis Type:** RES **Dilution:** 0.78

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-BUTANONE (MEK)	2.0	J	1.1	MDL	7.1	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	0.46	J	0.21	MDL	3.6	PQL	ug/Kg	U	B

Sample ID: SL-189-SA5A-SB-5.0-6.0 **Collected:** 4/11/2011 10:12:00 **Analysis Type:** RES **Dilution:** 0.93

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-BUTANONE (MEK)	8.0	J	1.4	MDL	9.0	PQL	ug/Kg	J	Z
BENZENE	3.0	J	0.11	MDL	4.5	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	0.66	J	0.27	MDL	4.5	PQL	ug/Kg	U	B
O-XYLENE	4.1	J	0.19	MDL	4.5	PQL	ug/Kg	J	Z
TOLUENE	0.25	J	0.09	MDL	4.5	PQL	ug/Kg	J	Z

Sample ID: SL-189-SA5A-SB-8.5-9.5 **Collected:** 4/11/2011 10:23:00 **Analysis Type:** RES **Dilution:** 42.52

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3-TRICHLOROBENZENE	85	J	6.9	MDL	200	PQL	ug/Kg	J	Z
1,2,4-TRIMETHYLBENZENE	32	J	20	MDL	200	PQL	ug/Kg	J	Z
BENZENE	8.4	J	4.9	MDL	200	PQL	ug/Kg	J	Z
BROMODICHLOROMETHANE	50	J	4.0	MDL	200	PQL	ug/Kg	J	Z
HEXACHLOROBUTADIENE	100	J	6.9	MDL	200	PQL	ug/Kg	J	Z
m,p-Xylene	16	J	8.4	MDL	200	PQL	ug/Kg	J	Z
O-XYLENE	13	J	8.4	MDL	200	PQL	ug/Kg	J	Z
P-ISOPROPYLTOLUENE	130	J	5.4	MDL	200	PQL	ug/Kg	J	Z
TERT-BUTYLBENZENE	47	J	7.9	MDL	200	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE123
EDD Filename: PrepDE123_v1

Laboratory: LL
eQAPP Name: CDM_SSFL_110509

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE123

EDD Filename: PrepDE123_v1

Laboratory: LL

eQAPP Name: CDM_SSFL_110509

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
*#	Professional Judgment
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Verification Correlation Coefficient
C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE123

Laboratory: LL

EDD Filename: PrepDE123_v1

eQAPP Name: CDM_SSFL_110509

F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation
L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery Lower Estimation

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE123

Laboratory: LL

EDD Filename: PrepDE123_v1

eQAPP Name: CDM_SSFL_110509

R	Continuing Calibration Verification Percent Recovery Lower Rejection
R	Continuing Calibration Verification Percent Recovery Upper Estimation
R	Continuing Calibration Verification Percent Recovery Upper Rejection
R	Continuing Calibration Verification Relative Response Factor
R	Initial Calibration Relative Response Factor
R	Initial Calibration Verification Percent Recovery Lower Estimation
R	Initial Calibration Verification Percent Recovery Lower Rejection
R	Initial Calibration Verification Percent Recovery Upper Estimation
R	Initial Calibration Verification Percent Recovery Upper Rejection
R	Initial Calibration Verification Relative Response Factor
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control Outlier Reports

DE123

Method Blank Outlier Report

Lab Reporting Batch ID: DE123

EDD Filename: DE123_v1

Laboratory: LL

eQAPP Name: CDM_SSFL_110509

Method: 6010B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P10208AB220725	4/16/2011 7:25:00 AM	ALUMINUM LITHIUM PHOSPHORUS TIN	29.3 mg/Kg 0.33 mg/Kg 1.22 mg/Kg 1.28 mg/Kg	DUP-13-SA5A-QC-041111 SL-186-SA5A-SB-3.5-4.5 SL-187-SA5A-SB-4.0-5.0 SL-188-SA5A-SB-4.5-5.5 SL-189-SA5A-SB-5.0-6.0 SL-189-SA5A-SB-8.5-9.5

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
DUP-13-SA5A-QC-041111(RES)	TIN	2.32 mg/Kg	2.32U mg/Kg
SL-186-SA5A-SB-3.5-4.5(RES)	TIN	2.97 mg/Kg	2.97U mg/Kg
SL-187-SA5A-SB-4.0-5.0(RES)	TIN	2.99 mg/Kg	2.99U mg/Kg
SL-188-SA5A-SB-4.5-5.5(RES)	TIN	2.99 mg/Kg	2.99U mg/Kg
SL-189-SA5A-SB-5.0-6.0(RES)	TIN	3.30 mg/Kg	3.30U mg/Kg
SL-189-SA5A-SB-8.5-9.5(RES)	TIN	3.09 mg/Kg	3.09U mg/Kg

Method: 6020
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P10226AB220850A	4/13/2011 8:50:00 AM	COPPER	0.162 mg/Kg	DUP-13-SA5A-QC-041111 SL-186-SA5A-SB-3.5-4.5 SL-187-SA5A-SB-4.0-5.0 SL-188-SA5A-SB-4.5-5.5 SL-189-SA5A-SB-5.0-6.0 SL-189-SA5A-SB-8.5-9.5

Method: 8260B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB23B211418A	4/13/2011 2:18:00 PM	METHYLENE CHLORIDE	1.3 ug/Kg	DUP-13-SA5A-QC-041111 SL-186-SA5A-SB-3.5-4.5 SL-187-SA5A-SB-4.0-5.0 SL-188-SA5A-SB-4.5-5.5 SL-189-SA5A-SB-5.0-6.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
DUP-13-SA5A-QC-041111(RES)	METHYLENE CHLORIDE	0.76 ug/Kg	4.0U ug/Kg
SL-186-SA5A-SB-3.5-4.5(RES)	METHYLENE CHLORIDE	1.5 ug/Kg	3.9U ug/Kg
SL-187-SA5A-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.51 ug/Kg	4.1U ug/Kg
SL-188-SA5A-SB-4.5-5.5(RES)	METHYLENE CHLORIDE	0.46 ug/Kg	3.6U ug/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE123

EDD Filename: DE123_v1

Laboratory: LL

eQAPP Name: CDM_SSFL_110509

Method: 8260B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-189-SA5A-SB-5.0-6.0(RES)	METHYLENE CHLORIDE	0.66 ug/Kg	4.5U ug/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE123

EDD Filename: DE123_v1

Laboratory: LL

eQAPP Name: CDM_SSFL_110509

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-187-SA5A-SB-4.0-5.0MS **SL-187-SA5A-SB-4.0-5.0MSD** (DUP-13-SA5A-QC-041111 SL -186-SA5A-SB-3.5-4.5 SL -187-SA5A-SB-4.0-5.0 SL -188-SA5A-SB-4.5-5.5 SL -189-SA5A-SB-5.0-6.0 SL -189-SA5A-SB-8.5-9.5)	ARSENIC CHROMIUM COPPER LEAD NICKEL THALLIUM VANADIUM ZINC	126 131 133 151 134 133 160 180	- 127 - 150 127 - 177 185	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	- - - - - - - -	ARSENIC CHROMIUM COPPER LEAD NICKEL THALLIUM VANADIUM ZINC	J (all detects) Zn No Qual, >4x
SL-187-SA5A-SB-4.0-5.0MSD (DUP-13-SA5A-QC-041111 SL -186-SA5A-SB-3.5-4.5 SL -187-SA5A-SB-4.0-5.0 SL -188-SA5A-SB-4.5-5.5 SL -189-SA5A-SB-5.0-6.0 SL -189-SA5A-SB-8.5-9.5)	ANTIMONY	-	73	75.00-125.00	-	ANTIMONY	J(all detects) UJ(all non-detects)
SL-187-SA5A-SB-4.0-5.0MS (DUP-13-SA5A-QC-041111 SL -186-SA5A-SB-3.5-4.5 SL -187-SA5A-SB-4.0-5.0 SL -188-SA5A-SB-4.5-5.5 SL -189-SA5A-SB-5.0-6.0 SL -189-SA5A-SB-8.5-9.5)	BARIUM	311	-	75.00-125.00	-	BARIUM	No Qual, >4x

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-187-SA5A-SB-4.0-5.0MS **SL-187-SA5A-SB-4.0-5.0MSD** (DUP-13-SA5A-QC-041111 SL -186-SA5A-SB-3.5-4.5 SL -187-SA5A-SB-4.0-5.0 SL -188-SA5A-SB-4.5-5.5 SL -189-SA5A-SB-5.0-6.0 SL -189-SA5A-SB-8.5-9.5)	ALUMINUM CALCIUM MAGNESIUM POTASSIUM TITANIUM	2160 135 205 - 265	1678 136 - 135 262	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	- - - - -	ALUMINUM CALCIUM MAGNESIUM POTASSIUM TITANIUM	J(all detects) Al, Ca, Mg, Ti No Qual, >4x
SL-187-SA5A-SB-4.0-5.0MS **SL-187-SA5A-SB-4.0-5.0MSD** (DUP-13-SA5A-QC-041111 SL -186-SA5A-SB-3.5-4.5 SL -187-SA5A-SB-4.0-5.0 SL -188-SA5A-SB-4.5-5.5 SL -189-SA5A-SB-5.0-6.0 SL -189-SA5A-SB-8.5-9.5)	IRON	373	-1674	75.00-125.00	-	IRON	No Qual, >4x
SL-187-SA5A-SB-4.0-5.0MS **SL-187-SA5A-SB-4.0-5.0MSD** (DUP-13-SA5A-QC-041111 SL -186-SA5A-SB-3.5-4.5 SL -187-SA5A-SB-4.0-5.0 SL -188-SA5A-SB-4.5-5.5 SL -189-SA5A-SB-5.0-6.0 SL -189-SA5A-SB-8.5-9.5)	PHOSPHORUS	73	52	75.00-125.00	-	PHOSPHORUS	J(all detects) UJ(all non-detects)

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE123

EDD Filename: DE123_v1

Laboratory: LL

eQAPP Name: CDM_SSFL_110509

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-187-SA5A-SB-4.0-5.0MSD (SL-187-SA5A-SB-4.0-5.0)	2,4-DINITROPHENOL	-	-	20.00-143.00	41 (30.00)	2,4-DINITROPHENOL	J(all detects)
SL-187-SA5A-SB-4.0-5.0MS SL-187-SA5A-SB-4.0-5.0MSD (SL-187-SA5A-SB-4.0-5.0)	BENZIDINE	15	21	35.00-141.00	37 (30.00)	BENZIDINE	J(all detects) UJ(all non-detects)

Method: 8270C SIM
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-187-SA5A-SB-4.0-5.0MSD (SL-187-SA5A-SB-4.0-5.0)	1-METHYLNAPHTHALENE	-	135	72.00-123.00	36 (30.00)	1-METHYLNAPHTHALENE	J(all detects)
	ACENAPHTHENE	-	138	63.00-105.00	34 (30.00)	ACENAPHTHENE	
	ANTHRACENE	-	145	60.00-122.00	34 (30.00)	ANTHRACENE	
	NAPHTHALENE	-	113	61.00-102.00	-	NAPHTHALENE	
SL-187-SA5A-SB-4.0-5.0MSD (SL-187-SA5A-SB-4.0-5.0)	BENZO(G,H,I)PERYLENE	-	11	33.00-141.00	59 (30.00)	BENZO(G,H,I)PERYLENE	J(all detects) UJ(all non-detects)

Method: 1625C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-187-SA5A-SB-4.0-5.0MS SL-187-SA5A-SB-4.0-5.0MSD (SL-187-SA5A-SB-4.0-5.0)	N-NITROSODIMETHYLAMINE	34	52	70.00-130.00	38 (30.00)	N-NITROSODIMETHYLAMINE	J(all detects) UJ(all non-detects)

Method: 300.0
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-187-SA5A-SB-4.0-5.0MS (SL-187-SA5A-SB-4.0-5.0)	FLUORIDE	70	-	80.00-120.00	-	FLUORIDE	J(all detects) UJ(all non-detects)

Method: 8015B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-187-SA5A-SB-4.0-5.0MSD (SL-187-SA5A-SB-4.0-5.0)	METHANOL	-	-	43.00-138.00	22 (20.00)	METHANOL	J(all detects)

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE123

EDD Filename: DE123_v1

Laboratory: LL

eQAPP Name: CDM_SSFL_110509

Method: 8330A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-187-SA5A-SB-4.0-5.0MSD (SL-187-SA5A-SB-4.0-5.0)	PETN	-	122	80.00-121.00	-	PETN	J(all detects)
SL-187-SA5A-SB-4.0-5.0MS **SL-187-SA5A-SB-4.0-5.0MSD** (SL-187-SA5A-SB-4.0-5.0)	1,3,5-TRINITROBENZENE	47	65	82.00-126.00	-	1,3,5-TRINITROBENZENE	J(all detects) UJ(all non-detects)
	2,4,6-TRINITROTOLUENE	53	74	82.00-130.00	-	2,4,6-TRINITROTOLUENE	
	2,4-DINITROTOLUENE	78	-	80.00-131.00	-	2,4-DINITROTOLUENE	
	Tetryl	47	-	55.00-174.00	-	Tetryl	

Method: 8015M
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-187-SA5A-SB-4.0-5.0MS **SL-187-SA5A-SB-4.0-5.0MSD** (SL-187-SA5A-SB-4.0-5.0)	EFH (C12-C14)	224	-	49.00-123.00	66 (20.00)	EFH (C12-C14)	J(all detects)
	EFH (C15-C20)	165	137	49.00-123.00	-	EFH (C15-C20)	
	EFH (C21-C30)	144	153	49.00-123.00	-	EFH (C21-C30)	

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE123

EDD Filename: DE123_v1

Laboratory: LL

eQAPP Name: CDM_SSFL_110509

Method: 6010B
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-187-SA5A-SB-4.0-5.0DUP (DUP-13-SA5A-QC-041111 SL-186-SA5A-SB-3.5-4.5 SL-187-SA5A-SB-4.0-5.0 SL-188-SA5A-SB-4.5-5.5 SL-189-SA5A-SB-5.0-6.0 SL-189-SA5A-SB-8.5-9.5)	Zirconium	23	20.00	No Qual OK by difference

Method: 6020
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-187-SA5A-SB-4.0-5.0DUP (DUP-13-SA5A-QC-041111 SL-186-SA5A-SB-3.5-4.5 SL-187-SA5A-SB-4.0-5.0 SL-188-SA5A-SB-4.5-5.5 SL-189-SA5A-SB-5.0-6.0 SL-189-SA5A-SB-8.5-9.5)	ANTIMONY MOLYBDENUM	57 21	20.00 20.00	No Qual OK by difference

Method: 7199
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-187-SA5A-SB-4.0-5.0DUP (DUP-13-SA5A-QC-041111 SL-186-SA5A-SB-3.5-4.5 SL-187-SA5A-SB-4.0-5.0 SL-188-SA5A-SB-4.5-5.5 SL-189-SA5A-SB-5.0-6.0 SL-189-SA5A-SB-8.5-9.5)	HEXAVALENT CHROMIUM	200	20.00	No Qual OK by difference

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE123

EDD Filename: DE123_v1

Laboratory: LL

eQAPP Name: CDM_SSFL_110509

Method: 8260B
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
LCS1Y14Q210248A LCS1Y14Y210309A (TB-041111)	2-Chloro-1,1,1-trifluoroethane	123	124	77.00-120.00	-	2-Chloro-1,1,1-trifluoroethane	J(all detects)

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P10226AQ220853A (DUP-13-SA5A-QC-041111 SL-186-SA5A-SB-3.5-4.5 SL-187-SA5A-SB-4.0-5.0 SL-188-SA5A-SB-4.5-5.5 SL-189-SA5A-SB-5.0-6.0 SL-189-SA5A-SB-8.5-9.5)	ANTIMONY	177	-	80.00-120.00	-	ANTIMONY	No Qual SRM within QC limits

Method: 8270C SIM
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P3LCLCSQ261825 (DUP-13-SA5A-QC-041111 SL-186-SA5A-SB-3.5-4.5 SL-187-SA5A-SB-4.0-5.0 SL-188-SA5A-SB-4.5-5.5 SL-189-SA5A-SB-5.0-6.0 SL-189-SA5A-SB-8.5-9.5)	N-NITROSODIMETHYLAMINE	47	-	55.00-118.00	-	N-NITROSODIMETHYLAMINE	J(all detects) UJ(all non-detects)

Method: 8330A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11080AQ242114A (DUP-13-SA5A-QC-041111 SL-186-SA5A-SB-3.5-4.5 SL-187-SA5A-SB-4.0-5.0 SL-188-SA5A-SB-4.5-5.5 SL-189-SA5A-SB-5.0-6.0 SL-189-SA5A-SB-8.5-9.5)	PETN	126	-	80.00-120.00	-	PETN	J(all detects)

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE123

EDD Filename: DE123_v1

Laboratory: LL

eQAPP Name: CDM_SSFL_110509

Method: **8260B**

Matrix: **SO**

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
LCSR97Q211035A LCSR97Y211057A (SL-189-SA5A-SB-8.5-9.5)	CHLOROETHANE	155	158	37.00-154.00	-	CHLOROETHANE	J(all detects)

Surrogate Outlier Report

Lab Reporting Batch ID: DE123

Laboratory: LL

EDD Filename: DE123_v1

eQAPP Name: CDM_SSFL_110509

Method: **8082**
Matrix: **SO**

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-189-SA5A-SB-8.5-9.5	TETRACHLORO-M-XYLENE	44	53.00-139.00	All Target Analytes	J (all detects) UJ (all non-detects)

Field Duplicate RPD Report

Lab Reporting Batch ID: DE123

Laboratory: LL

EDD Filename: PrepDE123_v1

eQAPP Name: CDM_SSFL_110509

Method: 160.3M
Matrix: SO

Analyte	Concentration (%)		Sample RPD	eQAPP RPD	Flag
	SL-187-SA5A-SB-4.0-5.0	DUP-13-SA5A-QC-041111			
MOISTURE	15.3	15.4	1		No Qualifiers Applied

Method: 1625C
Matrix: SO

Analyte	Concentration (ng/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-187-SA5A-SB-4.0-5.0	DUP-13-SA5A-QC-041111			
N-NITROSODIMETHYLAMINE	37.5	39.4 U	200	50.00	J(all detects) UJ(all non-detects)

Method: 300.0
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-187-SA5A-SB-4.0-5.0	DUP-13-SA5A-QC-041111			
Nitrate-NO3	1.3	1.3	0	50.00	No Qualifiers Applied
FLUORIDE	3.2	1.6	67	50.00	J(all detects)

Method: 6010B
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-187-SA5A-SB-4.0-5.0	DUP-13-SA5A-QC-041111			
ALUMINUM	14900	9800	41	50.00	No Qualifiers Applied
IRON	21100	21400	1	50.00	
LITHIUM	20.4	15.0	31	50.00	
MAGNESIUM	4040	4160	3	50.00	
MANGANESE	265	243	9	50.00	
POTASSIUM	3450	2490	32	50.00	
STRONTIUM	22.1	27.3	21	50.00	
TIN	2.99	2.32	25	50.00	
TITANIUM	1190	1020	15	50.00	
BORON	2.73	5.79 U	200	50.00	J(all detects) UJ(all non-detects)
CALCIUM	2250	5470	83	50.00	
PHOSPHORUS	341	858	86	50.00	
SODIUM	133	286	73	50.00	
Zirconium	4.83	1.79	92	50.00	

Field Duplicate RPD Report

Lab Reporting Batch ID: DE123

Laboratory: LL

EDD Filename: PrepDE123_v1

eQAPP Name: CDM_SSFL_110509

Method: 6020
Matrix: SO

Analyte	Concentration (mg/Kg) SL-187-SA5A-SB-4.0-5.0	Concentration (mg/Kg) DUP-13-SA5A-QC-041111	Sample RPD	eQAPP RPD	Flag
ANTIMONY	0.0988	0.137	32	50.00	No Qualifiers Applied
ARSENIC	3.06	2.04	40	50.00	
BARIUM	114	101	12	50.00	
BERYLLIUM	0.506	0.302	50	50.00	
CHROMIUM	14.9	9.86	41	50.00	
COBALT	5.37	6.39	17	50.00	
COPPER	10.3	14.4	33	50.00	
LEAD	4.95	3.24	42	50.00	
MOLYBDENUM	0.420	0.391	7	50.00	
NICKEL	10.3	6.20	50	50.00	
ZINC	54.2	34.3	45	50.00	
CADMIUM	0.167	0.0601	94	50.00	J(all detects) UJ(all non-detects)
SELENIUM	0.123	0.459 U	200	50.00	
SILVER	0.0283	0.292	165	50.00	
THALLIUM	0.254	0.105	83	50.00	
VANADIUM	26.9	47.6	56	50.00	

Method: 7199
Matrix: SO

Analyte	Concentration (mg/Kg) SL-187-SA5A-SB-4.0-5.0	Concentration (mg/Kg) DUP-13-SA5A-QC-041111	Sample RPD	eQAPP RPD	Flag
HEXAVALENT CHROMIUM	1.2 U	0.60	200	50.00	J(all detects) UJ(all non-detects)

Method: 7471A
Matrix: SO

Analyte	Concentration (mg/Kg) SL-187-SA5A-SB-4.0-5.0	Concentration (mg/Kg) DUP-13-SA5A-QC-041111	Sample RPD	eQAPP RPD	Flag
MERCURY	0.115 U	0.0077	200	50.00	J(all detects) UJ(all non-detects)

Method: 8015B
Matrix: SO

Analyte	Concentration (ug/Kg) SL-187-SA5A-SB-4.0-5.0	Concentration (ug/Kg) DUP-13-SA5A-QC-041111	Sample RPD	eQAPP RPD	Flag
METHANOL	150	590 U	200	50.00	J(all detects) UJ(all non-detects)

Method: 8015M
Matrix: SO

Analyte	Concentration (mg/Kg) SL-187-SA5A-SB-4.0-5.0	Concentration (mg/Kg) DUP-13-SA5A-QC-041111	Sample RPD	eQAPP RPD	Flag
EFH (C15-C20)	0.51	0.68	29	50.00	No Qualifiers Applied
EFH (C30-C40)	1.6	0.96	50	50.00	
GASOLINE RANGE ORGANICS (C5-C12)	0.3	0.4	29	50.00	
EFH (C12-C14)	1.4 U	0.50	200	50.00	J(all detects) UJ(all non-detects)

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Field Duplicate RPD Report

Lab Reporting Batch ID: DE123

Laboratory: LL

EDD Filename: PrepDE123_v1

eQAPP Name: CDM_SSFL_110509

Method: 8082
Matrix: SO

Analyte	Concentration (ug/Kg) SL-187-SA5A-SB-4.0-5.0	Concentration (ug/Kg) DUP-13-SA5A-QC-041111	Sample RPD	eQAPP RPD	Flag
AROCLOR 1254	0.62	2.0 U	200	50.00	J(all detects) UJ(all non-detects)

Method: 8260B
Matrix: SO

Analyte	Concentration (ug/Kg) SL-187-SA5A-SB-4.0-5.0	Concentration (ug/Kg) DUP-13-SA5A-QC-041111	Sample RPD	eQAPP RPD	Flag
2-BUTANONE (MEK)	1.7	2.3	30	50.00	No Qualifiers Applied
ACETONE	13	14	7	50.00	
METHYLENE CHLORIDE	0.51	0.76	39	50.00	
ETHYLBENZENE	4.1 U	0.15	200	50.00	J(all detects) UJ(all non-detects)
ISOPROPYLBENZENE	4.1 U	0.27	200	50.00	
N-PROPYLBENZENE	4.1 U	0.26	200	50.00	
SEC-BUTYLBENZENE	0.14	0.85	143	50.00	

Method: 8270C SIM
Matrix: SO

Analyte	Concentration (ug/Kg) SL-187-SA5A-SB-4.0-5.0	Concentration (ug/Kg) DUP-13-SA5A-QC-041111	Sample RPD	eQAPP RPD	Flag
BIS(2-ETHYLHEXYL)PHTHALATE	7.9	13	49	50.00	No Qualifiers Applied
CHRYSENE	3.5	3.2	9	50.00	
Diethylphthalate	8.5	8.3	2	50.00	
Di-n-butylphthalate	10	10	0	50.00	
FLUORANTHENE	9.9	7.6	26	50.00	
PYRENE	11	9.0	20	50.00	
ACENAPHTHYLENE	0.42	2.0 U	200	50.00	J(all detects) UJ(all non-detects)
ANTHRACENE	2.2	0.95	79	50.00	
BENZO(A)ANTHRACENE	4.7	2.5	61	50.00	
BENZO(A)PYRENE	1.7	2.0 U	200	50.00	
BENZO(B)FLUORANTHENE	1.1	2.0 U	200	50.00	
DIBENZO(A,H)ANTHRACENE	1.5	2.0 U	200	50.00	
INDENO(1,2,3-CD)PYRENE	11	2.3	131	50.00	
PHENANTHRENE	1.3	2.0 U	200	50.00	

Method: 8270C
Matrix: SO

Analyte	Concentration (ug/Kg) SL-187-SA5A-SB-4.0-5.0	Concentration (ug/Kg) DUP-13-SA5A-QC-041111	Sample RPD	eQAPP RPD	Flag
BENZO(G,H,I)PERYLENE	28	26	7	50.00	No Qualifiers Applied

Method: 8315A
Matrix: SO

Analyte	Concentration (ug/Kg) SL-187-SA5A-SB-4.0-5.0	Concentration (ug/Kg) DUP-13-SA5A-QC-041111	Sample RPD	eQAPP RPD	Flag
FORMALDEHYDE	15000	7300	69	50.00	J(all detects)

Field Duplicate RPD Report

Lab Reporting Batch ID: DE123

Laboratory: LL

EDD Filename: PrepDE123_v1

eQAPP Name: CDM_SSFL_110509

Method: 9045M
Matrix: SO

Analyte	Concentration (pH unit)		Sample RPD	eQAPP RPD	Flag
	SL-187-SA5A-SB-4.0-5.0	DUP-13-SA5A-QC-041111			
PH	7.13	6.92	3	50.00	No Qualifiers Applied

Method: ASTM D1498
Matrix: SO

Analyte	Concentration (mV)		Sample RPD	eQAPP RPD	Flag
	SL-187-SA5A-SB-4.0-5.0	DUP-13-SA5A-QC-041111			
Oxidation Reduction Potential	143	373	89		No Qualifiers Applied

Reporting Limit Outliers

Lab Reporting Batch ID: DE123

EDD Filename: DE123_v1

Laboratory: LL

eQAPP Name: CDM_SSFL_110509

Method: 1625C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-187-SA5A-SB-4.0-5.0	N-NITROSODIMETHYLAMINE	J	37.5	39.4	PQL	ng/Kg	J (all detects)
SL-188-SA5A-SB-4.5-5.5	N-NITROSODIMETHYLAMINE	J	351	381	PQL	ng/Kg	J (all detects)
SL-189-SA5A-SB-5.0-6.0	N-NITROSODIMETHYLAMINE	J	321	404	PQL	ng/Kg	J (all detects)
SL-189-SA5A-SB-8.5-9.5	N-NITROSODIMETHYLAMINE	J	264	388	PQL	ng/Kg	J (all detects)

Method: 300.0

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-13-SA5A-QC-041111	Nitrate-NO3	J	1.3	1.8	PQL	mg/Kg	J (all detects)
SL-186-SA5A-SB-3.5-4.5	Nitrate-NO3	J	1.3	1.7	PQL	mg/Kg	J (all detects)
SL-187-SA5A-SB-4.0-5.0	Nitrate-NO3	J	1.3	1.8	PQL	mg/Kg	J (all detects)
SL-188-SA5A-SB-4.5-5.5	Nitrate-NO3	J	1.5	1.7	PQL	mg/Kg	J (all detects)
SL-189-SA5A-SB-5.0-6.0	Nitrate-NO3	J	1.4	1.8	PQL	mg/Kg	J (all detects)
SL-189-SA5A-SB-8.5-9.5	Nitrate-NO3	J	1.3	1.7	PQL	mg/Kg	J (all detects)

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-13-SA5A-QC-041111	TIN Zirconium	J J	2.32 1.79	11.6 5.79	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-186-SA5A-SB-3.5-4.5	BORON TIN Zirconium	J J J	2.15 2.97 2.15	5.76 11.5 5.76	PQL PQL PQL	mg/Kg mg/Kg mg/Kg	J (all detects)
SL-187-SA5A-SB-4.0-5.0	BORON TIN Zirconium	J J J	2.73 2.99 4.83	5.73 11.5 5.73	PQL PQL PQL	mg/Kg mg/Kg mg/Kg	J (all detects)
SL-188-SA5A-SB-4.5-5.5	BORON TIN Zirconium	J J J	1.65 2.99 4.49	5.49 11.0 5.49	PQL PQL PQL	mg/Kg mg/Kg mg/Kg	J (all detects)
SL-189-SA5A-SB-5.0-6.0	BORON TIN Zirconium	J J J	2.32 3.30 4.81	5.93 11.9 5.93	PQL PQL PQL	mg/Kg mg/Kg mg/Kg	J (all detects)
SL-189-SA5A-SB-8.5-9.5	BORON TIN Zirconium	J J J	2.57 3.09 2.15	5.70 11.4 5.70	PQL PQL PQL	mg/Kg mg/Kg mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE123

EDD Filename: DE123_v1

Laboratory: LL

eQAPP Name: CDM_SSFL_110509

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-13-SA5A-QC-041111	ANTIMONY	J	0.137	0.230	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0601	0.115	PQL	mg/Kg	
	THALLIUM	J	0.105	0.115	PQL	mg/Kg	
SL-186-SA5A-SB-3.5-4.5	ANTIMONY	J	0.159	0.224	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.143	0.448	PQL	mg/Kg	
	SILVER	J	0.0358	0.112	PQL	mg/Kg	
SL-187-SA5A-SB-4.0-5.0	ANTIMONY	J	0.0988	0.231	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.123	0.463	PQL	mg/Kg	
	SILVER	J	0.0283	0.116	PQL	mg/Kg	
SL-188-SA5A-SB-4.5-5.5	ANTIMONY	J	0.226	0.228	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.160	0.457	PQL	mg/Kg	
	SILVER	J	0.0621	0.114	PQL	mg/Kg	
SL-189-SA5A-SB-5.0-6.0	SELENIUM	J	0.133	0.484	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0495	0.121	PQL	mg/Kg	
SL-189-SA5A-SB-8.5-9.5	ANTIMONY	J	0.160	0.233	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0980	0.465	PQL	mg/Kg	
	SILVER	J	0.0547	0.116	PQL	mg/Kg	

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-13-SA5A-QC-041111	HEXAVALENT CHROMIUM	J	0.60	1.2	PQL	mg/Kg	J (all detects)
SL-186-SA5A-SB-3.5-4.5	HEXAVALENT CHROMIUM	J	0.50	1.2	PQL	mg/Kg	J (all detects)
SL-188-SA5A-SB-4.5-5.5	HEXAVALENT CHROMIUM	J	0.45	1.1	PQL	mg/Kg	J (all detects)
SL-189-SA5A-SB-5.0-6.0	HEXAVALENT CHROMIUM	J	1.0	1.2	PQL	mg/Kg	J (all detects)
SL-189-SA5A-SB-8.5-9.5	HEXAVALENT CHROMIUM	J	1.1	1.2	PQL	mg/Kg	J (all detects)

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-13-SA5A-QC-041111	MERCURY	J	0.0077	0.115	PQL	mg/Kg	J (all detects)

Method: 8015B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-186-SA5A-SB-3.5-4.5	METHANOL	J	200	580	PQL	ug/Kg	J (all detects)
SL-187-SA5A-SB-4.0-5.0	METHANOL	J	150	590	PQL	ug/Kg	J (all detects)

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Reporting Limit Outliers

Lab Reporting Batch ID: DE123

EDD Filename: DE123_v1

Laboratory: LL

eQAPP Name: CDM_SSFL_110509

Method: 8015B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-189-SA5A-SB-5.0-6.0	METHANOL	J	300	610	PQL	ug/Kg	J (all detects)

Method: 8015M

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-13-SA5A-QC-041111	EFH (C12-C14)	J	0.50	1.4	PQL	mg/Kg	J (all detects)
	EFH (C15-C20)	J	0.68	1.4	PQL	mg/Kg	
	EFH (C30-C40)	J	0.96	1.4	PQL	mg/Kg	
	GASOLINE RANGE ORGANICS (C5-C12)	J	0.4	1.0	PQL	mg/Kg	
SL-186-SA5A-SB-3.5-4.5	EFH (C30-C40)	J	1.1	1.4	PQL	mg/Kg	J (all detects)
SL-187-SA5A-SB-4.0-5.0	EFH (C15-C20)	J	0.51	1.4	PQL	mg/Kg	J (all detects)
	GASOLINE RANGE ORGANICS (C5-C12)	J	0.3	0.9	PQL	mg/Kg	
SL-188-SA5A-SB-4.5-5.5	EFH (C30-C40)	J	1.1	1.4	PQL	mg/Kg	J (all detects)
SL-189-SA5A-SB-8.5-9.5	EFH (C21-C30)	J	150	280	PQL	mg/Kg	J (all detects)
	Propylene glycol	J	8.9	15	PQL	mg/Kg	

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-187-SA5A-SB-4.0-5.0	AROCLOR 1254	J	0.62	2.0	PQL	ug/Kg	J (all detects)
SL-189-SA5A-SB-8.5-9.5	AROCLOR 1260	J	0.64	2.0	PQL	ug/Kg	J (all detects)

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-13-SA5A-QC-041111	2-BUTANONE (MEK)	J	2.3	8.1	PQL	ug/Kg	J (all detects)
	ETHYLBENZENE	J	0.15	4.0	PQL	ug/Kg	
	ISOPROPYLBENZENE	J	0.27	4.0	PQL	ug/Kg	
	METHYLENE CHLORIDE	J	0.76	4.0	PQL	ug/Kg	
	N-PROPYLBENZENE	J	0.26	4.0	PQL	ug/Kg	
	SEC-BUTYLBENZENE	J	0.85	4.0	PQL	ug/Kg	
SL-186-SA5A-SB-3.5-4.5	2-BUTANONE (MEK)	J	4.0	7.9	PQL	ug/Kg	J (all detects)
	METHYLENE CHLORIDE	J	1.5	3.9	PQL	ug/Kg	
SL-187-SA5A-SB-4.0-5.0	2-BUTANONE (MEK)	J	1.7	8.3	PQL	ug/Kg	J (all detects)
	METHYLENE CHLORIDE	J	0.51	4.1	PQL	ug/Kg	
	SEC-BUTYLBENZENE	J	0.14	4.1	PQL	ug/Kg	
SL-188-SA5A-SB-4.5-5.5	2-BUTANONE (MEK)	J	2.0	7.1	PQL	ug/Kg	J (all detects)
	METHYLENE CHLORIDE	J	0.46	3.6	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE123

EDD Filename: DE123_v1

Laboratory: LL

eQAPP Name: CDM_SSFL_110509

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-189-SA5A-SB-5.0-6.0	2-BUTANONE (MEK)	J	8.0	9.0	PQL	ug/Kg	J (all detects)
	BENZENE	J	3.0	4.5	PQL	ug/Kg	
	METHYLENE CHLORIDE	J	0.66	4.5	PQL	ug/Kg	
	O-XYLENE	J	4.1	4.5	PQL	ug/Kg	
	TOLUENE	J	0.25	4.5	PQL	ug/Kg	
SL-189-SA5A-SB-8.5-9.5	1,2,3-TRICHLOROBENZENE	J	85	200	PQL	ug/Kg	J (all detects)
	1,2,4-TRIMETHYLBENZENE	J	32	200	PQL	ug/Kg	
	BENZENE	J	8.4	200	PQL	ug/Kg	
	BROMODICHLOROMETHANE	J	50	200	PQL	ug/Kg	
	HEXACHLOROBUTADIENE	J	100	200	PQL	ug/Kg	
	m,p-Xylene	J	16	200	PQL	ug/Kg	
	O-XYLENE	J	13	200	PQL	ug/Kg	
	P-ISOPROPYLTOLUENE	J	130	200	PQL	ug/Kg	
	TERT-BUTYLBENZENE	J	47	200	PQL	ug/Kg	

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-13-SA5A-QC-041111	BENZO(G,H,I)PERYLENE	J	26	200	PQL	ug/Kg	J (all detects)
SL-187-SA5A-SB-4.0-5.0	BENZO(G,H,I)PERYLENE	J	28	200	PQL	ug/Kg	J (all detects)
SL-189-SA5A-SB-5.0-6.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	200	4000	PQL	ug/Kg	J (all detects)
	FLUORENE	J	710	2000	PQL	ug/Kg	
	NAPHTHALENE	J	1400	2000	PQL	ug/Kg	

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-13-SA5A-QC-041111	ANTHRACENE	J	0.95	2.0	PQL	ug/Kg	J (all detects)
	BIS(2-ETHYLHEXYL)PHTHALATE	J	13	21	PQL	ug/Kg	
	Diethylphthalate	J	8.3	21	PQL	ug/Kg	
	Di-n-butylphthalate	J	10	21	PQL	ug/Kg	
SL-186-SA5A-SB-3.5-4.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	7.6	21	PQL	ug/Kg	J (all detects)
	Diethylphthalate	J	7.6	21	PQL	ug/Kg	
	Di-n-butylphthalate	J	9.7	21	PQL	ug/Kg	
SL-187-SA5A-SB-4.0-5.0	ACENAPHTHYLENE	J	0.42	2.0	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	1.7	2.0	PQL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	1.1	2.0	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	7.9	21	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	1.5	2.0	PQL	ug/Kg	
	Diethylphthalate	J	8.5	21	PQL	ug/Kg	
	Di-n-butylphthalate	J	10	21	PQL	ug/Kg	
	PHENANTHRENE	J	1.3	2.0	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE123

EDD Filename: DE123_v1

Laboratory: LL

eQAPP Name: CDM_SSFL_110509

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-188-SA5A-SB-4.5-5.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	7.3	20	PQL	ug/Kg	J (all detects)
	Diethylphthalate	J	8.1	20	PQL	ug/Kg	
	Di-n-butylphthalate	J	9.5	20	PQL	ug/Kg	

Method: 8330A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-189-SA5A-SB-8.5-9.5	2,4-DIAMINO-6-NITROTOLUENE	J	98	270	PQL	ug/Kg	J (all detects)

LDC #: 25916E4
SDG #: DE123
Laboratory: Lancaster Laboratories

VALIDATION COMPLETENESS WORKSHEET
ADR

Date: 8-3-11

Reviewer: CR
2nd Reviewer: A

METHOD: Metals (EPA SW 846 Method 6010B/6020A/7000)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	N	Sampling dates:
II.	ICP/MS Tune	—	
III.	Calibration	—	
IV.	Blanks	A	No quals
V.	ICP Interference Check Sample (ICS) Analysis	N	
VI.	Matrix Spike Analysis	N	MS/D (Al, Ba, Ca, Fe, Mg, Mn, Ti, Zn >4x)
VII.	Duplicate Sample Analysis	N	Dup (Sb, Mo, Zr <5x RL)
VIII.	Laboratory Control Samples (LCS)	A	LCS
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	SW	J/UJ
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	—	
XV	Field Blanks	—	

Note: A = Acceptable
N = Not provided/applicable
SW = See worksheet

ND = No compounds detected
R = Rinsate
FB = Field blank

D = Duplicate
TB = Trip blank
EB = Equipment blank

Validated Samples: Soil

1	DUP-13-SA5A-QC-041111	11		21		31	
2	SL-186-SA5A-SB-3.5-4.5	12		22		32	
3	SL-187-SA5A-SB-4.0-5.0	13		23		33	
4	SL-188-SA5A-SB-4.5-5.5	14		24		34	
5	SL-189-SA5A-SB-5.0-6.0	15		25		35	
6	SL-189-SA5A-SB-8.5-9.5	16		26		36	
7	SL-187-SA5A-SB-4.0-5.0MS	17		27		37	
8	SL-187-SA5A-SB-4.0-5.0MSD	18		28		38	
9	SL-187-SA5A-SB-4.0-5.0DUP	19		29		39	
10		20		30		40	

Notes:

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 9
SERIAL DILUTIONS
SDG No.: DE123
Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: 6255761BKG Serial Dilution Lab Sample ID: 6255761L
Batch ID(s): P10208A, P10226A
Concentration Units: UG/L

Analyte	Mass	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Diff.	Q	M
Aluminum		130393.4800		137834.1000		6		P
Antimony	121	0.4267	B	1.5000	U	100		MS
Arsenic	75	13.2300		14.2300		8		MS
Barium	137	491.0000		589.5000		20	E	MS
Beryllium	9	2.1850		2.7260		25		MS
Boron		23.8600	B	57.9500	B	143		P
Cadmium	111	0.7196		1.0000	U	100		MS
Calcium		19603.4100		19875.2500		1		P
Chromium	52	64.4800		82.0500		27	E	MS
Cobalt	59	23.2000		28.8450		24	E	MS
Copper	63	44.5100		56.0500		26	E	MS
Iron		183947.4200		184649.9500		0		P
Lead	208	21.3800		26.1800		22	E	MS
Lithium		178.1400		197.3500		11	E	P
Magnesium		35279.0500		36350.8000		3		P
Manganese		2313.9500		2430.6500		5		P
Molybdenum	98	1.8130		2.5465		40		MS
Nickel	60	44.3600		53.7500		21		MS
Phosphorus		2977.8300		3050.2500		2		P
Potassium		30095.9200		30768.8500		2		P
Selenium	78	0.5310	B	1.0000	U	100		MS
Silver	107	0.1221	B	0.3000	U	100		MS
Sodium		1163.6600		1865.0000	U	100		P
Strontium		192.4400		202.6000		5		P
Thallium	203	1.0960		1.2900	B	18		MS
Tin		26.0500	B	50.0000	U	100		P
Titanium		10399.3100		10876.2000		5		P
Vanadium	51	116.0000		145.9000		26	E	MS
Zinc	66	234.3000		293.0500		25		MS
Zirconium		42.1000	B	42.0000	U	100		P

NOTE: An E in column Q indicates the presence of a chemical or physical interference in the matrix when the % difference is greater than 10%. This applies only when (I) is greater than or equal to 50x MDL for ICP, 100x MDL for ICP-MS (6020), 50x MDL for ICP-MS (200.8), or 25x MDL for GFAA.

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry

CONCENTRATION QUALIFIERS:
U= Below MDL
B= Below LOQ

FLAGS:
E = Matrix Effects exist as proven by Serial Dilution or Spiked Dilution

DE123 3938

SAMPLE DELIVERY GROUP

DE125

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
12-Apr-2011	TB-041211	6256879	TB	5030B	8260B	IV
12-Apr-2011	TB-041211	6256879	TB	5030B	8260B SIM	IV
12-Apr-2011	SL-018-SA8N-SS-0.0-0.5	6256862	N	3050B	6010B	IV
12-Apr-2011	SL-018-SA8N-SS-0.0-0.5	6256862	N	3050B	6020	IV
12-Apr-2011	SL-018-SA8N-SS-0.0-0.5	6256862	N	3060A	7199	IV
12-Apr-2011	SL-018-SA8N-SS-0.0-0.5	6256862	N	3550B	8082	IV
12-Apr-2011	SL-018-SA8N-SS-0.0-0.5	6256862	N	3550B	8270C	IV
12-Apr-2011	SL-018-SA8N-SS-0.0-0.5	6256862	N	3550B	8270C SIM	IV
12-Apr-2011	SL-018-SA8N-SS-0.0-0.5	6256862	N	Gen Prep	9045M	IV
12-Apr-2011	SL-018-SA8N-SS-0.0-0.5	6256862	N	METHOD	300.0	IV
12-Apr-2011	SL-018-SA8N-SS-0.0-0.5	6256862	N	METHOD	314.0	IV
12-Apr-2011	SL-018-SA8N-SS-0.0-0.5	6256862	N	METHOD	7471A	IV
12-Apr-2011	SL-228-SA5A-SB-3.0-4.0	6256878	N	3050B	6010B	IV
12-Apr-2011	SL-228-SA5A-SB-3.0-4.0	6256878	N	3050B	6020	IV
12-Apr-2011	SL-228-SA5A-SB-3.0-4.0	6256878	N	3060A	7199	IV
12-Apr-2011	SL-228-SA5A-SB-3.0-4.0	6256878	N	3550B	8082	IV
12-Apr-2011	SL-228-SA5A-SB-3.0-4.0	6256878	N	3550B	8270C	IV
12-Apr-2011	SL-228-SA5A-SB-3.0-4.0	6256878	N	3550B	8270C SIM	IV
12-Apr-2011	SL-228-SA5A-SB-3.0-4.0	6256878	N	5035	8260B	IV
12-Apr-2011	SL-228-SA5A-SB-3.0-4.0	6256878	N	5035	8260B SIM	IV
12-Apr-2011	SL-228-SA5A-SB-3.0-4.0	6256878	N	Gen Prep	9045M	IV
12-Apr-2011	SL-228-SA5A-SB-3.0-4.0	6256878	N	METHOD	300.0	IV
12-Apr-2011	SL-228-SA5A-SB-3.0-4.0	6256878	N	METHOD	314.0	IV
12-Apr-2011	SL-228-SA5A-SB-3.0-4.0	6256878	N	METHOD	6850	IV
12-Apr-2011	SL-228-SA5A-SB-3.0-4.0	6256878	N	METHOD	7471A	IV
12-Apr-2011	SL-016-SA8N-SS-0.0-0.5	6256861	N	3050B	6010B	IV

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
12-Apr-2011	SL-016-SA8N-SS-0.0-0.5	6256861	N	3050B	6020	IV
12-Apr-2011	SL-016-SA8N-SS-0.0-0.5	6256861	N	3060A	7199	IV
12-Apr-2011	SL-016-SA8N-SS-0.0-0.5	6256861	N	3550B	8082	IV
12-Apr-2011	SL-016-SA8N-SS-0.0-0.5	6256861	N	3550B	8270C	IV
12-Apr-2011	SL-016-SA8N-SS-0.0-0.5	6256861	N	3550B	8270C SIM	IV
12-Apr-2011	SL-016-SA8N-SS-0.0-0.5	6256861	N	Gen Prep	9045M	IV
12-Apr-2011	SL-016-SA8N-SS-0.0-0.5	6256861	N	METHOD	300.0	IV
12-Apr-2011	SL-016-SA8N-SS-0.0-0.5	6256861	N	METHOD	314.0	IV
12-Apr-2011	SL-016-SA8N-SS-0.0-0.5	6256861	N	METHOD	6850	IV
12-Apr-2011	SL-016-SA8N-SS-0.0-0.5	6256861	N	METHOD	7471A	IV
12-Apr-2011	SL-016-SA8N-SS-0.0-0.5	6256861	N	METHOD	8015M	IV
12-Apr-2011	SL-015-SA8N-SS-0.0-0.5	6256860	N	3050B	6010B	IV
12-Apr-2011	SL-015-SA8N-SS-0.0-0.5	6256860	N	3050B	6020	IV
12-Apr-2011	SL-015-SA8N-SS-0.0-0.5	6256860	N	3060A	7199	IV
12-Apr-2011	SL-015-SA8N-SS-0.0-0.5	6256860	N	3550B	8082	IV
12-Apr-2011	SL-015-SA8N-SS-0.0-0.5	6256860	N	3550B	8270C	IV
12-Apr-2011	SL-015-SA8N-SS-0.0-0.5	6256860	N	3550B	8270C SIM	IV
12-Apr-2011	SL-015-SA8N-SS-0.0-0.5	6256860	N	Gen Prep	9045M	IV
12-Apr-2011	SL-015-SA8N-SS-0.0-0.5	6256860	N	METHOD	300.0	IV
12-Apr-2011	SL-015-SA8N-SS-0.0-0.5	6256860	N	METHOD	314.0	IV
12-Apr-2011	SL-015-SA8N-SS-0.0-0.5	6256860	N	METHOD	7471A	IV
12-Apr-2011	SL-015-SA8N-SS-0.0-0.5	6256860	N	METHOD	8015M	IV
12-Apr-2011	SL-227-SA5A-SB-3.0-4.0	6256877	N	3050B	6010B	IV
12-Apr-2011	SL-227-SA5A-SB-3.0-4.0	6256877	N	3050B	6020	IV
12-Apr-2011	SL-227-SA5A-SB-3.0-4.0	6256877	N	3060A	7199	IV
12-Apr-2011	SL-227-SA5A-SB-3.0-4.0	6256877	N	3550B	8082	IV

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
12-Apr-2011	SL-227-SA5A-SB-3.0-4.0	6256877	N	3550B	8270C	IV
12-Apr-2011	SL-227-SA5A-SB-3.0-4.0	6256877	N	3550B	8270C SIM	IV
12-Apr-2011	SL-227-SA5A-SB-3.0-4.0	6256877	N	5035	8260B	IV
12-Apr-2011	SL-227-SA5A-SB-3.0-4.0	6256877	N	5035	8260B SIM	IV
12-Apr-2011	SL-227-SA5A-SB-3.0-4.0	6256877	N	Gen Prep	9045M	IV
12-Apr-2011	SL-227-SA5A-SB-3.0-4.0	6256877	N	METHOD	300.0	IV
12-Apr-2011	SL-227-SA5A-SB-3.0-4.0	6256877	N	METHOD	314.0	IV
12-Apr-2011	SL-227-SA5A-SB-3.0-4.0	6256877	N	METHOD	7471A	IV
12-Apr-2011	SL-227-SA5A-SB-3.0-4.0DUP	P256877D271448A	DUP	3060A	7199	IV
12-Apr-2011	SL-227-SA5A-SB-3.0-4.0MS	P256877R271040A	MS	3060A	7199	IV
12-Apr-2011	SL-048-SA8N-SS-0.0-0.5	6256870	N	3050B	6010B	IV
12-Apr-2011	SL-048-SA8N-SS-0.0-0.5	6256870	N	3050B	6020	IV
12-Apr-2011	SL-048-SA8N-SS-0.0-0.5	6256870	N	3060A	7199	IV
12-Apr-2011	SL-048-SA8N-SS-0.0-0.5	6256870	N	3550B	8082	IV
12-Apr-2011	SL-048-SA8N-SS-0.0-0.5	6256870	N	3550B	8270C	IV
12-Apr-2011	SL-048-SA8N-SS-0.0-0.5	6256870	N	3550B	8270C SIM	IV
12-Apr-2011	SL-048-SA8N-SS-0.0-0.5	6256870	N	Gen Prep	9045M	IV
12-Apr-2011	SL-048-SA8N-SS-0.0-0.5	6256870	N	METHOD	300.0	IV
12-Apr-2011	SL-048-SA8N-SS-0.0-0.5	6256870	N	METHOD	314.0	IV
12-Apr-2011	SL-048-SA8N-SS-0.0-0.5	6256870	N	METHOD	7471A	IV
12-Apr-2011	SL-048-SA8N-SS-0.0-0.5	6256870	N	METHOD	8015M	IV
12-Apr-2011	SL-012-SA8N-SS-0.0-0.5	6256859	N	3050B	6010B	IV
12-Apr-2011	SL-012-SA8N-SS-0.0-0.5	6256859	N	3050B	6020	IV
12-Apr-2011	SL-012-SA8N-SS-0.0-0.5	6256859	N	3060A	7199	IV
12-Apr-2011	SL-012-SA8N-SS-0.0-0.5	6256859	N	3546	1625C	IV
12-Apr-2011	SL-012-SA8N-SS-0.0-0.5	6256859	N	3550B	8015B	IV

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IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
12-Apr-2011	SL-012-SA8N-SS-0.0-0.5	6256859	N	3550B	8015M	IV
12-Apr-2011	SL-012-SA8N-SS-0.0-0.5	6256859	N	3550B	8082	IV
12-Apr-2011	SL-012-SA8N-SS-0.0-0.5	6256859	N	3550B	8270C	IV
12-Apr-2011	SL-012-SA8N-SS-0.0-0.5	6256859	N	3550B	8270C SIM	IV
12-Apr-2011	SL-012-SA8N-SS-0.0-0.5	6256859	N	8330	8330A	IV
12-Apr-2011	SL-012-SA8N-SS-0.0-0.5	6256859	N	Gen Prep	9045M	IV
12-Apr-2011	SL-012-SA8N-SS-0.0-0.5	6256859	N	METHOD	300.0	IV
12-Apr-2011	SL-012-SA8N-SS-0.0-0.5	6256859	N	METHOD	314.0	IV
12-Apr-2011	SL-012-SA8N-SS-0.0-0.5	6256859	N	METHOD	7471A	IV
12-Apr-2011	SL-012-SA8N-SS-0.0-0.5	6256859	N	METHOD	8015B	IV
12-Apr-2011	SL-012-SA8N-SS-0.0-0.5	6256859	N	METHOD	8015M	IV
12-Apr-2011	SL-012-SA8N-SS-0.0-0.5	6256859	N	METHOD	8315A	IV
12-Apr-2011	SL-012-SA8N-SS-0.0-0.5	6256859	N	METHOD	9012B	IV
12-Apr-2011	SL-012-SA8N-SS-0.0-0.5DUP	P256859D220657	DUP	METHOD	7471A	IV
12-Apr-2011	SL-012-SA8N-SS-0.0-0.5DUP	P256859D221029	DUP	3050B	6010B	IV
12-Apr-2011	SL-012-SA8N-SS-0.0-0.5DUP	P256859D271632A	DUP	METHOD	314.0	IV
12-Apr-2011	SL-012-SA8N-SS-0.0-0.5DUP	P256859D271910A	DUP	METHOD	300.0	IV
12-Apr-2011	SL-012-SA8N-SS-0.0-0.5MSD	P256859M220659	MSD	METHOD	7471A	IV
12-Apr-2011	SL-012-SA8N-SS-0.0-0.5MSD	P256859M221037	MSD	3050B	6010B	IV
12-Apr-2011	SL-012-SA8N-SS-0.0-0.5MSD	P256859M241644A	MSD	3550B	8082	IV
12-Apr-2011	SL-012-SA8N-SS-0.0-0.5MSD	P256859M260032	MSD	3550B	8270C SIM	IV
12-Apr-2011	SL-012-SA8N-SS-0.0-0.5MSD	P256859M262215	MSD	3550B	8270C	IV
12-Apr-2011	SL-012-SA8N-SS-0.0-0.5MS	P256859R220658	MS	METHOD	7471A	IV
12-Apr-2011	SL-012-SA8N-SS-0.0-0.5MS	P256859R221033	MS	3050B	6010B	IV
12-Apr-2011	SL-012-SA8N-SS-0.0-0.5MS	P256859R241626A	MS	3550B	8082	IV
12-Apr-2011	SL-012-SA8N-SS-0.0-0.5MS	P256859R260000	MS	3550B	8270C SIM	IV

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IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
12-Apr-2011	SL-012-SA8N-SS-0.0-0.5MS	P256859R262151	MS	3550B	8270C	IV
12-Apr-2011	SL-012-SA8N-SS-0.0-0.5MS	P256859R271654A	MS	METHOD	314.0	IV
12-Apr-2011	SL-012-SA8N-SS-0.0-0.5MS	P256859R271924A	MS	METHOD	300.0	IV
12-Apr-2011	SL-050-SA8N-SS-0.0-0.5	6256871	N	3050B	6010B	IV
12-Apr-2011	SL-050-SA8N-SS-0.0-0.5	6256871	N	3050B	6020	IV
12-Apr-2011	SL-050-SA8N-SS-0.0-0.5	6256871	N	3060A	7199	IV
12-Apr-2011	SL-050-SA8N-SS-0.0-0.5	6256871	N	3550B	8082	IV
12-Apr-2011	SL-050-SA8N-SS-0.0-0.5	6256871	N	3550B	8270C	IV
12-Apr-2011	SL-050-SA8N-SS-0.0-0.5	6256871	N	3550B	8270C SIM	IV
12-Apr-2011	SL-050-SA8N-SS-0.0-0.5	6256871	N	Gen Prep	9045M	IV
12-Apr-2011	SL-050-SA8N-SS-0.0-0.5	6256871	N	METHOD	300.0	IV
12-Apr-2011	SL-050-SA8N-SS-0.0-0.5	6256871	N	METHOD	314.0	IV
12-Apr-2011	SL-050-SA8N-SS-0.0-0.5	6256871	N	METHOD	6850	IV
12-Apr-2011	SL-050-SA8N-SS-0.0-0.5	6256871	N	METHOD	7471A	IV
12-Apr-2011	SL-050-SA8N-SS-0.0-0.5	6256871	N	METHOD	8015M	IV
12-Apr-2011	SL-019-SA8N-SS-0.0-0.5	6256863	N	3050B	6010B	IV
12-Apr-2011	SL-019-SA8N-SS-0.0-0.5	6256863	N	3050B	6020	IV
12-Apr-2011	SL-019-SA8N-SS-0.0-0.5	6256863	N	3060A	7199	IV
12-Apr-2011	SL-019-SA8N-SS-0.0-0.5	6256863	N	3546	1625C	IV
12-Apr-2011	SL-019-SA8N-SS-0.0-0.5	6256863	N	3550B	8015B	IV
12-Apr-2011	SL-019-SA8N-SS-0.0-0.5	6256863	N	3550B	8015M	IV
12-Apr-2011	SL-019-SA8N-SS-0.0-0.5	6256863	N	3550B	8082	IV
12-Apr-2011	SL-019-SA8N-SS-0.0-0.5	6256863	N	3550B	8270C	IV
12-Apr-2011	SL-019-SA8N-SS-0.0-0.5	6256863	N	3550B	8270C SIM	IV
12-Apr-2011	SL-019-SA8N-SS-0.0-0.5	6256863	N	8330	8330A	IV
12-Apr-2011	SL-019-SA8N-SS-0.0-0.5	6256863	N	Gen Prep	9045M	IV

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IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
12-Apr-2011	SL-019-SA8N-SS-0.0-0.5	6256863	N	METHOD	300.0	IV
12-Apr-2011	SL-019-SA8N-SS-0.0-0.5	6256863	N	METHOD	314.0	IV
12-Apr-2011	SL-019-SA8N-SS-0.0-0.5	6256863	N	METHOD	7471A	IV
12-Apr-2011	SL-019-SA8N-SS-0.0-0.5	6256863	N	METHOD	8015B	IV
12-Apr-2011	SL-019-SA8N-SS-0.0-0.5	6256863	N	METHOD	8015M	IV
12-Apr-2011	SL-019-SA8N-SS-0.0-0.5	6256863	N	METHOD	8315A	IV
12-Apr-2011	SL-019-SA8N-SS-0.0-0.5	6256863	N	METHOD	9012B	IV
12-Apr-2011	SL-019-SA8N-SS-0.0-0.5DUP	P256863D271833B	DUP	METHOD	9012B	IV
12-Apr-2011	SL-019-SA8N-SS-0.0-0.5MS	P256863R271834B	MS	METHOD	9012B	IV
12-Apr-2011	SL-020-SA8N-SS-0.0-0.5	6256864	N	3050B	6010B	IV
12-Apr-2011	SL-020-SA8N-SS-0.0-0.5	6256864	N	3050B	6020	IV
12-Apr-2011	SL-020-SA8N-SS-0.0-0.5	6256864	N	3060A	7199	IV
12-Apr-2011	SL-020-SA8N-SS-0.0-0.5	6256864	N	3546	1625C	IV
12-Apr-2011	SL-020-SA8N-SS-0.0-0.5	6256864	N	3550B	8015B	IV
12-Apr-2011	SL-020-SA8N-SS-0.0-0.5	6256864	N	3550B	8015M	IV
12-Apr-2011	SL-020-SA8N-SS-0.0-0.5	6256864	N	3550B	8082	IV
12-Apr-2011	SL-020-SA8N-SS-0.0-0.5	6256864	N	3550B	8270C	IV
12-Apr-2011	SL-020-SA8N-SS-0.0-0.5	6256864	N	3550B	8270C SIM	IV
12-Apr-2011	SL-020-SA8N-SS-0.0-0.5	6256864	N	8330	8330A	IV
12-Apr-2011	SL-020-SA8N-SS-0.0-0.5	6256864	N	Gen Prep	9045M	IV
12-Apr-2011	SL-020-SA8N-SS-0.0-0.5	6256864	N	METHOD	300.0	IV
12-Apr-2011	SL-020-SA8N-SS-0.0-0.5	6256864	N	METHOD	314.0	IV
12-Apr-2011	SL-020-SA8N-SS-0.0-0.5	6256864	N	METHOD	7471A	IV
12-Apr-2011	SL-020-SA8N-SS-0.0-0.5	6256864	N	METHOD	8015B	IV
12-Apr-2011	SL-020-SA8N-SS-0.0-0.5	6256864	N	METHOD	8015M	IV
12-Apr-2011	SL-020-SA8N-SS-0.0-0.5	6256864	N	METHOD	8315A	IV

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IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
12-Apr-2011	SL-020-SA8N-SS-0.0-0.5	6256864	N	METHOD	9012B	IV
12-Apr-2011	SL-207-SA5A-SB-3.0-4.0	6256876	N	3050B	6010B	IV
12-Apr-2011	SL-207-SA5A-SB-3.0-4.0	6256876	N	3050B	6020	IV
12-Apr-2011	SL-207-SA5A-SB-3.0-4.0	6256876	N	3060A	7199	IV
12-Apr-2011	SL-207-SA5A-SB-3.0-4.0	6256876	N	3550B	8082	IV
12-Apr-2011	SL-207-SA5A-SB-3.0-4.0	6256876	N	3550B	8270C	IV
12-Apr-2011	SL-207-SA5A-SB-3.0-4.0	6256876	N	3550B	8270C SIM	IV
12-Apr-2011	SL-207-SA5A-SB-3.0-4.0	6256876	N	5035	8260B	IV
12-Apr-2011	SL-207-SA5A-SB-3.0-4.0	6256876	N	5035	8260B SIM	IV
12-Apr-2011	SL-207-SA5A-SB-3.0-4.0	6256876	N	Gen Prep	9045M	IV
12-Apr-2011	SL-207-SA5A-SB-3.0-4.0	6256876	N	METHOD	300.0	IV
12-Apr-2011	SL-207-SA5A-SB-3.0-4.0	6256876	N	METHOD	314.0	IV
12-Apr-2011	SL-207-SA5A-SB-3.0-4.0	6256876	N	METHOD	7471A	IV
12-Apr-2011	SL-021-SA8N-SS-0.0-0.5	6256865	N	3050B	6010B	IV
12-Apr-2011	SL-021-SA8N-SS-0.0-0.5	6256865	N	3050B	6020	IV
12-Apr-2011	SL-021-SA8N-SS-0.0-0.5	6256865	N	3060A	7199	IV
12-Apr-2011	SL-021-SA8N-SS-0.0-0.5	6256865	N	3546	1625C	IV
12-Apr-2011	SL-021-SA8N-SS-0.0-0.5	6256865	N	3550B	8015B	IV
12-Apr-2011	SL-021-SA8N-SS-0.0-0.5	6256865	N	3550B	8015M	IV
12-Apr-2011	SL-021-SA8N-SS-0.0-0.5	6256865	N	3550B	8082	IV
12-Apr-2011	SL-021-SA8N-SS-0.0-0.5	6256865	N	3550B	8270C	IV
12-Apr-2011	SL-021-SA8N-SS-0.0-0.5	6256865	N	3550B	8270C SIM	IV
12-Apr-2011	SL-021-SA8N-SS-0.0-0.5	6256865	N	8330	8330A	IV
12-Apr-2011	SL-021-SA8N-SS-0.0-0.5	6256865	N	Gen Prep	9045M	IV
12-Apr-2011	SL-021-SA8N-SS-0.0-0.5	6256865	N	METHOD	300.0	IV
12-Apr-2011	SL-021-SA8N-SS-0.0-0.5	6256865	N	METHOD	314.0	IV

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
12-Apr-2011	SL-021-SA8N-SS-0.0-0.5	6256865	N	METHOD	6850	IV
12-Apr-2011	SL-021-SA8N-SS-0.0-0.5	6256865	N	METHOD	7471A	IV
12-Apr-2011	SL-021-SA8N-SS-0.0-0.5	6256865	N	METHOD	8015B	IV
12-Apr-2011	SL-021-SA8N-SS-0.0-0.5	6256865	N	METHOD	8015M	IV
12-Apr-2011	SL-021-SA8N-SS-0.0-0.5	6256865	N	METHOD	8315A	IV
12-Apr-2011	SL-021-SA8N-SS-0.0-0.5	6256865	N	METHOD	9012B	IV
12-Apr-2011	SL-021-SA8N-SS-0.0-0.5DUP	P256865D220845A	DUP	3050B	6020	IV
12-Apr-2011	SL-021-SA8N-SS-0.0-0.5DUP	P256865D220845B	DUP	3050B	6020	IV
12-Apr-2011	SL-021-SA8N-SS-0.0-0.5DUP	P256865D220845D	DUP	3050B	6020	IV
12-Apr-2011	SL-021-SA8N-SS-0.0-0.5DUP	P256865D221324C	DUP	3050B	6020	IV
12-Apr-2011	SL-021-SA8N-SS-0.0-0.5DUP	P256865D291630B	DUP	Gen Prep	9045M	IV
12-Apr-2011	SL-021-SA8N-SS-0.0-0.5MSD	P256865M220851A	MSD	3050B	6020	IV
12-Apr-2011	SL-021-SA8N-SS-0.0-0.5MSD	P256865M220851B	MSD	3050B	6020	IV
12-Apr-2011	SL-021-SA8N-SS-0.0-0.5MSD	P256865M220851C	MSD	3050B	6020	IV
12-Apr-2011	SL-021-SA8N-SS-0.0-0.5MSD	P256865M220851D	MSD	3050B	6020	IV
12-Apr-2011	SL-021-SA8N-SS-0.0-0.5MS	P256865R220848A	MS	3050B	6020	IV
12-Apr-2011	SL-021-SA8N-SS-0.0-0.5MS	P256865R220848B	MS	3050B	6020	IV
12-Apr-2011	SL-021-SA8N-SS-0.0-0.5MS	P256865R220848C	MS	3050B	6020	IV
12-Apr-2011	SL-021-SA8N-SS-0.0-0.5MS	P256865R220848D	MS	3050B	6020	IV
12-Apr-2011	SL-047-SA8N-SS-0.0-0.5	6256869	N	3050B	6010B	IV
12-Apr-2011	SL-047-SA8N-SS-0.0-0.5	6256869	N	3050B	6020	IV
12-Apr-2011	SL-047-SA8N-SS-0.0-0.5	6256869	N	3060A	7199	IV
12-Apr-2011	SL-047-SA8N-SS-0.0-0.5	6256869	N	3546	1625C	IV
12-Apr-2011	SL-047-SA8N-SS-0.0-0.5	6256869	N	3550B	8015B	IV
12-Apr-2011	SL-047-SA8N-SS-0.0-0.5	6256869	N	3550B	8015M	IV
12-Apr-2011	SL-047-SA8N-SS-0.0-0.5	6256869	N	3550B	8082	IV

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
12-Apr-2011	SL-047-SA8N-SS-0.0-0.5	6256869	N	3550B	8270C	IV
12-Apr-2011	SL-047-SA8N-SS-0.0-0.5	6256869	N	3550B	8270C SIM	IV
12-Apr-2011	SL-047-SA8N-SS-0.0-0.5	6256869	N	8330	8330A	IV
12-Apr-2011	SL-047-SA8N-SS-0.0-0.5	6256869	N	Gen Prep	9045M	IV
12-Apr-2011	SL-047-SA8N-SS-0.0-0.5	6256869	N	METHOD	300.0	IV
12-Apr-2011	SL-047-SA8N-SS-0.0-0.5	6256869	N	METHOD	314.0	IV
12-Apr-2011	SL-047-SA8N-SS-0.0-0.5	6256869	N	METHOD	7471A	IV
12-Apr-2011	SL-047-SA8N-SS-0.0-0.5	6256869	N	METHOD	8015B	IV
12-Apr-2011	SL-047-SA8N-SS-0.0-0.5	6256869	N	METHOD	8015M	IV
12-Apr-2011	SL-047-SA8N-SS-0.0-0.5	6256869	N	METHOD	8315A	IV
12-Apr-2011	SL-047-SA8N-SS-0.0-0.5	6256869	N	METHOD	9012B	IV
12-Apr-2011	SL-047-SA8N-SS-0.0-0.5DUP	P256869D272125B	DUP	METHOD	314.0	IV
12-Apr-2011	SL-047-SA8N-SS-0.0-0.5DUP	P256869D272228B	DUP	METHOD	300.0	IV
12-Apr-2011	SL-047-SA8N-SS-0.0-0.5MS	P256869R272210B	MS	METHOD	314.0	IV
12-Apr-2011	SL-047-SA8N-SS-0.0-0.5MS	P256869R272243B	MS	METHOD	300.0	IV
12-Apr-2011	SL-022-SA8N-SS-0.0-0.5	6256866	N	3050B	6010B	IV
12-Apr-2011	SL-022-SA8N-SS-0.0-0.5	6256866	N	3050B	6020	IV
12-Apr-2011	SL-022-SA8N-SS-0.0-0.5	6256866	N	3060A	7199	IV
12-Apr-2011	SL-022-SA8N-SS-0.0-0.5	6256866	N	3546	1625C	IV
12-Apr-2011	SL-022-SA8N-SS-0.0-0.5	6256866	N	3550B	8015B	IV
12-Apr-2011	SL-022-SA8N-SS-0.0-0.5	6256866	N	3550B	8015M	IV
12-Apr-2011	SL-022-SA8N-SS-0.0-0.5	6256866	N	3550B	8082	IV
12-Apr-2011	SL-022-SA8N-SS-0.0-0.5	6256866	N	3550B	8270C	IV
12-Apr-2011	SL-022-SA8N-SS-0.0-0.5	6256866	N	3550B	8270C SIM	IV
12-Apr-2011	SL-022-SA8N-SS-0.0-0.5	6256866	N	8330	8330A	IV
12-Apr-2011	SL-022-SA8N-SS-0.0-0.5	6256866	N	Gen Prep	9045M	IV

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
12-Apr-2011	SL-022-SA8N-SS-0.0-0.5	6256866	N	METHOD	300.0	IV
12-Apr-2011	SL-022-SA8N-SS-0.0-0.5	6256866	N	METHOD	314.0	IV
12-Apr-2011	SL-022-SA8N-SS-0.0-0.5	6256866	N	METHOD	7471A	IV
12-Apr-2011	SL-022-SA8N-SS-0.0-0.5	6256866	N	METHOD	8015B	IV
12-Apr-2011	SL-022-SA8N-SS-0.0-0.5	6256866	N	METHOD	8015M	IV
12-Apr-2011	SL-022-SA8N-SS-0.0-0.5	6256866	N	METHOD	8315A	IV
12-Apr-2011	SL-022-SA8N-SS-0.0-0.5	6256866	N	METHOD	9012B	IV
12-Apr-2011	SL-022-SA8N-SS-0.0-0.5DUP	P256866D290915A	DUP	Gen Prep	9045M	IV
12-Apr-2011	SL-023-SA8N-SS-0.0-0.5	6256867	N	3050B	6010B	IV
12-Apr-2011	SL-023-SA8N-SS-0.0-0.5	6256867	N	3050B	6020	IV
12-Apr-2011	SL-023-SA8N-SS-0.0-0.5	6256867	N	3060A	7199	IV
12-Apr-2011	SL-023-SA8N-SS-0.0-0.5	6256867	N	3550B	8082	IV
12-Apr-2011	SL-023-SA8N-SS-0.0-0.5	6256867	N	3550B	8270C	IV
12-Apr-2011	SL-023-SA8N-SS-0.0-0.5	6256867	N	3550B	8270C SIM	IV
12-Apr-2011	SL-023-SA8N-SS-0.0-0.5	6256867	N	Gen Prep	9045M	IV
12-Apr-2011	SL-023-SA8N-SS-0.0-0.5	6256867	N	METHOD	300.0	IV
12-Apr-2011	SL-023-SA8N-SS-0.0-0.5	6256867	N	METHOD	314.0	IV
12-Apr-2011	SL-023-SA8N-SS-0.0-0.5	6256867	N	METHOD	7471A	IV
12-Apr-2011	SL-202-SA5A-SB-3.0-4.0	6256874	N	3050B	6010B	IV
12-Apr-2011	SL-202-SA5A-SB-3.0-4.0	6256874	N	3050B	6020	IV
12-Apr-2011	SL-202-SA5A-SB-3.0-4.0	6256874	N	3060A	7199	IV
12-Apr-2011	SL-202-SA5A-SB-3.0-4.0	6256874	N	3550B	8082	IV
12-Apr-2011	SL-202-SA5A-SB-3.0-4.0	6256874	N	3550B	8270C	IV
12-Apr-2011	SL-202-SA5A-SB-3.0-4.0	6256874	N	3550B	8270C SIM	IV
12-Apr-2011	SL-202-SA5A-SB-3.0-4.0	6256874	N	5035	8260B	IV
12-Apr-2011	SL-202-SA5A-SB-3.0-4.0	6256874	N	5035	8260B SIM	IV

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
12-Apr-2011	SL-202-SA5A-SB-3.0-4.0	6256874	N	Gen Prep	9045M	IV
12-Apr-2011	SL-202-SA5A-SB-3.0-4.0	6256874	N	METHOD	300.0	IV
12-Apr-2011	SL-202-SA5A-SB-3.0-4.0	6256874	N	METHOD	314.0	IV
12-Apr-2011	SL-202-SA5A-SB-3.0-4.0	6256874	N	METHOD	7471A	IV
12-Apr-2011	SL-036-SA8N-SS-0.0-0.5	6256868	N	3050B	6010B	IV
12-Apr-2011	SL-036-SA8N-SS-0.0-0.5	6256868	N	3050B	6020	IV
12-Apr-2011	SL-036-SA8N-SS-0.0-0.5	6256868	N	3060A	7199	IV
12-Apr-2011	SL-036-SA8N-SS-0.0-0.5	6256868	N	3550B	8015M	IV
12-Apr-2011	SL-036-SA8N-SS-0.0-0.5	6256868	N	3550B	8082	IV
12-Apr-2011	SL-036-SA8N-SS-0.0-0.5	6256868	N	3550B	8270C	IV
12-Apr-2011	SL-036-SA8N-SS-0.0-0.5	6256868	N	3550B	8270C SIM	IV
12-Apr-2011	SL-036-SA8N-SS-0.0-0.5	6256868	N	Gen Prep	9045M	IV
12-Apr-2011	SL-036-SA8N-SS-0.0-0.5	6256868	N	METHOD	300.0	IV
12-Apr-2011	SL-036-SA8N-SS-0.0-0.5	6256868	N	METHOD	314.0	IV
12-Apr-2011	SL-036-SA8N-SS-0.0-0.5	6256868	N	METHOD	7471A	IV
12-Apr-2011	SL-131-SA8N-SS-0.0-0.5	6256872	N	3050B	6010B	IV
12-Apr-2011	SL-131-SA8N-SS-0.0-0.5	6256872	N	3050B	6020	IV
12-Apr-2011	SL-131-SA8N-SS-0.0-0.5	6256872	N	3060A	7199	IV
12-Apr-2011	SL-131-SA8N-SS-0.0-0.5	6256872	N	3550B	8082	IV
12-Apr-2011	SL-131-SA8N-SS-0.0-0.5	6256872	N	3550B	8270C	IV
12-Apr-2011	SL-131-SA8N-SS-0.0-0.5	6256872	N	3550B	8270C SIM	IV
12-Apr-2011	SL-131-SA8N-SS-0.0-0.5	6256872	N	Gen Prep	9045M	IV
12-Apr-2011	SL-131-SA8N-SS-0.0-0.5	6256872	N	METHOD	300.0	IV
12-Apr-2011	SL-131-SA8N-SS-0.0-0.5	6256872	N	METHOD	314.0	IV
12-Apr-2011	SL-131-SA8N-SS-0.0-0.5	6256872	N	METHOD	7471A	IV
12-Apr-2011	SL-206-SA5A-SB-4.0-5.0	6256875	N	3050B	6010B	IV

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
12-Apr-2011	SL-206-SA5A-SB-4.0-5.0	6256875	N	3050B	6020	IV
12-Apr-2011	SL-206-SA5A-SB-4.0-5.0	6256875	N	3060A	7199	IV
12-Apr-2011	SL-206-SA5A-SB-4.0-5.0	6256875	N	3550B	8082	IV
12-Apr-2011	SL-206-SA5A-SB-4.0-5.0	6256875	N	3550B	8270C	IV
12-Apr-2011	SL-206-SA5A-SB-4.0-5.0	6256875	N	3550B	8270C SIM	IV
12-Apr-2011	SL-206-SA5A-SB-4.0-5.0	6256875	N	5035	8260B	IV
12-Apr-2011	SL-206-SA5A-SB-4.0-5.0	6256875	N	5035	8260B SIM	IV
12-Apr-2011	SL-206-SA5A-SB-4.0-5.0	6256875	N	Gen Prep	9045M	IV
12-Apr-2011	SL-206-SA5A-SB-4.0-5.0	6256875	N	METHOD	300.0	IV
12-Apr-2011	SL-206-SA5A-SB-4.0-5.0	6256875	N	METHOD	314.0	IV
12-Apr-2011	SL-206-SA5A-SB-4.0-5.0	6256875	N	METHOD	6850	IV
12-Apr-2011	SL-206-SA5A-SB-4.0-5.0	6256875	N	METHOD	7471A	IV
12-Apr-2011	EB01-SA8N-041211	6256873	EB	3005A	6010B	IV
12-Apr-2011	EB01-SA8N-041211	6256873	EB	3020A	6020	IV
12-Apr-2011	EB01-SA8N-041211	6256873	EB	3510C	8082	IV
12-Apr-2011	EB01-SA8N-041211	6256873	EB	3510C	8270C	IV
12-Apr-2011	EB01-SA8N-041211	6256873	EB	3510C	8270C SIM	IV
12-Apr-2011	EB01-SA8N-041211	6256873	EB	Gen Prep	300.0	IV
12-Apr-2011	EB01-SA8N-041211	6256873	EB	Gen Prep	314.0	IV
12-Apr-2011	EB01-SA8N-041211	6256873	EB	Gen Prep	7199	IV
12-Apr-2011	EB01-SA8N-041211	6256873	EB	Gen Prep	9040B	IV
12-Apr-2011	EB01-SA8N-041211	6256873	EB	METHOD	7470A	IV

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IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE125 **Laboratory: LL**

EDD Filename: DE125_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: EM
Method: 9040B **Matrix:** AQ

Sample ID: EB01-SA8N-041211 **Collected:** 4/12/2011 4:00:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PH	5.7		0.010	MDL	0.010	PQL	pH unit	J	H

Method Category: GENCHEM
Method: 300.0 **Matrix:** SO

Sample ID: SL-012-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 10:35:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.7		0.91	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-015-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 9:35:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	3.0		0.94	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-016-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 9:15:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.9		0.91	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-018-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 9:00:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.9		0.93	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-019-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 11:05:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.5		0.96	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-020-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 11:25:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.8		0.93	MDL	1.2	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE125 **Laboratory: LL**

EDD Filename: DE125_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: GENCHEM

Method: 300.0 **Matrix: SO**

Sample ID: SL-021-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 1:15:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	3.2		0.90	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-022-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 1:50:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.8		0.94	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-023-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 2:10:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.8		0.93	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-036-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 2:25:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.5		0.97	MDL	1.2	PQL	mg/Kg	J	Q

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-012-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 10:35:00 **Analysis Type:** REA **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	426		0.0867	MDL	0.556	PQL	mg/Kg	J	A
SODIUM	98.9	J	41.5	MDL	111	PQL	mg/Kg	J	Z
STRONTIUM	42.9		0.0689	MDL	0.556	PQL	mg/Kg	J	A
TIN	2.54	J	1.11	MDL	11.1	PQL	mg/Kg	U	B
Zirconium	2.73	J	0.934	MDL	5.56	PQL	mg/Kg	J	Z

Sample ID: SL-015-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 9:35:00 **Analysis Type:** REA **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	485		0.0886	MDL	0.568	PQL	mg/Kg	J	A
SODIUM	102	J	42.4	MDL	114	PQL	mg/Kg	J	Z
STRONTIUM	37.6		0.0704	MDL	0.568	PQL	mg/Kg	J	A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE125 **Laboratory: LL**

EDD Filename: DE125_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B ***Matrix:*** SO

Sample ID: SL-015-SA8N-SS-0.0-0.5 ***Collected:*** 4/12/2011 9:35:00 ***Analysis Type:*** REA ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.58	J	1.14	MDL	11.4	PQL	mg/Kg	U	B
Zirconium	3.23	J	0.954	MDL	5.68	PQL	mg/Kg	J	Z

Sample ID: SL-016-SA8N-SS-0.0-0.5 ***Collected:*** 4/12/2011 9:15:00 ***Analysis Type:*** REA ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	399		0.0857	MDL	0.549	PQL	mg/Kg	J	A
SODIUM	100	J	41.0	MDL	110	PQL	mg/Kg	J	Z
STRONTIUM	26.6		0.0681	MDL	0.549	PQL	mg/Kg	J	A
TIN	2.56	J	1.10	MDL	11.0	PQL	mg/Kg	U	B
Zirconium	2.69	J	0.923	MDL	5.49	PQL	mg/Kg	J	Z

Sample ID: SL-018-SA8N-SS-0.0-0.5 ***Collected:*** 4/12/2011 9:00:00 ***Analysis Type:*** REA ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	414		0.0901	MDL	0.578	PQL	mg/Kg	J	A
STRONTIUM	64.9		0.0716	MDL	0.578	PQL	mg/Kg	J	A
TIN	2.54	J	1.16	MDL	11.6	PQL	mg/Kg	U	B
Zirconium	3.13	J	0.970	MDL	5.78	PQL	mg/Kg	J	Z

Sample ID: SL-019-SA8N-SS-0.0-0.5 ***Collected:*** 4/12/2011 11:05:00 ***Analysis Type:*** REA ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	463		0.0896	MDL	0.574	PQL	mg/Kg	J	A
SODIUM	112	J	42.8	MDL	115	PQL	mg/Kg	J	Z
STRONTIUM	36.9		0.0712	MDL	0.574	PQL	mg/Kg	J	A
TIN	2.45	J	1.15	MDL	11.5	PQL	mg/Kg	U	B
Zirconium	3.76	J	0.965	MDL	5.74	PQL	mg/Kg	J	Z

Sample ID: SL-020-SA8N-SS-0.0-0.5 ***Collected:*** 4/12/2011 11:25:00 ***Analysis Type:*** REA ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	428		0.0903	MDL	0.579	PQL	mg/Kg	J	A
SODIUM	104	J	43.2	MDL	116	PQL	mg/Kg	J	Z
STRONTIUM	48.3		0.0718	MDL	0.579	PQL	mg/Kg	J	A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE125 **Laboratory: LL**

EDD Filename: DE125_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-020-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 11:25:00 **Analysis Type:** REA **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.71	J	1.16	MDL	11.6	PQL	mg/Kg	U	B
Zirconium	3.19	J	0.972	MDL	5.79	PQL	mg/Kg	J	Z

Sample ID: SL-021-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 1:15:00 **Analysis Type:** REA **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	374		0.0856	MDL	0.549	PQL	mg/Kg	J	A
STRONTIUM	41.7		0.0680	MDL	0.549	PQL	mg/Kg	J	A
TIN	2.43	J	1.10	MDL	11.0	PQL	mg/Kg	U	B
Zirconium	2.42	J	0.922	MDL	5.49	PQL	mg/Kg	J	Z

Sample ID: SL-022-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 1:50:00 **Analysis Type:** REA **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	406		0.0904	MDL	0.580	PQL	mg/Kg	J	A
SODIUM	92.9	J	43.2	MDL	116	PQL	mg/Kg	J	Z
STRONTIUM	37.5		0.0719	MDL	0.580	PQL	mg/Kg	J	A
TIN	2.71	J	1.16	MDL	11.6	PQL	mg/Kg	U	B
Zirconium	2.90	J	0.974	MDL	5.80	PQL	mg/Kg	J	Z

Sample ID: SL-023-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 2:10:00 **Analysis Type:** REA **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	491		0.0892	MDL	0.572	PQL	mg/Kg	J	A
SODIUM	88.1	J	42.7	MDL	114	PQL	mg/Kg	J	Z
STRONTIUM	29.0		0.0709	MDL	0.572	PQL	mg/Kg	J	A
TIN	2.59	J	1.14	MDL	11.4	PQL	mg/Kg	U	B
Zirconium	3.19	J	0.961	MDL	5.72	PQL	mg/Kg	J	Z

Sample ID: SL-036-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 2:25:00 **Analysis Type:** REA **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	477		0.0940	MDL	0.602	PQL	mg/Kg	J	A
SODIUM	85.3	J	44.9	MDL	120	PQL	mg/Kg	J	Z
STRONTIUM	33.3		0.0747	MDL	0.602	PQL	mg/Kg	J	A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE125 **Laboratory: LL**

EDD Filename: DE125_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-036-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 2:25:00 **Analysis Type:** REA **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.85	J	1.20	MDL	12.0	PQL	mg/Kg	U	B
Zirconium	3.14	J	1.01	MDL	6.02	PQL	mg/Kg	J	Z

Sample ID: SL-047-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 1:30:00 **Analysis Type:** REA **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	416		0.0902	MDL	0.578	PQL	mg/Kg	J	A
STRONTIUM	71.3		0.0717	MDL	0.578	PQL	mg/Kg	J	A
TIN	2.62	J	1.16	MDL	11.6	PQL	mg/Kg	U	B
Zirconium	2.33	J	0.971	MDL	5.78	PQL	mg/Kg	J	Z

Sample ID: SL-048-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 10:15:00 **Analysis Type:** REA **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	445		0.0991	MDL	0.635	PQL	mg/Kg	J	A
STRONTIUM	36.6		0.0788	MDL	0.635	PQL	mg/Kg	J	A
TIN	2.75	J	1.27	MDL	12.7	PQL	mg/Kg	U	B
Zirconium	3.40	J	1.07	MDL	6.35	PQL	mg/Kg	J	Z

Sample ID: SL-050-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 10:45:00 **Analysis Type:** REA **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	440		0.0946	MDL	0.607	PQL	mg/Kg	J	A
SODIUM	109	J	45.3	MDL	121	PQL	mg/Kg	J	Z
STRONTIUM	48.4		0.0752	MDL	0.607	PQL	mg/Kg	J	A
TIN	2.69	J	1.21	MDL	12.1	PQL	mg/Kg	U	B
Zirconium	2.73	J	1.02	MDL	6.07	PQL	mg/Kg	J	Z

Sample ID: SL-131-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 3:00:00 **Analysis Type:** REA **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	452		0.0882	MDL	0.565	PQL	mg/Kg	J	A
SODIUM	93.2	J	42.2	MDL	113	PQL	mg/Kg	J	Z
STRONTIUM	31.7		0.0701	MDL	0.565	PQL	mg/Kg	J	A
TIN	2.84	J	1.13	MDL	11.3	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE125 **Laboratory: LL**

EDD Filename: DE125_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-131-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 3:00:00 **Analysis Type:** REA **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	2.98	J	0.950	MDL	5.65	PQL	mg/Kg	J	Z

Sample ID: SL-202-SA5A-SB-3.0-4.0 **Collected:** 4/12/2011 2:14:00 **Analysis Type:** REA **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	370		0.0882	MDL	0.565	PQL	mg/Kg	J	A
STRONTIUM	22.4		0.0701	MDL	0.565	PQL	mg/Kg	J	A
TIN	2.84	J	1.13	MDL	11.3	PQL	mg/Kg	U	B

Sample ID: SL-206-SA5A-SB-4.0-5.0 **Collected:** 4/12/2011 3:25:00 **Analysis Type:** REA **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	354		0.0867	MDL	0.556	PQL	mg/Kg	J	A
STRONTIUM	23.5		0.0690	MDL	0.556	PQL	mg/Kg	J	A
TIN	2.87	J	1.11	MDL	11.1	PQL	mg/Kg	U	B

Sample ID: SL-207-SA5A-SB-3.0-4.0 **Collected:** 4/12/2011 12:03:00 **Analysis Type:** REA **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	215		0.0831	MDL	0.533	PQL	mg/Kg	J	A
STRONTIUM	16.3		0.0661	MDL	0.533	PQL	mg/Kg	J	A
TIN	2.82	J	1.07	MDL	10.7	PQL	mg/Kg	U	B

Sample ID: SL-227-SA5A-SB-3.0-4.0 **Collected:** 4/12/2011 10:13:00 **Analysis Type:** REA **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	238		0.0861	MDL	0.552	PQL	mg/Kg	J	A
STRONTIUM	20.5		0.0684	MDL	0.552	PQL	mg/Kg	J	A
TIN	2.66	J	1.10	MDL	11.0	PQL	mg/Kg	U	B

Sample ID: SL-228-SA5A-SB-3.0-4.0 **Collected:** 4/12/2011 9:06:00 **Analysis Type:** REA **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	116		0.0888	MDL	0.569	PQL	mg/Kg	J	A
STRONTIUM	16.1		0.0706	MDL	0.569	PQL	mg/Kg	J	A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE125 **Laboratory: LL**

EDD Filename: DE125_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS
Method: 6010B **Matrix:** SO

Sample ID: SL-228-SA5A-SB-3.0-4.0 **Collected:** 4/12/2011 9:06:00 **Analysis Type:** REA **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.75	J	1.14	MDL	11.4	PQL	mg/Kg	U	B

Method Category: METALS
Method: 6020 **Matrix:** SO

Sample ID: SL-012-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 10:35:00 **Analysis Type:** REA4 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.187	J	0.0667	MDL	0.222	PQL	mg/Kg	J	Z, Q, E
ARSENIC	6.23		0.0889	MDL	0.445	PQL	mg/Kg	J	Q
CHROMIUM	30.4		0.133	MDL	0.445	PQL	mg/Kg	J	A
COPPER	14.7		0.0734	MDL	0.445	PQL	mg/Kg	J	A
LEAD	11.7		0.0116	MDL	0.222	PQL	mg/Kg	J	A
NICKEL	16.6		0.111	MDL	0.445	PQL	mg/Kg	J	A
SILVER	0.0554	J	0.0133	MDL	0.111	PQL	mg/Kg	J	Z
VANADIUM	52.7		0.0245	MDL	0.111	PQL	mg/Kg	J	A
ZINC	77.9		0.622	MDL	3.33	PQL	mg/Kg	J	A

Sample ID: SL-012-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 10:35:00 **Analysis Type:** REA6 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.229	J	0.0445	MDL	0.445	PQL	mg/Kg	J	Z

Sample ID: SL-015-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 9:35:00 **Analysis Type:** REA4 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.182	J	0.0668	MDL	0.223	PQL	mg/Kg	J	Z, Q, E
ARSENIC	6.88		0.0891	MDL	0.446	PQL	mg/Kg	J	Q
CHROMIUM	29.2		0.134	MDL	0.446	PQL	mg/Kg	J	A
COPPER	15.7		0.0735	MDL	0.446	PQL	mg/Kg	J	A
LEAD	11.1		0.0116	MDL	0.223	PQL	mg/Kg	J	A
NICKEL	16.5		0.111	MDL	0.446	PQL	mg/Kg	J	A
SILVER	0.0593	J	0.0134	MDL	0.111	PQL	mg/Kg	J	Z
VANADIUM	51.8		0.0245	MDL	0.111	PQL	mg/Kg	J	A
ZINC	69.3		0.624	MDL	3.34	PQL	mg/Kg	J	A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE125 **Laboratory: LL**

EDD Filename: DE125_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-015-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 9:35:00 **Analysis Type:** REA6 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.227	J	0.0446	MDL	0.446	PQL	mg/Kg	J	Z

Sample ID: SL-016-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 9:15:00 **Analysis Type:** REA4 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0815	J	0.0679	MDL	0.226	PQL	mg/Kg	J	Z, Q, E
ARSENIC	5.11		0.0905	MDL	0.453	PQL	mg/Kg	J	Q
CHROMIUM	26.5		0.136	MDL	0.453	PQL	mg/Kg	J	A
COPPER	13.4		0.0747	MDL	0.453	PQL	mg/Kg	J	A
LEAD	13.1		0.0118	MDL	0.226	PQL	mg/Kg	J	A
NICKEL	15.1		0.113	MDL	0.453	PQL	mg/Kg	J	A
SILVER	0.0593	J	0.0136	MDL	0.113	PQL	mg/Kg	J	Z
VANADIUM	46.3		0.0249	MDL	0.113	PQL	mg/Kg	J	A
ZINC	68.1		0.634	MDL	3.39	PQL	mg/Kg	J	A

Sample ID: SL-016-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 9:15:00 **Analysis Type:** REA6 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.191	J	0.0453	MDL	0.453	PQL	mg/Kg	J	Z

Sample ID: SL-018-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 9:00:00 **Analysis Type:** REA4 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0903	J	0.0680	MDL	0.227	PQL	mg/Kg	J	Z, Q, E
ARSENIC	5.87		0.0906	MDL	0.453	PQL	mg/Kg	J	Q
CHROMIUM	29.3		0.136	MDL	0.453	PQL	mg/Kg	J	A
COPPER	14.0		0.0748	MDL	0.453	PQL	mg/Kg	J	A
LEAD	12.9		0.0118	MDL	0.227	PQL	mg/Kg	J	A
NICKEL	16.2		0.113	MDL	0.453	PQL	mg/Kg	J	A
SILVER	0.0421	J	0.0136	MDL	0.113	PQL	mg/Kg	J	Z
VANADIUM	51.0		0.0249	MDL	0.113	PQL	mg/Kg	J	A
ZINC	68.6		0.634	MDL	3.40	PQL	mg/Kg	J	A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE125 **Laboratory: LL**

EDD Filename: DE125_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 ***Matrix:*** SO

Sample ID: SL-018-SA8N-SS-0.0-0.5 ***Collected:*** 4/12/2011 9:00:00 ***Analysis Type:*** REA6 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.236	J	0.0453	MDL	0.453	PQL	mg/Kg	J	Z

Sample ID: SL-019-SA8N-SS-0.0-0.5 ***Collected:*** 4/12/2011 11:05:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.142	J	0.0703	MDL	0.234	PQL	mg/Kg	J	Z, Q, E
ARSENIC	6.50		0.0937	MDL	0.469	PQL	mg/Kg	J	Q
CHROMIUM	31.4		0.141	MDL	0.469	PQL	mg/Kg	J	A
COPPER	13.8		0.0773	MDL	0.469	PQL	mg/Kg	J	A
LEAD	12.2		0.0122	MDL	0.234	PQL	mg/Kg	J	A
NICKEL	17.7		0.117	MDL	0.469	PQL	mg/Kg	J	A
SILVER	0.0541	J	0.0141	MDL	0.117	PQL	mg/Kg	J	Z
VANADIUM	55.4		0.0258	MDL	0.117	PQL	mg/Kg	J	A
ZINC	71.9		0.656	MDL	3.51	PQL	mg/Kg	J	A

Sample ID: SL-019-SA8N-SS-0.0-0.5 ***Collected:*** 4/12/2011 11:05:00 ***Analysis Type:*** REA6 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.196	J	0.0469	MDL	0.469	PQL	mg/Kg	J	Z

Sample ID: SL-020-SA8N-SS-0.0-0.5 ***Collected:*** 4/12/2011 11:25:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.220	J	0.0694	MDL	0.231	PQL	mg/Kg	J	Z, Q, E
ARSENIC	6.43		0.0926	MDL	0.463	PQL	mg/Kg	J	Q
CHROMIUM	30.9		0.139	MDL	0.463	PQL	mg/Kg	J	A
COPPER	15.4		0.0764	MDL	0.463	PQL	mg/Kg	J	A
LEAD	11.9		0.0120	MDL	0.231	PQL	mg/Kg	J	A
NICKEL	17.5		0.116	MDL	0.463	PQL	mg/Kg	J	A
SILVER	0.0536	J	0.0139	MDL	0.116	PQL	mg/Kg	J	Z
VANADIUM	54.0		0.0255	MDL	0.116	PQL	mg/Kg	J	A
ZINC	74.6		0.648	MDL	3.47	PQL	mg/Kg	J	A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE125 **Laboratory: LL**

EDD Filename: DE125_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 ***Matrix:*** SO

Sample ID: SL-020-SA8N-SS-0.0-0.5 ***Collected:*** 4/12/2011 11:25:00 ***Analysis Type:*** REA6 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.242	J	0.0463	MDL	0.463	PQL	mg/Kg	J	Z

Sample ID: SL-021-SA8N-SS-0.0-0.5 ***Collected:*** 4/12/2011 1:15:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.141	J	0.0671	MDL	0.224	PQL	mg/Kg	J	Z, Q, E
ARSENIC	5.84		0.0895	MDL	0.448	PQL	mg/Kg	J	Q
CHROMIUM	26.7		0.134	MDL	0.448	PQL	mg/Kg	J	A
COPPER	13.5		0.0738	MDL	0.448	PQL	mg/Kg	J	A
LEAD	9.14		0.0116	MDL	0.224	PQL	mg/Kg	J	A
NICKEL	15.6		0.112	MDL	0.448	PQL	mg/Kg	J	A
SILVER	0.0370	J	0.0134	MDL	0.112	PQL	mg/Kg	J	Z
VANADIUM	48.3		0.0246	MDL	0.112	PQL	mg/Kg	J	A
ZINC	80.9		0.627	MDL	3.36	PQL	mg/Kg	J	A

Sample ID: SL-021-SA8N-SS-0.0-0.5 ***Collected:*** 4/12/2011 1:15:00 ***Analysis Type:*** REA6 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.271	J	0.0448	MDL	0.448	PQL	mg/Kg	J	Z

Sample ID: SL-022-SA8N-SS-0.0-0.5 ***Collected:*** 4/12/2011 1:50:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.115	J	0.0703	MDL	0.234	PQL	mg/Kg	J	Z, Q, E
ARSENIC	6.45		0.0937	MDL	0.468	PQL	mg/Kg	J	Q
CHROMIUM	32.1		0.141	MDL	0.468	PQL	mg/Kg	J	A
COPPER	17.2		0.0773	MDL	0.468	PQL	mg/Kg	J	A
LEAD	12.1		0.0122	MDL	0.234	PQL	mg/Kg	J	A
NICKEL	17.9		0.117	MDL	0.468	PQL	mg/Kg	J	A
SILVER	0.0456	J	0.0141	MDL	0.117	PQL	mg/Kg	J	Z
VANADIUM	56.1		0.0258	MDL	0.117	PQL	mg/Kg	J	A
ZINC	82.2		0.656	MDL	3.51	PQL	mg/Kg	J	A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE125 **Laboratory: LL**

EDD Filename: DE125_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-022-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 1:50:00 **Analysis Type:** REA6 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.183	J	0.0468	MDL	0.468	PQL	mg/Kg	J	Z

Sample ID: SL-023-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 2:10:00 **Analysis Type:** REA4 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.109	J	0.0680	MDL	0.227	PQL	mg/Kg	J	Z, Q, E
ARSENIC	6.37		0.0906	MDL	0.453	PQL	mg/Kg	J	Q
CHROMIUM	31.7		0.136	MDL	0.453	PQL	mg/Kg	J	A
COPPER	17.0		0.0748	MDL	0.453	PQL	mg/Kg	J	A
LEAD	13.9		0.0118	MDL	0.227	PQL	mg/Kg	J	A
NICKEL	18.1		0.113	MDL	0.453	PQL	mg/Kg	J	A
SILVER	0.0501	J	0.0136	MDL	0.113	PQL	mg/Kg	J	Z
VANADIUM	55.0		0.0249	MDL	0.113	PQL	mg/Kg	J	A
ZINC	83.7		0.634	MDL	3.40	PQL	mg/Kg	J	A

Sample ID: SL-023-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 2:10:00 **Analysis Type:** REA6 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.257	J	0.0453	MDL	0.453	PQL	mg/Kg	J	Z

Sample ID: SL-036-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 2:25:00 **Analysis Type:** REA4 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.248		0.0709	MDL	0.236	PQL	mg/Kg	J	Q, E
ARSENIC	6.63		0.0945	MDL	0.472	PQL	mg/Kg	J	Q
CHROMIUM	33.0		0.142	MDL	0.472	PQL	mg/Kg	J	A
COPPER	16.7		0.0780	MDL	0.472	PQL	mg/Kg	J	A
LEAD	14.7		0.0123	MDL	0.236	PQL	mg/Kg	J	A
NICKEL	18.9		0.118	MDL	0.472	PQL	mg/Kg	J	A
SILVER	0.0529	J	0.0142	MDL	0.118	PQL	mg/Kg	J	Z
VANADIUM	59.2		0.0260	MDL	0.118	PQL	mg/Kg	J	A
ZINC	83.4		0.661	MDL	3.54	PQL	mg/Kg	J	A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE125 **Laboratory: LL**

EDD Filename: DE125_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 ***Matrix:*** SO

Sample ID: SL-036-SA8N-SS-0.0-0.5 ***Collected:*** 4/12/2011 2:25:00 ***Analysis Type:*** REA6 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.227	J	0.0472	MDL	0.472	PQL	mg/Kg	J	Z

Sample ID: SL-047-SA8N-SS-0.0-0.5 ***Collected:*** 4/12/2011 1:30:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.141	J	0.0701	MDL	0.234	PQL	mg/Kg	J	Z, Q, E
ARSENIC	5.56		0.0934	MDL	0.467	PQL	mg/Kg	J	Q
CHROMIUM	30.5		0.140	MDL	0.467	PQL	mg/Kg	J	A
COPPER	14.1		0.0771	MDL	0.467	PQL	mg/Kg	J	A
LEAD	9.97		0.0121	MDL	0.234	PQL	mg/Kg	J	A
NICKEL	16.6		0.117	MDL	0.467	PQL	mg/Kg	J	A
SILVER	0.0228	J	0.0140	MDL	0.117	PQL	mg/Kg	J	Z
VANADIUM	55.6		0.0257	MDL	0.117	PQL	mg/Kg	J	A
ZINC	76.6		0.654	MDL	3.50	PQL	mg/Kg	J	A

Sample ID: SL-047-SA8N-SS-0.0-0.5 ***Collected:*** 4/12/2011 1:30:00 ***Analysis Type:*** REA6 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.216	J	0.0467	MDL	0.467	PQL	mg/Kg	J	Z

Sample ID: SL-048-SA8N-SS-0.0-0.5 ***Collected:*** 4/12/2011 10:15:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.184	J	0.0755	MDL	0.252	PQL	mg/Kg	J	Z, Q, E
ARSENIC	6.27		0.101	MDL	0.503	PQL	mg/Kg	J	Q
CHROMIUM	28.3		0.151	MDL	0.503	PQL	mg/Kg	J	A
COPPER	14.6		0.0830	MDL	0.503	PQL	mg/Kg	J	A
LEAD	11.0		0.0131	MDL	0.252	PQL	mg/Kg	J	A
NICKEL	15.2		0.126	MDL	0.503	PQL	mg/Kg	J	A
SILVER	0.0411	J	0.0151	MDL	0.126	PQL	mg/Kg	J	Z
VANADIUM	50.0		0.0277	MDL	0.126	PQL	mg/Kg	J	A
ZINC	66.8		0.705	MDL	3.77	PQL	mg/Kg	J	A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE125 **Laboratory: LL**

EDD Filename: DE125_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 ***Matrix:*** SO

Sample ID: SL-048-SA8N-SS-0.0-0.5 ***Collected:*** 4/12/2011 10:15:00 ***Analysis Type:*** REA6 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.238	J	0.0503	MDL	0.503	PQL	mg/Kg	J	Z

Sample ID: SL-050-SA8N-SS-0.0-0.5 ***Collected:*** 4/12/2011 10:45:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.200	J	0.0707	MDL	0.236	PQL	mg/Kg	J	Z, Q, E
ARSENIC	6.39		0.0943	MDL	0.471	PQL	mg/Kg	J	Q
CHROMIUM	32.2		0.141	MDL	0.471	PQL	mg/Kg	J	A
COPPER	15.7		0.0778	MDL	0.471	PQL	mg/Kg	J	A
LEAD	11.8		0.0123	MDL	0.236	PQL	mg/Kg	J	A
NICKEL	17.7		0.118	MDL	0.471	PQL	mg/Kg	J	A
SILVER	0.0288	J	0.0141	MDL	0.118	PQL	mg/Kg	J	Z
VANADIUM	56.3		0.0259	MDL	0.118	PQL	mg/Kg	J	A
ZINC	74.3		0.660	MDL	3.54	PQL	mg/Kg	J	A

Sample ID: SL-050-SA8N-SS-0.0-0.5 ***Collected:*** 4/12/2011 10:45:00 ***Analysis Type:*** REA6 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.244	J	0.0471	MDL	0.471	PQL	mg/Kg	J	Z

Sample ID: SL-131-SA8N-SS-0.0-0.5 ***Collected:*** 4/12/2011 3:00:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.155	J	0.0678	MDL	0.226	PQL	mg/Kg	J	Z, Q, E
ARSENIC	5.95		0.0905	MDL	0.452	PQL	mg/Kg	J	Q
CHROMIUM	29.6		0.136	MDL	0.452	PQL	mg/Kg	J	A
COPPER	16.1		0.0746	MDL	0.452	PQL	mg/Kg	J	A
LEAD	17.7		0.0118	MDL	0.226	PQL	mg/Kg	J	A
NICKEL	17.4		0.113	MDL	0.452	PQL	mg/Kg	J	A
SILVER	0.0658	J	0.0136	MDL	0.113	PQL	mg/Kg	J	Z
VANADIUM	52.8		0.0249	MDL	0.113	PQL	mg/Kg	J	A
ZINC	90.8		0.633	MDL	3.39	PQL	mg/Kg	J	A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE125 **Laboratory: LL**

EDD Filename: DE125_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 ***Matrix:*** SO

Sample ID: SL-131-SA8N-SS-0.0-0.5 ***Collected:*** 4/12/2011 3:00:00 ***Analysis Type:*** REA6 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.221	J	0.0452	MDL	0.452	PQL	mg/Kg	J	Z

Sample ID: SL-202-SA5A-SB-3.0-4.0 ***Collected:*** 4/12/2011 2:14:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0882	J	0.0692	MDL	0.231	PQL	mg/Kg	J	Z, Q, E
ARSENIC	6.06		0.0922	MDL	0.461	PQL	mg/Kg	J	Q
CADMIUM	0.0912	J	0.0461	MDL	0.115	PQL	mg/Kg	J	Z
CHROMIUM	25.7		0.138	MDL	0.461	PQL	mg/Kg	J	A
COPPER	11.5		0.0761	MDL	0.461	PQL	mg/Kg	J	A
LEAD	8.45		0.0120	MDL	0.231	PQL	mg/Kg	J	A
NICKEL	17.1		0.115	MDL	0.461	PQL	mg/Kg	J	A
SILVER	0.0517	J	0.0138	MDL	0.115	PQL	mg/Kg	J	Z
VANADIUM	48.1		0.0254	MDL	0.115	PQL	mg/Kg	J	A
ZINC	68.5		0.645	MDL	3.46	PQL	mg/Kg	J	A

Sample ID: SL-202-SA5A-SB-3.0-4.0 ***Collected:*** 4/12/2011 2:14:00 ***Analysis Type:*** REA6 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.160	J	0.0461	MDL	0.461	PQL	mg/Kg	J	Z

Sample ID: SL-206-SA5A-SB-4.0-5.0 ***Collected:*** 4/12/2011 3:25:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.103	J	0.0687	MDL	0.229	PQL	mg/Kg	J	Z, Q, E
ARSENIC	6.02		0.0916	MDL	0.458	PQL	mg/Kg	J	Q
CADMIUM	0.0474	J	0.0458	MDL	0.115	PQL	mg/Kg	J	Z
CHROMIUM	24.1		0.137	MDL	0.458	PQL	mg/Kg	J	A
COPPER	9.63		0.0756	MDL	0.458	PQL	mg/Kg	J	A
LEAD	6.40		0.0119	MDL	0.229	PQL	mg/Kg	J	A
NICKEL	13.4		0.115	MDL	0.458	PQL	mg/Kg	J	A
SILVER	0.0606	J	0.0137	MDL	0.115	PQL	mg/Kg	J	Z
VANADIUM	42.5		0.0252	MDL	0.115	PQL	mg/Kg	J	A
ZINC	52.9		0.641	MDL	3.44	PQL	mg/Kg	J	A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE125 **Laboratory: LL**

EDD Filename: DE125_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 ***Matrix:*** SO

Sample ID: SL-206-SA5A-SB-4.0-5.0 ***Collected:*** 4/12/2011 3:25:00 ***Analysis Type:*** REA6 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0852	J	0.0458	MDL	0.458	PQL	mg/Kg	J	Z

Sample ID: SL-207-SA5A-SB-3.0-4.0 ***Collected:*** 4/12/2011 12:03:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.139	J	0.0659	MDL	0.220	PQL	mg/Kg	J	Z, Q, E
ARSENIC	8.07		0.0878	MDL	0.439	PQL	mg/Kg	J	Q
CADMIUM	0.0820	J	0.0439	MDL	0.110	PQL	mg/Kg	J	Z
CHROMIUM	25.3		0.132	MDL	0.439	PQL	mg/Kg	J	A
COPPER	10.6		0.0724	MDL	0.439	PQL	mg/Kg	J	A
LEAD	11.0		0.0114	MDL	0.220	PQL	mg/Kg	J	A
NICKEL	14.0		0.110	MDL	0.439	PQL	mg/Kg	J	A
SILVER	0.0540	J	0.0132	MDL	0.110	PQL	mg/Kg	J	Z
VANADIUM	46.8		0.0241	MDL	0.110	PQL	mg/Kg	J	A
ZINC	57.8		0.615	MDL	3.29	PQL	mg/Kg	J	A

Sample ID: SL-207-SA5A-SB-3.0-4.0 ***Collected:*** 4/12/2011 12:03:00 ***Analysis Type:*** REA6 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.181	J	0.0439	MDL	0.439	PQL	mg/Kg	J	Z

Sample ID: SL-227-SA5A-SB-3.0-4.0 ***Collected:*** 4/12/2011 10:13:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0825	J	0.0689	MDL	0.230	PQL	mg/Kg	J	Z, Q, E
ARSENIC	6.56		0.0918	MDL	0.459	PQL	mg/Kg	J	Q
CADMIUM	0.102	J	0.0459	MDL	0.115	PQL	mg/Kg	J	Z
CHROMIUM	23.3		0.138	MDL	0.459	PQL	mg/Kg	J	A
COPPER	8.29		0.0758	MDL	0.459	PQL	mg/Kg	J	A
LEAD	5.48		0.0119	MDL	0.230	PQL	mg/Kg	J	A
NICKEL	14.3		0.115	MDL	0.459	PQL	mg/Kg	J	A
SILVER	0.0515	J	0.0138	MDL	0.115	PQL	mg/Kg	J	Z
VANADIUM	41.1		0.0253	MDL	0.115	PQL	mg/Kg	J	A
ZINC	53.5		0.643	MDL	3.44	PQL	mg/Kg	J	A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE125 **Laboratory: LL**

EDD Filename: DE125_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS
Method: 6020 **Matrix:** SO

Sample ID: SL-227-SA5A-SB-3.0-4.0 **Collected:** 4/12/2011 10:13:00 **Analysis Type:** REA6 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0478	J	0.0459	MDL	0.459	PQL	mg/Kg	J	Z

Sample ID: SL-228-SA5A-SB-3.0-4.0 **Collected:** 4/12/2011 9:06:00 **Analysis Type:** REA4 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0676	U	0.0676	MDL	0.225	PQL	mg/Kg	R	Q
ARSENIC	5.66		0.0902	MDL	0.451	PQL	mg/Kg	J	Q
CADMIUM	0.0660	J	0.0451	MDL	0.113	PQL	mg/Kg	J	Z
CHROMIUM	18.7		0.135	MDL	0.451	PQL	mg/Kg	J	A
COPPER	6.85		0.0744	MDL	0.451	PQL	mg/Kg	J	A
LEAD	4.81		0.0117	MDL	0.225	PQL	mg/Kg	J	A
NICKEL	9.37		0.113	MDL	0.451	PQL	mg/Kg	J	A
SILVER	0.0469	J	0.0135	MDL	0.113	PQL	mg/Kg	J	Z
VANADIUM	35.2		0.0248	MDL	0.113	PQL	mg/Kg	J	A
ZINC	38.0		0.631	MDL	3.38	PQL	mg/Kg	J	A

Sample ID: SL-228-SA5A-SB-3.0-4.0 **Collected:** 4/12/2011 9:06:00 **Analysis Type:** REA6 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0453	J	0.0451	MDL	0.451	PQL	mg/Kg	J	Z

Method Category: METALS
Method: 7199 **Matrix:** SO

Sample ID: SL-015-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 9:35:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.50	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-018-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 9:00:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	1.1	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE125 **Laboratory: LL**

EDD Filename: DE125_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 7199 *Matrix:* SO

Sample ID: SL-019-SA8N-SS-0.0-0.5 *Collected:* 4/12/2011 11:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.53	J	0.24	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-020-SA8N-SS-0.0-0.5 *Collected:* 4/12/2011 11:25:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.45	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-022-SA8N-SS-0.0-0.5 *Collected:* 4/12/2011 1:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.47	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-047-SA8N-SS-0.0-0.5 *Collected:* 4/12/2011 1:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.39	J	0.24	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-048-SA8N-SS-0.0-0.5 *Collected:* 4/12/2011 10:15:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.47	J	0.25	MDL	1.3	PQL	mg/Kg	J	Z

Sample ID: SL-131-SA8N-SS-0.0-0.5 *Collected:* 4/12/2011 3:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.44	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-202-SA5A-SB-3.0-4.0 *Collected:* 4/12/2011 2:14:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.75	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-206-SA5A-SB-4.0-5.0 *Collected:* 4/12/2011 3:25:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.38	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE125 **Laboratory: LL**

EDD Filename: DE125_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS
Method: 7199 **Matrix:** SO

Sample ID: SL-207-SA5A-SB-3.0-4.0 **Collected:** 4/12/2011 12:03:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.56	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-228-SA5A-SB-3.0-4.0 **Collected:** 4/12/2011 9:06:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.41	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Method Category: METALS
Method: 7471A **Matrix:** SO

Sample ID: SL-012-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 10:35:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0249	J	0.0032	MDL	0.112	PQL	mg/Kg	J	Z

Sample ID: SL-015-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 9:35:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0250	J	0.0033	MDL	0.116	PQL	mg/Kg	J	Z

Sample ID: SL-018-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 9:00:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0408	J	0.0033	MDL	0.114	PQL	mg/Kg	J	Z

Sample ID: SL-019-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 11:05:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0499	J	0.0033	MDL	0.116	PQL	mg/Kg	J	Z

Sample ID: SL-020-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 11:25:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0375	J	0.0031	MDL	0.107	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE125 **Laboratory: LL**

EDD Filename: DE125_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 7471A **Matrix:** SO

Sample ID: SL-021-SA8N-SS-0.0-0.5 *Collected:* 4/12/2011 1:15:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0475	J	0.0031	MDL	0.109	PQL	mg/Kg	J	Z

Sample ID: SL-022-SA8N-SS-0.0-0.5 *Collected:* 4/12/2011 1:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0452	J	0.0033	MDL	0.116	PQL	mg/Kg	J	Z

Sample ID: SL-023-SA8N-SS-0.0-0.5 *Collected:* 4/12/2011 2:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0223	J	0.0032	MDL	0.113	PQL	mg/Kg	J	Z

Sample ID: SL-036-SA8N-SS-0.0-0.5 *Collected:* 4/12/2011 2:25:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0163	J	0.0033	MDL	0.115	PQL	mg/Kg	J	Z

Sample ID: SL-047-SA8N-SS-0.0-0.5 *Collected:* 4/12/2011 1:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0430	J	0.0033	MDL	0.116	PQL	mg/Kg	J	Z

Sample ID: SL-048-SA8N-SS-0.0-0.5 *Collected:* 4/12/2011 10:15:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0143	J	0.0036	MDL	0.124	PQL	mg/Kg	J	Z

Sample ID: SL-050-SA8N-SS-0.0-0.5 *Collected:* 4/12/2011 10:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0174	J	0.0033	MDL	0.115	PQL	mg/Kg	J	Z

Sample ID: SL-131-SA8N-SS-0.0-0.5 *Collected:* 4/12/2011 3:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0326	J	0.0033	MDL	0.114	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE125 **Laboratory: LL**

EDD Filename: DE125_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 7471A **Matrix: SO**

Sample ID: SL-202-SA5A-SB-3.0-4.0 **Collected: 4/12/2011 2:14:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0061	J	0.0033	MDL	0.114	PQL	mg/Kg	J	Z

Sample ID: SL-206-SA5A-SB-4.0-5.0 **Collected: 4/12/2011 3:25:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0091	J	0.0031	MDL	0.107	PQL	mg/Kg	J	Z

Sample ID: SL-207-SA5A-SB-3.0-4.0 **Collected: 4/12/2011 12:03:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0059	J	0.0031	MDL	0.107	PQL	mg/Kg	J	Z

Sample ID: SL-227-SA5A-SB-3.0-4.0 **Collected: 4/12/2011 10:13:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0109	J	0.0031	MDL	0.107	PQL	mg/Kg	J	Z

Sample ID: SL-228-SA5A-SB-3.0-4.0 **Collected: 4/12/2011 9:06:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0065	J	0.0032	MDL	0.112	PQL	mg/Kg	J	Z

Method Category: SVOA

Method: 1625C **Matrix: SO**

Sample ID: SL-020-SA8N-SS-0.0-0.5 **Collected: 4/12/2011 11:25:00** **Analysis Type: RES-BASE/NEUTRAL** **Dilution: 10**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	368	J	193	MDL	386	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE125 **Laboratory: LL**

EDD Filename: DE125_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA
Method: 6850 **Matrix:** SO

Sample ID: SL-021-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 1:15:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PERCHLORATE	3.8	J	2.4	MDL	5.6	PQL	ug/Kg	J	Z

Method Category: SVOA
Method: 8015M **Matrix:** SO

Sample ID: SL-020-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 11:25:00 **Analysis Type:** REA2 **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	1.3	J	0.46	MDL	1.4	PQL	mg/Kg	J	Z

Sample ID: SL-022-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 1:50:00 **Analysis Type:** REA2 **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	1.3	J	0.47	MDL	1.4	PQL	mg/Kg	J	Z

Method Category: SVOA
Method: 8082 **Matrix:** SO

Sample ID: SL-012-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 10:35:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5460	1.9	J	1.1	MDL	3.7	PQL	ug/Kg	J	Z

Sample ID: SL-015-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 9:35:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5460	2.5	J	1.2	MDL	3.9	PQL	ug/Kg	J	Z

Sample ID: SL-018-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 9:00:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5460	2.2	J	1.2	MDL	3.9	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE125 **Laboratory: LL**

EDD Filename: DE125_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **8082** ***Matrix:*** **SO**

Sample ID: **SL-022-SA8N-SS-0.0-0.5** ***Collected:*** **4/12/2011 1:50:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5460	3.7	J	2.3	MDL	7.7	PQL	ug/Kg	J	Z

Sample ID: **SL-023-SA8N-SS-0.0-0.5** ***Collected:*** **4/12/2011 2:10:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	1.8	J	0.39	MDL	2.0	PQL	ug/Kg	J	Z
Aroclor 1268	0.61	J	0.39	MDL	2.0	PQL	ug/Kg	J	Z
Aroclor 5460	1.2	U	1.2	MDL	3.9	PQL	ug/Kg	UJ	C

Sample ID: **SL-036-SA8N-SS-0.0-0.5** ***Collected:*** **4/12/2011 2:25:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	1.5	J	0.40	MDL	2.1	PQL	ug/Kg	J	Z, *XIII
AROCLOR 1260	1.1	J	0.47	MDL	2.1	PQL	ug/Kg	J	Z
Aroclor 5460	3.6	J	1.2	MDL	4.0	PQL	ug/Kg	J	Z, C

Sample ID: **SL-047-SA8N-SS-0.0-0.5** ***Collected:*** **4/12/2011 1:30:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5460	1.6	J	1.2	MDL	3.9	PQL	ug/Kg	J	Z, C

Sample ID: **SL-048-SA8N-SS-0.0-0.5** ***Collected:*** **4/12/2011 10:15:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	1.1	J	0.42	MDL	2.2	PQL	ug/Kg	J	Z
Aroclor 5460	1.3	U	1.3	MDL	4.2	PQL	ug/Kg	UJ	C

Sample ID: **SL-050-SA8N-SS-0.0-0.5** ***Collected:*** **4/12/2011 10:45:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	1.7	J	0.48	MDL	2.1	PQL	ug/Kg	J	Z
Aroclor 5460	2.7	J	1.2	MDL	4.0	PQL	ug/Kg	J	Z, C

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE125 **Laboratory: LL**

EDD Filename: DE125_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: SL-131-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 3:00:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	31		0.76	MDL	3.9	PQL	ug/Kg	J	S
Aroclor 1268	9.4		0.76	MDL	3.9	PQL	ug/Kg	J	S
Aroclor 5432	2.3	U	2.3	MDL	7.6	PQL	ug/Kg	UJ	C
Aroclor 5460	14		2.3	MDL	7.6	PQL	ug/Kg	J	S, C

Sample ID: SL-202-SA5A-SB-3.0-4.0 **Collected:** 4/12/2011 2:14:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5460	1.2	U	1.2	MDL	3.8	PQL	ug/Kg	UJ	C

Sample ID: SL-206-SA5A-SB-4.0-5.0 **Collected:** 4/12/2011 3:25:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5460	1.1	U	1.1	MDL	3.8	PQL	ug/Kg	UJ	C

Sample ID: SL-207-SA5A-SB-3.0-4.0 **Collected:** 4/12/2011 12:03:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5460	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	C

Sample ID: SL-227-SA5A-SB-3.0-4.0 **Collected:** 4/12/2011 10:13:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5460	1.1	U	1.1	MDL	3.8	PQL	ug/Kg	UJ	C

Sample ID: SL-228-SA5A-SB-3.0-4.0 **Collected:** 4/12/2011 9:06:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5460	1.1	U	1.1	MDL	3.8	PQL	ug/Kg	UJ	C

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE125 **Laboratory: LL**

EDD Filename: DE125_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SL-012-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 10:35:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
4-CHLOROANILINE	76	U	76	MDL	190	PQL	ug/Kg	UJ	Q
BENZIDINE	1300	U	1300	MDL	3800	PQL	ug/Kg	UJ	Q
BIS(2-ETHYLHEXYL)PHTHALATE	28	J	19	MDL	380	PQL	ug/Kg	J	Z

Sample ID: SL-015-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 9:35:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	25	J	19	MDL	390	PQL	ug/Kg	J	Z

Sample ID: SL-016-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 9:15:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L

Sample ID: SL-018-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 9:00:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	21	J	19	MDL	390	PQL	ug/Kg	J	Z

Sample ID: SL-019-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 11:05:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROBENZENE	20	U	20	MDL	200	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	39	J	20	MDL	400	PQL	ug/Kg	J	Z

Sample ID: SL-020-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 11:25:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	25	J	19	MDL	380	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE125 **Laboratory: LL**

EDD Filename: DE125_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SL-021-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 1:15:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L

Sample ID: SL-022-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 1:50:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	25	J	19	MDL	390	PQL	ug/Kg	J	Z

Sample ID: SL-023-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 2:10:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	22	J	19	MDL	390	PQL	ug/Kg	J	Z

Sample ID: SL-036-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 2:25:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROBENZENE	20	U	20	MDL	200	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	160	J	20	MDL	400	PQL	ug/Kg	J	Z

Sample ID: SL-047-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 1:30:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	36	J	19	MDL	390	PQL	ug/Kg	J	Z

Sample ID: SL-048-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 10:15:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROBENZENE	21	U	21	MDL	210	PQL	ug/Kg	UJ	L

Sample ID: SL-050-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 10:45:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROBENZENE	20	U	20	MDL	200	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	27	J	20	MDL	410	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE125 **Laboratory: LL**

EDD Filename: DE125_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SL-131-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 3:00:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROBENZENE	96	U	96	MDL	960	PQL	ug/Kg	UJ	L

Sample ID: SL-202-SA5A-SB-3.0-4.0 **Collected:** 4/12/2011 2:14:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	25	J	19	MDL	390	PQL	ug/Kg	J	Z

Sample ID: SL-206-SA5A-SB-4.0-5.0 **Collected:** 4/12/2011 3:25:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	21	J	19	MDL	380	PQL	ug/Kg	J	Z

Sample ID: SL-207-SA5A-SB-3.0-4.0 **Collected:** 4/12/2011 12:03:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROBENZENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	23	J	18	MDL	360	PQL	ug/Kg	J	Z

Sample ID: SL-227-SA5A-SB-3.0-4.0 **Collected:** 4/12/2011 10:13:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L

Sample ID: SL-228-SA5A-SB-3.0-4.0 **Collected:** 4/12/2011 9:06:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE125 **Laboratory: LL**

EDD Filename: DE125_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA
Method: 8270C SIM **Matrix:** AQ

Sample ID: EB01-SA8N-041211 **Collected:** 4/12/2011 4:00:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	0.011	U	0.011	MDL	0.053	PQL	ug/L	UJ	C
Diethylphthalate	0.13	J	0.053	MDL	1.1	PQL	ug/L	J	Z
Di-n-butylphthalate	0.51	J	0.053	MDL	1.1	PQL	ug/L	J	Z
Di-n-octylphthalate	4.7		0.053	MDL	1.1	PQL	ug/L	J	L, C

Method Category: SVOA
Method: 8270C SIM **Matrix:** SO

Sample ID: SL-012-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 10:35:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	1.1	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.1	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	2.0		0.75	MDL	1.9	PQL	ug/Kg	J	C
BENZO(G,H,I)PERYLENE	1.5	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	0.84	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
Di-n-octylphthalate	9.3	J	6.8	MDL	20	PQL	ug/Kg	UJ	F, C
PHENANTHRENE	1.1	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-015-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 9:35:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	1.0	J	0.78	MDL	1.9	PQL	ug/Kg	J	Z, C
Di-n-octylphthalate	9.7	J	7.0	MDL	21	PQL	ug/Kg	UJ	F, C
FLUORANTHENE	1.1	J	0.78	MDL	1.9	PQL	ug/Kg	J	Z
PYRENE	0.90	J	0.78	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-016-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 9:15:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	0.83	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	5.2		0.76	MDL	1.9	PQL	ug/Kg	J	C
BENZO(G,H,I)PERYLENE	1.5	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
Di-n-octylphthalate	9.9	J	6.9	MDL	21	PQL	ug/Kg	UJ	F, C
INDENO(1,2,3-CD)PYRENE	1.3	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE125

Laboratory: LL

EDD Filename: DE125_v1

eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8270C SIM **Matrix:** SO

Sample ID: SL-016-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 9:15:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NAPHTHALENE	1.1	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-018-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 9:00:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	0.80	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	1.7	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z, C
Di-n-octylphthalate	9.6	J	7.0	MDL	21	PQL	ug/Kg	UJ	F, C
NAPHTHALENE	0.96	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
PHENANTHRENE	1.1	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-019-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 11:05:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	1.4	J	0.79	MDL	2.0	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.4	J	0.79	MDL	2.0	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	3.1		0.79	MDL	2.0	PQL	ug/Kg	J	C
BENZO(G,H,I)PERYLENE	1.1	J	0.79	MDL	2.0	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.4	J	0.79	MDL	2.0	PQL	ug/Kg	J	Z
Di-n-octylphthalate	10	J	7.1	MDL	21	PQL	ug/Kg	UJ	F, C
NAPHTHALENE	1.1	J	0.79	MDL	2.0	PQL	ug/Kg	J	Z
PHENANTHRENE	1.6	J	0.79	MDL	2.0	PQL	ug/Kg	J	Z

Sample ID: SL-020-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 11:25:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	1.2	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	60		0.76	MDL	1.9	PQL	ug/Kg	J	C
Di-n-butylphthalate	8.5	J	6.9	MDL	21	PQL	ug/Kg	U	F
Di-n-octylphthalate	9.7	J	6.9	MDL	21	PQL	ug/Kg	UJ	F, C
NAPHTHALENE	1.2	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE125 **Laboratory: LL**

EDD Filename: DE125_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C SIM **Matrix:** SO

Sample ID: **SL-021-SA8N-SS-0.0-0.5** ***Collected:*** **4/12/2011 1:15:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	0.51	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	11		0.75	MDL	1.9	PQL	ug/Kg	J	C
BIS(2-ETHYLHEXYL)PHTHALATE	28		6.7	MDL	20	PQL	ug/Kg	U	F, Z
Di-n-octylphthalate	9.5	J	6.7	MDL	20	PQL	ug/Kg	UJ	F, C
NAPHTHALENE	0.81	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: **SL-022-SA8N-SS-0.0-0.5** ***Collected:*** **4/12/2011 1:50:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	1.5	J	0.39	MDL	2.0	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	34		0.78	MDL	2.0	PQL	ug/Kg	J	C
DIBENZO(A,H)ANTHRACENE	1.8	J	0.78	MDL	2.0	PQL	ug/Kg	J	Z
Di-n-octylphthalate	12	J	7.0	MDL	21	PQL	ug/Kg	UJ	F, C
NAPHTHALENE	0.96	J	0.78	MDL	2.0	PQL	ug/Kg	J	Z

Sample ID: **SL-023-SA8N-SS-0.0-0.5** ***Collected:*** **4/12/2011 2:10:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	1.1	J	0.39	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	12		0.77	MDL	1.9	PQL	ug/Kg	J	C
Di-n-octylphthalate	13	J	7.0	MDL	21	PQL	ug/Kg	UJ	F, C
INDENO(1,2,3-CD)PYRENE	1.4	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
NAPHTHALENE	1.3	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: **SL-036-SA8N-SS-0.0-0.5** ***Collected:*** **4/12/2011 2:25:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	0.43	J	0.40	MDL	2.0	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	1.2	J	0.81	MDL	2.0	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.3	J	0.81	MDL	2.0	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	3.6		0.81	MDL	2.0	PQL	ug/Kg	J	C
BENZO(G,H,I)PERYLENE	1.4	J	0.81	MDL	2.0	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.0	J	0.81	MDL	2.0	PQL	ug/Kg	J	Z
Di-n-octylphthalate	7.3	U	7.3	MDL	22	PQL	ug/Kg	UJ	C
INDENO(1,2,3-CD)PYRENE	1.1	J	0.81	MDL	2.0	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE125 **Laboratory: LL**

EDD Filename: DE125_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C SIM **Matrix:** SO

Sample ID: SL-036-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 2:25:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NAPHTHALENE	1.8	J	0.81	MDL	2.0	PQL	ug/Kg	J	Z

Sample ID: SL-047-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 1:30:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	0.65	J	0.39	MDL	2.0	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	1.3	J	0.78	MDL	2.0	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.6	J	0.78	MDL	2.0	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	6.1		0.78	MDL	2.0	PQL	ug/Kg	J	C
BENZO(G,H,I)PERYLENE	1.2	J	0.78	MDL	2.0	PQL	ug/Kg	J	Z
Di-n-octylphthalate	7.0	U	7.0	MDL	21	PQL	ug/Kg	UJ	C
INDENO(1,2,3-CD)PYRENE	1.1	J	0.78	MDL	2.0	PQL	ug/Kg	J	Z
NAPHTHALENE	0.81	J	0.78	MDL	2.0	PQL	ug/Kg	J	Z

Sample ID: SL-048-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 10:15:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	1.6	J	0.84	MDL	2.1	PQL	ug/Kg	J	Z, C
CHRYSENE	2.0	J	0.42	MDL	2.1	PQL	ug/Kg	J	Z
Di-n-octylphthalate	7.6	U	7.6	MDL	23	PQL	ug/Kg	UJ	C
FLUORANTHENE	1.6	J	0.84	MDL	2.1	PQL	ug/Kg	J	Z
NAPHTHALENE	1.2	J	0.84	MDL	2.1	PQL	ug/Kg	J	Z
PHENANTHRENE	1.2	J	0.84	MDL	2.1	PQL	ug/Kg	J	Z
PYRENE	1.5	J	0.84	MDL	2.1	PQL	ug/Kg	J	Z

Sample ID: SL-050-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 10:45:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	1.6	J	0.82	MDL	2.0	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.4	J	0.82	MDL	2.0	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	3.1		0.82	MDL	2.0	PQL	ug/Kg	J	C
BENZO(G,H,I)PERYLENE	0.88	J	0.82	MDL	2.0	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	0.91	J	0.82	MDL	2.0	PQL	ug/Kg	J	Z
Di-n-octylphthalate	7.4	U	7.4	MDL	22	PQL	ug/Kg	UJ	C
INDENO(1,2,3-CD)PYRENE	0.90	J	0.82	MDL	2.0	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE125 **Laboratory: LL**

EDD Filename: DE125_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C SIM ***Matrix:*** SO

Sample ID: SL-131-SA8N-SS-0.0-0.5 ***Collected:*** 4/12/2011 3:00:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	1.1	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	1.8	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
ACENAPHTHYLENE	1.0	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	140		0.76	MDL	1.9	PQL	ug/Kg	J	C
BIS(2-ETHYLHEXYL)PHTHALATE	34		6.9	MDL	21	PQL	ug/Kg	U	F, Z
Butylbenzylphthalate	18	J	6.9	MDL	21	PQL	ug/Kg	J	Z
Di-n-octylphthalate	6.9	U	6.9	MDL	21	PQL	ug/Kg	UJ	C

Sample ID: SL-202-SA5A-SB-3.0-4.0 ***Collected:*** 4/12/2011 2:14:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)PYRENE	1.7	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	3.0		0.77	MDL	1.9	PQL	ug/Kg	J	C
Di-n-octylphthalate	6.9	U	6.9	MDL	21	PQL	ug/Kg	UJ	C
NAPHTHALENE	0.82	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-206-SA5A-SB-4.0-5.0 ***Collected:*** 4/12/2011 3:25:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	0.75	U	0.75	MDL	1.9	PQL	ug/Kg	UJ	C
Di-n-octylphthalate	6.8	U	6.8	MDL	20	PQL	ug/Kg	UJ	C

Sample ID: SL-207-SA5A-SB-3.0-4.0 ***Collected:*** 4/12/2011 12:03:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	0.73	U	0.73	MDL	1.8	PQL	ug/Kg	UJ	C
Di-n-octylphthalate	6.6	U	6.6	MDL	20	PQL	ug/Kg	UJ	C

Sample ID: SL-227-SA5A-SB-3.0-4.0 ***Collected:*** 4/12/2011 10:13:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	0.76	U	0.76	MDL	1.9	PQL	ug/Kg	UJ	C
Di-n-octylphthalate	6.8	U	6.8	MDL	20	PQL	ug/Kg	UJ	C

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE125

Laboratory: LL

EDD Filename: DE125_v1

eQAPP Name: CDM_SSFL_110509

Method Category: SVOA
Method: 8270C SIM **Matrix:** SO

Sample ID: SL-228-SA5A-SB-3.0-4.0 **Collected:** 4/12/2011 9:06:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	0.76	U	0.76	MDL	1.9	PQL	ug/Kg	UJ	C
Di-n-octylphthalate	6.8	U	6.8	MDL	20	PQL	ug/Kg	UJ	C

Method Category: VOA
Method: 8260B **Matrix:** AQ

Sample ID: TB-041211 **Collected:** 4/12/2011 12:00:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-Chloro-1,1,1-trifluoroethane	2	U	2	MDL	5	PQL	ug/L	UJ	C
ACETONE	6	U	6	MDL	20	PQL	ug/L	UJ	C
DICHLORODIFLUOROMETHANE	2	U	2	MDL	5	PQL	ug/L	UJ	C, C
TRICHLOROFLUOROMETHANE	2	U	2	MDL	5	PQL	ug/L	UJ	C

Method Category: VOA
Method: 8260B **Matrix:** SO

Sample ID: SL-202-SA5A-SB-3.0-4.0 **Collected:** 4/12/2011 2:14:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 0.88

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DIBROMO-3-CHLOROPROPANE	0.71	U	0.71	MDL	4.1	PQL	ug/Kg	UJ	C
2-HEXANONE	1.6	U	1.6	MDL	8.2	PQL	ug/Kg	UJ	C
4-METHYL-2-PENTANONE (MIBK)	0.40	U	0.40	MDL	8.2	PQL	ug/Kg	UJ	C
BROMOCHLOROMETHANE	0.34	U	0.34	MDL	4.1	PQL	ug/Kg	UJ	C
ETHYLBENZENE	0.10	J	0.06	MDL	4.1	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	2.9	J	0.25	MDL	4.1	PQL	ug/Kg	U	B
N-BUTYLBENZENE	2.2	J	0.12	MDL	4.1	PQL	ug/Kg	J	Z
N-PROPYLBENZENE	0.24	J	0.07	MDL	4.1	PQL	ug/Kg	J	Z
SEC-BUTYLBENZENE	2.1	J	0.06	MDL	4.1	PQL	ug/Kg	J	Z

Sample ID: SL-206-SA5A-SB-4.0-5.0 **Collected:** 4/12/2011 3:25:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 0.9

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DIBROMO-3-CHLOROPROPANE	0.72	U	0.72	MDL	4.1	PQL	ug/Kg	UJ	C

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE125 **Laboratory: LL**

EDD Filename: DE125_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: SL-206-SA5A-SB-4.0-5.0 **Collected:** 4/12/2011 3:25:00 **Analysis Type:** RES **Dilution:** 0.9

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-HEXANONE	1.6	U	1.6	MDL	8.2	PQL	ug/Kg	UJ	C
4-METHYL-2-PENTANONE (MIBK)	0.40	U	0.40	MDL	8.2	PQL	ug/Kg	UJ	C
BROMOCHLOROMETHANE	0.34	U	0.34	MDL	4.1	PQL	ug/Kg	UJ	C
METHYLENE CHLORIDE	0.56	J	0.25	MDL	4.1	PQL	ug/Kg	U	B

Sample ID: SL-207-SA5A-SB-3.0-4.0 **Collected:** 4/12/2011 12:03:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DIBROMO-3-CHLOROPROPANE	0.77	U	0.77	MDL	4.4	PQL	ug/Kg	UJ	C
2-HEXANONE	1.8	U	1.8	MDL	8.8	PQL	ug/Kg	UJ	C
4-METHYL-2-PENTANONE (MIBK)	0.43	U	0.43	MDL	8.8	PQL	ug/Kg	UJ	C
BROMOCHLOROMETHANE	0.36	U	0.36	MDL	4.4	PQL	ug/Kg	UJ	C
ISOPROPYLBENZENE	0.21	J	0.07	MDL	4.4	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	0.60	J	0.26	MDL	4.4	PQL	ug/Kg	U	B

Sample ID: SL-227-SA5A-SB-3.0-4.0 **Collected:** 4/12/2011 10:13:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 0.97

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DIBROMO-3-CHLOROPROPANE	0.78	U	0.78	MDL	4.5	PQL	ug/Kg	UJ	C
2-HEXANONE	1.8	U	1.8	MDL	8.9	PQL	ug/Kg	UJ	C
4-METHYL-2-PENTANONE (MIBK)	0.44	U	0.44	MDL	8.9	PQL	ug/Kg	UJ	C
BROMOCHLOROMETHANE	0.37	U	0.37	MDL	4.5	PQL	ug/Kg	UJ	C
METHYLENE CHLORIDE	1.3	J	0.27	MDL	4.5	PQL	ug/Kg	U	B

Sample ID: SL-228-SA5A-SB-3.0-4.0 **Collected:** 4/12/2011 9:06:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 0.86

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DIBROMO-3-CHLOROPROPANE	0.69	U	0.69	MDL	3.9	PQL	ug/Kg	UJ	C
2-HEXANONE	1.6	U	1.6	MDL	7.9	PQL	ug/Kg	UJ	C
4-METHYL-2-PENTANONE (MIBK)	0.38	U	0.38	MDL	7.9	PQL	ug/Kg	UJ	C
BROMOCHLOROMETHANE	0.33	U	0.33	MDL	3.9	PQL	ug/Kg	UJ	C
METHYLENE CHLORIDE	4.2		0.24	MDL	3.9	PQL	ug/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE125

EDD Filename: DE125_v1

Laboratory: LL

eQAPP Name: CDM_SSFL_110509

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
*XIII	Compound Quantitation and CRQL
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Verification Correlation Coefficient
C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE125

Laboratory: LL

EDD Filename: DE125_v1

eQAPP Name: CDM_SSFL_110509

F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation
L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery Lower Estimation

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE125 **Laboratory: LL**

EDD Filename: DE125_v1 **eQAPP Name: CDM_SSFL_110509**

R	Continuing Calibration Verification Percent Recovery Lower Rejection
R	Continuing Calibration Verification Percent Recovery Upper Estimation
R	Continuing Calibration Verification Percent Recovery Upper Rejection
R	Continuing Calibration Verification Relative Response Factor
R	Initial Calibration Relative Response Factor
R	Initial Calibration Verification Percent Recovery Lower Estimation
R	Initial Calibration Verification Percent Recovery Lower Rejection
R	Initial Calibration Verification Percent Recovery Upper Estimation
R	Initial Calibration Verification Percent Recovery Upper Rejection
R	Initial Calibration Verification Relative Response Factor
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control Outlier Reports

DE125

QC Outlier Report: HoldingTimes

Lab Reporting Batch ID: DE125
EDD Filename: DE125_v1

Laboratory: LL
eQAPP Name: CDM_SSFL_110509

Method: 9040B
Matrix: AQ
Preparation Method: Gen Prep

Sample ID	Type	Actual	Criteria	Units	Flag
EB01-SA8N-041211 (RES)	Sampling To Analysis	54.00	48.00	HOURS	J (all detects) UJ (all non-detects)

Project Name and Number: 1203-004-008-AL -

Method Blank Outlier Report

Lab Reporting Batch ID: DE125

EDD Filename: DE125_v1

Laboratory: LL

eQAPP Name: CDM_SSFL_110509

Method: **6010B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P11008BB221923	4/22/2011 7:23:00 PM	PHOSPHORUS TIN	1.41 mg/Kg 1.40 mg/Kg	SL-012-SA8N-SS-0.0-0.5 SL-015-SA8N-SS-0.0-0.5 SL-016-SA8N-SS-0.0-0.5 SL-018-SA8N-SS-0.0-0.5 SL-019-SA8N-SS-0.0-0.5 SL-020-SA8N-SS-0.0-0.5 SL-021-SA8N-SS-0.0-0.5 SL-022-SA8N-SS-0.0-0.5 SL-023-SA8N-SS-0.0-0.5 SL-036-SA8N-SS-0.0-0.5 SL-047-SA8N-SS-0.0-0.5 SL-048-SA8N-SS-0.0-0.5 SL-050-SA8N-SS-0.0-0.5 SL-131-SA8N-SS-0.0-0.5 SL-202-SA5A-SB-3.0-4.0 SL-206-SA5A-SB-4.0-5.0 SL-207-SA5A-SB-3.0-4.0 SL-227-SA5A-SB-3.0-4.0 SL-228-SA5A-SB-3.0-4.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-012-SA8N-SS-0.0-0.5(REA)	TIN	2.54 mg/Kg	2.54U mg/Kg
SL-015-SA8N-SS-0.0-0.5(REA)	TIN	2.58 mg/Kg	2.58U mg/Kg
SL-016-SA8N-SS-0.0-0.5(REA)	TIN	2.56 mg/Kg	2.56U mg/Kg
SL-018-SA8N-SS-0.0-0.5(REA)	TIN	2.54 mg/Kg	2.54U mg/Kg
SL-019-SA8N-SS-0.0-0.5(REA)	TIN	2.45 mg/Kg	2.45U mg/Kg
SL-020-SA8N-SS-0.0-0.5(REA)	TIN	2.71 mg/Kg	2.71U mg/Kg
SL-021-SA8N-SS-0.0-0.5(REA)	TIN	2.43 mg/Kg	2.43U mg/Kg
SL-022-SA8N-SS-0.0-0.5(REA)	TIN	2.71 mg/Kg	2.71U mg/Kg
SL-023-SA8N-SS-0.0-0.5(REA)	TIN	2.59 mg/Kg	2.59U mg/Kg
SL-036-SA8N-SS-0.0-0.5(REA)	TIN	2.85 mg/Kg	2.85U mg/Kg
SL-047-SA8N-SS-0.0-0.5(REA)	TIN	2.62 mg/Kg	2.62U mg/Kg
SL-048-SA8N-SS-0.0-0.5(REA)	TIN	2.75 mg/Kg	2.75U mg/Kg
SL-050-SA8N-SS-0.0-0.5(REA)	TIN	2.69 mg/Kg	2.69U mg/Kg
SL-131-SA8N-SS-0.0-0.5(REA)	TIN	2.84 mg/Kg	2.84U mg/Kg
SL-202-SA5A-SB-3.0-4.0(REA)	TIN	2.84 mg/Kg	2.84U mg/Kg
SL-206-SA5A-SB-4.0-5.0(REA)	TIN	2.87 mg/Kg	2.87U mg/Kg
SL-207-SA5A-SB-3.0-4.0(REA)	TIN	2.82 mg/Kg	2.82U mg/Kg
SL-227-SA5A-SB-3.0-4.0(REA)	TIN	2.66 mg/Kg	2.66U mg/Kg
SL-228-SA5A-SB-3.0-4.0(REA)	TIN	2.75 mg/Kg	2.75U mg/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE125

EDD Filename: DE125_v1

Laboratory: LL

eQAPP Name: CDM_SSFL_110509

Method: 6020
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P11026AB220833A	4/21/2011 8:33:00 AM	COPPER	0.276 mg/Kg	SL-012-SA8N-SS-0.0-0.5 SL-015-SA8N-SS-0.0-0.5 SL-016-SA8N-SS-0.0-0.5 SL-018-SA8N-SS-0.0-0.5 SL-019-SA8N-SS-0.0-0.5 SL-020-SA8N-SS-0.0-0.5 SL-021-SA8N-SS-0.0-0.5 SL-022-SA8N-SS-0.0-0.5 SL-023-SA8N-SS-0.0-0.5 SL-036-SA8N-SS-0.0-0.5 SL-047-SA8N-SS-0.0-0.5 SL-048-SA8N-SS-0.0-0.5 SL-050-SA8N-SS-0.0-0.5 SL-131-SA8N-SS-0.0-0.5 SL-202-SA5A-SB-3.0-4.0 SL-206-SA5A-SB-4.0-5.0 SL-207-SA5A-SB-3.0-4.0 SL-227-SA5A-SB-3.0-4.0 SL-228-SA5A-SB-3.0-4.0

Method: 8015M
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P09092AB320241A	4/28/2011 2:41:00 AM	EFH (C21-C30) EFH (C30-C40)	0.93 mg/Kg 0.92 mg/Kg	SL-012-SA8N-SS-0.0-0.5 SL-019-SA8N-SS-0.0-0.5 SL-020-SA8N-SS-0.0-0.5 SL-021-SA8N-SS-0.0-0.5 SL-022-SA8N-SS-0.0-0.5 SL-036-SA8N-SS-0.0-0.5 SL-047-SA8N-SS-0.0-0.5

Method: 8260B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB23B211418A	4/13/2011 2:18:00 PM	METHYLENE CHLORIDE	1.3 ug/Kg	SL-202-SA5A-SB-3.0-4.0 SL-206-SA5A-SB-4.0-5.0 SL-207-SA5A-SB-3.0-4.0 SL-227-SA5A-SB-3.0-4.0 SL-228-SA5A-SB-3.0-4.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-202-SA5A-SB-3.0-4.0(RES)	METHYLENE CHLORIDE	2.9 ug/Kg	4.1U ug/Kg
SL-206-SA5A-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.56 ug/Kg	4.1U ug/Kg
SL-207-SA5A-SB-3.0-4.0(RES)	METHYLENE CHLORIDE	0.60 ug/Kg	4.4U ug/Kg
SL-227-SA5A-SB-3.0-4.0(RES)	METHYLENE CHLORIDE	1.3 ug/Kg	4.5U ug/Kg
SL-228-SA5A-SB-3.0-4.0(RES)	METHYLENE CHLORIDE	4.2 ug/Kg	4.2U ug/Kg

Equipment Rinsate Blank Outlier Report

Lab Reporting Batch ID: DE125 **Laboratory: LL**

EDD Filename: DE125_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8270C SIM**
Matrix: **SO**

Equipment Blank Sample ID	Collected Date	Analyte	Result	Associated Samples
EB01-SA8N-041211(RES)	4/12/2011 4:00:00 PM	BIS(2-ETHYLHEXYL)PHTHALATE Diethylphthalate Di-n-butylphthalate Di-n-octylphthalate	4.9 ug/L 0.13 ug/L 0.51 ug/L 4.7 ug/L	SL-012-SA8N-SS-0.0-0.5 SL-015-SA8N-SS-0.0-0.5 SL-016-SA8N-SS-0.0-0.5 SL-018-SA8N-SS-0.0-0.5 SL-019-SA8N-SS-0.0-0.5 SL-020-SA8N-SS-0.0-0.5 SL-021-SA8N-SS-0.0-0.5 SL-022-SA8N-SS-0.0-0.5 SL-023-SA8N-SS-0.0-0.5 SL-036-SA8N-SS-0.0-0.5 SL-047-SA8N-SS-0.0-0.5 SL-048-SA8N-SS-0.0-0.5 SL-050-SA8N-SS-0.0-0.5 SL-131-SA8N-SS-0.0-0.5 SL-202-SA5A-SB-3.0-4.0 SL-206-SA5A-SB-4.0-5.0 SL-207-SA5A-SB-3.0-4.0 SL-227-SA5A-SB-3.0-4.0 SL-228-SA5A-SB-3.0-4.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-012-SA8N-SS-0.0-0.5(RES)	Di-n-octylphthalate	9.3 ug/Kg	20U ug/Kg
SL-015-SA8N-SS-0.0-0.5(RES)	Di-n-octylphthalate	9.7 ug/Kg	21U ug/Kg
SL-016-SA8N-SS-0.0-0.5(RES)	Di-n-octylphthalate	9.9 ug/Kg	21U ug/Kg
SL-018-SA8N-SS-0.0-0.5(RES)	Di-n-octylphthalate	9.6 ug/Kg	21U ug/Kg
SL-019-SA8N-SS-0.0-0.5(RES)	Di-n-octylphthalate	10 ug/Kg	21U ug/Kg
SL-020-SA8N-SS-0.0-0.5(RES)	Di-n-butylphthalate	8.5 ug/Kg	21U ug/Kg
SL-020-SA8N-SS-0.0-0.5(RES)	Di-n-octylphthalate	9.7 ug/Kg	21U ug/Kg
SL-021-SA8N-SS-0.0-0.5(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	28 ug/Kg	28U ug/Kg
SL-021-SA8N-SS-0.0-0.5(RES)	Di-n-octylphthalate	9.5 ug/Kg	20U ug/Kg
SL-022-SA8N-SS-0.0-0.5(RES)	Di-n-octylphthalate	12 ug/Kg	21U ug/Kg
SL-023-SA8N-SS-0.0-0.5(RES)	Di-n-octylphthalate	13 ug/Kg	21U ug/Kg
SL-131-SA8N-SS-0.0-0.5(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	34 ug/Kg	34U ug/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE125

EDD Filename: DE125_v1

Laboratory: LL

eQAPP Name: CDM_SSFL_110509

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-012-SA8N-SS-0.0-0.5MSD (SL-012-SA8N-SS-0.0-0.5)	3,3'-DICHLOROBENZIDINE ANILINE	- -	- -	16.00-119.00 35.00-95.00	43 (30.00) 46 (30.00)	3,3'-DICHLOROBENZIDINE ANILINE	J (all detects)
SL-012-SA8N-SS-0.0-0.5MS **SL-012-SA8N-SS-0.0-0.5MSD** (SL-012-SA8N-SS-0.0-0.5)	4-CHLOROANILINE BENZIDINE	- 33	19 -	23.00-95.00 35.00-141.00	93 (30.00) -	4-CHLOROANILINE BENZIDINE	J(all detects) UJ(all non-detects)

Method: 8270C SIM
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-012-SA8N-SS-0.0-0.5MS (SL-012-SA8N-SS-0.0-0.5)	ACENAPHTHENE	106	-	63.00-105.00	-	ACENAPHTHENE	J(all detects)

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-021-SA8N-SS-0.0-0.5MS **SL-021-SA8N-SS-0.0-0.5MSD** (SL-012-SA8N-SS-0.0-0.5 SL-015-SA8N-SS-0.0-0.5 SL-016-SA8N-SS-0.0-0.5 SL-018-SA8N-SS-0.0-0.5 SL-019-SA8N-SS-0.0-0.5 SL-020-SA8N-SS-0.0-0.5 SL-021-SA8N-SS-0.0-0.5 SL-022-SA8N-SS-0.0-0.5 SL-023-SA8N-SS-0.0-0.5 SL-036-SA8N-SS-0.0-0.5 SL-047-SA8N-SS-0.0-0.5 SL-048-SA8N-SS-0.0-0.5 SL-050-SA8N-SS-0.0-0.5 SL-131-SA8N-SS-0.0-0.5 SL-202-SA5A-SB-3.0-4.0 SL-206-SA5A-SB-4.0-5.0 SL-207-SA5A-SB-3.0-4.0 SL-227-SA5A-SB-3.0-4.0 SL-228-SA5A-SB-3.0-4.0)	VANADIUM	131	145	75.00-125.00	-	VANADIUM	No Qual, >4x

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE125

EDD Filename: DE125_v1

Laboratory: LL

eQAPP Name: CDM_SSFL_110509

Method: 6020

Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-021-SA8N-SS-0.0-0.5MS **SL-021-SA8N-SS-0.0-0.5MSD** (SL-012-SA8N-SS-0.0-0.5 SL-015-SA8N-SS-0.0-0.5 SL-016-SA8N-SS-0.0-0.5 SL-018-SA8N-SS-0.0-0.5 SL-019-SA8N-SS-0.0-0.5 SL-020-SA8N-SS-0.0-0.5 SL-021-SA8N-SS-0.0-0.5 SL-022-SA8N-SS-0.0-0.5 SL-023-SA8N-SS-0.0-0.5 SL-036-SA8N-SS-0.0-0.5 SL-047-SA8N-SS-0.0-0.5 SL-048-SA8N-SS-0.0-0.5 SL-050-SA8N-SS-0.0-0.5 SL-131-SA8N-SS-0.0-0.5 SL-202-SA5A-SB-3.0-4.0 SL-206-SA5A-SB-4.0-5.0 SL-207-SA5A-SB-3.0-4.0 SL-227-SA5A-SB-3.0-4.0 SL-228-SA5A-SB-3.0-4.0)	ANTIMONY	26	18	75.00-125.00	26 (20.00)	ANTIMONY	J(all detects) R(all non-detects)
SL-021-SA8N-SS-0.0-0.5MS **SL-021-SA8N-SS-0.0-0.5MSD** (SL-012-SA8N-SS-0.0-0.5 SL-015-SA8N-SS-0.0-0.5 SL-016-SA8N-SS-0.0-0.5 SL-018-SA8N-SS-0.0-0.5 SL-019-SA8N-SS-0.0-0.5 SL-020-SA8N-SS-0.0-0.5 SL-021-SA8N-SS-0.0-0.5 SL-022-SA8N-SS-0.0-0.5 SL-023-SA8N-SS-0.0-0.5 SL-036-SA8N-SS-0.0-0.5 SL-047-SA8N-SS-0.0-0.5 SL-048-SA8N-SS-0.0-0.5 SL-050-SA8N-SS-0.0-0.5 SL-131-SA8N-SS-0.0-0.5 SL-202-SA5A-SB-3.0-4.0 SL-206-SA5A-SB-4.0-5.0 SL-207-SA5A-SB-3.0-4.0 SL-227-SA5A-SB-3.0-4.0 SL-228-SA5A-SB-3.0-4.0)	ARSENIC ZINC	- 56	70 61	75.00-125.00 75.00-125.00	- -	ARSENIC ZINC	J(all detects) UJ(all non-detects) Zn No Qual, >4x
SL-021-SA8N-SS-0.0-0.5MS (SL-012-SA8N-SS-0.0-0.5 SL-015-SA8N-SS-0.0-0.5 SL-016-SA8N-SS-0.0-0.5 SL-018-SA8N-SS-0.0-0.5 SL-019-SA8N-SS-0.0-0.5 SL-020-SA8N-SS-0.0-0.5 SL-021-SA8N-SS-0.0-0.5 SL-022-SA8N-SS-0.0-0.5 SL-023-SA8N-SS-0.0-0.5 SL-036-SA8N-SS-0.0-0.5 SL-047-SA8N-SS-0.0-0.5 SL-048-SA8N-SS-0.0-0.5 SL-050-SA8N-SS-0.0-0.5 SL-131-SA8N-SS-0.0-0.5 SL-202-SA5A-SB-3.0-4.0 SL-206-SA5A-SB-4.0-5.0 SL-207-SA5A-SB-3.0-4.0 SL-227-SA5A-SB-3.0-4.0 SL-228-SA5A-SB-3.0-4.0)	BARIUM	21	-	75.00-125.00	-	BARIUM	No Qual, >4x

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE125

EDD Filename: DE125_v1

Laboratory: LL

eQAPP Name: CDM_SSFL_110509

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-012-SA8N-SS-0.0-0.5MS **SL-012-SA8N-SS-0.0-0.5MSD** (SL-012-SA8N-SS-0.0-0.5 SL-015-SA8N-SS-0.0-0.5 SL-016-SA8N-SS-0.0-0.5 SL-018-SA8N-SS-0.0-0.5 SL-019-SA8N-SS-0.0-0.5 SL-020-SA8N-SS-0.0-0.5 SL-021-SA8N-SS-0.0-0.5 SL-022-SA8N-SS-0.0-0.5 SL-023-SA8N-SS-0.0-0.5 SL-036-SA8N-SS-0.0-0.5 SL-047-SA8N-SS-0.0-0.5 SL-048-SA8N-SS-0.0-0.5 SL-050-SA8N-SS-0.0-0.5 SL-131-SA8N-SS-0.0-0.5 SL-202-SA5A-SB-3.0-4.0 SL-206-SA5A-SB-4.0-5.0 SL-207-SA5A-SB-3.0-4.0 SL-227-SA5A-SB-3.0-4.0 SL-228-SA5A-SB-3.0-4.0)	ALUMINUM IRON MAGNESIUM PHOSPHORUS POTASSIUM TITANIUM	2690 1265 378 - 151 367	2738 1019 270 140 135 323	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	- - - - - -	ALUMINUM IRON MAGNESIUM PHOSPHORUS POTASSIUM TITANIUM	No Qual, >4x
SL-012-SA8N-SS-0.0-0.5MS **SL-012-SA8N-SS-0.0-0.5MSD** (SL-012-SA8N-SS-0.0-0.5 SL-015-SA8N-SS-0.0-0.5 SL-016-SA8N-SS-0.0-0.5 SL-018-SA8N-SS-0.0-0.5 SL-019-SA8N-SS-0.0-0.5 SL-020-SA8N-SS-0.0-0.5 SL-021-SA8N-SS-0.0-0.5 SL-022-SA8N-SS-0.0-0.5 SL-023-SA8N-SS-0.0-0.5 SL-036-SA8N-SS-0.0-0.5 SL-047-SA8N-SS-0.0-0.5 SL-048-SA8N-SS-0.0-0.5 SL-050-SA8N-SS-0.0-0.5 SL-131-SA8N-SS-0.0-0.5 SL-202-SA5A-SB-3.0-4.0 SL-206-SA5A-SB-4.0-5.0 SL-207-SA5A-SB-3.0-4.0 SL-227-SA5A-SB-3.0-4.0 SL-228-SA5A-SB-3.0-4.0)	CALCIUM	-226	168	75.00-125.00	-	CALCIUM	No Qual, >4x

Method: 300.0
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-012-SA8N-SS-0.0-0.5MS (SL-012-SA8N-SS-0.0-0.5 SL-015-SA8N-SS-0.0-0.5 SL-016-SA8N-SS-0.0-0.5 SL-018-SA8N-SS-0.0-0.5 SL-019-SA8N-SS-0.0-0.5 SL-020-SA8N-SS-0.0-0.5 SL-021-SA8N-SS-0.0-0.5 SL-022-SA8N-SS-0.0-0.5 SL-023-SA8N-SS-0.0-0.5 SL-036-SA8N-SS-0.0-0.5)	FLUORIDE	60	-	80.00-120.00	-	FLUORIDE	J(all detects) UJ(all non-detects)

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE125 **Laboratory: LL**

EDD Filename: DE125_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-021-SA8N-SS-0.0-0.5DUP	SELENIUM	32	20.00	
(SL-012-SA8N-SS-0.0-0.5				
SL -015-SA8N-SS-0.0-0.5				
SL -016-SA8N-SS-0.0-0.5				
SL -018-SA8N-SS-0.0-0.5				
SL -019-SA8N-SS-0.0-0.5				
SL -020-SA8N-SS-0.0-0.5				
SL -021-SA8N-SS-0.0-0.5				
SL -022-SA8N-SS-0.0-0.5				
SL -023-SA8N-SS-0.0-0.5				No Qual
SL -036-SA8N-SS-0.0-0.5				OK by difference
SL -047-SA8N-SS-0.0-0.5				
SL -048-SA8N-SS-0.0-0.5				
SL -050-SA8N-SS-0.0-0.5				
SL -131-SA8N-SS-0.0-0.5				
SL -202-SA5A-SB-3.0-4.0				
SL -206-SA5A-SB-4.0-5.0				
SL -207-SA5A-SB-3.0-4.0				
SL -227-SA5A-SB-3.0-4.0				
SL -228-SA5A-SB-3.0-4.0)				

Method: 6010B
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-012-SA8N-SS-0.0-0.5DUP	Zirconium	28	20.00	
(SL-012-SA8N-SS-0.0-0.5				
SL -015-SA8N-SS-0.0-0.5				
SL -016-SA8N-SS-0.0-0.5				
SL -018-SA8N-SS-0.0-0.5				
SL -019-SA8N-SS-0.0-0.5				
SL -020-SA8N-SS-0.0-0.5				
SL -021-SA8N-SS-0.0-0.5				
SL -022-SA8N-SS-0.0-0.5				
SL -023-SA8N-SS-0.0-0.5				No Qual
SL -036-SA8N-SS-0.0-0.5				OK by difference
SL -047-SA8N-SS-0.0-0.5				
SL -048-SA8N-SS-0.0-0.5				
SL -050-SA8N-SS-0.0-0.5				
SL -131-SA8N-SS-0.0-0.5				
SL -202-SA5A-SB-3.0-4.0				
SL -206-SA5A-SB-4.0-5.0				
SL -207-SA5A-SB-3.0-4.0				
SL -227-SA5A-SB-3.0-4.0				
SL -228-SA5A-SB-3.0-4.0)				

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE125

Laboratory: LL

EDD Filename: DE125_v1

eQAPP Name: CDM_SSFL_110509

Method: 7471A
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-012-SA8N-SS-0.0-0.5DUP (SL-012-SA8N-SS-0.0-0.5 SL -015-SA8N-SS-0.0-0.5 SL -016-SA8N-SS-0.0-0.5 SL -018-SA8N-SS-0.0-0.5 SL -019-SA8N-SS-0.0-0.5 SL -020-SA8N-SS-0.0-0.5 SL -021-SA8N-SS-0.0-0.5 SL -022-SA8N-SS-0.0-0.5 SL -023-SA8N-SS-0.0-0.5 SL -036-SA8N-SS-0.0-0.5 SL -047-SA8N-SS-0.0-0.5 SL -048-SA8N-SS-0.0-0.5 SL -050-SA8N-SS-0.0-0.5 SL -131-SA8N-SS-0.0-0.5 SL -202-SA5A-SB-3.0-4.0 SL -206-SA5A-SB-4.0-5.0 SL -207-SA5A-SB-3.0-4.0 SL -227-SA5A-SB-3.0-4.0 SL -228-SA5A-SB-3.0-4.0)	MERCURY	92	20.00	No Qual OK by difference

Method: 7199
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-227-SA5A-SB-3.0-4.0DUP (SL-012-SA8N-SS-0.0-0.5 SL -015-SA8N-SS-0.0-0.5 SL -016-SA8N-SS-0.0-0.5 SL -018-SA8N-SS-0.0-0.5 SL -019-SA8N-SS-0.0-0.5 SL -020-SA8N-SS-0.0-0.5 SL -021-SA8N-SS-0.0-0.5 SL -022-SA8N-SS-0.0-0.5 SL -023-SA8N-SS-0.0-0.5 SL -036-SA8N-SS-0.0-0.5 SL -047-SA8N-SS-0.0-0.5 SL -048-SA8N-SS-0.0-0.5 SL -050-SA8N-SS-0.0-0.5 SL -131-SA8N-SS-0.0-0.5 SL -202-SA5A-SB-3.0-4.0 SL -206-SA5A-SB-4.0-5.0 SL -207-SA5A-SB-3.0-4.0 SL -227-SA5A-SB-3.0-4.0 SL -228-SA5A-SB-3.0-4.0)	HEXAVALENT CHROMIUM	200	20.00	No Qual OK by difference

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE125

Laboratory: LL

EDD Filename: DE125_v1

eQAPP Name: CDM_SSFL_110509

Method: 8270C SIM
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P6WDLCSQ262022 (EB01-SA8N-041211)	ACENAPHTHENE	116	-	74.00-109.00	-	ACENAPHTHENE	J(all detects)
	Di-n-octylphthalate	154	-	57.00-145.00	-	Di-n-octylphthalate	

Method: 8270C
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P8WCLCSY261402 (EB01-SA8N-041211)	1,2-Diphenylhydrazine/Azobenzen	-	118	78.00-116.00	-	1,2-Diphenylhydrazine/Azobenz	J(all detects)

Method: 8082
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11047AQ240032A P11047AY240013A (EB01-SA8N-041211)	Aroclor 5442	90	92	35.00-84.00	-	Aroclor 5432, 5442, 5460	J(all detects)

Method: 8260B
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
LCS1Y14Q210248A LCS1Y14Y210309A (TB-041211)	2-Chloro-1,1,1-trifluoroethane	123	124	77.00-120.00	-	2-Chloro-1,1,1-trifluoroethane	J(all detects)

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE125

EDD Filename: DE125_v1

Laboratory: LL

eQAPP Name: CDM_SSFL_110509

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P6LALCSQ262101 (SL-012-SA8N-SS-0.0-0.5 SL-015-SA8N-SS-0.0-0.5 SL-016-SA8N-SS-0.0-0.5 SL-018-SA8N-SS-0.0-0.5 SL-019-SA8N-SS-0.0-0.5 SL-020-SA8N-SS-0.0-0.5 SL-021-SA8N-SS-0.0-0.5 SL-022-SA8N-SS-0.0-0.5 SL-023-SA8N-SS-0.0-0.5 SL-036-SA8N-SS-0.0-0.5 SL-047-SA8N-SS-0.0-0.5 SL-048-SA8N-SS-0.0-0.5 SL-050-SA8N-SS-0.0-0.5 SL-131-SA8N-SS-0.0-0.5 SL-202-SA5A-SB-3.0-4.0 SL-206-SA5A-SB-4.0-5.0 SL-207-SA5A-SB-3.0-4.0 SL-227-SA5A-SB-3.0-4.0 SL-228-SA5A-SB-3.0-4.0)	1,2-DICHLOROBENZENE	78	-	79.00-102.00	-	1,2-DICHLOROBENZENE	J (all detects) UJ (all non-detects)

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11026AQ220836A (SL-012-SA8N-SS-0.0-0.5 SL-015-SA8N-SS-0.0-0.5 SL-016-SA8N-SS-0.0-0.5 SL-018-SA8N-SS-0.0-0.5 SL-019-SA8N-SS-0.0-0.5 SL-020-SA8N-SS-0.0-0.5 SL-021-SA8N-SS-0.0-0.5 SL-022-SA8N-SS-0.0-0.5 SL-023-SA8N-SS-0.0-0.5 SL-036-SA8N-SS-0.0-0.5 SL-047-SA8N-SS-0.0-0.5 SL-048-SA8N-SS-0.0-0.5 SL-050-SA8N-SS-0.0-0.5 SL-131-SA8N-SS-0.0-0.5 SL-202-SA5A-SB-3.0-4.0 SL-206-SA5A-SB-4.0-5.0 SL-207-SA5A-SB-3.0-4.0 SL-227-SA5A-SB-3.0-4.0 SL-228-SA5A-SB-3.0-4.0)	ANTIMONY	65	-	80.00-120.00	-	ANTIMONY	No Qual SRM within QC limits

Method: 8330A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11080AQ242114A (SL-012-SA8N-SS-0.0-0.5 SL-019-SA8N-SS-0.0-0.5 SL-020-SA8N-SS-0.0-0.5 SL-021-SA8N-SS-0.0-0.5 SL-047-SA8N-SS-0.0-0.5)	PETN	126	-	80.00-120.00	-	PETN	J(all detects)

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE125

EDD Filename: DE125_v1

Laboratory: LL

eQAPP Name: CDM_SSFL_110509

Method: **8330A**

Matrix: **SO**

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11164AQ240658A (SL-022-SA8N-SS-0.0-0.5)	NITROBENZENE PETN	124 124	- -	80.00-120.00 80.00-120.00	- -	NITROBENZENE PETN	J(all detects)

Surrogate Outlier Report

Lab Reporting Batch ID: DE125

Laboratory: LL

EDD Filename: DE125_v1

eQAPP Name: CDM_SSFL_110509

Method: 1625C
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-022-SA8N-SS-0.0-0.5	N-Nitrosodimethylamine-d6	183	50.00-150.00	All Target Analytes	J (all detects)

Method: 8082
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-131-SA8N-SS-0.0-0.5	DECACHLOROBIPHENYL	129	45.00-120.00	All Target Analytes	J(all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE125

EDD Filename: DE125_v1

Laboratory: LL

eQAPP Name: CDM_SSFL_110509

Method: 8270C SIM

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB01-SA8N-041211	Diethylphthalate	J	0.13	1.1	PQL	ug/L	J (all detects)
	Di-n-butylphthalate	J	0.51	1.1	PQL	ug/L	

Method: 1625C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-020-SA8N-SS-0.0-0.5	N-NITROSODIMETHYLAMINE	J	368	386	PQL	ng/Kg	J (all detects)

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-012-SA8N-SS-0.0-0.5	SODIUM	J	98.9	111	PQL	mg/Kg	J (all detects)
	TIN	J	2.54	11.1	PQL	mg/Kg	
	Zirconium	J	2.73	5.56	PQL	mg/Kg	
SL-015-SA8N-SS-0.0-0.5	SODIUM	J	102	114	PQL	mg/Kg	J (all detects)
	TIN	J	2.58	11.4	PQL	mg/Kg	
	Zirconium	J	3.23	5.68	PQL	mg/Kg	
SL-016-SA8N-SS-0.0-0.5	SODIUM	J	100	110	PQL	mg/Kg	J (all detects)
	TIN	J	2.56	11.0	PQL	mg/Kg	
	Zirconium	J	2.69	5.49	PQL	mg/Kg	
SL-018-SA8N-SS-0.0-0.5	TIN	J	2.54	11.6	PQL	mg/Kg	J (all detects)
	Zirconium	J	3.13	5.78	PQL	mg/Kg	
SL-019-SA8N-SS-0.0-0.5	SODIUM	J	112	115	PQL	mg/Kg	J (all detects)
	TIN	J	2.45	11.5	PQL	mg/Kg	
	Zirconium	J	3.76	5.74	PQL	mg/Kg	
SL-020-SA8N-SS-0.0-0.5	SODIUM	J	104	116	PQL	mg/Kg	J (all detects)
	TIN	J	2.71	11.6	PQL	mg/Kg	
	Zirconium	J	3.19	5.79	PQL	mg/Kg	
SL-021-SA8N-SS-0.0-0.5	TIN	J	2.43	11.0	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.42	5.49	PQL	mg/Kg	
SL-022-SA8N-SS-0.0-0.5	SODIUM	J	92.9	116	PQL	mg/Kg	J (all detects)
	TIN	J	2.71	11.6	PQL	mg/Kg	
	Zirconium	J	2.90	5.80	PQL	mg/Kg	
SL-023-SA8N-SS-0.0-0.5	SODIUM	J	88.1	114	PQL	mg/Kg	J (all detects)
	TIN	J	2.59	11.4	PQL	mg/Kg	
	Zirconium	J	3.19	5.72	PQL	mg/Kg	
SL-036-SA8N-SS-0.0-0.5	SODIUM	J	85.3	120	PQL	mg/Kg	J (all detects)
	TIN	J	2.85	12.0	PQL	mg/Kg	
	Zirconium	J	3.14	6.02	PQL	mg/Kg	
SL-047-SA8N-SS-0.0-0.5	TIN	J	2.62	11.6	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.33	5.78	PQL	mg/Kg	
SL-048-SA8N-SS-0.0-0.5	TIN	J	2.75	12.7	PQL	mg/Kg	J (all detects)
	Zirconium	J	3.40	6.35	PQL	mg/Kg	

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Reporting Limit Outliers

Lab Reporting Batch ID: DE125

EDD Filename: DE125_v1

Laboratory: LL

eQAPP Name: CDM_SSFL_110509

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-050-SA8N-SS-0.0-0.5	SODIUM	J	109	121	PQL	mg/Kg	J (all detects)
	TIN	J	2.69	12.1	PQL	mg/Kg	
	Zirconium	J	2.73	6.07	PQL	mg/Kg	
SL-131-SA8N-SS-0.0-0.5	SODIUM	J	93.2	113	PQL	mg/Kg	J (all detects)
	TIN	J	2.84	11.3	PQL	mg/Kg	
	Zirconium	J	2.98	5.65	PQL	mg/Kg	
SL-202-SA5A-SB-3.0-4.0	TIN	J	2.84	11.3	PQL	mg/Kg	J (all detects)
SL-206-SA5A-SB-4.0-5.0	TIN	J	2.87	11.1	PQL	mg/Kg	J (all detects)
SL-207-SA5A-SB-3.0-4.0	TIN	J	2.82	10.7	PQL	mg/Kg	J (all detects)
SL-227-SA5A-SB-3.0-4.0	TIN	J	2.66	11.0	PQL	mg/Kg	J (all detects)
SL-228-SA5A-SB-3.0-4.0	TIN	J	2.75	11.4	PQL	mg/Kg	J (all detects)

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-012-SA8N-SS-0.0-0.5	ANTIMONY	J	0.187	0.222	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.229	0.445	PQL	mg/Kg	
	SILVER	J	0.0554	0.111	PQL	mg/Kg	
SL-015-SA8N-SS-0.0-0.5	ANTIMONY	J	0.182	0.223	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.227	0.446	PQL	mg/Kg	
	SILVER	J	0.0593	0.111	PQL	mg/Kg	
SL-016-SA8N-SS-0.0-0.5	ANTIMONY	J	0.0815	0.226	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.191	0.453	PQL	mg/Kg	
	SILVER	J	0.0593	0.113	PQL	mg/Kg	
SL-018-SA8N-SS-0.0-0.5	ANTIMONY	J	0.0903	0.227	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.236	0.453	PQL	mg/Kg	
	SILVER	J	0.0421	0.113	PQL	mg/Kg	
SL-019-SA8N-SS-0.0-0.5	ANTIMONY	J	0.142	0.234	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.196	0.469	PQL	mg/Kg	
	SILVER	J	0.0541	0.117	PQL	mg/Kg	
SL-020-SA8N-SS-0.0-0.5	ANTIMONY	J	0.220	0.231	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.242	0.463	PQL	mg/Kg	
	SILVER	J	0.0536	0.116	PQL	mg/Kg	
SL-021-SA8N-SS-0.0-0.5	ANTIMONY	J	0.141	0.224	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.271	0.448	PQL	mg/Kg	
	SILVER	J	0.0370	0.112	PQL	mg/Kg	
SL-022-SA8N-SS-0.0-0.5	ANTIMONY	J	0.115	0.234	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.183	0.468	PQL	mg/Kg	
	SILVER	J	0.0456	0.117	PQL	mg/Kg	
SL-023-SA8N-SS-0.0-0.5	ANTIMONY	J	0.109	0.227	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.257	0.453	PQL	mg/Kg	
	SILVER	J	0.0501	0.113	PQL	mg/Kg	
SL-036-SA8N-SS-0.0-0.5	SELENIUM	J	0.227	0.472	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0529	0.118	PQL	mg/Kg	

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Reporting Limit Outliers

Lab Reporting Batch ID: DE125

EDD Filename: DE125_v1

Laboratory: LL

eQAPP Name: CDM_SSFL_110509

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-047-SA8N-SS-0.0-0.5	ANTIMONY	J	0.141	0.234	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.216	0.467	PQL	mg/Kg	
	SILVER	J	0.0228	0.117	PQL	mg/Kg	
SL-048-SA8N-SS-0.0-0.5	ANTIMONY	J	0.184	0.252	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.238	0.503	PQL	mg/Kg	
	SILVER	J	0.0411	0.126	PQL	mg/Kg	
SL-050-SA8N-SS-0.0-0.5	ANTIMONY	J	0.200	0.236	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.244	0.471	PQL	mg/Kg	
	SILVER	J	0.0288	0.118	PQL	mg/Kg	
SL-131-SA8N-SS-0.0-0.5	ANTIMONY	J	0.155	0.226	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.221	0.452	PQL	mg/Kg	
	SILVER	J	0.0658	0.113	PQL	mg/Kg	
SL-202-SA5A-SB-3.0-4.0	ANTIMONY	J	0.0882	0.231	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0912	0.115	PQL	mg/Kg	
	SELENIUM	J	0.160	0.461	PQL	mg/Kg	
	SILVER	J	0.0517	0.115	PQL	mg/Kg	
SL-206-SA5A-SB-4.0-5.0	ANTIMONY	J	0.103	0.229	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0474	0.115	PQL	mg/Kg	
	SELENIUM	J	0.0852	0.458	PQL	mg/Kg	
	SILVER	J	0.0606	0.115	PQL	mg/Kg	
SL-207-SA5A-SB-3.0-4.0	ANTIMONY	J	0.139	0.220	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0820	0.110	PQL	mg/Kg	
	SELENIUM	J	0.181	0.439	PQL	mg/Kg	
	SILVER	J	0.0540	0.110	PQL	mg/Kg	
SL-227-SA5A-SB-3.0-4.0	ANTIMONY	J	0.0825	0.230	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.102	0.115	PQL	mg/Kg	
	SELENIUM	J	0.0478	0.459	PQL	mg/Kg	
	SILVER	J	0.0515	0.115	PQL	mg/Kg	
SL-228-SA5A-SB-3.0-4.0	CADMIUM	J	0.0660	0.113	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0453	0.451	PQL	mg/Kg	
	SILVER	J	0.0469	0.113	PQL	mg/Kg	

Method: 6850

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-021-SA8N-SS-0.0-0.5	PERCHLORATE	J	3.8	5.6	PQL	ug/Kg	J (all detects)

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-015-SA8N-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.50	1.2	PQL	mg/Kg	J (all detects)
SL-018-SA8N-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	1.1	1.2	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE125

EDD Filename: DE125_v1

Laboratory: LL

eQAPP Name: CDM_SSFL_110509

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-019-SA8N-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.53	1.2	PQL	mg/Kg	J (all detects)
SL-020-SA8N-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.45	1.2	PQL	mg/Kg	J (all detects)
SL-022-SA8N-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.47	1.2	PQL	mg/Kg	J (all detects)
SL-047-SA8N-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.39	1.2	PQL	mg/Kg	J (all detects)
SL-048-SA8N-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.47	1.3	PQL	mg/Kg	J (all detects)
SL-131-SA8N-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.44	1.2	PQL	mg/Kg	J (all detects)
SL-202-SA5A-SB-3.0-4.0	HEXAVALENT CHROMIUM	J	0.75	1.2	PQL	mg/Kg	J (all detects)
SL-206-SA5A-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.38	1.1	PQL	mg/Kg	J (all detects)
SL-207-SA5A-SB-3.0-4.0	HEXAVALENT CHROMIUM	J	0.56	1.1	PQL	mg/Kg	J (all detects)
SL-228-SA5A-SB-3.0-4.0	HEXAVALENT CHROMIUM	J	0.41	1.1	PQL	mg/Kg	J (all detects)

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-012-SA8N-SS-0.0-0.5	MERCURY	J	0.0249	0.112	PQL	mg/Kg	J (all detects)
SL-015-SA8N-SS-0.0-0.5	MERCURY	J	0.0250	0.116	PQL	mg/Kg	J (all detects)
SL-018-SA8N-SS-0.0-0.5	MERCURY	J	0.0408	0.114	PQL	mg/Kg	J (all detects)
SL-019-SA8N-SS-0.0-0.5	MERCURY	J	0.0499	0.116	PQL	mg/Kg	J (all detects)
SL-020-SA8N-SS-0.0-0.5	MERCURY	J	0.0375	0.107	PQL	mg/Kg	J (all detects)
SL-021-SA8N-SS-0.0-0.5	MERCURY	J	0.0475	0.109	PQL	mg/Kg	J (all detects)
SL-022-SA8N-SS-0.0-0.5	MERCURY	J	0.0452	0.116	PQL	mg/Kg	J (all detects)
SL-023-SA8N-SS-0.0-0.5	MERCURY	J	0.0223	0.113	PQL	mg/Kg	J (all detects)
SL-036-SA8N-SS-0.0-0.5	MERCURY	J	0.0163	0.115	PQL	mg/Kg	J (all detects)
SL-047-SA8N-SS-0.0-0.5	MERCURY	J	0.0430	0.116	PQL	mg/Kg	J (all detects)
SL-048-SA8N-SS-0.0-0.5	MERCURY	J	0.0143	0.124	PQL	mg/Kg	J (all detects)
SL-050-SA8N-SS-0.0-0.5	MERCURY	J	0.0174	0.115	PQL	mg/Kg	J (all detects)
SL-131-SA8N-SS-0.0-0.5	MERCURY	J	0.0326	0.114	PQL	mg/Kg	J (all detects)
SL-202-SA5A-SB-3.0-4.0	MERCURY	J	0.0061	0.114	PQL	mg/Kg	J (all detects)
SL-206-SA5A-SB-4.0-5.0	MERCURY	J	0.0091	0.107	PQL	mg/Kg	J (all detects)
SL-207-SA5A-SB-3.0-4.0	MERCURY	J	0.0059	0.107	PQL	mg/Kg	J (all detects)
SL-227-SA5A-SB-3.0-4.0	MERCURY	J	0.0109	0.107	PQL	mg/Kg	J (all detects)
SL-228-SA5A-SB-3.0-4.0	MERCURY	J	0.0065	0.112	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE125

EDD Filename: DE125_v1

Laboratory: LL

eQAPP Name: CDM_SSFL_110509

Method: 8015M

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-020-SA8N-SS-0.0-0.5	EFH (C15-C20)	J	1.3	1.4	PQL	mg/Kg	J (all detects)
SL-022-SA8N-SS-0.0-0.5	EFH (C15-C20)	J	1.3	1.4	PQL	mg/Kg	J (all detects)

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-012-SA8N-SS-0.0-0.5	Aroclor 5460	J	1.9	3.7	PQL	ug/Kg	J (all detects)
SL-015-SA8N-SS-0.0-0.5	Aroclor 5460	J	2.5	3.9	PQL	ug/Kg	J (all detects)
SL-018-SA8N-SS-0.0-0.5	Aroclor 5460	J	2.2	3.9	PQL	ug/Kg	J (all detects)
SL-022-SA8N-SS-0.0-0.5	Aroclor 5460	J	3.7	7.7	PQL	ug/Kg	J (all detects)
SL-023-SA8N-SS-0.0-0.5	AROCLOR 1254 Aroclor 1268	J J	1.8 0.61	2.0 2.0	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-036-SA8N-SS-0.0-0.5	AROCLOR 1254 AROCLOR 1260 Aroclor 5460	J J J	1.5 1.1 3.6	2.1 2.1 4.0	PQL PQL PQL	ug/Kg ug/Kg ug/Kg	J (all detects)
SL-047-SA8N-SS-0.0-0.5	Aroclor 5460	J	1.6	3.9	PQL	ug/Kg	J (all detects)
SL-048-SA8N-SS-0.0-0.5	AROCLOR 1254	J	1.1	2.2	PQL	ug/Kg	J (all detects)
SL-050-SA8N-SS-0.0-0.5	AROCLOR 1260 Aroclor 5460	J J	1.7 2.7	2.1 4.0	PQL PQL	ug/Kg ug/Kg	J (all detects)

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-202-SA5A-SB-3.0-4.0	ETHYLBENZENE METHYLENE CHLORIDE N-BUTYLBENZENE N-PROPYLBENZENE SEC-BUTYLBENZENE	J J J J J	0.10 2.9 2.2 0.24 2.1	4.1 4.1 4.1 4.1 4.1	PQL PQL PQL PQL PQL	ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg	J (all detects)
SL-206-SA5A-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.56	4.1	PQL	ug/Kg	J (all detects)
SL-207-SA5A-SB-3.0-4.0	ISOPROPYLBENZENE METHYLENE CHLORIDE	J J	0.21 0.60	4.4 4.4	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-227-SA5A-SB-3.0-4.0	METHYLENE CHLORIDE	J	1.3	4.5	PQL	ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE125

EDD Filename: DE125_v1

Laboratory: LL

eQAPP Name: CDM_SSFL_110509

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-012-SA8N-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	28	380	PQL	ug/Kg	J (all detects)
SL-015-SA8N-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	25	390	PQL	ug/Kg	J (all detects)
SL-018-SA8N-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	21	390	PQL	ug/Kg	J (all detects)
SL-019-SA8N-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	39	400	PQL	ug/Kg	J (all detects)
SL-020-SA8N-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	25	380	PQL	ug/Kg	J (all detects)
SL-022-SA8N-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	25	390	PQL	ug/Kg	J (all detects)
SL-023-SA8N-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	22	390	PQL	ug/Kg	J (all detects)
SL-036-SA8N-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	160	400	PQL	ug/Kg	J (all detects)
SL-047-SA8N-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	36	390	PQL	ug/Kg	J (all detects)
SL-050-SA8N-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	27	410	PQL	ug/Kg	J (all detects)
SL-202-SA5A-SB-3.0-4.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	25	390	PQL	ug/Kg	J (all detects)
SL-206-SA5A-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	21	380	PQL	ug/Kg	J (all detects)
SL-207-SA5A-SB-3.0-4.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	23	360	PQL	ug/Kg	J (all detects)

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-012-SA8N-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	1.1	1.9	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	1.1	1.9	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.5	1.9	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	0.84	1.9	PQL	ug/Kg	
	Di-n-octylphthalate	J	9.3	20	PQL	ug/Kg	
	PHENANTHRENE	J	1.1	1.9	PQL	ug/Kg	
SL-015-SA8N-SS-0.0-0.5	BENZO(B)FLUORANTHENE	J	1.0	1.9	PQL	ug/Kg	J (all detects)
	Di-n-octylphthalate	J	9.7	21	PQL	ug/Kg	
	FLUORANTHENE	J	1.1	1.9	PQL	ug/Kg	
	PYRENE	J	0.90	1.9	PQL	ug/Kg	
SL-016-SA8N-SS-0.0-0.5	ANTHRACENE	J	0.83	1.9	PQL	ug/Kg	J (all detects)
	BENZO(G,H,I)PERYLENE	J	1.5	1.9	PQL	ug/Kg	
	Di-n-octylphthalate	J	9.9	21	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.3	1.9	PQL	ug/Kg	
	NAPHTHALENE	J	1.1	1.9	PQL	ug/Kg	
SL-018-SA8N-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	0.80	1.9	PQL	ug/Kg	J (all detects)
	BENZO(B)FLUORANTHENE	J	1.7	1.9	PQL	ug/Kg	
	Di-n-octylphthalate	J	9.6	21	PQL	ug/Kg	
	NAPHTHALENE	J	0.96	1.9	PQL	ug/Kg	
	PHENANTHRENE	J	1.1	1.9	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE125

EDD Filename: DE125_v1

Laboratory: LL

eQAPP Name: CDM_SSFL_110509

Method: **8270C SIM**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-019-SA8N-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	1.4	2.0	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	1.4	2.0	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.1	2.0	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	1.4	2.0	PQL	ug/Kg	
	Di-n-octylphthalate	J	10	21	PQL	ug/Kg	
	NAPHTHALENE	J	1.1	2.0	PQL	ug/Kg	
	PHENANTHRENE	J	1.6	2.0	PQL	ug/Kg	
SL-020-SA8N-SS-0.0-0.5	ANTHRACENE	J	1.2	1.9	PQL	ug/Kg	J (all detects)
	Di-n-butylphthalate	J	8.5	21	PQL	ug/Kg	
	Di-n-octylphthalate	J	9.7	21	PQL	ug/Kg	
	NAPHTHALENE	J	1.2	1.9	PQL	ug/Kg	
SL-021-SA8N-SS-0.0-0.5	ANTHRACENE	J	0.51	1.9	PQL	ug/Kg	J (all detects)
	Di-n-octylphthalate	J	9.5	20	PQL	ug/Kg	
	NAPHTHALENE	J	0.81	1.9	PQL	ug/Kg	
SL-022-SA8N-SS-0.0-0.5	ANTHRACENE	J	1.5	2.0	PQL	ug/Kg	J (all detects)
	DIBENZO(A,H)ANTHRACENE	J	1.8	2.0	PQL	ug/Kg	
	Di-n-octylphthalate	J	12	21	PQL	ug/Kg	
	NAPHTHALENE	J	0.96	2.0	PQL	ug/Kg	
SL-023-SA8N-SS-0.0-0.5	ANTHRACENE	J	1.1	1.9	PQL	ug/Kg	J (all detects)
	Di-n-octylphthalate	J	13	21	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.4	1.9	PQL	ug/Kg	
	NAPHTHALENE	J	1.3	1.9	PQL	ug/Kg	
SL-036-SA8N-SS-0.0-0.5	ANTHRACENE	J	0.43	2.0	PQL	ug/Kg	J (all detects)
	BENZO(A)ANTHRACENE	J	1.2	2.0	PQL	ug/Kg	
	BENZO(A)PYRENE	J	1.3	2.0	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.4	2.0	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	1.0	2.0	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.1	2.0	PQL	ug/Kg	
	NAPHTHALENE	J	1.8	2.0	PQL	ug/Kg	
SL-047-SA8N-SS-0.0-0.5	ANTHRACENE	J	0.65	2.0	PQL	ug/Kg	J (all detects)
	BENZO(A)ANTHRACENE	J	1.3	2.0	PQL	ug/Kg	
	BENZO(A)PYRENE	J	1.6	2.0	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.2	2.0	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.1	2.0	PQL	ug/Kg	
	NAPHTHALENE	J	0.81	2.0	PQL	ug/Kg	
SL-048-SA8N-SS-0.0-0.5	BENZO(B)FLUORANTHENE	J	1.6	2.1	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	2.0	2.1	PQL	ug/Kg	
	FLUORANTHENE	J	1.6	2.1	PQL	ug/Kg	
	NAPHTHALENE	J	1.2	2.1	PQL	ug/Kg	
	PHENANTHRENE	J	1.2	2.1	PQL	ug/Kg	
	PYRENE	J	1.5	2.1	PQL	ug/Kg	
SL-050-SA8N-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	1.6	2.0	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	1.4	2.0	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	0.88	2.0	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	0.91	2.0	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	0.90	2.0	PQL	ug/Kg	
SL-131-SA8N-SS-0.0-0.5	1-METHYLNAPHTHALENE	J	1.1	1.9	PQL	ug/Kg	J (all detects)
	2-METHYLNAPHTHALENE	J	1.8	1.9	PQL	ug/Kg	
	ACENAPHTHYLENE	J	1.0	1.9	PQL	ug/Kg	
	Butylbenzylphthalate	J	18	21	PQL	ug/Kg	
SL-202-SA5A-SB-3.0-4.0	BENZO(A)PYRENE	J	1.7	1.9	PQL	ug/Kg	J (all detects)
	NAPHTHALENE	J	0.82	1.9	PQL	ug/Kg	

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Reporting Limit Outliers

Lab Reporting Batch ID: DE125

EDD Filename: DE125_v1

Laboratory: LL

eQAPP Name: CDM_SSFL_110509

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag

Enclosure II

EPA Level IV Validation Reports

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	April 12, 2011
LDC Report Date:	August 10, 2011
Matrix:	Soil/Water
Parameters:	Volatiles
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE125

Sample Identification

SL-202-SA5A-SB-3.0-4.0
SL-206-SA5A-SB-4.0-5.0
SL-207-SA5A-SB-3.0-4.0
SL-227-SA5A-SB-3.0-4.0
SL-228-SA5A-SB-3.0-4.0
TB-041211

Introduction

This data review covers 5 soil samples and one water sample listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8260B for Volatiles.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 30.0% for all compounds.

In the case where the laboratory used a calibration curve to evaluate the compounds, all coefficients of determination (r^2) were greater than or equal to 0.990 .

Average relative response factors (RRF) for all compounds were within method and validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs) and 25.0% for all other compounds with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
4/13/11 (ba13c02)	4-Methyl-2-pentanone 2-Hexanone 1,2-Dibromo-3-chloropropane	26 33 30	SL-202-SA5A-SB-3.0-4.0 SL-206-SA5A-SB-4.0-5.0 SL-207-SA5A-SB-3.0-4.0 SL-227-SA5A-SB-3.0-4.0 SL-228-SA5A-SB-3.0-4.0 VBLKB23	J (all detects) UJ (all non-detects)	A
4/18/11 (ya18c01)	Dichlorodifluoromethane Trichlorofluoromethane	28 30	TB-041211 VBLKY14	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A

Date	Compound	%D	Associated Samples	Flag	A or P
4/18/11 (ya18c02)	Freon-133a	26	TB-041211 VBLKY14	J (all detects) UJ (all non-detects)	A

The percent differences (%D) of the second source calibration standard were less than or equal to 25.0% for all compounds with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
3/1/11 (bm01v02)	Bromochloromethane	36	SL-202-SA5A-SB-3.0-4.0 SL-206-SA5A-SB-4.0-5.0 SL-207-SA5A-SB-3.0-4.0 SL-227-SA5A-SB-3.0-4.0 SL-228-SA5A-SB-3.0-4.0 VBLKB23	J (all detects) UJ (all non-detects)	A
2/10/11 (yf10v20)	Dichlorodifluoromethane Acetone	30 28	TB-041211 VBLKY14	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A

All of the continuing calibration relative response factors (RRF) were within method and validation criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No volatile contaminants were found in the method blanks with the following exceptions:

Method Blank ID	Analysis Date	Compound TIC (RT in minutes)	Concentration	Associated Samples
VBLKB23	4/13/11	Methylene chloride	1.3 ug/Kg	All soil samples in SDG DE125

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated method blanks with the following exceptions:

Sample	Compound TIC (RT in minutes)	Reported Concentration	Modified Final Concentration
SL-202-SA5A-SB-3.0-4.0	Methylene chloride	2.9 ug/Kg	4.1U ug/Kg
SL-206-SA5A-SB-4.0-5.0	Methylene chloride	0.56 ug/Kg	4.1U ug/Kg

Sample	Compound TIC (RT in minutes)	Reported Concentration	Modified Final Concentration
SL-207-SA5A-SB-3.0-4.0	Methylene chloride	0.60 ug/Kg	4.4U ug/Kg
SL-227-SA5A-SB-3.0-4.0	Methylene chloride	1.3 ug/Kg	4.5U ug/Kg
SL-228-SA5A-SB-3.0-4.0	Methylene chloride	4.2 ug/Kg	4.2U ug/Kg

Sample TB-041211 was identified as a trip blank. No volatile contaminants were found.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

LCS ID (Associated Samples)	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Flag	A or P
LCS/DY14 (TB-041211 VBLKY14)	Freon-133a	123 (77-120)	124 (77-120)	-	J (all detects)	P

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE125	All compounds reported below the RL.	J (all detects)	A

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was acceptable.

XV. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Volatiles - Data Qualification Summary - SDG DE125

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE125	SL-202-SA5A-SB-3.0-4.0 SL-206-SA5A-SB-4.0-5.0 SL-207-SA5A-SB-3.0-4.0 SL-227-SA5A-SB-3.0-4.0 SL-228-SA5A-SB-3.0-4.0	4-Methyl-2-pentanone 2-Hexanone 1,2-Dibromo-3-chloropropane	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D) (C)
DE125	TB-041211	Dichlorodifluoromethane Trichlorofluoromethane Freon-133a	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D) (C)
DE125	SL-202-SA5A-SB-3.0-4.0 SL-206-SA5A-SB-4.0-5.0 SL-207-SA5A-SB-3.0-4.0 SL-227-SA5A-SB-3.0-4.0 SL-228-SA5A-SB-3.0-4.0	Bromochloromethane	J (all detects) UJ (all non-detects)	A	Continuing calibration (ICV %D) (C)
DE125	TB-041211	Dichlorodifluoromethane Acetone	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A	Continuing calibration (ICV %D) (C)
DE125	TB-041211	Freon-133a	J (all detects)	P	Laboratory control samples (%R) (L)
DE125	SL-202-SA5A-SB-3.0-4.0 SL-206-SA5A-SB-4.0-5.0 SL-207-SA5A-SB-3.0-4.0 SL-227-SA5A-SB-3.0-4.0 SL-228-SA5A-SB-3.0-4.0 TB-041211	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
Volatiles - Laboratory Blank Data Qualification Summary - SDG DE125

SDG	Sample	Compound TIC (RT in minutes)	Modified Final Concentration	A or P	Code
DE125	SL-202-SA5A-SB-3.0-4.0	Methylene chloride	4.1U ug/Kg	A	B
DE125	SL-206-SA5A-SB-4.0-5.0	Methylene chloride	4.1U ug/Kg	A	B
DE125	SL-207-SA5A-SB-3.0-4.0	Methylene chloride	4.4U ug/Kg	A	B
DE125	SL-227-SA5A-SB-3.0-4.0	Methylene chloride	4.5U ug/Kg	A	B
DE125	SL-228-SA5A-SB-3.0-4.0	Methylene chloride	4.2U ug/Kg	A	B

Santa Susana Field Laboratory
Volatiles - Field Blank Data Qualification Summary - SDG DE125

No Sample Data Qualified in this SDG

LDC #: 25916G1a **VALIDATION COMPLETENESS WORKSHEET** Date: 8/08/11
SDG #: DE125 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: NG
2nd Reviewer: A

METHOD: GC/MS Volatiles (EPA SW 846 Method 8260B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 4/12/11
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	A	% RSD ≤ 30 % r²
IV.	Continuing calibration/ICV	SW	CCV/ICV ≤ 25 %
V.	Blanks	SW	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	N	client Spec
VIII.	Laboratory control samples	SW	LCS/D
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A	
XI.	Target compound identification	A	
XII.	Compound quantitation/~~CRQLs~~ RLs	A	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	A	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	N	
XVII.	Field blanks	ND	TB = 6

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: Soil + Water

1	SL-202-SA5A-SB-3.0-4.0 S	11	VBLKB23	21		31	
2	SL-206-SA5A-SB-4.0-5.0	12	VBLKY14	22		32	
3	SL-207-SA5A-SB-3.0-4.0	13		23		33	
4	SL-227-SA5A-SB-3.0-4.0	14		24		34	
5	SL-228-SA5A-SB-3.0-4.0	15		25		35	
6	TB-041211 W	16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

LDC #: 25 916 G1a

VALIDATION FINDINGS CHECKLIST

Reviewer: JVG
2nd Reviewer: CA

Method: Volatiles (EPA SW 846 Method 8260B)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. GC/MS instrument performance check				
Were the BFB performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
III. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Was a curve fit used for evaluation?	✓			
Did the initial calibration meet the curve fit acceptance criteria of > 0.990?	✓			
Were all percent relative standard deviations (%RSD) ≤ 30% and relative response factors (RRF) > 0.05?	✓			
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓			
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Were all percent differences (%D) ≤ 25% and relative response factors (RRF) > 0.05?		✓		
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed at least once every 12 hours for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.	✓			
VI. Surrogate spikes				
Were all surrogate %R within QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.		✓		
Was a MS/MSD analyzed every 20 samples of each matrix?		✓		
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			

LDC #: 25916 G1a

VALIDATION FINDINGS CHECKLIST

Reviewer: JVG
2nd Reviewer: A

Validation Area	Yes	No	NA	Findings/Comments
Was an LCS analyzed per analytical batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?		✓		
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?		✓		
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
X. Internal standards				
Were internal standard area counts within -50% or +100% of the associated calibration standard?	✓			
Were retention times within + 30 seconds of the associated calibration standard?	✓			
XI. Target compound identification				
Were relative retention times (RRT's) within + 0.06 RRT units of the standard?	✓			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	✓			
Were chromatogram peaks verified and accounted for?	✓			
XII. Compound quantitation/CRQLs				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	✓			
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XIII. Tentatively identified compounds (TICs)				
Were the major ions (> 10 percent relative intensity) in the reference spectrum evaluated in sample spectrum?			✓	
Were relative intensities of the major ions within ± 20% between the sample and the reference spectra?			✓	
Did the raw data indicate that the laboratory performed a library search for all required peaks in the chromatograms (samples and blanks)?		✓		
XIV. System performance				
System performance was found to be acceptable.	✓			
XV. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XVI. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XVII. Field blanks				
Field blanks were identified in this SDG.	✓			
Target compounds were detected in the field blanks.		✓		

TARGET COMPOUND WORKSHEET

METHOD: VOA (EPA SW 846 Method 8260B)

A. Chloromethane*	U. 1,1,2-Trichloroethane	OO. 2,2-Dichloropropane	III. n-Butylbenzene	CCCC.1-Chlorohexane
B. Bromomethane	V. Benzene	PP. Bromochloromethane	JJJ. 1,2-Dichlorobenzene	DDDD. Isopropyl alcohol
C. Vinyl choride**	W. trans-1,3-Dichloropropene	QQ. 1,1-Dichloropropene	KKK. 1,2,4-Trichlorobenzene	EEEE. Acetonitrile
D. Chloroethane	X. Bromoform*	RR. Dibromomethane	LLL. Hexachlorobutadiene	FFFF. Acrolein
E. Methylene chloride	Y. 4-Methyl-2-pentanone	SS. 1,3-Dichloropropane	MMM. Naphthalene	GGGG. Acrylonitrile
F. Acetone	Z. 2-Hexanone	TT. 1,2-Dibromoethane	NNN. 1,2,3-Trichlorobenzene	HHHH. 1,4-Dioxane
G. Carbon disulfide	AA. Tetrachloroethene	UU. 1,1,1,2-Tetrachloroethane	OOO. 1,3,5-Trichlorobenzene	IIII. Isobutyl alcohol
H. 1,1-Dichloroethene**	BB. 1,1,2,2-Tetrachloroethane*	VV. Isopropylbenzene	PPP. trans-1,2-Dichloroethene	JJJJ. Methacrylonitrile
I. 1,1-Dichloroethane*	CC. Toluene**	WW. Bromobenzene	QQQ. cis-1,2-Dichloroethene	KKKK. Propionitrile
J. 1,2-Dichloroethene, total	DD. Chlorobenzene*	XX. 1,2,3-Trichloropropane	RRR. m,p-Xylenes	LLLL. Ethyl ether
K. Chloroform**	EE. Ethylbenzene**	YY. n-Propylbenzene	SSS. o-Xylene	MMMM. Benzyl chloride
L. 1,2-Dichloroethane	FF. Styrene	ZZ. 2-Chlorotoluene	TTT. 1,1,2-Trichloro-1,2,2-trifluoroethane	NNNN. Freon 133a
M. 2-Butanone	GG. Xylenes, total	AAA. 1,3,5-Trimethylbenzene	UUU. 1,2-Dichlorotetrafluoroethane	OOOO.
N. 1,1,1-Trichloroethane	HH. Vinyl acetate	BBB. 4-Chlorotoluene	VVV. 4-Ethyltoluene	PPPP.
O. Carbon tetrachloride	II. 2-Chloroethylvinyl ether	CCC. tert-Butylbenzene	WWW. Ethanol	QQQQ.
P. Bromodichloromethane	JJ. Dichlorodifluoromethane	DDD. 1,2,4-Trimethylbenzene	XXX. Di-isopropyl ether	RRRR.
Q. 1,2-Dichloropropane**	KK. Trichlorofluoromethane	EEE. sec-Butylbenzene	YYY. tert-Butanol	SSSS.
R. cis-1,3-Dichloropropene	LL. Methyl-tert-butyl ether	FFF. 1,3-Dichlorobenzene	ZZZ. tert-Butyl alcohol	TTTT.
S. Trichloroethene	MM. 1,2-Dibromo-3-chloropropane	GGG. p-Isopropyltoluene	AAAA. Ethyl tert-butyl ether	UUUU.
T. Dibromochloromethane	NN. Methyl ethyl ketone	HHH. 1,4-Dichlorobenzene	BBBB. tert-Amyl methyl ether	VVVV.

* = System performance check compounds (SPCC) for RRF ; ** = Calibration check compounds (CCC) for %RSD.

LDC #: 25916 G1a

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Page: 1 of 1
Reviewer: JVG
2nd Reviewer: [illegible]

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)
Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?
Y N N/A Were percent differences (%D) and relative response factors (RRF) within method criteria for all CCC's and SPCC's ?
Y N N/A Were all %D and RRFs within the validation criteria of ≤25 %D and ≥0.05 RRF ?

#	Date	Standard ID	Compound	Finding %D (Limit: ≤25.0%)	Finding RRF (Limit: ≥0.05)	Associated Samples	Qualifications
	3/01/11	bm01V02	PP	36		All S, VBLKB23	J/UJ/A (C)
		(ICV)					
	4/13/11	ba13C02	Y	26			
		(CCV)	Z	33			
			mm	30			
	4/18/11	ya18C01	JJ	28		6, VBLKY14	
		(CCV)	KK	30			
		ya18C02	NNNN	26			
		(CCV)					
	2/10/11	yf10V20	JJ	30			
		(ICV)	F	28			

CONCAL.wpd

LDC #: 25916 G1a

VALIDATION FINDINGS WORKSHEET
Blanks

Page: 1 of 1
Reviewer: JVG
2nd Reviewer: A

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)
Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a method blank associated with every sample in this SDG?
Y N N/A Was a method blank analyzed at least once every 12 hours for each matrix and concentration?
Y N N/A Was there contamination in the method blanks? If yes, please see the qualifications below.

Blank analysis date: 4/13/11
Conc. units: ug/kg Associated Samples: All S Code: B

Compound	Blank ID	Sample Identification								
	VBLKB23	1	2	3	4	5				
Methylene chloride	1.3	2.9/4.1U	0.50/4.1U	0.60/4.4U	1.3/4.5U	4.2/U				
Acetone										
CRQL										

Blank analysis date:
Conc. units: Associated Samples:

Compound	Blank ID	Sample Identification								
Methylene chloride										
Acetone										
CRQL										

All results were qualified using the criteria stated below except those circled.

Note: Common contaminants such as Methylene chloride, Acetone, 2-Butanone, Carbon disulfide and TICs that were detected in samples within ten times the associated method blank concentration were qualified as not detected, "U". Other contaminants within five times the method blank concentration were also qualified as not detected, "U".

LDC #: 25916 G1a

VALIDATION FINDINGS WORKSHEET
Laboratory Control Samples (LCS)

Page: 1 of 1
Reviewer: JVG
2nd Reviewer: C

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a LCS required?
Y N N/A Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?

#	LCS/LCSD ID	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
	LCS/D Y14	NNNN	123 (77-120)	124 (77-120)	( )	6, VBLK Y14	J det/p (L)
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
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LDC #: 25916 G1a

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: JVG
2nd Reviewer: [illegible]

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

$RRF = (A_x)(C_{is})/(A_{is})(C_x)$
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

A_x = Area of Compound
C_x = Concentration of compound
S= Standard deviation of the RRFs

A_{is} = Area of associated internal standard
C_{is} = Concentration of internal standard
X = Mean of the RRFs

#	Standard ID	Calibration Date	Compound (IS)	Reported RRF (RRF 50 std)	Recalculated RRF (RRF 50 std)	Reported Average RRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL	03/01/11	Methylene chloride (FBZ)	0.3130	0.3130	0.3108	0.3108	9	9
	HP09953		Toluene (CBZ)	0.8498	0.8498	0.8282	0.8282	7	7
			1,1,2,2-TCA (DCB)	0.6532	0.6532	0.6201	0.6201	8	8

Cis/Cx	Ax	Ais
50/50	386013	1233308
50/50	744690	876328
50/50	348637	533776

Conc	MeCl2	Toluene	1,1,2,2-TCA
4	0.3324	0.7056	0.5983
10	0.3397	0.8565	0.6441
20	0.3240	0.8626	0.6605
50	0.3130	0.8498	0.6532
100	0.2960	0.8430	0.6335
300	0.2596	0.8516	0.5312
S =	0.3108	0.8282	0.6201
X =	0.0294	0.0604	0.0487

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25 916 G1a

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 2 of 2
Reviewer: JVG
2nd Reviewer: [illegible]

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

$RRF = (A_x)(C_{is})/(A_{is})(C_x)$
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

A_x = Area of Compound
C_x = Concentration of compound
S= Standard deviation of the RRFs

A_{is} = Area of associated internal standard
C_{is} = Concentration of internal standard
X = Mean of the RRFs

#	Standard ID	Calibration Date	Compound (IS)	Reported RRF (RRF 50 std)	Recalculated RRF (RRF 50 std)	Reported Average RRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL	02/10/11	Acetone (FBZ)	0.0410	0.0410	0.0429	0.0429	14	14
	HP09355		Toluene (CBZ)	1.0041	1.0041	0.9969	0.9969	3	3
			1,1,2,2-TCA (DCB)	0.9767	0.9767	0.9569	0.9569	7	7

Cis/Cx	Ax	Ais
50/100	89674	1092991
50/50	801855	798571
50/50	469555	480763

Conc	Acetone	Toluene	1,1,2,2-TCA
4	0.0509	0.9810	0.9274
10	0.0498	1.0449	1.0560
20	0.0411	0.9670	0.9796
50	0.0410	1.0041	0.9767
100	0.0392	0.9917	0.9563
300	0.0352	0.9929	0.8454
S =	0.0429	0.9969	0.9569
X =	0.0062	0.0266	0.0693

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC # 25916 G1a

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: JVG
2nd Reviewer: A

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
RRF = (Ax)(Cis)/(Ais)(Cx)

Where:
ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
Ax = Area of compound,
Cx = Concentration of compound,
Ais = Area of associated internal standard
Cis = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (IS)	Average RRF (Initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported % D	Recalculated %D
1	ba13c02	4/13/11	Methylene chloride (FBZ)	0.3108	0.3366	0.3366	8	8
	HP09953		Toluene (CBZ)	0.8282	0.8466	0.8466	2	2
			1,1,2,2-TCA (DCB)	0.6201	0.6871	0.6871	11	11
2	ya18c01	4/18/11	Acetone (FBZ)	0.0429	0.0399	0.0399	7	7
	HP09355		Toluene (CBZ)	0.9969	1.0134	1.0134	2	2
			1,1,2,2-TCA (DCB)	0.9569	0.9601	0.9601	0	0

CCV1

Cis/Cx	Compound	Ax	Ais
50/50	Methylene chloride (FBZ)	434840	1291701
50/50	Toluene (CBZ)	804188	949877
50/50	1,1,2,2-TCA (DCB)	394431	574053

CCV2

Cis/Cx	Compound	Ax	Ais
50/100	Acetone (FBZ)	86267	1080675
50/50	Toluene (CBZ)	809545	798862
50/50	1,1,2,2-TCA (DCB)	496805	517465

LDC #: 25916 61a

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: JVG
2nd reviewer: [illegible]

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: # 1

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8	50	50.23	100	100	0
Bromofluorobenzene		47.09	94	94	
1,2-Dichloroethane-d4		48.85	98	98	
Dibromofluoromethane		46.7	93	93	

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Dibromofluoromethane					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Dibromofluoromethane					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Dibromofluoromethane					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Dibromofluoromethane					

LDC #: 25916 G1a

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample Results Verification

Reviewer: JVG
2nd Reviewer: [illegible]

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratoy control sample and laboratory control sample duplicate (if applicable) were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * SSC/SA Where: SSC = Spiked sample concentration
SA = Spike added

RPD = I LCSC - LCSDC I * 2/(LCSC + LCSDC) LCSC = Laboraotry control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCS ID: LCS B 23

Compound	Spike Added (ug/kg)		Spiked Sample Concentration (ug/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
1,1-Dichloroethene	20	20	20.58	20.37	103	103	103	103	1	1
Trichloroethene	↓	↓	20.81	20.35	104	104	102	102	2	2
Benzene	↓	↓	20.87	20.74	104	104	104	104	1	1
Toluene	↓	↓	20.16	20.22	101	101	101	101	0	0
Chlorobenzene	↓	↓	20.89	20.59	104	104	103	103	1	1

Comments: Refer to Laboratory Control Sample findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25916 G1a

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: JVG
2nd reviewer: A

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

Y N N/A Were all reported results recalculated and verified for all level IV samples?

Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(DF)}{(A_{is})(RRF)(V_o)(\%S)}$

A_x	=	Area of the characteristic ion (EICP) for the compound to be measured
A_{is}	=	Area of the characteristic ion (EICP) for the specific internal standard
I_s	=	Amount of internal standard added in nanograms (ng)
RRF	=	Relative response factor of the calibration standard.
V_o	=	Volume or weight of sample pruged in milliliters (ml) or grams (g).
Df	=	Dilution factor.
%S	=	Percent solids, applicable to soils and solid matrices only.

Example:

Sample I.D. #5 , E :

Conc. = $\frac{(34835)(50)(5\ ml)}{(1303279)(0.3108)(5.84g)(0.87)}$

= ~~3.68~~ 4.23 ug/kg

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	April 12, 2011
LDC Report Date:	August 10, 2011
Matrix:	Soil/Water
Parameters:	1,4-Dioxane
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE125

Sample Identification

SL-202-SA5A-SB-3.0-4.0
SL-206-SA5A-SB-4.0-5.0
SL-207-SA5A-SB-3.0-4.0
SL-227-SA5A-SB-3.0-4.0
SL-228-SA5A-SB-3.0-4.0
TB-041211

Introduction

This data review covers 5 soil samples and one water sample listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8260B using Selected Ion Monitoring (SIM) for 1,4-Dioxane.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 30.0% for 1,4-dioxane.

Average relative response factors (RRF) for all compounds were within method and validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 25.0% for 1,4-dioxane.

The percent differences (%D) of the second source calibration standard were less than or equal to 25.0% for 1,4-dioxane.

All of the continuing calibration relative response factors (RRF) were within method and validation criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No 1,4-dioxane was found in the method blanks.

Sample TB-041211 was identified as a trip blank. No 1,4-dioxane was found.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE125	All compounds reported below the RL.	J (all detects)	A

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was acceptable.

XV. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
1,4-Dioxane - Data Qualification Summary - SDG DE125

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE125	SL-202-SA5A-SB-3.0-4.0 SL-206-SA5A-SB-4.0-5.0 SL-207-SA5A-SB-3.0-4.0 SL-227-SA5A-SB-3.0-4.0 SL-228-SA5A-SB-3.0-4.0 TB-041211	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
1,4-Dioxane - Laboratory Blank Data Qualification Summary - SDG DE125

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
1,4-Dioxane - Field Blank Data Qualification Summary - SDG DE125

No Sample Data Qualified in this SDG

LDC #: 25916G1b **VALIDATION COMPLETENESS WORKSHEET** Date: 8/08/11
SDG #: DE125 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: JVG
2nd Reviewer:

METHOD: GC/MS 1,4-Dioxane (EPA SW 846 Method 8260B-SIM)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 4/12/11
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	A	% RSD ≤ 30%
IV.	Continuing calibration/ICV	A	CCV/ICV ≤ 25%
V.	Blanks	A	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	N	Client Spec
VIII.	Laboratory control samples	A	LCS/D
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A	
XI.	Target compound identification	A	
XII.	Compound quantitation/~~CRQLs~~ RLs	A	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	A	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	N	
XVII.	Field blanks	MD	TB = 6

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: Soil + Water

1	SL-202-SA5A-SB-3.0-4.0 S	11	VBLKE91	21		31	
2	SL-206-SA5A-SB-4.0-5.0	12	VBLKE91	22		32	
3	SL-207-SA5A-SB-3.0-4.0	13		23		33	
4	SL-227-SA5A-SB-3.0-4.0	14		24		34	
5	SL-228-SA5A-SB-3.0-4.0	15		25		35	
6	TB-041211 W	16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

LDC #: 25 916 G1b

VALIDATION FINDINGS CHECKLIST

Reviewer: JVG
2nd Reviewer: A

Method: Volatiles (EPA SW 846 Method 8260B)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. GC/MS instrument performance check				
Were the BFB performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
III. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Was a curve fit used for evaluation?		✓		
Did the initial calibration meet the curve fit acceptance criteria of > 0.990?			✓	
Were all percent relative standard deviations (%RSD) ≤ 30% and relative response factors (RRF) > 0.05?	✓			
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓			
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Were all percent differences (%D) ≤ 25% and relative response factors (RRF) > 0.05?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed at least once every 12 hours for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.		✓		
Was a MS/MSD analyzed every 20 samples of each matrix?		✓		
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			

LDC #: 25 916 G16

VALIDATION FINDINGS CHECKLIST

Reviewer: JVG
2nd Reviewer: C

Validation Area	Yes	No	NA	Findings/Comments
Was an LCS analyzed per analytical batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?		✓		
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
X. Internal standards				
Were internal standard area counts within -50% or +100% of the associated calibration standard?	✓			
Were retention times within ± 30 seconds of the associated calibration standard?	✓			
XI. Target compound identification				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?	✓			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	✓			
Were chromatogram peaks verified and accounted for?	✓			
XII. Compound quantitation/CRQLs				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	✓			
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XIII. Tentatively identified compounds (TICs)				
Were the major ions (> 10 percent relative intensity) in the reference spectrum evaluated in sample spectrum?			✓	
Were relative intensities of the major ions within ± 20% between the sample and the reference spectra?			✓	
Did the raw data indicate that the laboratory performed a library search for all required peaks in the chromatograms (samples and blanks)?		✓		
XIV. System performance				
System performance was found to be acceptable.	✓			
XV. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XVI. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XVII. Field blanks				
Field blanks were identified in this SDG.	✓			
Target compounds were detected in the field blanks.	✓			

LDC # 25916 G16

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: JVG
2nd Reviewer: A

METHOD: GC/MS VOA (EPA SW 846 Method 8260B-SIM)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

RRF = (Ax)(Cis)/(Ais)(Cx)
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

Ax = Area of Compound
Cx = Concentration of compound
S= Standard deviation of the RRFs

Ais = Area of associated internal standard
Cis = Concentration of internal standard
X = Mean of the RRFs

#	Standard ID	Calibration Date	Compound (IS)	Reported RRF (RRF 10 std)	Recalculated RRF (RRF 10 std)	Reported Average RRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL	11/7/10	1,4-Dioxane (1,4-D-d8)	1.3392	1.3392	1.3396	1.3396	2	2
	HP15648								

Cis/Cx	Ax	Ax
10/10	25596	19113

Conc	RRF
0.5	1.3082
2.0	1.3793
5.0	1.3539
10.0	1.3392
25.0	1.3175
X =	1.3396
S =	0.0285

LDC # 25916 G1b

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: JVG
2nd Reviewer: A

METHOD: GC/MS VOA (EPA SW 846 Method 8260B-SIM)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

RRF = (Ax)(Cis)/(Ais)(Cx)
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

Ax = Area of Compound
Cx = Concentration of compound
S= Standard deviation of the RRFs

Ais = Area of associated internal standard
Cis = Concentration of internal standard
X = Mean of the RRFs

#	Standard ID	Calibration Date	Compound (IS)	Reported RRF (RRF 10 std)	Recalculated RRF (RRF 10 std)	Reported Average RRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL	11/1/10	1,4-Dioxane (1,4-D-d8)	1.3193	1.3359	1.3219	1.3219	1	1
	HP15648								

Cis/Cx	Ax	Ax
10/10	29359	21977

Conc	RRF
0.5	1.3291
2.0	1.3004
5.0	1.3359
10.0	1.3193
25.0	1.3248
X =	1.3219
S =	0.0135

LDC # 25916 G1b

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Calculation Verification

Reviewer: JVG
2nd Reviewer: [illegible]

METHOD: GC/MS VOA (EPA SW 846 Method 8260B-SIM)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
RRF = (Ax)(Cis)/(Ais)(Cx)

Where:
ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
Ax = Area of compound
Cx = Concentration of compound,
Ais = Area of associated internal standard
Cis = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (IS)	CCV RRF	Reported RRF	Recalculated RRF	Reported % D	Recalculated %D
1	ea13c51	4/13/11	1,4-Dioxane (1,4-D-d8)	1.3219	1.3567	1.3567	3	3
	HP15648							
2	ea14c01	4/14/11	1,4-Dioxane (1,4-D-d8)	1.3396	1.4732	1.4732	10	10
	HP15648							

	Compound (IS)	Cis/Cx	Ax	Ais
CCV1	1,4-Dioxane (1,4-D-d8)	10/10	21091	15546
CCV2	1,4-Dioxane (1,4-D-d8)	10/10	29681	20147

LDC #: 25916 GLb

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: JVG
2nd reviewer: A

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: # 1

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8	10	9.641	96	96	0
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Dibromofluoromethane					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Dibromofluoromethane					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Dibromofluoromethane					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Dibromofluoromethane					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Dibromofluoromethane					

LDC #: 25916 G1b

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample Results Verification

Reviewer: JVG
2nd Reviewer: CA

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratoy control sample and laboratory control sample duplicate (if applicable) were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * SSC/SA Where: SSC = Spiked sample concentration
SA = Spike added

RPD = I LCSC - LCSDC I * 2/(LCSC + LCSDC) LCSC = Laboraotry control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCS ID: LCS/D E 9✓

Compound	Spike Added (ug/kg)		Spiked Sample Concentration (ug/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
~~1,1-Dichloroethene~~ 1,4-Dioxane	125	125	141.63	137.61	113	113	110	110	3	3
Trichloroethene										
Benzene										
Toluene										
Chlorobenzene										

Comments: Refer to Laboratory Control Sample findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25916 G1b

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: JVG
2nd reviewer: C

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

Y N N/A Were all reported results recalculated and verified for all level IV samples?

Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(DF)}{(A_{is})(RRF)(V_o)(\%S)}$

A_x	=	Area of the characteristic ion (EICP) for the compound to be measured
A_{is}	=	Area of the characteristic ion (EICP) for the specific internal standard
I_s	=	Amount of internal standard added in nanograms (ng)
RRF	=	Relative response factor of the calibration standard.
V_o	=	Volume or weight of sample pruged in milliliters (ml) or grams (g).
Df	=	Dilution factor.
%S	=	Percent solids, applicable to soils and solid matrices only.

Example:

Sample I.D. _____ , MD

Conc. = ( ) ( ) ( ) / ( ) ( ) ( ) ( )

=

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: April 12, 2011

LDC Report Date: August 11, 2011

Matrix: Soil/Water

Parameters: Semivolatiles

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE125

Sample Identification

SL-012-SA8N-SS-0.0-0.5
SL-015-SA8N-SS-0.0-0.5
SL-016-SA8N-SS-0.0-0.5
SL-018-SA8N-SS-0.0-0.5
SL-019-SA8N-SS-0.0-0.5
SL-020-SA8N-SS-0.0-0.5
SL-021-SA8N-SS-0.0-0.5
SL-022-SA8N-SS-0.0-0.5
SL-023-SA8N-SS-0.0-0.5
SL-036-SA8N-SS-0.0-0.5
SL-047-SA8N-SS-0.0-0.5
SL-048-SA8N-SS-0.0-0.5
SL-050-SA8N-SS-0.0-0.5
SL-131-SA8N-SS-0.0-0.5
EB01-SA8N-041211
SL-202-SA5A-SB-3.0-4.0
SL-206-SA5A-SB-4.0-5.0
SL-207-SA5A-SB-3.0-4.0
SL-227-SA5A-SB-3.0-4.0
SL-228-SA5A-SB-3.0-4.0
SL-012-SA8N-SS-0.0-0.5MS
SL-012-SA8N-SS-0.0-0.5MSD

Introduction

This data review covers 21 soil samples and one water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8270C for Semivolatiles.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 30.0% for all compounds.

In the case where the laboratory used a calibration curve to evaluate the compounds, all coefficients of determination (r^2) were greater than or equal to 0.990 .

Average relative response factors (RRF) for all compounds were within method and validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs) and 25.0% for all other compounds.

The percent differences (%D) of the second source calibration standard were less than or equal to 25.0% for all compounds.

All of the continuing calibration relative response factors (RRF) were within method and validation criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No semivolatile contaminants were found in the method blanks.

Sample EB01-SA8N-041211 was identified as an equipment blank. No semivolatile contaminants were found.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
SL-012-SA8N-SS-0.0-0.5MS/MSD (SL-012-SA8N-SS-0.0-0.5)	Aniline 3,3'-Dichlorobenzidine	- -	- -	46 (≤30) 43 (≤30)	J (all detects) J (all detects)	A
SL-012-SA8N-SS-0.0-0.5MS/MSD (SL-012-SA8N-SS-0.0-0.5)	4-Chloroaniline Benzidine	- 33 (35-141)	19 (23-95) -	93 (≤30) -	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

LCS ID (Associated Samples)	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Flag	A or P
106LALCS (SL-012-SA8N-SS-0.0-0.5 SL-015-SA8N-SS-0.0-0.5 SL-016-SA8N-SS-0.0-0.5 SL-018-SA8N-SS-0.0-0.5 SL-019-SA8N-SS-0.0-0.5 SL-020-SA8N-SS-0.0-0.5 SL-021-SA8N-SS-0.0-0.5 SL-022-SA8N-SS-0.0-0.5 SL-023-SA8N-SS-0.0-0.5 SL-036-SA8N-SS-0.0-0.5 SL-047-SA8N-SS-0.0-0.5 SL-048-SA8N-SS-0.0-0.5 SL-050-SA8N-SS-0.0-0.5 SL-131-SA8N-SS-0.0-0.5 SL-202-SA5A-SB-3.0-4.0 SL-206-SA5A-SB-4.0-5.0 SL-207-SA5A-SB-3.0-4.0 SL-227-SA5A-SB-3.0-4.0 SL-228-SA5A-SB-3.0-4.0 SBLKLA106)	1,2-Dichlorobenzene	78 (79-102)	-	-	J (all detects) UJ (all non-detects)	P

LCS ID (Associated Samples)	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Flag	A or P
108WCLCS/D (EB01-SA8N-041211 SBLKWC108)	1,2-Diphenyl hydrazine	-	118 (78-116)	-	J (all detects)	P

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE125	All compounds reported below the RL.	J (all detects)	A

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was acceptable.

XV. Overall Assessment

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Semivolatiles - Data Qualification Summary - SDG DE125

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE125	SL-012-SA8N-SS-0.0-0.5	Aniline 3,3'-Dichlorobenzidine	J (all detects) J (all detects)	A	Matrix spike/Matrix spike duplicate (RPD) (Q)
DE125	SL-012-SA8N-SS-0.0-0.5	4-Chloroaniline	J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicate (%R)(RPD) (Q)
DE125	SL-012-SA8N-SS-0.0-0.5	Benzidine	J (all detects) UJ (all non-detects)		Matrix spike/Matrix spike duplicate (%R) (Q)
DE125	SL-012-SA8N-SS-0.0-0.5 SL-015-SA8N-SS-0.0-0.5 SL-016-SA8N-SS-0.0-0.5 SL-018-SA8N-SS-0.0-0.5 SL-019-SA8N-SS-0.0-0.5 SL-020-SA8N-SS-0.0-0.5 SL-021-SA8N-SS-0.0-0.5 SL-022-SA8N-SS-0.0-0.5 SL-023-SA8N-SS-0.0-0.5 SL-036-SA8N-SS-0.0-0.5 SL-047-SA8N-SS-0.0-0.5 SL-048-SA8N-SS-0.0-0.5 SL-050-SA8N-SS-0.0-0.5 SL-131-SA8N-SS-0.0-0.5 SL-202-SA5A-SB-3.0-4.0 SL-206-SA5A-SB-4.0-5.0 SL-207-SA5A-SB-3.0-4.0 SL-227-SA5A-SB-3.0-4.0 SL-228-SA5A-SB-3.0-4.0	1,2-Dichlorobenzene	J (all detects) UJ (all non-detects)	P	Laboratory control samples (%R) (L)
DE125	EB01-SA8N-041211	1,2-Diphenyl hydrazine	J (all detects)	P	Laboratory control samples (%R) (L)
DE125	SL-012-SA8N-SS-0.0-0.5 SL-015-SA8N-SS-0.0-0.5 SL-016-SA8N-SS-0.0-0.5 SL-018-SA8N-SS-0.0-0.5 SL-019-SA8N-SS-0.0-0.5 SL-020-SA8N-SS-0.0-0.5 SL-021-SA8N-SS-0.0-0.5 SL-022-SA8N-SS-0.0-0.5 SL-023-SA8N-SS-0.0-0.5 SL-036-SA8N-SS-0.0-0.5 SL-047-SA8N-SS-0.0-0.5 SL-048-SA8N-SS-0.0-0.5 SL-050-SA8N-SS-0.0-0.5 SL-131-SA8N-SS-0.0-0.5 EB01-SA8N-041211 SL-202-SA5A-SB-3.0-4.0 SL-206-SA5A-SB-4.0-5.0 SL-207-SA5A-SB-3.0-4.0 SL-227-SA5A-SB-3.0-4.0 SL-228-SA5A-SB-3.0-4.0	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
Semivolatiles - Laboratory Blank Data Qualification Summary - SDG DE125

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Semivolatiles - Field Blank Data Qualification Summary - SDG DE125

No Sample Data Qualified in this SDG

LDC #: 25916G2a **VALIDATION COMPLETENESS WORKSHEET** Date: 8/09/11
SDG #: DE125 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: JM
2nd Reviewer: [illegible]

METHOD: GC/MS Semivolatiles (EPA SW 846 Method 8270C)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 4/12/11
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	A	% RSD ≤ 30% rr
IV.	Continuing calibration/ICV	A	CCV/ICV ≤ 25%
V.	Blanks	A	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	SW	
VIII.	Laboratory control samples	SW	LCS/D
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A	
XI.	Target compound identification	A	
XII.	Compound quantitation/~~CRQLs~~ RLs	A	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	A	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	A	
XVII.	Field blanks	ND	EB = 15

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: Soil + Water

1	SL-012-SA8N-SS-0.0-0.5	S	11	SL-047-SA8N-SS-0.0-0.5	S	21	1 MS	31	SBLKLA106
2	SL-015-SA8N-SS-0.0-0.5		12	SL-048-SA8N-SS-0.0-0.5		22	1 MSD	32	SBLKWC108
3	SL-016-SA8N-SS-0.0-0.5		13	SL-050-SA8N-SS-0.0-0.5		23		33	
4	SL-018-SA8N-SS-0.0-0.5		14	SL-131-SA8N-SS-0.0-0.5		24		34	
5	SL-019-SA8N-SS-0.0-0.5		15	EB01-SA8N-041211	W	25		35	
6	SL-020-SA8N-SS-0.0-0.5		16	SL-202-SA5A-SB-3.0-4.0	S	26		36	
7	SL-021-SA8N-SS-0.0-0.5		17	SL-206-SA5A-SB-4.0-5.0		27		37	
8	SL-022-SA8N-SS-0.0-0.5		18	SL-207-SA5A-SB-3.0-4.0		28		38	
9	SL-023-SA8N-SS-0.0-0.5		19	SL-227-SA5A-SB-3.0-4.0		29		39	
10	SL-036-SA8N-SS-0.0-0.5		20	SL-228-SA5A-SB-3.0-4.0		30		40	

LDC #: 25916 G2a

VALIDATION FINDINGS CHECKLIST

Reviewer: JVR
2nd Reviewer: C

Method: Semivolatiles (EPA SW 846 Method 8270C)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. GC/MS Instrument performance check				
Were the DFTPP performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
III. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Was a curve fit used for evaluation?	✓			
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?	✓			
Were all percent relative standard deviations (%RSD) ≤ 30% and relative response factors (RRF) ≥ 0.05?	✓			
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓			
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Were all percent differences (%D) ≤ 25% and relative response factors (RRF) ≥ 0.05?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within QC limits?	✓			
If 2 or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R?			✓	
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?		✓		
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			

LDC #: 25916G29

VALIDATION FINDINGS CHECKLIST

Reviewer: JVG
2nd Reviewer: [illegible]

Validation Area	Yes	No	NA	Findings/Comments
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?		✓		
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?		✓		
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
X. Internal standards				
Were internal standard area counts within -50% or +100% of the associated calibration standard?	✓			
Were retention times within ± 30 seconds from the associated calibration standard?	✓			
XI. Target compound identification				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?	✓			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	✓			
Were chromatogram peaks verified and accounted for?	✓			
XII. Compound quantitation/CRQLs				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	✓			
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XIII. Tentatively identified compounds (TICs)				
Were the major ions (> 10 percent relative intensity) in the reference spectrum evaluated in sample spectrum?			✓	
Were relative intensities of the major ions within ± 20% between the sample and the reference spectra?			✓	
Did the raw data indicate that the laboratory performed a library search for all required peaks in the chromatograms (samples and blanks)?		✓		
XIV. System performance				
System performance was found to be acceptable.	✓			
XV. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XVI. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XVII. Field blanks				
Field blanks were identified in this SDG.	✓			
Target compounds were detected in the field blanks.		✓		

VALIDATION FINDINGS WORKSHEET

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

A. Phenol**	P. Bis(2-chloroethoxy)methane	EE. 2,6-Dinitrotoluene	TT. Pentachlorophenol**	III. Benzo(a)pyrene**
B. Bis (2-chloroethyl) ether	Q. 2,4-Dichlorophenol**	FF. 3-Nitroaniline	UU. Phenanthrene	JJJ. Indeno(1,2,3-cd)pyrene
C. 2-Chlorophenol	R. 1,2,4-Trichlorobenzene	GG. Acenaphthene**	VV. Anthracene	KKK. Dibenz(a,h)anthracene
D. 1,3-Dichlorobenzene	S. Naphthalene	HH. 2,4-Dinitrophenol*	WW. Carbazole	LLL. Benzo(g,h,i)perylene
E. 1,4-Dichlorobenzene**	T. 4-Chloroaniline	II. 4-Nitrophenol*	XX. Di-n-butylphthalate	MMM. Bis(2-Chloroisopropyl)ether
F. 1,2-Dichlorobenzene	U. Hexachlorobutadiene**	JJ. Dibenzofuran	YY. Fluoranthene**	NNN. Aniline
G. 2-Methylphenol	V. 4-Chloro-3-methylphenol**	KK. 2,4-Dinitrotoluene	ZZ. Pyrene	OOO. N-Nitrosodimethylamine
H. 2,2'-Oxybis(1-chloropropane)	W. 2-Methylnaphthalene	LL. Diethylphthalate	AAA. Butylbenzylphthalate	PPP. Benzoic Acid
I. 4-Methylphenol	X. Hexachlorocyclopentadiene*	MM. 4-Chlorophenyl-phenyl ether	BBB. 3,3'-Dichlorobenzidine	QQQ. Benzyl alcohol
J. N-Nitroso-di-n-propylamine*	Y. 2,4,6-Trichlorophenol**	NN. Fluorene	CCC. Benzo(a)anthracene	RRR. Pyridine
K. Hexachloroethane	Z. 2,4,5-Trichlorophenol	OO. 4-Nitroaniline	DDD. Chrysene	SSS. Benzidine
L. Nitrobenzene	AA. 2-Chloronaphthalene	PP. 4,6-Dinitro-2-methylphenol	EEE. Bis(2-ethylhexyl)phthalate	TTT. 1,2-Diphenyl hydrazine
M. Isophorone	BB. 2-Nitroaniline	QQ. N-Nitrosodiphenylamine (1)**	FFF. Di-n-octylphthalate**	UUU
N. 2-Nitrophenol**	CC. Dimethylphthalate	RR. 4-Bromophenyl-phenylether	GGG. Benzo(b)fluoranthene	VVV.
O. 2,4-Dimethylphenol	DD. Acenaphthylene	SS. Hexachlorobenzene	HHH. Benzo(k)fluoranthene	WWW.

Notes: * = System performance check compound (SPCC) for RRF; ** = Calibration check compound (CCC) for %RSD.

LDC #: 25916 G 2a

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Page: 1 of 1
Reviewer: JVR
2nd Reviewer: [illegible]

METHOD: GC/MS BNA (EPA SW 846 Method 8270C)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.

Y N N/A Was a MS/MSD analyzed every 20 samples of each matrix?

Y N N/A Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?

#	Date	MS/MSD ID	Compound	MS %R (Limits)	MSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
		21/22	NNN	( )	( )	46 (30)	1	J dets/A (Q)
			T	( )	19 (23-95)	93 ( )	↓	J/UJ/A
			SSS	33 (35-141)	( )	( )	↓	↓
			BBB	( )	( )	43 ( )	↓	J dets/A
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		

	Compound	QC Limits (Soil)	RPD (Soil)	QC Limits (Water)	RPD (Water)		Compound	QC Limits (Soil)	RPD (Soil)	QC Limits (Water)	RPD (Water)
A.	Phenol	26-90%	≤ 35%	12-110%	≤ 42%	GG	Acenaphthene	31-137%	≤ 19%	46-118%	≤ 31%
C.	2-Chlorophenol	25-102%	≤ 50%	27-123%	≤ 40%	II.	4-Nitrophenol	11-114%	≤ 50%	10-80%	≤ 50%
E.	1,4-Dichlorobenzene	28-104%	≤ 27%	36-97%	≤ 28%	KK.	2,4-Dinitrotoluene	28-89%	≤ 47%	24-96%	≤ 38%
J.	N-Nitroso-di-n-propylamine	41-126%	≤ 38%	41-116%	≤ 38%	TT.	Pentachlorophenol	17-109%	≤ 47%	9-103%	≤ 50%
R.	1,2,4-Trichlorobenzene	38-107%	≤ 23%	39-98%	≤ 28%	ZZ.	Pyrene	35-142%	≤ 36%	26-127%	≤ 31%
V.	4-Chloro-3-methylphenol	26-103%	≤ 33%	23-97%	≤ 42%						

LDC #: 25916 G 2a

VALIDATION FINDINGS WORKSHEET
Laboratory Control Samples (LCS)

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC/MS BNA (EPA SW 846 Method 8270C)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a LCS required?

Y N N/A Were the LCS/LCSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?

#	LCS/LCSD ID	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
	106LALCS	F	78 (79-102)	( )	( )	All soils, SBLKLA106	J/UJ/P (L)
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
	108WC LCS/D	TTT	( )	118 (78-116)	( )	15, SBLKWC108	J dets/P (L)
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
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			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		

LDC #: 25916 62a

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: JVG
2nd Reviewer:

METHOD: GC/MS SVOA (EPA SW 846 Method 8270C)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

$RRF = (A_x)(C_{is})/(A_{is})(C_x)$
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

A_x = Area of Compound
C_x = Concentration of compound,
S= Standard deviation of the RRFs,

A_{is} = Area of associated internal standard
C_{is} = Concentration of internal standard
X = Mean of the RRFs

#	Standard ID	Calibration Date	Compound (IS)	Reported RRF (RRF 40 std)	Recalculated RRF (RRF 40 std)	Reported Average RRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL	04/05/11	Phenol (IS1)	2.906	2.906	2.808	2.808	8	8
			2,4-Dichlorophenol (IS2)	0.335	0.335	0.323	0.323	7	7
	HP09572		2,4,5-Trichlorophenol (IS3)	0.400	0.400	0.390	0.390	7	7
			Pentachlorophenol (IS4)	0.128	0.128	0.119	0.119	12	11
			Benzidine (IS5)	0.858	0.858	0.780	0.780	11	11

Cis/Cx	Ax	Ais
40/50	780259	214805
40/50	404436	966036
40/50	345153	691030
40/50	193159	1207144
40/150	3846865	1196118

Conc	Phenol	2,4-DCP	2,4,5-TCP	PCP	Benzidine
5	2.398	0.280	0.338	0.098	0.608
15	2.798	0.317	0.387	0.107	0.772
30	2.863	0.334	0.403	0.118	0.817
50	2.906	0.335	0.400	0.128	0.858
80	2.994	0.340	0.408	0.129	0.828
120	2.891	0.333	0.404	0.131	0.798
X =	2.808	0.323	0.390	0.119	0.780
S =	0.211	0.023	0.026	0.013	0.089

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 05916 G2c

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 2 of 2
Reviewer: JVG
2nd Reviewer: [illegible]

METHOD: GC/MS SVOA (EPA SW 846 Method 8270C)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

$RRF = (A_x)(C_{is})/(A_{is})(C_x)$
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

A_x = Area of Compound
C_x = Concentration of compound,
S= Standard deviation of the RRFs,

A_{is} = Area of associated internal standard
C_{is} = Concentration of internal standard
X = Mean of the RRFs

#	Standard ID	Calibration Date	Compound (IS)	Reported RRF (RRF 50 std)	Recalculated RRF (RRF 50 std)	Reported Average RRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL	04/01/11	Phenol (IS1)	3.124	3.124	3.056	3.056	6	6
			2,4-Dichlorophenol (IS2)	0.305	0.305	0.298	0.298	5	5
	HP11165		2,4,5-Trichlorophenol (IS3)	0.389	0.389	0.378	0.379	6	6
			Pentachlorophenol (IS4)	0.158	0.158	0.156	0.156	12	6
			Bis(2-ethex)phthalate (IS5)	0.747	0.747	0.715	0.715	7	7

Cis/Cx	Ax	Ais
40/50	580122	148556
40/50	281006	738203
40/50	222855	458423
40/50	155692	789411
40/50	730092	781794

Conc	Phenol	2,4-DCP	2,4,5-TCP	PCP	Bis(2-eh)phtha
5	2.732	0.270	0.334	0.142	0.633
15	3.093	0.302	0.377	0.151	0.682
30	3.195	0.308	0.384	0.154	0.736
50	3.124	0.305	0.389	0.158	0.747
80	3.173	0.310	0.398	0.163	0.746
120	3.018	0.295	0.389	0.167	0.743
X =	3.056	0.298	0.379	0.156	0.715
S =	0.171	0.015	0.023	0.009	0.047

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC # 25916 G2a

VALIDATION FINDINGS WORSHEET
Continuing Calibration Calculation Verification

Reviewer: JVG
2nd Reviewer: [illegible]

METHOD: GC/MS SVOA (EPA SW 846 Method 8270C)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
RRF = (Ax)(Cis)/(Ais)(Cx)

ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
Ax = Area of compound,

Cx = Concentration of compound,
Ais = Area of associated internal standard
Cis = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (IS)	Average RRF (Initial)	Reported RRF (CCV)	Recalculated RRF (CCV)	Reported % D	Recalculated %D
1	ed0881	04/20/11	Phenol (IS1)	2.808	2.844	2.844	1	1
			2,4-Dichlorophenol (IS2)	0.323	0.330	0.330	2	2
	HP09572		2,4,5-Trichlorophenol (IS3)	0.390	0.400	0.400	3	3
			Pentachlorophenol (IS4)	0.119	0.133	0.133	12	12
			Benzidine (IS5)	0.780	0.874	0.874	12	12

CCV1

Compound (IS)	Cis/Cx	Ax	Ais
Phenol (IS1)	40/80	1078250	189547
2,4-Dichlorophenol (IS2)	40/80	569650	862959
2,4,5-Trichlorophenol (IS3)	40/80	485230	606184
Pentachlorophenol (IS4)	40/80	281373	1058314
Benzidine (IS5)	40/240	5013772	956480

LDC # K916 G2

VALIDATION FINDINGS WORSHEET
Continuing Calibration Calculation Verification

Reviewer: JVG
2nd Reviewer:

METHOD: GC/MS SVOA (EPA SW 846 Method 8270C)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
RRF = (Ax)(Cis)/(Ais)(Cx)

ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
Ax = Area of compound,

Cx = Concentration of compound,
Ais = Area of associated internal standard
Cis = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (IS)	Average RRF (Initial)	Reported RRF (CCV)	Recalculated RRF (CCV)	Reported % D	Recalculated %D
1	gd0741	04/18/11	Phenol (IS1)	3.056	3.199	3.199	5	5
			2,4-Dichlorophenol (IS2)	0.298	0.299	0.299	0	0
	HP11165		2,4,5-Trichlorophenol (IS3)	0.378	0.383	0.383	1	1
			Pentachlorophenol (IS4)	0.156	0.137	0.137	12	12
			Bis(2-ethex)phthalate (IS5)	0.715	0.817	0.817	14	14

CCV1

Compound (IS)	Cis/Cx	Ax	Ais
Phenol (IS1)	40/50	768756	192224
2,4-Dichlorophenol (IS2)	40/50	348445	930805
2,4,5-Trichlorophenol (IS3)	40/50	267376	559115
Pentachlorophenol (IS4)	40/50	166510	973603
Bis(2-ethex)phthalate (IS5)	40/50	1015611	994726

LDC #: 25916 G2a

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: JVG
2nd reviewer: A

METHOD: GC/MS Semivolatiles (EPA SW 846 Method 8270C)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: # 1

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5	100	87.66	88	88	0
2-Fluorobiphenyl		88.34	88	88	
Terphenyl-d14		85.88	86	86	
Phenol-d5	200	177.95	89	89	
2-Fluorophenol		188.95	94	94	
2,4,6-Tribromophenol		175.15	88	88	
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5					
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5					
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

LDC #: 25916 G2C

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Reviewer: JVG
2nd Reviewer: C

METHOD: GC/MS BNA (EPA SW 846 Method 8270C)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SSC - SC)/SA Where: SSC = Spiked sample concentration, SA = Spike added, SC = Sample concentation

RPD = | MSC - MSC | * 2/(MSC + MSDC) MSC = Matrix spike concentration MSDC = Matrix spike duplicate concentration

MS/MSD samples: 21/22

Compound	Spike Added (ug/kg)		Sample Concentration (ug/kg)	Spiked Sample Concentration (ug/kg)		Matrix Spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	------	MS	MSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
Phenol	1666.67	1666.67	0	1360.88	1443.29	87	87	87	87	6	6
N-Nitroso-di-n-propylamine				1388.44	1458.53	83	83	88	88	5	5
4-Chloro-3-methylphenol				1415.3	1455.89	85	85	88	88	3	3
~~Acenaphthene~~											
Pentachlorophenol				1150.08	1210.85	69	69	73	73	5	5
~~Pyrene~~											

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: Y5916G29

VALIDATION FINDINGS WORKSHEET

Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: JVG
2nd Reviewer: [illegible]

METHOD: GC/MS BNA (EPA SW 846 Method 8270C)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SC/SA Where: SSC = Spike concentration
SA = Spike added

RPD = I LCSC - LCSDC I * 2/(LCSC + LCSDC) LCSC = Laboraotry control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCS/LCSD samples: 106 LA LCS

Compound	Spike Added (ug/kg)		Spike Concentration (ug/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
Phenol	1666.67	NA	1324.94	NA	79	79				
N-Nitroso-di-n-propylamine			1349.09		81	81				
4-Chloro-3-methylphenol			1380.97		83	83				
~~Acenaphthene~~										
Pentachlorophenol			1158.54		70	90				
~~Pyrene~~										

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25916 G2a

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: JVG
2nd reviewer: A

METHOD: GC/MS BNA (EPA SW 846 Method 8270C)

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

$$\text{Concentration} = \frac{(A_x)(I_s)(V_t)(DF)(2.0)}{(A_{is})(RRF)(V_o)(V_i)(\%S)}$$

A_x	=	Area of the characteristic ion (EICP) for the compound to be measured
A_{is}	=	Area of the characteristic ion (EICP) for the specific internal standard
I_s	=	Amount of internal standard added in nanograms (ng)
V_o	=	Volume or weight of sample extract in milliliters (ml) or grams (g).
V_i	=	Volume of extract injected in microliters (ul)
V_t	=	Volume of the concentrated extract in microliters (ul)
Df	=	Dilution Factor.
%S	=	Percent solids, applicable to soil and solid matrices only.
2.0	=	Factor of 2 to account for GPC cleanup

Example:

Sample I.D. 1, EEE

Conc. = (10140)(40)(1 ml)(1000)( ) / (757830)(0.715)(30 g)(0.882)( )

= 28 ug/kg

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: April 12, 2011

LDC Report Date: August 11, 2011

Matrix: Soil/Water

Parameters: Semivolatiles

Validation Level: Level IV

Laboratory: Lancaster laboratories

Sample Delivery Group (SDG): DE125

Sample Identification

SL-012-SA8N-SS-0.0-0.5
SL-015-SA8N-SS-0.0-0.5
SL-016-SA8N-SS-0.0-0.5
SL-018-SA8N-SS-0.0-0.5
SL-019-SA8N-SS-0.0-0.5
SL-020-SA8N-SS-0.0-0.5
SL-021-SA8N-SS-0.0-0.5
SL-022-SA8N-SS-0.0-0.5
SL-023-SA8N-SS-0.0-0.5
SL-036-SA8N-SS-0.0-0.5
SL-047-SA8N-SS-0.0-0.5
SL-048-SA8N-SS-0.0-0.5
SL-050-SA8N-SS-0.0-0.5
SL-131-SA8N-SS-0.0-0.5
EB01-SA8N-041211
SL-202-SA5A-SB-3.0-4.0
SL-206-SA5A-SB-4.0-5.0
SL-207-SA5A-SB-3.0-4.0
SL-227-SA5A-SB-3.0-4.0
SL-228-SA5A-SB-3.0-4.0
SL-012-SA8N-SS-0.0-0.5MS
SL-012-SA8N-SS-0.0-0.5MSD

Introduction

This data review covers 21 soil samples and one water sample listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Semivolatiles.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 30.0% for all compounds.

In the case where the laboratory used a calibration curve to evaluate the compounds, all coefficients of determination (r^2) were greater than or equal to 0.990 .

Average relative response factors (RRF) for all compounds were within method and validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs) and 25.0% for all other compounds.

The percent differences (%D) of the second source calibration standard were less than or equal to 25.0% for all compounds with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
4/15/11	Di-n-octylphthalate	26	All samples in SDG DE125	J (all detects) UJ (all non-detects)	A
	Benzo(b)fluoranthene	30		J (all detects) UJ (all non-detects)	

All of the continuing calibration relative response factors (RRF) were within method and validation criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No semivolatiles were found in the method blanks.

Sample EB01-SA8N-041211 was identified as an equipment blank. No semivolatiles were found with the following exceptions:

Equipment Blank ID	Sampling Date	Compound	Concentration	Associated Samples
EB01-SA8N-041211	4/12/11	Di-n-butylphthalate Diethylphthalate Di-n-octylphthalate Bis(2-ethylhexyl)phthalate	0.51 ug/L 0.13 ug/L 4.7 ug/L 4.9 ug/L	SL-012-SA8N-SS-0.0-0.5 SL-015-SA8N-SS-0.0-0.5 SL-016-SA8N-SS-0.0-0.5 SL-018-SA8N-SS-0.0-0.5 SL-019-SA8N-SS-0.0-0.5 SL-020-SA8N-SS-0.0-0.5 SL-021-SA8N-SS-0.0-0.5 SL-022-SA8N-SS-0.0-0.5 SL-023-SA8N-SS-0.0-0.5 SL-036-SA8N-SS-0.0-0.5 SL-047-SA8N-SS-0.0-0.5 SL-048-SA8N-SS-0.0-0.5 SL-050-SA8N-SS-0.0-0.5 SL-131-SA8N-SS-0.0-0.5

Sample concentrations were compared to concentrations detected in the field blanks. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated field blanks with the following exceptions:

Sample	Compound	Reported Concentration	Modified Final Concentration
SL-012-SA8N-SS-0.0-0.5	Di-n-octylphthalate	9.3 ug/Kg	20U ug/Kg
SL-015-SA8N-SS-0.0-0.5	Di-n-octylphthalate	9.7 ug/Kg	21U ug/Kg
SL-016-SA8N-SS-0.0-0.5	Di-n-octylphthalate	9.9 ug/Kg	21U ug/Kg
SL-018-SA8N-SS-0.0-0.5	Di-n-octylphthalate	9.6 ug/Kg	21U ug/Kg
SL-019-SA8N-SS-0.0-0.5	Di-n-octylphthalate	10 ug/Kg	21U ug/Kg
SL-020-SA8N-SS-0.0-0.5	Di-n-butylphthalate Di-n-octylphthalate	8.5 ug/Kg 9.7 ug/Kg	21U ug/Kg 21U ug/Kg
SL-021-SA8N-SS-0.0-0.5	Di-n-octylphthalate Bis(2-ethylhexyl)phthalate	9.5 ug/Kg 28 ug/Kg	20U ug/Kg 28U ug/Kg
SL-022-SA8N-SS-0.0-0.5	Di-n-octylphthalate	12 ug/Kg	21U ug/Kg

Sample	Compound	Reported Concentration	Modified Final Concentration
SL-023-SA8N-SS-0.0-0.5	Di-n-octylphthalate	13 ug/Kg	21U ug/Kg
SL-131-SA8N-SS-0.0-0.5	Bis(2-ethylhexyl)phthalate	34 ug/Kg	34U ug/Kg

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
SL-012-SA8N-SS-0.0-0.5MS/MSD (SL-012-SA8N-SS-0.0-0.5)	Acenaphthene	106 (63-105)	-	-	J (all detects)	A

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

LCS ID (Associated Samples)	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Flag	A or P
106WDLCS/D (EB01-SA8N-041211 5BLKWD106)	Acenaphthene Di-n-octylphthalate	116 (74-109) 154 (57-145)	- -	- -	J (all detects) J (all detects)	P

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE125	All compounds reported below the RL.	J (all detects)	A

XIII. Tentatively Identified Compounds (TICs)

All tentatively identified compounds were within validation criteria.

XIV. System Performance

The system performance was acceptable.

XV. Overall Assessment

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Semivolatiles - Data Qualification Summary - SDG DE125

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE125	SL-012-SA8N-SS-0.0-0.5 SL-015-SA8N-SS-0.0-0.5 SL-016-SA8N-SS-0.0-0.5 SL-018-SA8N-SS-0.0-0.5 SL-019-SA8N-SS-0.0-0.5 SL-020-SA8N-SS-0.0-0.5 SL-021-SA8N-SS-0.0-0.5 SL-022-SA8N-SS-0.0-0.5 SL-023-SA8N-SS-0.0-0.5 SL-036-SA8N-SS-0.0-0.5 SL-047-SA8N-SS-0.0-0.5 SL-048-SA8N-SS-0.0-0.5 SL-050-SA8N-SS-0.0-0.5 SL-131-SA8N-SS-0.0-0.5 EB01-SA8N-041211 SL-202-SA5A-SB-3.0-4.0 SL-206-SA5A-SB-4.0-5.0 SL-207-SA5A-SB-3.0-4.0 SL-227-SA5A-SB-3.0-4.0 SL-228-SA5A-SB-3.0-4.0	Di-n-octylphthalate Benzo(b)fluoranthene	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A	Continuing calibration (ICV %D) (C)
DE125	SL-012-SA8N-SS-0.0-0.5	Acenaphthene	J (all detects)	A	Matrix spike/Matrix spike duplicate (%R) (Q)
DE125	EB01-SA8N-041211	Acenaphthene Di-n-octylphthalate	J (all detects) J (all detects)	P	Laboratory control samples (%R) (L)
DE125	SL-012-SA8N-SS-0.0-0.5 SL-015-SA8N-SS-0.0-0.5 SL-016-SA8N-SS-0.0-0.5 SL-018-SA8N-SS-0.0-0.5 SL-019-SA8N-SS-0.0-0.5 SL-020-SA8N-SS-0.0-0.5 SL-021-SA8N-SS-0.0-0.5 SL-022-SA8N-SS-0.0-0.5 SL-023-SA8N-SS-0.0-0.5 SL-036-SA8N-SS-0.0-0.5 SL-047-SA8N-SS-0.0-0.5 SL-048-SA8N-SS-0.0-0.5 SL-050-SA8N-SS-0.0-0.5 SL-131-SA8N-SS-0.0-0.5 EB01-SA8N-041211 SL-202-SA5A-SB-3.0-4.0 SL-206-SA5A-SB-4.0-5.0 SL-207-SA5A-SB-3.0-4.0 SL-227-SA5A-SB-3.0-4.0 SL-228-SA5A-SB-3.0-4.0	All TCL compounds	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
Semivolatiles - Laboratory Blank Data Qualification Summary - SDG DE125

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Semivolatiles - Field Blank Data Qualification Summary - SDG DE125

SDG	Sample	Compound TIC (RT in minutes)	Modified Final Concentration	A or P	Code
DE125	SL-012-SA8N-SS-0.0-0.5	Di-n-octylphthalate	20U ug/Kg	A	F
DE125	SL-015-SA8N-SS-0.0-0.5	Di-n-octylphthalate	21U ug/Kg	A	F
DE125	SL-016-SA8N-SS-0.0-0.5	Di-n-octylphthalate	21U ug/Kg	A	F
DE125	SL-018-SA8N-SS-0.0-0.5	Di-n-octylphthalate	21U ug/Kg	A	F
DE125	SL-019-SA8N-SS-0.0-0.5	Di-n-octylphthalate	21U ug/Kg	A	F
DE125	SL-020-SA8N-SS-0.0-0.5	Di-n-butylphthalate Di-n-octylphthalate	21U ug/Kg 21U ug/Kg	A	F
DE125	SL-021-SA8N-SS-0.0-0.5	Di-n-octylphthalate Bis(2-ethylhexyl)phthalate	20U ug/Kg 28U ug/Kg	A	F
DE125	SL-022-SA8N-SS-0.0-0.5	Di-n-octylphthalate	21U ug/Kg	A	F
DE125	SL-023-SA8N-SS-0.0-0.5	Di-n-octylphthalate	21U ug/Kg	A	F
DE125	SL-131-SA8N-SS-0.0-0.5	Bis(2-ethylhexyl)phthalate	34U ug/Kg	A	F

LDC #: 25916G2b **VALIDATION COMPLETENESS WORKSHEET** Date: 8/09/11
SDG #: DE125 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: DVG
SVOA 2nd Reviewer: A

METHOD: GC/MS P~~olynuclear Aromatic Hydrocarbons (EP~~A SW 846 Method 8270C-SIM)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 4/12/11
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	A	2 RSD ≤ 30% r2
IV.	Continuing calibration/ICV	SW	CCV/ICV ≤ 25%
V.	Blanks	A	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	SW	
VIII.	Laboratory control samples	SW	LCS/D
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A	
XI.	Target compound identification	A	
XII.	Compound quantitation/~~CRQLs~~ RLs	A	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	A	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	N	
XVII.	Field blanks	SW	EB = 15

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: soil + Water

1	SL-012-SA8N-SS-0.0-0.5 S	11	SL-047-SA8N-SS-0.0-0.5 S	21	1 MS	31	SBLK LD108
2	SL-015-SA8N-SS-0.0-0.5	12	SL-048-SA8N-SS-0.0-0.5	22	1 MSD	32	SBLK WD106
3	SL-016-SA8N-SS-0.0-0.5	13	SL-050-SA8N-SS-0.0-0.5	23		33	
4	SL-018-SA8N-SS-0.0-0.5	14	SL-131-SA8N-SS-0.0-0.5	24		34	
5	SL-019-SA8N-SS-0.0-0.5	15	EB01-SA8N-041211 W	25		35	
6	SL-020-SA8N-SS-0.0-0.5	16	SL-202-SA5A-SB-3.0-4.0 S	26		36	
7	SL-021-SA8N-SS-0.0-0.5	17	SL-206-SA5A-SB-4.0-5.0	27		37	
8	SL-022-SA8N-SS-0.0-0.5	18	SL-207-SA5A-SB-3.0-4.0	28		38	
9	SL-023-SA8N-SS-0.0-0.5	19	SL-227-SA5A-SB-3.0-4.0	29		39	
10	SL-036-SA8N-SS-0.0-0.5	20	SL-228-SA5A-SB-3.0-4.0	30		40	

LDC #: 25916 G 26

VALIDATION FINDINGS CHECKLIST

Reviewer: JVR
2nd Reviewer: [illegible]

Method: Semivolatiles (EPA SW 846 Method 8270C)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. GC/MS instrument performance check				
Were the DFTPP performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
III. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Was a curve fit used for evaluation?	✓			
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?	✓			
Were all percent relative standard deviations (%RSD) ≤ 30% and relative response factors (RRF) ≥ 0.05?	✓			
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓			
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Were all percent differences (%D) ≤ 25% and relative response factors (RRF) ≥ 0.05?		✓		
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within QC limits?	✓			
If 2 or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R?			✓	
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?		✓		
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?				

LDC #: 25916 G 2b

VALIDATION FINDINGS CHECKLIST

Reviewer: JVB
2nd Reviewer: [illegible]

Validation Area	Yes	No	NA	Findings/Comments
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?		✓		
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?		✓		
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
X. Internal standards				
Were internal standard area counts within -50% or +100% of the associated calibration standard?	✓			
Were retention times within ± 30 seconds from the associated calibration standard?	✓			
XI. Target compound identification				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?	✓			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	✓			
Were chromatogram peaks verified and accounted for?	✓			
XII. Compound quantitation/CRQLs				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	✓			
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XIII. Tentatively identified compounds (TICs)				
Were the major ions (> 10 percent relative intensity) in the reference spectrum evaluated in sample spectrum?			✓	
Were relative intensities of the major ions within ± 20% between the sample and the reference spectra?			✓	
Did the raw data indicate that the laboratory performed a library search for all required peaks in the chromatograms (samples and blanks)?		✓		
XIV. System performance				
System performance was found to be acceptable.	✓			
XV. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XVI. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XVII. Field blanks				
Field blanks were identified in this SDG.	✓			
Target compounds were detected in the field blanks.	✓			

VALIDATION FINDINGS WORKSHEET

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

A. Phenol**	P. Bis(2-chloroethoxy)methane	EE. 2,6-Dinitrotoluene	TT. Pentachlorophenol**	III. Benzo(a)pyrene**
B. Bis (2-chloroethyl) ether	Q. 2,4-Dichlorophenol**	FF. 3-Nitroaniline	UU. Phenanthrene	JJJ. Indeno(1,2,3-cd)pyrene
C. 2-Chlorophenol	R. 1,2,4-Trichlorobenzene	GG. Acenaphthene**	VV. Anthracene	KKK. Dibenz(a,h)anthracene
D. 1,3-Dichlorobenzene	S. Naphthalene	HH. 2,4-Dinitrophenol*	WW. Carbazole	LLL. Benzo(g,h,i)perylene
E. 1,4-Dichlorobenzene**	T. 4-Chloroaniline	II. 4-Nitrophenol*	XX. Di-n-butylphthalate	MMM. Bis(2-Chloroisopropyl)ether
F. 1,2-Dichlorobenzene	U. Hexachlorobutadiene**	JJ. Dibenzofuran	YY. Fluoranthene**	NNN. Aniline
G. 2-Methylphenol	V. 4-Chloro-3-methylphenol**	KK. 2,4-Dinitrotoluene	ZZ. Pyrene	OOO. N-Nitrosodimethylamine
H. 2,2'-Oxybis(1-chloropropane)	W. 2-Methylnaphthalene	LL. Diethylphthalate	AAA. Butylbenzylphthalate	PPP. Benzoic Acid
I. 4-Methylphenol	X. Hexachlorocyclopentadiene*	MM. 4-Chlorophenyl-phenyl ether	BBB. 3,3'-Dichlorobenzidine	QQQ. Benzyl alcohol
J. N-Nitroso-di-n-propylamine*	Y. 2,4,6-Trichlorophenol**	NN. Fluorene	CCC. Benzo(a)anthracene	RRR. Pyridine
K. Hexachloroethane	Z. 2,4,5-Trichlorophenol	OO. 4-Nitroaniline	DDD. Chrysene	SSS. Benzidine
L. Nitrobenzene	AA. 2-Chloronaphthalene	PP. 4,6-Dinitro-2-methylphenol	EEE. Bis(2-ethylhexyl)phthalate	TTT.
M. Isophorone	BB. 2-Nitroaniline	QQ. N-Nitrosodiphenylamine (1)**	FFF. Di-n-octylphthalate**	UUU
N. 2-Nitrophenol**	CC. Dimethylphthalate	RR. 4-Bromophenyl-phenylether	GGG. Benzo(b)fluoranthene	VVV.
O. 2,4-Dimethylphenol	DD. Acenaphthylene	SS. Hexachlorobenzene	HHH. Benzo(k)fluoranthene	WWW.

Notes: * = System performance check compound (SPCC) for RRF; ** = Calibration check compound (CCC) for %RSD.

LDC #: 25916 G 26

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Page: 1 of 1
Reviewer: NG
2nd Reviewer: A

METHOD: GC/MS BNA (EPA SW 846 Method 8270C)
Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a continuing calibration standard analyzed at least once every 12 hours of sample analysis for each instrument?
Y N N/A Were percent differences (%D) and relative response factors (RRF) within method criteria for all CCC's and SPCC's ?
Y N N/A Were all %D and RRFs within the validation criteria of ≤25 %D and ≥0.05 RRF ?

#	Date	Standard ID	Compound	Finding %D (Limit: ≤25.0%)	Finding RRF (Limit: ≥0.05)	Associated Samples	Qualifications
	4/15/11	id0341i	FFF	26		All	J/UJ/A (c)
		(ICV)	GGG	30		↓	↓ ↓

LDC #: 25916 G 26

VALIDATION FINDINGS WORKSHEET
Field Blanks

Page: 1 of ___
Reviewer: JVB
2nd Reviewer: C

METHOD: GC/MS BNA (EPA SW 846 Method 8270)
Y N N/A Were field blanks identified in this SDG?
Y N N/A Were target compounds detected in the field blanks?
Blank units: ug /L **Associated sample units:** ug /kg
Sampling date: 4 /12 /11
Field blank type: (circle one) Field Blank / Rinsate / Other: EB Associated Samples: ~~All Soils~~ 1 - 14 Code : F

Compound	Blank ID	Sample Identification										
	15	1	2	3	4	5	6	7	8	9	~~11~~	14
XX	0.51						8.5/21 u					
LL	0.13											
FFF	4.7	9.3/20 u	9.7/21 u	9.9/21 u	9.6/21 u	10/21 u	9.7/21 u	9.5/20 u	12/21 u	13/21 u		
EEE	4.9							28/u				34/u

Blank units: ug /L **Associated sample units:** ug /kg
Sampling date: 4 /12 /11
Field blank type: (circle one) Field Blank / Rinsate / Other: Associated Samples: ~~7, 14, 18, 19, 20~~ ~~Code: F~~

Compound	Blank ID	Sample Identification								
	~~15~~	~~7~~	~~14~~							
~~EEE~~	~~4.9~~	~~28/u~~	~~34/u~~							
		CL								

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
Common contaminants such as the phthalates and TICs noted above that were detected in samples within ten times the associated field blank concentration were qualified as not detected, "U". Other contaminants within five times the field blank concentration were also qualified as not detected, "U".

LDC #: 25916 G 26

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Page: 1 of 1
Reviewer: JVG
2nd Reviewer: [illegible]

METHOD: GC/MS BNA (EPA SW 846 Method 8270C)
Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.

Y N N/A Was a MS/MSD analyzed every 20 samples of each matrix?

Y N N/A Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?

#	Date	MS/MSD ID	Compound	MS %R (Limits)	MSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
		21/22	GG	106 (63-105)	( )	( )	1	J dets/A (Q)
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
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				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		

	Compound	QC Limits (Soil)	RPD (Soil)	QC Limits (Water)	RPD (Water)		Compound	QC Limits (Soil)	RPD (Soil)	QC Limits (Water)	RPD (Water)
A.	Phenol	26-90%	≤ 35%	12-110%	≤ 42%	GG	Acenaphthene	31-137%	≤ 19%	46-118%	≤ 31%
C.	2-Chlorophenol	25-102%	≤ 50%	27-123%	≤ 40%	II.	4-Nitrophenol	11-114%	≤ 50%	10-80%	≤ 50%
E.	1,4-Dichlorobenzene	28-104%	≤ 27%	36-97%	≤ 28%	KK.	2,4-Dinitrotoluene	28-89%	≤ 47%	24-96%	≤ 38%
J.	N-Nitroso-di-n-propylamine	41-126%	≤ 38%	41-116%	≤ 38%	TT.	Pentachlorophenol	17-109%	≤ 47%	9-103%	≤ 50%
R.	1,2,4-Trichlorobenzene	38-107%	≤ 23%	39-98%	≤ 28%	ZZ.	Pyrene	35-142%	≤ 36%	26-127%	≤ 31%
V.	4-Chloro-3-methylphenol	26-103%	≤ 33%	23-97%	≤ 42%						

LDC #: 25916 G26

VALIDATION FINDINGS WORKSHEET
Laboratory Control Samples (LCS)

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC/MS BNA (EPA SW 846 Method 8270C)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a LCS required?

Y N N/A Were the LCS/LCSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?

#	LCS/LCSD ID	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
	106WDLCS/D	GG	116 (74-109)	( )	( )	15, SBLKWD106	J dets/p (L)
		FFF	154 (57-145)	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
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LDC #: 25916 G26

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: JVG
2nd Reviewer: [illegible]

METHOD: GC/MS SVOA (EPA SW 846 Method 8270C-SIM)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

$RRF = (A_x)(C_{is})/(A_{is})(C_x)$
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

A_x = Area of Compound
C_x = Concentration of compound,
S= Standard deviation of the RRFs,

A_{is} = Area of associated internal standard
C_{is} = Concentration of internal standard
X = Mean of the RRFs

#	Standard ID	Calibration Date	Compound (IS)	Reported RRF (RRF 1.0 std)	Recalculated RRF (RRF 1.0 std)	Reported Average RRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL	04/15/11	NDMA (IS1)	0.885	0.719	0.844	0.844	4	4
			Naphthalene (IS2)	1.061	0.758	1.029	1.029	4	4
	HP10976		Diethylphthalate (IS3)	1.313	0.829	1.401	1.401	12	12
			Phenanthrene (IS4)	1.115	0.772	1.106	1.106	6	6
			Chrysene (IS5)	1.188	0.779	1.146	1.146	4	4
			Benzo(a)pyrene (IS6)	1.092	0.680	1.034	1.034	12	11

Cis/Cx	Ax	Ais
1/1	84069	116860
1/1	343632	453172
1/1	230725	278432
1/1	371146	480903
1/1	404794	519775
1/1	356552	524029

Conc	NDMA	Naphthalene	Diethylphthalate	Phenanthrene	Chrysene	Benzo(a)py
0.05	0.778	0.995		1.029	1.090	0.848
0.20	0.842	1.024	1.466	1.106	1.153	0.973
0.50	0.831	0.969	1.660	1.038	1.085	1.002
1.00	0.885	1.061	1.313	1.115	1.188	1.092
5.00	0.857	1.034	1.245	1.131	1.148	1.101
10.00	0.870	1.092	1.320	1.216	1.210	1.187
X =	0.8438	1.029	1.401	1.106	1.146	1.034
S =	0.038	0.044	0.166	0.068	0.051	0.119

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC # 25916 526

VALIDATION FINDINGS WORSHEET
Continuing Calibration Calculation Verification

Reviewer: JVG
2nd Reviewer:

METHOD: GC/MS SVOA (EPA SW 846 Method 8270C-SIM)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
RRF = (Ax)(Cis)/(Ais)(Cx)

ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
Ax = Area of compound,

Cx = Concentration of compound,
Ais = Area of associated internal standard
Cis = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (IS)	Average RRF (Initial)	Reported RRF (CCV)	Recalculated RRF (CCV)	Reported % D	Recalculated %D
1	id0401	04/18/11	NDMA (IS1)	0.844	0.876	0.876	4	4
			Naphthalene (IS2)	1.029	1.016	1.016	1	1
	HP10976		Diethylphthalate (IS3)	1.401	1.229	1.229	12	12
			Phenanthrene (IS4)	1.106	1.104	1.104	0	0
			Chrysene (IS5)	1.146	1.146	1.146	0	0
			Benzo(a)pyrene (IS6)	1.034	1.116	1.116	8	8
2	id0451	04/19/11	NDMA (IS1)	0.844	0.906	0.906	7	7
			Naphthalene (IS2)	1.029	1.054	1.054	2	2
	HP10976		Diethylphthalate (IS3)	1.401	1.396	1.396	0	0
			Phenanthrene (IS4)	1.106	1.115	1.115	1	1
			Chrysene (IS5)	1.146	1.189	1.189	4	4
			Benzo(a)pyrene (IS6)	1.034	1.108	1.108	7	7
3	id0491	04/20/11	NDMA (IS1)	0.844	0.847	0.847	0	0
			Naphthalene (IS2)	1.029	1.014	1.014	1	1
	HP10976		Diethylphthalate (IS3)	1.401	1.197	1.197	15	15
			Phenanthrene (IS4)	1.106	1.115	1.115	1	1
			Chrysene (IS5)	1.146	1.113	1.113	3	3
			Benzo(a)pyrene (IS6)	1.034	1.087	1.087	5	5

	CCV1 (1/5)		CCV2 (1/1)		CCV3 (1/5)	
Compound (IS)	Ax	Ais	Ax	Ais	Ax	Ais
NDMA	357715	81660	81447	89907	366458	86572
Naphthalene	1620263	318912	377208	357764	1727888	340859
Diethylphthalate	1173273	190854	304982	218521	1233878	206237
Phenanthrene	1817213	329262	413741	370986	1970370	353325
Chrysene	2236994	390382	467770	393351	2212246	397471
Benzo(a)pyrene	2170848	389195	431224	389118	2103711	387038

LDC #: 25916 G2b

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: JVG
2nd reviewer: C

METHOD: GC/MS Semivolatiles (EPA SW 846 Method 8270C)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5	1.00	1.044	104	104	0
2-Fluorobiphenyl		0.986	99	99	
Terphenyl-d14		1.057	105	105	
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5					
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5					
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

LDC #: 35916 G2b

VALIDATION FINDINGS WORKSHEET

Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: SVG

2nd Reviewer: C

METHOD: GC/MS BNA (EPA SW 846 Method 8270C)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SC/SA

Where: SSC = Spike concentration
SA = Spike added

RPD = I LCSC - LCSDC I * 2/(LCSC + LCSDC)

LCSC = Laboraotry control sample concentration

LCSDC = Laboratory control sample duplicate concentration

LCS/LCSD samples: I1108SLD026

Compound	Spike Added (ug/kg)		Spike Concentration (ug/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
Phenol										
N-Nitroso-di-n-propylamine										
4-Chloro-3-methylphenol										
Acenaphthene	33.33	NA	36.36	NA	109	109				
Pentachlorophenol										
Pyrene	33.33		35.4		106	106				

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25 916 G2b

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: JG
2nd reviewer: [illegible]

METHOD: GC/MS BNA (EPA SW 846 Method 8270C)

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

$$\text{Concentration} = \frac{(A_x)(I_s)(V_t)(DF)(2.0)}{(A_{is})(RRF)(V_o)(V_i)(\%S)}$$

A_x	=	Area of the characteristic ion (EICP) for the compound to be measured
A_{is}	=	Area of the characteristic ion (EICP) for the specific internal standard
I_s	=	Amount of internal standard added in nanograms (ng)
V_o	=	Volume or weight of sample extract in milliliters (ml) or grams (g).
V_i	=	Volume of extract injected in microliters (ul)
V_t	=	Volume of the concentrated extract in microliters (ul)
Df	=	Dilution Factor.
%S	=	Percent solids, applicable to soil and solid matrices only.
2.0	=	Factor of 2 to account for GPC cleanup

Example:

Sample I.D. #1, DDD

$$\text{Conc.} = \frac{(53821)(1.0)(1.0\,ml)(1000)(\quad)}{(451045)(1.146)(30.1g)(0.88\,r)(\quad)}$$

= 3.9 ug/kg

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification

LDC Report# 25916G2c

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	April 12, 2011
LDC Report Date:	August 10, 2011
Matrix:	Soil
Parameters:	N-Nitrosodimethylamine
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE125

Sample Identification

SL-012-SA8N-SS-0.0-0.5
SL-019-SA8N-SS-0.0-0.5
SL-020-SA8N-SS-0.0-0.5
SL-021-SA8N-SS-0.0-0.5
SL-022-SA8N-SS-0.0-0.5
SL-047-SA8N-SS-0.0-0.5

Introduction

This data review covers 6 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA Method 1625C for N-Nitrosodimethylamine.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance check is not required for by this method.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 30.0% .

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration all compounds.

The percent differences (%D) of the second source calibration standard were less than or equal to 30.0% for all compounds.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No N-nitrosodimethylamine was found in the method blanks.

No field blanks were identified in this SDG.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits with the following exceptions:

Sample	Surrogate	%R (Limits)	Compound	Flag	A or P
SL-022-SA8N-SS-0.0-0.5	N-nitrosodimethylamine-d6	183 (50-150)	N-nitrosodimethylamine	J (all detects)	P

VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE125	All compounds reported below the RL.	J (all detects)	A

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was within validation criteria.

XV. Overall Assessment

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
N-Nitrosodimethylamine - Data Qualification Summary - SDG DE125

SDG	Sample	Compound	Flag	A or P	Reason
DE125	SL-022-SA8N-SS-0.0-0.5	N-nitrosodimethylamine	J (all detects)	P	Surrogate spikes (%R) (S)
DE125	SL-012-SA8N-SS-0.0-0.5 SL-019-SA8N-SS-0.0-0.5 SL-020-SA8N-SS-0.0-0.5 SL-021-SA8N-SS-0.0-0.5 SL-022-SA8N-SS-0.0-0.5 SL-047-SA8N-SS-0.0-0.5	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
N-Nitrosodimethylamine - Laboratory Blank Data Qualification Summary - SDG DE125

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
N-Nitrosodimethylamine - Field Blank Data Qualification Summary - SDG DE125

No Sample Data Qualified in this SDG

LDC #: 25916G2c **VALIDATION COMPLETENESS WORKSHEET** Date: 8/08/11
SDG #: DE125 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: JVG
2nd Reviewer: C

METHOD: GC/MS N-Nitrosodimethylamine (EPA Method 1625C)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 4/12/11
II.	GC/MS Instrument performance check	N	
III.	Initial calibration	A	% RSD ≤ 30 %
IV.	Continuing calibration/ICV	A	~~[illegible]~~ CW ≤ 30% CCV ≤ 20 %
V.	Blanks	A	
VI.	Surrogate spikes	SW	
VII.	Matrix spike/Matrix spike duplicates	N	Client Spec
VIII.	Laboratory control samples	A	LCS
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A	
XI.	Target compound identification	A	
XII.	Compound quantitation/~~CRQLs~~ RLs	A	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	A	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	N	
XVII.	Field blanks	N	

Note: A = Acceptable
N = Not provided/applicable
SW = See worksheet
ND = No compounds detected
R = Rinsate
FB = Field blank
D = Duplicate
TB = Trip blank
EB = Equipment blank

Validated Samples: Soil

1	SL-012-SA8N-SS-0.0-0.5	11	SBLK LA 1081	21		31	
2	SL-019-SA8N-SS-0.0-0.5	12		22		32	
3	SL-020-SA8N-SS-0.0-0.5	13		23		33	
4	SL-021-SA8N-SS-0.0-0.5	14		24		34	
5	SL-022-SA8N-SS-0.0-0.5	15		25		35	
6	SL-047-SA8N-SS-0.0-0.5	16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

LDC #: 25916 G 2C

VALIDATION FINDINGS CHECKLIST

Reviewer: JVB
2nd Reviewer: A

Method: Semivolatiles (EPA SW 846 Method 8270C)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. GC/MS Instrument performance check				
Were the DFTPP performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
III. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Was a curve fit used for evaluation?		✓		
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?			✓	
Were all percent relative standard deviations (%RSD) ≤ 30% and relative response factors (RRF) ≥ 0.05?	✓			
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓			
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Were all percent differences (%D) ≤ 25% and relative response factors (RRF) ≥ 0.05?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within QC limits?		✓		
If 2 or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R?			✓	
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.		✓		
Was a MS/MSD analyzed every 20 samples of each matrix?		✓		
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			

LDC #: 25916 G2C

VALIDATION FINDINGS CHECKLIST

Reviewer: JVG
2nd Reviewer: A

Validation Area	Yes	No	NA	Findings/Comments
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?		✓		
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
X. Internal standards				
Were internal standard area counts within -50% or +100% of the associated calibration standard?.	✓			
Were retention times within ± 30 seconds from the associated calibration standard?	✓			
XI. Target compound identification				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?	✓			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	✓			
Were chromatogram peaks verified and accounted for?	✓			
XII. Compound quantitation/CRQLs				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	✓			
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XIII. Tentatively identified compounds (TICs)				
Were the major ions (> 10 percent relative intensity) in the reference spectrum evaluated in sample spectrum?			✓	
Were relative intensities of the major ions within ± 20% between the sample and the reference spectra?			✓	
Did the raw data indicate that the laboratory performed a library search for all required peaks in the chromatograms (samples and blanks)?		✓		
XIV. System performance				
System performance was found to be acceptable.	✓			
XV. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XVI. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XVII. Field blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

LDC #: 25916 G2c

VALIDATION FINDINGS WORKSHEET
Surrogate Recovery

Page: 1 of 1
Reviewer: OVG
2nd Reviewer: C

METHOD: GC/MS BNA (EPA SW 846 Method 8270C)
Please see qualification below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were percent recoveries (%R) for surrogates within QC limits?
Y N N/A If 2 or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R?
Y N N/A If any %R was less than 10 percent, was a reanalysis performed to confirm %R?

#	Date	Sample ID	Surrogate	%R (Limits)	Qualifications
		5	NDMA -d6	183 (50-150)	J detects / P (5)
				( )	
				( )	
				( )

LDC #25916 G 2C

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: JVG
2nd Reviewer: [illegible]

METHOD: GC/MS NDMA (EPA Method 1625C)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

RRF = (Ax)(Cis)/(Ais)(Cx)
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

Ax = Area of Compound
Cx = Concentration of compound
S= Standard deviation of the RRFs

Ais = Area of associated internal standard
Cis = Concentration of internal standard
X = Mean of the RRFs

#	Standard ID	Calibration Date	Compound (IS)	Reported RRF (RRF 25 std)	Recalculated RRF (RRF 25 std)	Reported Average RRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL	4/20/2011	NDMA (NDMA-d6)	1.489	1.489	1.5197	1.5197	9	9
	TE16311								

Cis/Cx	Ax	Ax
25/25	203162	136472

Conc	RRF
1.0	1.788
5.0	1.424
10.0	1.502
25.0	1.489
50.0	1.484
100.0	1.431
X =	1.5197
S =	0.1353

LDC #: 25916 G2C

VALIDATION FINDINGS WORKSHEET

Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: JVG
2nd Reviewer: CA

METHOD: GC/MS ~~BNA~~ NDMA (EPA SW 846 Method ~~8270C~~ 1625C)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SC/SA

Where: SSC = Spike concentration
SA = Spike added

RPD = I LCSC - LCSDC I * 2/(LCSC + LCSDC)

LCSC = Laboraotry control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCS/LCSD samples: _____

Compound	Spike Added (ug/kg)		Spike Concentration (ug/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
~~Phenol~~ NDMA	833.33	NA	751.66	NA	90	90				
N-Nitroso-di-n-propylamine										
4-Chloro-3-methylphenol										
Acenaphthene										
Pentachlorophenol										
Pyrene										

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25916 G2C

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: JVG
2nd reviewer: [illegible]

METHOD: GC/MS BNA (EPA SW 846 Method 8270C)

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

$$\text{Concentration} = \frac{(A_x)(I_s)(V_t)(DF)(2.0)}{(A_{is})(RRF)(V_o)(V_i)(\%S)}$$

A_x	=	Area of the characteristic ion (EICP) for the compound to be measured
A_{is}	=	Area of the characteristic ion (EICP) for the specific internal standard
I_s	=	Amount of internal standard added in nanograms (ng)
V_o	=	Volume or weight of sample extract in milliliters (ml) or grams (g).
V_i	=	Volume of extract injected in microliters (ul)
V_t	=	Volume of the concentrated extract in microliters (ul)
Df	=	Dilution Factor.
%S	=	Percent solids, applicable to soil and solid matrices only.
2.0	=	Factor of 2 to account for GPC cleanup

Example:

Sample I.D. 3, ND MA

$$\text{Conc.} = \frac{(8267)(25)(1\,ml)(10)(\quad)}{(142524)(1.5197)(30.0\,g)(0.864)(\quad)}$$

= 0.368 mg/kg (1000)

= 370 ng/kg

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: April 12, 2011

LDC Report Date: August 11, 2011

Matrix: Soil/Water

Parameters: Polychlorinated Biphenyls

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE125

Sample Identification

SL-012-SA8N-SS-0.0-0.5
SL-015-SA8N-SS-0.0-0.5
SL-016-SA8N-SS-0.0-0.5
SL-018-SA8N-SS-0.0-0.5
SL-019-SA8N-SS-0.0-0.5
SL-020-SA8N-SS-0.0-0.5
SL-021-SA8N-SS-0.0-0.5
SL-022-SA8N-SS-0.0-0.5
SL-023-SA8N-SS-0.0-0.5
SL-036-SA8N-SS-0.0-0.5
SL-047-SA8N-SS-0.0-0.5
SL-048-SA8N-SS-0.0-0.5
SL-050-SA8N-SS-0.0-0.5
SL-131-SA8N-SS-0.0-0.5
EB01-SA8N-041211
SL-202-SA5A-SB-3.0-4.0
SL-206-SA5A-SB-4.0-5.0
SL-207-SA5A-SB-3.0-4.0
SL-227-SA5A-SB-3.0-4.0
SL-228-SA5A-SB-3.0-4.0
SL-012-SA8N-SS-0.0-0.5MS
SL-012-SA8N-SS-0.0-0.5MSD

Introduction

This data review covers 21 soil samples and one water sample listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8082 for Polychlorinated Biphenyls.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/ECD Instrument Performance Check

Instrument performance was acceptable unless noted otherwise under initial calibration and continuing calibration sections.

III. Initial Calibration

Initial calibration of multicomponent compounds was performed for the primary (quantitation) column as required by the method.

The percent relative standard deviations (%RSD) were less than or equal to 20.0% for all compounds.

Retention time windows were evaluated and considered technically acceptable.

IV. Continuing Calibration

Continuing calibration was performed at required frequencies.

The percent differences (%D) of calibration factors in continuing standard mixtures were within the 20.0% QC limits with the following exceptions:

Date	Standard	Column	Compound	%D	Associated Samples	Affected Compound	Flag	A or P
4/20/11	3C20104B.30R	ZB-MR2	Aroclor-5460	27.8	SL-023-SA8N-SS-0.0-0.5 SL-036-SA8N-SS-0.0-0.5 SL-047-SA8N-SS-0.0-0.5 SL-048-SA8N-SS-0.0-0.5 SL-050-SA8N-SS-0.0-0.5 SL-202-SA5A-SB-3.0-4.0 SL-206-SA5A-SB-4.0-5.0 SL-207-SA5A-SB-3.0-4.0 SL-227-SA5A-SB-3.0-4.0 SL-228-SA5A-SB-3.0-4.0	Aroclor-5460	J (all detects) UJ (all non-detects)	A
4/21/11	4C20104B.05R	ZB-MR2	Aroclor-5432 Aroclor-5460	22.1 24.1	SL-131-SA8N-SS-0.0-0.5	Aroclor-5432 Aroclor-5460	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A

The percent difference (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

Retention times (RT) of all compounds in the calibration standards were within QC limits.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polychlorinated biphenyl contaminants were found in the method blanks.

Sample EB01-SA8N-041211 was identified as an equipment blank. No polychlorinated biphenyl contaminants were found.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits with the following exceptions:

Sample	Surrogate	%R (Limits)	Compound	Flag	A or P
SL-131-SA8N-SS-0.0-0.5	Decachlorobiphenyl	129 (45-120)	All TCL compounds	J (all detects)	A

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

LCS ID (Associated Samples)	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Affected Compounds	Flag	A or P
LCS/D07104 (EB01-SA8N-041211 PBLK07104)	Aroclor-5442	90 (35-84)	92 (35-84)	-	Aroclor-5460 Aroclor-5432 Aroclor-5442	J (all detects) J (all detects) J (all detects)	P

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Florisil Cartridge Check

Florisil cleanup was not required and therefore not performed in this SDG.

XI. GPC Calibration

GPC cleanup was not required and therefore not performed in this SDG.

XII. Target Compound Identification

All target compound identifications were within validation criteria.

XIII. Compound Quantitation and Reported RLs

All compound quantitation and RLs were within validation criteria.

The sample results for detected compounds from the two columns were within 40% relative percent difference (RPD) with the following exceptions:

Sample	Compound	RPD	Flag	A or P
SL-036-SA8N-SS-0.0-0.5	Aroclor-1254	61.22	J (all detects)	A

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE125	All compounds reported below the RL.	J (all detects)	A

XIV. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XV. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Polychlorinated Biphenyls - Data Qualification Summary - SDG DE125

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE125	SL-023-SA8N-SS-0.0-0.5 SL-036-SA8N-SS-0.0-0.5 SL-047-SA8N-SS-0.0-0.5 SL-048-SA8N-SS-0.0-0.5 SL-050-SA8N-SS-0.0-0.5 SL-202-SA5A-SB-3.0-4.0 SL-206-SA5A-SB-4.0-5.0 SL-207-SA5A-SB-3.0-4.0 SL-227-SA5A-SB-3.0-4.0 SL-228-SA5A-SB-3.0-4.0	Aroclor-5460	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D) (C)
DE125	SL-131-SA8N-SS-0.0-0.5	Aroclor-5432 Aroclor-5460	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A	Continuing calibration (%D) (C)
DE125	SL-131-SA8N-SS-0.0-0.5	All TCL compounds	J (all detects)	A	Surrogate spikes (%R) (S)
DE125	EB01-SA8N-041211	Aroclor-5460 Aroclor-5432 Aroclor-5442	J (all detects) J (all detects) J (all detects)	P	Laboratory control samples (%R) (L)
DE125	SL-036-SA8N-SS-0.0-0.5	Aroclor-1254	J (all detects)	A	Compound quantitation and RLs (RPD) (*XIII)
DE125	SL-012-SA8N-SS-0.0-0.5 SL-015-SA8N-SS-0.0-0.5 SL-016-SA8N-SS-0.0-0.5 SL-018-SA8N-SS-0.0-0.5 SL-019-SA8N-SS-0.0-0.5 SL-020-SA8N-SS-0.0-0.5 SL-021-SA8N-SS-0.0-0.5 SL-022-SA8N-SS-0.0-0.5 SL-023-SA8N-SS-0.0-0.5 SL-036-SA8N-SS-0.0-0.5 SL-047-SA8N-SS-0.0-0.5 SL-048-SA8N-SS-0.0-0.5 SL-050-SA8N-SS-0.0-0.5 SL-131-SA8N-SS-0.0-0.5 EB01-SA8N-041211 SL-202-SA5A-SB-3.0-4.0 SL-206-SA5A-SB-4.0-5.0 SL-207-SA5A-SB-3.0-4.0 SL-227-SA5A-SB-3.0-4.0 SL-228-SA5A-SB-3.0-4.0	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and RLs (Z)

Santa Susana Field Laboratory
Polychlorinated Biphenyls - Laboratory Blank Data Qualification Summary - SDG DE125

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Polychlorinated Biphenyls - Field Blank Data Qualification Summary - SDG DE125

No Sample Data Qualified in this SDG

LDC #: 25916G3b **VALIDATION COMPLETENESS WORKSHEET** Date: 8/09/11
SDG #: DE125 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: JVC
2nd Reviewer: [illegible]

METHOD: GC Polychlorinated Biphenyls (EPA SW 846 Method 8082)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 4/12/11
II.	GC/ECD Instrument Performance Check	N	
III.	Initial calibration	A	% RSD ≤ 20%
IV.	Continuing calibration/ICV	SW	CW/ICW ≤ 20%
V.	Blanks	A	
VI.	Surrogate spikes	SW	
VII.	Matrix spike/Matrix spike duplicates	A	
VIII.	Laboratory control samples	SW	LCS/D
IX.	Regional quality assurance and quality control	N	
X.	Florisil cartridge check	N	
XI.	GPC Calibration	N	
XII.	Target compound identification	A	
XIII.	Compound quantitation and reported ~~CRQLs~~ RL's	SW	
XIV.	Overall assessment of data	A	
XV.	Field duplicates	N	
XVI.	Field blanks	ND	EB = 15

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: Soil + Water

1	SL-012-SA8N-SS-0.0-0.5 S	11	SL-047-SA8N-SS-0.0-0.5 S	21	1 MS	31	PBLK12108
2	SL-015-SA8N-SS-0.0-0.5	12	SL-048-SA8N-SS-0.0-0.5	22	1 MSD	32	PBLK67104
3	SL-016-SA8N-SS-0.0-0.5	13	SL-050-SA8N-SS-0.0-0.5	23		33	
4	SL-018-SA8N-SS-0.0-0.5	14	SL-131-SA8N-SS-0.0-0.5 W	24		34	
5	SL-019-SA8N-SS-0.0-0.5	15	EB01-SA8N-041211	25		35	
6	SL-020-SA8N-SS-0.0-0.5	16	SL-202-SA5A-SB-3.0-4.0 S	26		36	
7	SL-021-SA8N-SS-0.0-0.5	17	SL-206-SA5A-SB-4.0-5.0	27		37	
8	SL-022-SA8N-SS-0.0-0.5	18	SL-207-SA5A-SB-3.0-4.0	28		38	
9	SL-023-SA8N-SS-0.0-0.5	19	SL-227-SA5A-SB-3.0-4.0	29		39	
10	SL-036-SA8N-SS-0.0-0.5	20	SL-228-SA5A-SB-3.0-4.0	30		40	

Notes:

LDC #: 25916 G36

VALIDATION FINDINGS CHECKLIST

Reviewer: JVG
2nd Reviewer: C

Method: Pesticides/PCBs (EPA SW 846 Method 8081/8082)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. GC/ECD Instrument performance check				
Was the instrument performance found to be acceptable?	✓			
III. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Was a linear fit used for evaluation? If yes, were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation? If Yes, what was the acceptance criteria used?		✓		
Did the initial calibration meet the curve fit acceptance criteria?			✓	
Were the RT windows properly established?	✓			
Were the required standard concentrations analyzed in the initial calibration?	✓			
IV. Continuing calibration				
What type of continuing calibration calculation was performed? ____%D or ____%R	✓			
Were Evaluation mix standards analyzed prior to the initial calibration and sample analysis?	N		✓	
Were endrin and 4,4'-DDT breakdowns ≤ 15%.0 for individual breakdown in the Evaluation mix standards?			✓	
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20%.0 or percent recovieries 80-120%?		✓		
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Were extract cleanup blanks analyzed with every batch requiring clean-up?	✓			
Was there contamination in the method blanks or clean-up blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?		✓		
If the percent recovery (%R) of one or more surrogates was outside QC limits, was a reanalysis performed to confirm %R?	✓			
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?			✓	

LDC #: 25 916 G3b

VALIDATION FINDINGS CHECKLIST

Reviewer: JVG
2nd Reviewer: [illegible]

Validation Area	Yes	No	NA	Findings/Comments
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?	✓			
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?		✓		
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?		✓		
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
X. Target compound identification				
Were the retention times of reported detects within the RT windows?	✓			
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions, dry weight factors, and clean-up activities applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XV. Field blanks				
Field blanks were identified in this SDG.	✓			
Target compounds were detected in the field blanks.		✓		

VALIDATION FINDINGS WORKSHEET

METHOD: Pesticide/PCBs (EPASW 846 Method 8081/8082)

A. alpha-BHC	I. Dieldrin	Q. Endrin ketone	Y. Aroclor-1242	GG. Chlordane
B. beta-BHC	J. 4,4'-DDE	R. Endrin aldehyde	Z. Aroclor-1248	HH. Chlordane (Technical)
C. delta-BHC	K. Endrin	S. alpha-Chlordane	AA. Aroclor-1254	II. Arochlor 1262
D. gamma-BHC	L. Endosulfan II	T. gamma-Chlordane	BB. Aroclor-1260	JJ. Arochlor 1268
E. Heptachlor	M. 4,4'-DDD	U. Toxaphene	CC. 2,4'-DDD	KK. oxy Chlordane
F. Aldrin	N. Endosulfan sulfate	V. Aroclor-1016	DD. 2,4'-DDE	LL. trans-Nonachlor
G. Heptachlor epoxide	O. 4,4'-DDT	W. Aroclor-1221	EE. 2,4'-DDT	MM. cis-Nonachlor
H. Endosulfan I	P. Methoxychlor	X. Aroclor-1232	FF. Hexachlorobenzene	NN. Aroclor-5460

OO. Aroclor-5432

PP. Aroclor-5442

Notes:

COMPLST-3S.wpd

LDC #: 25916 G3b

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Reviewer: JVG
2nd Reviewer: [illegible]

METHOD: GC Pesticides/PCBs (EPA SW 846 Method 8081/8082)
Please see qualifications below for all questions answered "N" Not applicable questions are identified as "N/A".

Y N N/A Were Evaluation mix standards run before initial calibration and before samples?
Y N N/A Were Endrin & 4,4'-DDT breakdowns acceptable in the Evaluation Mix standard (≤15.0% for individual breakdowns)?
Y N N/A Was at least one standard run daily to verify the working curve?
Y N N/A Did the continuing calibration standards meet the percent difference (%D) / relative percent difference (RPD) criteria of ≤20.0%?

Level IV/D Only
Y N N/A Were the retention times for all calibrated compounds within their respective acceptance windows?

#	Date	Standard ID	Column	Compound	%D (Limit ≤ 20.0)	RT (Limits)	Associated Samples	Qualifications
	4/20/11	3C20104B.30R	ZB-MR2	NN	27.8	( )	9-13, 16-20	J/UJ/A (c)
						( )		
						( )		
						( )		
	4/21/11	4C20104B.05R	ZB-MR2	OO	22.1	( )	14	
				NN	24.1	( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
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						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		

A. alpha-BHC	E. Heptachlor	I. Dieldrin	M. 4,4'-DDD	Q. Endrin ketone	U. Toxaphene	Y. Aroclor-1242	CC. DB 608	GG._____
B. beta-BHC	F. Aldrin	J. 4,4'-DDE	N. Endosulfan sulfate	R. Endrin aldehyde	V. Aroclor-1016	Z. Aroclor-1248	DD. DB 1701	HH._____
C. delta-BHC	G. Heptachlor epoxide	K. Endrin	O. 4,4'-DDT	S. alpha-Chlordane	W. Aroclor-1221	AA. Aroclor-1254	EE. Hexachlobenzene	II._____
D. gamma-BHC	H. Endosulfan I	L. Endosulfan II	P. Methoxychlor	T. gamma-Chlordane	X. Aroclor-1232	BB. Aroclor-1260	FF._____	JJ._____

LDC #: 25916 G 36

VALIDATION FINDINGS WORKSHEET
Surrogate Spikes

Page: 1 of 1
Reviewer: JVG
2nd Reviewer: A

METHOD: GC Pesticides/PCBs (EPA SW 846 Method 8081/8082)

Please see qualification below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were surrogates spiked into all samples, standards and blanks?

Y N N/A Did all surrogate percent recoveries (%R) meet the QC limits?

#	Date	Sample ID	Column	Surrogate Compound	%R (Limits)	Qualifications
		14		B	129 (45-120)	J dets/A (5)
					( )	
					( )	
					( )	
					( )	
					( )	
					( )	
					( )	
					( )	
					( )	
					( )	
					( )	
					( )	
					( )	
					( )	
					( )	
					( )	
					( )	
					( )	
					( )	
					( )	

Letter Designation	Surrogate Compound	Recovery QC Limits (Soil)	Recovery QC Limits (Water)	Comments
A	Tetrachloro-m-xylene			
B	Decachlorobiphenyl			

LDC #: 25916 G3b
SDG #: See Cover

VALIDATION FINDINGS WORKSHEET
Laboratory Control Samples

Page: 1 of 1
Reviewer: JVG
2nd Reviewer: [illegible]

METHOD: GC Pesticides/PCBs (EPA SW 846 Method 8081/8082)
Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were a laboratory control samples (LCS) and laboratory control sample duplicate (LCSD) analyzed for each matrix in this SDG?
Y N N/A Were the LCS percent recoveries (%R) and relative percent differences (RPD) within the QC limits?

Level IV/D Only

Y N N/A Was a LCS analyzed every 20 samples for each matrix or whenever a sample extraction was performed?

#	Date	LCS/LCSD ID	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
		LCS/D 07104	Aroclor 5442	90 (35-84)	92 (35-84)	( )	15, PBLK07104	J det / P (L)
				( )	( )	( )		(and, NN, OO, PP)
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
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				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		

LDC #: 25916 G3b

VALIDATION FINDINGS WORKSHEET
Compound Quantitation and Reported CRQLs

Page: 1 of 1
Reviewer: NG
2nd Reviewer: A

METHOD: ✓ GC ___ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".
Level IV/D Only

Y N N/A Were CRQLs adjusted for sample dilutions, dry weight factors, etc.?
Y N N/A Did the reported results for detected target compounds agree within 10.0% of the recalculated results?
Y N N/A Did the percent difference of detected compounds between two columns./detectors ≤40%?
If no, please see findings bellow.

#	Compound Name	Sample ID	%RPD/%D Between Two Columns/Detectors Limit (≤ 40%)	Qualifications
	AA	10	61.22	J dets/A (~~*#~~) (*xiii)

Comments: See sample calculation verification worksheet for recalculations

COMQUA%DNew.wpd

LDC #: 25916 G3b

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: JVG
2nd Reviewer: A

METHOD: GC ✓ HPLC _____

The calibration factors (CF), average CF, and relative standard deviation (%RSD) were recalculated for compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

Where:
H = Height of compound
C = Concentration of compound
S = Standard deviation of calibration factors
X = Mean of calibration factors

#	Standard ID	Calibration Date	Compound	Reported (500 std)	Recalculated (500 std)	Reported Average RRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL	4/14/2011	1260-4 (ZB-MR1)	77.09	77.1	77.2	77.2	7.8	7.8
	17342A		1260-4 (ZB-MR2)	340.49	340.5	341.1	341.1	5.6	5.6

C	H
500	38546
500	170246

Conc	1260-4 MR1	1260-4 MR2
50.0	86.80	366.98
100.0	74.36	341.91
200.0	77.13	343.25
500.0	77.09	340.49
1000.0	70.47	313.01
X=	77.17	341.13
S=	6.032	19.133

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC # 25916 G3b

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: JVG
2nd Reviewer: A

METHOD: GC / HPLC

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration percent difference (%D) values were recalculated for the compounds identified below using the following calculation:

Percent difference (%D) = 100 * (N - C)/N

Where:
N = Initial Calibration Factor or Nominal Amount
C = Calibration Factor from Continuing Calibration Standard or Calculated Amount

#	Standard ID	Calibration Date	Compound	CCV Conc	Reported Conc (from Ave)	Recalculated Conc	Reported % D (from Ave)	Recalculated %D (from peak4)
1	2C20104.28R	4/18/2011	1260-4 (ZB-MR1)	200.00	205.97	205.37	3.0	2.7
			1260-4 (ZB-MR2)	200.00	224.57	228.88	12.3	14.4
2	3C20104.04R	4/20/2011	1260-4 (ZB-MR1)	200.00	194.18	199.81	2.9	0.1
			1260-4 (ZB-MR2)	200.00	216.15	226.01	8.1	13.0
3	3C20104.29R	4/20/2011	1260-4 (ZB-MR1)	200.00	196.67	198.95	1.7	0.5
			1260-4 (ZB-MR2)	200.00	221.95	229.90	11.0	15.0
4	4C20104.04R	4/21/2011	1260-4 (ZB-MR1)	200.00	195.29	200.90	1.7	0.4
			1260-4 (ZB-MR2)	200.00	227.48	230.37	11.0	15.2

Compound	CF	CCV1 Height	CCV2 Height	CCV3 Height	CCV4 Height
1260-4 (ZB-MR1)	77.17	15848.02	15419.32	15352.64	15503.26
1260-4 (ZB-MR2)	341.129	78079.08	77097.30	78427.23	78586.34

LDC #: 25916G3b

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Page: 1 of 1
Reviewer: JVG
2nd reviewer: C

METHOD: GC Pesticides/PCBs (EPA SW 846 Method 8081/8082)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: # 1

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
Tetrachloro-m-xylene	ZB-MR2	1.04	1.204	116	116	0
Tetrachloro-m-xylene	↓	↓				↓
Decachlorobiphenyl	↓	↓	1.061	102	102	↓
Decachlorobiphenyl						

Sample ID:

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
Tetrachloro-m-xylene						
Tetrachloro-m-xylene						
Decachlorobiphenyl						
Decachlorobiphenyl						

Sample ID:

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
Tetrachloro-m-xylene						
Tetrachloro-m-xylene						
Decachlorobiphenyl						
Decachlorobiphenyl						

Sample ID:

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
Tetrachloro-m-xylene						
Tetrachloro-m-xylene						
Decachlorobiphenyl						
Decachlorobiphenyl						

Notes:

LDC #: 25916 G36

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Reviewer: OVG
2nd Reviewer: [illegible]

METHOD: GC Pesticides/PCBs (EPA SW 846 Method 8081/8082)

The percent recoveries (%R) and Relative Percent difference (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100* (SSC-SC)/SA

Where: SSC = Spiked sample concentration; SA = Spike added; SC = Concentration

RPD = I MS - MSD I * 2/(MS + MSD)

MS = Matrix spike percent recovery; MSD = Matrix spike duplicate percent recovery

MS/MSD samples: 31 / 32

Compound	Spike Added (ug/kg)		Sample Concentration (ug/kg)	Spiked Sample Concentration (ug/kg)		Matrix Spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	-	MS	MSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalculated
gamma-BHC											
4,4'-DDT											
Aroclor 1260	16.67	16.67	3.3	18.59	20.3	9 ✓	9 ✓	10 ✓	10 ✓	9	7

Comments: Refer ot Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25916 63b

VALIDATION FINDINGS WORKSHEET

Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

Reviewer: OVG
2nd Reviewer: [illegible]

METHOD: GC Pesticides/PCBs (EPA SW 846 Method 8081/8082)

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100* (SSC-SC)/SA

Where: SSC = Spiked sample concentration
SA = Spike added
SC = Concentration

RPD = I LCS - LCSD I * 2/(LCS + LCSD)

LCS = Laboratory control sample percent recovery
LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: LCS/D 07104

Compound	Spike Added (ug/L)		Spiked Sample Concentration (ug/L)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
gamma-BHC										
4,4'-DDT										
Aroclor 1260	5.0	5.0	4.7	4.9	94	94	98	98	K	4

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25916 G3b

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: JVG
2nd reviewer: [illegible]

METHOD: GC Pesticides/PCBs (EPA SW 846 Method 8081/8082)

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Example:

Sample I.D. #1 PCB-1260 MRI
PCB 1260-4
Conc. = $\frac{(700\ 6.9297)(2.0\ ml)}{(77.17)(60g)}$
= 3.0266

PCB 1260 Ave.
$= \frac{3.0266 + 4.788761 + 2.095884}{3}$
= 3.30378

final conc. $= \frac{3.30378}{(0.882)}$
= 3.7 ug/kg

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification

Note:

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: April 12, 2011

LDC Report Date: August 2, 2011

Matrix: Soil/Water

Parameters: Metals

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE125

Sample Identification

SL-012-SA8N-SS-0.0-0.5
SL-015-SA8N-SS-0.0-0.5
SL-016-SA8N-SS-0.0-0.5
SL-018-SA8N-SS-0.0-0.5
SL-019-SA8N-SS-0.0-0.5
SL-020-SA8N-SS-0.0-0.5
SL-021-SA8N-SS-0.0-0.5
SL-022-SA8N-SS-0.0-0.5
SL-023-SA8N-SS-0.0-0.5
SL-036-SA8N-SS-0.0-0.5
SL-047-SA8N-SS-0.0-0.5
SL-048-SA8N-SS-0.0-0.5
SL-050-SA8N-SS-0.0-0.5
SL-131-SA8N-SS-0.0-0.5
EB01-SA8N-041211
SL-202-SA5A-SB-3.0-4.0
SL-206-SA5A-SB-4.0-5.0
SL-207-SA5A-SB-3.0-4.0
SL-227-SA5A-SB-3.0-4.0
SL-228-SA5A-SB-3.0-4.0

SL-012-SA8N-SS-0.0-0.5MS
SL-012-SA8N-SS-0.0-0.5MSD
SL-012-SA8N-SS-0.0-0.5DUP
SL-021-SA8N-SS-0.0-0.5MS
SL-021-SA8N-SS-0.0-0.5MSD
SL-021-SA8N-SS-0.0-0.5DUP

Introduction

This data review covers 25 soil samples and one water sample listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Methods 6010B, 6020, and 7000 for Metals. The metals analyzed were Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Phosphorus, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, and Zirconium.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review (January 2010).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. ICPMS Tune

The mass calibration was within 0.1 AMU and the percent relative standard deviation (%RSD) was less than or equal to 5% .

III. Calibration

An initial calibration was performed.

The frequency and analysis criteria of the initial calibration verification (ICV) and continuing calibration verification (CCV) were met.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No metal contaminants were found in the initial, continuing and preparation blanks with the following exceptions:

Method Blank ID	Analyte	Maximum Concentration	Associated Samples
PB (prep blank)	Copper Phosphorus Tin	0.276 mg/Kg 1.406 mg/Kg 1.404 mg/Kg	All soil samples in SDG DE125
ICB/CCB	Magnesium	39.6 ug/L	SL-012-SA8N-SS-0.0-0.5 SL-015-SA8N-SS-0.0-0.5
ICB/CCB	Titanium	0.54 ug/L	SL-050-SA8N-SS-0.0-0.5 SL-131-SA8N-SS-0.0-0.5 SL-202-SA5A-SB-3.0-4.0 SL-206-SA5A-SB-4.0-5.0 SL-207-SA5A-SB-3.0-4.0 SL-227-SA5A-SB-3.0-4.0 SL-228-SA5A-SB-3.0-4.0
ICB/CCB	Titanium	0.41 ug/L	SL-016-SA8N-SS-0.0-0.5 SL-018-SA8N-SS-0.0-0.5 SL-019-SA8N-SS-0.0-0.5 SL-020-SA8N-SS-0.0-0.5 SL-021-SA8N-SS-0.0-0.5 SL-022-SA8N-SS-0.0-0.5 SL-023-SA8N-SS-0.0-0.5 SL-036-SA8N-SS-0.0-0.5 SL-047-SA8N-SS-0.0-0.5 SL-048-SA8N-SS-0.0-0.5

Method Blank ID	Analyte	Maximum Concentration	Associated Samples
ICB/CCB	Vanadium	0.11 ug/L	SL-016-SA8N-SS-0.0-0.5 SL-018-SA8N-SS-0.0-0.5 SL-019-SA8N-SS-0.0-0.5 SL-020-SA8N-SS-0.0-0.5 SL-021-SA8N-SS-0.0-0.5 SL-023-SA8N-SS-0.0-0.5 SL-036-SA8N-SS-0.0-0.5 SL-047-SA8N-SS-0.0-0.5 SL-048-SA8N-SS-0.0-0.5 SL-050-SA8N-SS-0.0-0.5
ICB/CCB	Vanadium	0.13 ug/L	SL-131-SA8N-SS-0.0-0.5 SL-202-SA5A-SB-3.0-4.0 SL-206-SA5A-SB-4.0-5.0 SL-207-SA5A-SB-3.0-4.0 SL-227-SA5A-SB-3.0-4.0 SL-228-SA5A-SB-3.0-4.0

Data qualification by the initial, continuing and preparation blanks (ICB/CCB/PBs) was based on the maximum contaminant concentration in the ICB/CCB/PBs in the analysis of each analyte. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated method blanks with the following exceptions:

Sample	Analyte	Reported Concentration	Modified Final Concentration
SL-012-SA8N-SS-0.0-0.5	Tin	2.5 mg/Kg	2.5U mg/Kg
SL-015-SA8N-SS-0.0-0.5	Tin	2.6 mg/Kg	2.6U mg/Kg
SL-016-SA8N-SS-0.0-0.5	Tin	2.6 mg/Kg	2.6U mg/Kg
SL-018-SA8N-SS-0.0-0.5	Tin	2.5 mg/Kg	2.5U mg/Kg
SL-019-SA8N-SS-0.0-0.5	Tin	2.4 mg/Kg	2.4U mg/Kg
SL-020-SA8N-SS-0.0-0.5	Tin	2.7 mg/Kg	2.7U mg/Kg
SL-021-SA8N-SS-0.0-0.5	Tin	2.4 mg/Kg	2.4U mg/Kg
SL-022-SA8N-SS-0.0-0.5	Tin	2.7 mg/Kg	2.7U mg/Kg
SL-023-SA8N-SS-0.0-0.5	Tin	2.6 mg/Kg	2.6U mg/Kg
SL-036-SA8N-SS-0.0-0.5	Tin	2.9 mg/Kg	2.9U mg/Kg
SL-047-SA8N-SS-0.0-0.5	Tin	2.6 mg/Kg	2.6U mg/Kg

Sample	Analyte	Reported Concentration	Modified Final Concentration
SL-048-SA8N-SS-0.0-0.5	Tin	2.7 mg/Kg	2.7U mg/Kg
SL-050-SA8N-SS-0.0-0.5	Tin	2.7 mg/Kg	2.7U mg/Kg
SL-131-SA8N-SS-0.0-0.5	Tin	2.8 mg/Kg	2.8U mg/Kg
SL-202-SA5A-SB-3.0-4.0	Tin	2.8 mg/Kg	2.8U mg/Kg
SL-206-SA5A-SB-4.0-5.0	Tin	2.9 mg/Kg	2.9U mg/Kg
SL-207-SA5A-SB-3.0-4.0	Tin	2.8 mg/Kg	2.8U mg/Kg
SL-227-SA5A-SB-3.0-4.0	Tin	2.7 mg/Kg	2.7U mg/Kg
SL-228-SA5A-SB-3.0-4.0	Tin	2.8 mg/Kg	2.8U mg/Kg

Sample EB01-SA8N-041211 was identified as an equipment blank. No metal contaminants were found.

V. ICP Interference Check Sample (ICS) Analysis

The frequency of analysis was met.

The criteria for analysis were met.

VI. Matrix Spike Analysis

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Analyte	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
SL-021-SA8N-SS-0.0-0.5MS/MSD (All soil samples in SDG DE125)	Antimony	26 (75-125)	18 (75-125)	-	J (all detects) R (all non-detects)	A
SL-021-SA8N-SS-0.0-0.5MS/MSD (All soil samples in SDG DE125)	Arsenic	-	70 (75-125)	-	J (all detects) UJ (all non-detects)	A
SL-021-SA8N-SS-0.0-0.5MS/MSD (All soil samples in SDG DE125)	Antimony	-	-	26 (≤20)	J (all detects) UJ (all non-detects)	A

VII. Duplicate Sample Analysis

Duplicate (DUP) sample analyses were reviewed for each matrix as applicable. Results were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Internal Standards

All internal standard percent recoveries (%R) were within QC limits.

X. Furnace Atomic Absorption QC

Graphite furnace atomic absorption was not utilized in this SDG.

XI. ICP Serial Dilution

ICP serial dilution analysis was performed by the laboratory. The analysis criteria were met with the following exceptions:

Diluted Sample	Analyte	%D (Limits)	Associated Samples	Flag	A or P
SL-012-SA8N-SS-0.0-0.5	Manganese Strontium	12 (≤10) 11 (≤10)	All soil samples in SDG DE125	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A
SL-021-SA8N-SS-0.0-0.5	Chromium Copper Lead Nickel Vanadium Zinc	28 (≤10) 29 (≤10) 15 (≤10) 36 (≤10) 30 (≤10) 12 (≤10)	All soil samples in SDG DE125	J (all detects) UJ (all non-detects)	A

XII. Sample Result Verification

All sample result verifications were acceptable.

All metals reported below the RL and above the MDL were qualified as follows:

Sample	Analyte	Flag	A or P
All samples in SDG DE125	All analytes reported below the RL and above the MDL.	J (all detects)	A

XIII. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XIV. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Metals - Data Qualification Summary - SDG DE125

SDG	Sample	Analyte	Flag	A or P	Reason (Code)
DE125	SL-012-SA8N-SS-0.0-0.5 SL-015-SA8N-SS-0.0-0.5 SL-016-SA8N-SS-0.0-0.5 SL-018-SA8N-SS-0.0-0.5 SL-019-SA8N-SS-0.0-0.5 SL-020-SA8N-SS-0.0-0.5 SL-021-SA8N-SS-0.0-0.5 SL-022-SA8N-SS-0.0-0.5 SL-023-SA8N-SS-0.0-0.5 SL-036-SA8N-SS-0.0-0.5 SL-047-SA8N-SS-0.0-0.5 SL-048-SA8N-SS-0.0-0.5 SL-050-SA8N-SS-0.0-0.5 SL-131-SA8N-SS-0.0-0.5 SL-202-SA5A-SB-3.0-4.0 SL-206-SA5A-SB-4.0-5.0 SL-207-SA5A-SB-3.0-4.0 SL-227-SA5A-SB-3.0-4.0 SL-228-SA5A-SB-3.0-4.0	Antimony	J (all detects) R (all non-detects)	A	Matrix spike/Matrix spike duplicate (%R) (Q)
DE125	SL-012-SA8N-SS-0.0-0.5 SL-015-SA8N-SS-0.0-0.5 SL-016-SA8N-SS-0.0-0.5 SL-018-SA8N-SS-0.0-0.5 SL-019-SA8N-SS-0.0-0.5 SL-020-SA8N-SS-0.0-0.5 SL-021-SA8N-SS-0.0-0.5 SL-022-SA8N-SS-0.0-0.5 SL-023-SA8N-SS-0.0-0.5 SL-036-SA8N-SS-0.0-0.5 SL-047-SA8N-SS-0.0-0.5 SL-048-SA8N-SS-0.0-0.5 SL-050-SA8N-SS-0.0-0.5 SL-131-SA8N-SS-0.0-0.5 SL-202-SA5A-SB-3.0-4.0 SL-206-SA5A-SB-4.0-5.0 SL-207-SA5A-SB-3.0-4.0 SL-227-SA5A-SB-3.0-4.0 SL-228-SA5A-SB-3.0-4.0	Arsenic	J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicate (%R) (Q)
DE125	SL-012-SA8N-SS-0.0-0.5 SL-015-SA8N-SS-0.0-0.5 SL-016-SA8N-SS-0.0-0.5 SL-018-SA8N-SS-0.0-0.5 SL-019-SA8N-SS-0.0-0.5 SL-020-SA8N-SS-0.0-0.5 SL-021-SA8N-SS-0.0-0.5 SL-022-SA8N-SS-0.0-0.5 SL-023-SA8N-SS-0.0-0.5 SL-036-SA8N-SS-0.0-0.5 SL-047-SA8N-SS-0.0-0.5 SL-048-SA8N-SS-0.0-0.5 SL-050-SA8N-SS-0.0-0.5 SL-131-SA8N-SS-0.0-0.5 SL-202-SA5A-SB-3.0-4.0 SL-206-SA5A-SB-4.0-5.0 SL-207-SA5A-SB-3.0-4.0 SL-227-SA5A-SB-3.0-4.0 SL-228-SA5A-SB-3.0-4.0	Antimony	J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicate (RPD) (E)

SDG	Sample	Analyte	Flag	A or P	Reason (Code)
DE125	SL-012-SA8N-SS-0.0-0.5 SL-015-SA8N-SS-0.0-0.5 SL-016-SA8N-SS-0.0-0.5 SL-018-SA8N-SS-0.0-0.5 SL-019-SA8N-SS-0.0-0.5 SL-020-SA8N-SS-0.0-0.5 SL-021-SA8N-SS-0.0-0.5 SL-022-SA8N-SS-0.0-0.5 SL-023-SA8N-SS-0.0-0.5 SL-036-SA8N-SS-0.0-0.5 SL-047-SA8N-SS-0.0-0.5 SL-048-SA8N-SS-0.0-0.5 SL-050-SA8N-SS-0.0-0.5 SL-131-SA8N-SS-0.0-0.5 SL-202-SA5A-SB-3.0-4.0 SL-206-SA5A-SB-4.0-5.0 SL-207-SA5A-SB-3.0-4.0 SL-227-SA5A-SB-3.0-4.0 SL-228-SA5A-SB-3.0-4.0	Manganese Strontium Chromium Copper Lead Nickel Vanadium Zinc	J (all detects) UJ (all non-detects)	A	ICP serial dilution (%D) (A)
DE125	SL-012-SA8N-SS-0.0-0.5 SL-015-SA8N-SS-0.0-0.5 SL-016-SA8N-SS-0.0-0.5 SL-018-SA8N-SS-0.0-0.5 SL-019-SA8N-SS-0.0-0.5 SL-020-SA8N-SS-0.0-0.5 SL-021-SA8N-SS-0.0-0.5 SL-022-SA8N-SS-0.0-0.5 SL-023-SA8N-SS-0.0-0.5 SL-036-SA8N-SS-0.0-0.5 SL-047-SA8N-SS-0.0-0.5 SL-048-SA8N-SS-0.0-0.5 SL-050-SA8N-SS-0.0-0.5 SL-131-SA8N-SS-0.0-0.5 EB01-SA8N-041211 SL-202-SA5A-SB-3.0-4.0 SL-206-SA5A-SB-4.0-5.0 SL-207-SA5A-SB-3.0-4.0 SL-227-SA5A-SB-3.0-4.0 SL-228-SA5A-SB-3.0-4.0	All analytes reported below the RL and above the MDL.	J (all detects)	A	Sample result verification (Z)

Santa Susana Field Laboratory
Metals - Laboratory Blank Data Qualification Summary - SDG DE125

SDG	Sample	Analyte	Modified Final Concentration	A or P	Code
DE125	SL-012-SA8N-SS-0.0-0.5	Tin	2.5U mg/Kg	A	B
DE125	SL-015-SA8N-SS-0.0-0.5	Tin	2.6U mg/Kg	A	B
DE125	SL-016-SA8N-SS-0.0-0.5	Tin	2.6U mg/Kg	A	B
DE125	SL-018-SA8N-SS-0.0-0.5	Tin	2.5U mg/Kg	A	B
DE125	SL-019-SA8N-SS-0.0-0.5	Tin	2.4U mg/Kg	A	B

SDG	Sample	Analyte	Modified Final Concentration	A or P	Code
DE125	SL-020-SA8N-SS-0.0-0.5	Tin	2.7U mg/Kg	A	B
DE125	SL-021-SA8N-SS-0.0-0.5	Tin	2.4U mg/Kg	A	B
DE125	SL-022-SA8N-SS-0.0-0.5	Tin	2.7U mg/Kg	A	B
DE125	SL-023-SA8N-SS-0.0-0.5	Tin	2.6U mg/Kg	A	B
DE125	SL-036-SA8N-SS-0.0-0.5	Tin	2.9U mg/Kg	A	B
DE125	SL-047-SA8N-SS-0.0-0.5	Tin	2.6U mg/Kg	A	B
DE125	SL-048-SA8N-SS-0.0-0.5	Tin	2.7U mg/Kg	A	B
DE125	SL-050-SA8N-SS-0.0-0.5	Tin	2.7U mg/Kg	A	B
DE125	SL-131-SA8N-SS-0.0-0.5	Tin	2.8U mg/Kg	A	B
DE125	SL-202-SA5A-SB-3.0-4.0	Tin	2.8U mg/Kg	A	B
DE125	SL-206-SA5A-SB-4.0-5.0	Tin	2.9U mg/Kg	A	B
DE125	SL-207-SA5A-SB-3.0-4.0	Tin	2.8U mg/Kg	A	B
DE125	SL-227-SA5A-SB-3.0-4.0	Tin	2.7U mg/Kg	A	B
DE125	SL-228-SA5A-SB-3.0-4.0	Tin	2.8U mg/Kg	A	B

Santa Susana Field Laboratory
Metals - Field Blank Data Qualification Summary - SDG DE125

No Sample Data Qualified in this SDG

LDC #: 25916G4 **VALIDATION COMPLETENESS WORKSHEET** Date: 8-2-11

SDG #: DE125 Level IV Page: 1 of 1

Laboratory: Lancaster Laboratories Reviewer: [illegible]

2nd Reviewer: [illegible]

METHOD: Metals (EPA SW 846 Method 6010B/6020A/7000)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 4/12/11
II.	ICP/MS Tune	A	
III.	Calibration	A	
IV.	Blanks	SW	
V.	ICP Interference Check Sample (ICS) Analysis	SW	
VI.	Matrix Spike Analysis	SW	MS/D
VII.	Duplicate Sample Analysis	A	DUP
VIII.	Laboratory Control Samples (LCS)	A	LCS/D
IX.	Internal Standard (ICP-MS)	A	
X.	Furnace Atomic Absorption QC	N	Not ut. in SDG
XI.	ICP Serial Dilution	SW	
XII.	Sample Result Verification	A	
XIII.	Overall Assessment of Data	A	
XIV.	Field Duplicates	N	
XV	Field Blanks	ND	EB=15

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: all soil except 15=water

1	SL-012-SA8N-SS-0.0-0.5	11	SL-047-SA8N-SS-0.0-0.5	21	(#1) MS	31	
2	SL-015-SA8N-SS-0.0-0.5	12	SL-048-SA8N-SS-0.0-0.5	22	MSD	32	
3	SL-016-SA8N-SS-0.0-0.5	13	SL-050-SA8N-SS-0.0-0.5	23	DUP	33	
4	SL-018-SA8N-SS-0.0-0.5	14	SL-131-SA8N-SS-0.0-0.5	24	(#7) MS	34	
5	SL-019-SA8N-SS-0.0-0.5	15	EB01-SA8N-041211	25	MSD	35	
6	SL-020-SA8N-SS-0.0-0.5	16	SL-202-SA5A-SB-3.0-4.0	26	DUP	36	
7	SL-021-SA8N-SS-0.0-0.5	17	SL-206-SA5A-SB-4.0-5.0	27		37	
8	SL-022-SA8N-SS-0.0-0.5	18	SL-207-SA5A-SB-3.0-4.0	28		38	
9	SL-023-SA8N-SS-0.0-0.5	19	SL-227-SA5A-SB-3.0-4.0	29		39	
10	SL-036-SA8N-SS-0.0-0.5	20	SL-228-SA5A-SB-3.0-4.0	30		40	

Notes:

LDC #: 25911664

VALIDATION FINDINGS CHECKLIST

Page: 1 of 2
Reviewer: CR
2nd Reviewer: [illegible]

Method: Metals (EPA SW 846 Method 6010B/7000/6020)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. ICP/MS Tune				
Were all isotopes in the tuning solution mass resolution within 0.1 amu?	✓			
Were %RSD of isotopes in the tuning solution ≤5%?	✓			
III. Calibration				
Were all instruments calibrated daily, each set-up time?	✓			
Were the proper number of standards used?	✓			
Were all initial and continuing calibration verification %Rs within the 90-110% (80-120% for mercury) QC limits?	✓			
Were all initial calibration correlation coefficients > 0.995?	✓			
IV. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.	✓			
V. ICP Interference Check Sample				
Were ICP interference check samples performed daily?	✓			
Were the AB solution percent recoveries (%R) with the 80-120% QC limits?	✓			
VI. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and duplicate (DUP) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD or MS/DUP. Soil / Water.	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the 75-125 QC limits? If the sample concentration exceeded the spike concentration by a factor of 4 or more, no action was taken.		✓		
Were the MS/MSD or duplicate relative percent differences (RPD) ≤ 20% for waters and ≤ 35% for soil samples? A control limit of +/- RL(+/-2X RL for soil) was used for samples that were ≤ 5X the RL, including when only one of the duplicate sample values were ≤ 5X the RL.		✓		
VII. Laboratory control samples				
Was an LCS anaylzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the 80-120% QC limits for water samples and laboratory established QC limits for soils?	✓			

DC #: 25116G4

VALIDATION FINDINGS CHECKLIST

Reviewer: AR
2nd Reviewer: ✓

Validation Area	Yes	No	NA	Findings/Comments
VIII. Furnace Atomic Absorption QC				
If MSA was performed, was the correlation coefficients > 0.995?			✓	
Do all applicable analysies have duplicate injections? (Level IV only)			✓	
For sample concentrations > RL, are applicable duplicate injection RSD values < 20%? (Level IV only)			✓	
Were analytical spike recoveries within the 85-115% QC limits?			✓	
IX. ICP Serial Dilution				
Was an ICP serial dilution analyzed if analyte concentrations were > 50X the MDL (ICP)/>100X the MDL(ICP/MS)?	✓	✓		
Were all percent differences (%Ds) < 10%?	✓	✓		
Was there evidence of negative interference? If yes, professional judgement will be used to qualify the data.		✓		
X. Internal Standards (EPA SW 846 Method 6020/EPA 200.8)				
Were all the percent recoveries (%R) within the 30-120% (6020)/60-125% (200.8) of the intensity of the internal standard in the associated initial calibration?	✓			
If the %Rs were outside the criteria, was a reanalysis performed?	✓			
XI. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?		✓	✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
XII. Sample Result Verification				
Were RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target analytes were detected in the field duplicates.			✓	
XV. Field blanks				
Field blanks were identified in this SDG.	✓	✓		
Target analytes were detected in the field blanks.				

LDC #: 25916 64

VALIDATION FINDINGS WORKSHEET
Sample Specific Element Reference

Reviewer: CR
2nd reviewer: [illegible]

All circled elements are applicable to each sample.

Sample ID	Matrix	Target Analyte List (TAL)
1-20		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
21-23		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
24-26		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
Analysis Method		
ICP		Al, B, Ca, Fe, Li, Mg, Mn, P, K, Na, Sr, Sn, Ti, Zr
ICP-MS		Sb, As, Ba, Be, Cd, Cr, Co, Cu, Pb, Mo, Ni, Se, Ag, Tl, V, Zn

Comments: Mercury by CVAA if performed

LDC #: 25916G4

VALIDATION FINDINGS WORKSHEET
PB/ICB/CCB QUALIFIED SAMPLES

Reviewer: OR
2nd Reviewer: [illegible]

METHOD: Trace metals (EPA SW 864 Method 6010B/6020/7000) Soil preparation factor applied: 100x x (MS: 2xdil)
Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: All Soil

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit	1	2	3	4	5	6	7	8	9	10
Cu	0.276			1.38										
P	1.406			7.03										
Sn	1.404			7.02	2.5	2.6	2.6	2.5	2.4	2.7	2.4	2.7	2.6	2.9

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit	11	12	13	14	16	17	18	19	20	
Cu	0.276			1.38										
P	1.406			7.03										
Sn	1.404			7.02	2.6	2.7	2.7	2.8	2.8	2.9	2.8	2.7	2.8	

Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: 1, 2

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit	No Qualifiers									
Mg			39.6	19.8										

Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: 13, 14, 16-20

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit	No Qualifiers									
Ti			0.54	0.27										

Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: 3-12

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit	No Qualifiers									
Ti			0.41	0.205										

LDC #: 25916G4

VALIDATION FINDINGS WORKSHEET
PB/ICB/CCB QUALIFIED SAMPLES

Page: 22 of 22
Reviewer: 2nd Reviewer:

METHOD: Trace metals (EPA SW 864 Method 6010B/6020/7000) Soil preparation factor applied: 100x x (MS: 2xdil)
Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: 3-7, 9-13

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit	No Qualifiers									
V			0.11	0.06										

Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: 14, 16-20

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit	No Qualifiers									
V			0.13	0.07										

Samples with analyte concentrations within five times the associated ICB, CCB or PB concentration are listed above with the identifications from the Validation Completeness Worksheet. These sample results were qualified as not detected, "U".
Note : a - The listed analyte concentration is the highest ICB, CCB, or PB detected in the analysis of each element.

LDC #: 25916G4

VALIDATION FINDINGS WORKSHEET
ICP Interference Check Sample

Reviewer: CR
2nd Reviewer: [illegible]

METHOD: Trace Metals (EPA SW 846 Method 6010/6020/7000)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were ICP interference check samples performed as required?
Y N N/A Were the AB solution percent recoveries (%R) within the control limits of 80-120% ?

LEVEL IV ONLY:

Y N N/A Were recalculated results acceptable? See Level IV Recalculation Worksheet for recalculations.

#	Date	ICS Identification	Analyte	Concentration (ug/L)	Limit (<MDL)	Associated Samples	Qualifications
	4/22/11	ICSA (19:07)	Mn	5	0.78	All Soil	No Qual (>10x)
	4/22/11	ICSA (21:33)	Mn	5	↓	↓	↓

Comments:

LDC #: 25916G1

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: Trace metals (EPA SW 846 Method 6010/6020/7000)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a matrix spike analyzed for each matrix in this SDG?

Y N N/A Were matrix spike percent recoveries (%R) within the control limits of 75-125? If the sample concentration exceeded the spike concentration by a factor of 4 or more, no action was taken.

Y N N/A Were all duplicate sample relative percent differences (RPD) ≤ 20% for water samples and ≤35% for soil samples?

LEVEL IV ONLY:

Y N N/A Were recalculated results acceptable? See Level IV Recalculation Worksheet for recalculations.

#	MS/MSD ID	Matrix	Analyte	MS %Recovery	MSD %Recovery	RPD (Limits)	Associated Samples	Qualifications
	24/25	S	Sb	26	18	~~[illegible]~~	all soil	J/R/A (Q) (PS=-32%)
			As		70		↓	J/UJ/A (Q)
			Sb			26		J/UJ/A (E)

Comments:

MSD.4SW

LDC #: 25916G4

VALIDATION FINDINGS WORKSHEET
ICP Serial Dilution

Page: 1 of 1
Reviewer: CR
2nd Reviewer: h

METHOD: Trace Metals (EPA SW 846 Method 6010/6020/7000)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A If analyte concentrations were > 50X the MDL (ICP) ,or >100X the MDL (ICP/MS), was a serial dilution analyzed?
Y N N/A Were ICP serial dilution percent differences (%D) ≤10%?
Y N N/A Is there evidence of negative interference? If yes, professional judgement will be used to qualify the data.

LEVEL IV ONLY:

Y N N/A Were recalculated results acceptable? See Level IV Recalculation Worksheet for recalculations.

#	Date	Diluted Sample ID	Matrix	Analyte	%D (Limits)	Associated Samples	Qualifications
		1	S	Mn	12	All Soil	J/UJ/A (A)
				Sr	11		
		7	S	Cr	28		
				Cu	29		
				Pb	15		
				Ni	36		
				V	30		
				Zn	12		

Comments:

SDILICPMS.wpd

LDC #: 25916G4

VALIDATION FINDINGS WORKSHEET
Initial and Continuing Calibration Calculation Verification

Page: 1 of 1
Reviewer: CS
2nd Reviewer: [illegible]

METHOD: Trace Metals (EPA SW 846 Method 6010/6020/7000)

An initial and continuing calibration verification percent recovery (%R) was recalculated for each type of analysis using the following formula:

$\%R = \frac{Found}{True} \times 100$

Where, Found = concentration (in ug/L) of each analyte measured in the analysis of the ICV or CCV solution
True = concentration (in ug/L) of each analyte in the ICV or CCV source

Standard ID	Type of Analysis	Element	Found (ug/L)	True (ug/L)	Recalculated %R	Reported %R	Acceptable (Y/N)
ICV	ICP (Initial calibration)	Sn	579.18	600	96.5	96.5	Y
ICV	ICP/MS (Initial calibration)	Co	487	500	97.4	97.4	
ICV	CVAA (Initial calibration)	Hg	2.48	2.5	99.2	99.2	
CCV (20:04)	ICP (Continuing calibration)	Li	494.53	500	98.9	98.9	
CCV (09:41)	ICP/MS (Continuing calibration)	Tl	25.04	25	100.2	100.2	
CCV	CVAA (Continuing calibration)	Hg	1.03	1	103	103	
	GFAA (Initial calibration)						
	GFAA (Continuing calibation)						

Comments: Refer to Calibration Verification findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

CALCLC.4SW

LDC #: 28916G4

VALIDATION FINDINGS WORKSHEET
Level IV Recalculation Worksheet

Reviewer: CR
2nd Reviewer: [illegible]

METHOD: Trace Metals (EPA SW 846 Method 6010/6020/7000)

Percent recoveries (%R) for an ICP interference check sample, a laboratory control sample and a matrix spike sample were recalculated using the following formula:

$\%R = \frac{Found}{True} \times 100$

Where, Found = Concentration of each analyte measured in the analysis of the sample. For the matrix spike calculation, Found = SSR (spiked sample result) - SR (sample result).
True = Concentration of each analyte in the source.

A sample and duplicate relative percent difference (RPD) was recalculated using the following formula:

$RPD = \frac{|S-D|}{(S+D)/2} \times 100$

Where, S = Original sample concentration
D = Duplicate sample concentration

An ICP serial dilution percent difference (%D) was recalculated using the following formula:

$\%D = \frac{|I-SDR|}{I} \times 100$

Where, I = Initial Sample Result (mg/L)
SDR = Serial Dilution Result (mg/L) (Instrument Reading x 5)

Sample ID	Type of Analysis	Element	Found / S / I (units)	True / D / SDR (units)	Recalculated %R / RPD / %D	Reported %R / RPD / %D	Acceptable (Y/N)
ICSAB	ICP interference check	Zn	18.3	20	91.5	91.5	Y
LCS	Laboratory control sample	P	9984	1000	100	100	
24	Matrix spike	Tl	(SSR-SR) 0.4332	0.4346	100	100	
23	Duplicate	Li	22.0922	21.0929	5	5	
1	ICP serial dilution	Ti	10066.89	9136.8	9	9	

Comments: Refer to appropriate worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 2591664

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: CR
2nd reviewer: h

METHOD: Trace Metals (EPA SW 846 Method 6010/6020/7000)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Have results been reported and calculated correctly?
Y N N/A Are results within the calibrated range of the instruments and within the linear range of the ICP?
Y N N/A Are all detection limits below the CRDL?

Detected analyte results for Al were recalculated and verified using the following equation:

Concentration = (RD)(FV)(Dil) / (In. Vol.)

RD = Raw data concentration
FV = Final volume (ml)
In. Vol. = Initial volume (ml) or weight (G)
Dil = Dilution factor

Recalculation:

$$\frac{100mL\,(215.88699\,mg/L)}{0.882\,(kg)} = 23977\,mg/kg$$

#	Sample ID	Analyte	Reported Concentration (mg/kg)	Calculated Concentration (mg/kg)	Acceptable (Y/N)
	1	Al	24000	24000	
		Sb	0.19	0.19	
		As	6.2	6.2	
		Ba	116	116	
		Be	0.76	0.76	
		B	16.1	16.1	
		Cd	0.33	0.33	
		Ca	19100	19100	
		Cr	30.4	30.4	
		Co	9.9	9.9	
		Cu	14.7	14.7	
		Fe	26600	26600	
		Pb	11.7	11.7	
		Li	22.1	22.1	
		Mg	6690	6690	
		Mn	476	476	
		Hg	0.025	0.025	
		Mo	0.50	0.50	
		Ni	16.6	16.6	
		P	465	465	

Note:

LDC #: 25916G 4

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: [illegible]
2nd reviewer: [illegible]

METHOD: Trace Metals (EPA SW 846 Method 6010/6020/7000)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Have results been reported and calculated correctly?
Y N N/A Are results within the calibrated range of the instruments and within the linear range of the ICP?
Y N N/A Are all detection limits below the CRDL?

Detected analyte results for Cr were recalculated and verified using the following equation:

Concentration = (RD)(FV)(Dil) / (In. Vol.)

RD = Raw data concentration
FV = Final volume (ml)
In. Vol. = Initial volume (ml) or weight (G)
Dil = Dilution factor

Recalculation:

20= (100mL)(2)(82.83ug/L) / 0.87 (1.02g)(1000) = 18.7 mg/kg

#	Sample ID	Analyte	Reported Concentration mg/kg	Calculated Concentration (mg/kg)	Acceptable (Y/N)
	1	K	5480	5480	✓
		Se	0.23	0.23	
		Ag	0.055	0.055	
		Na	98.9	98.9	
		Sr	42.9	42.9	
		Tl	0.32	0.32	
		Sn	2.5	2.5	
		Ti	1120	1120	
		V	52.7	52.7	
		Zn	77.9	77.9	
		Zr	2.7	2.7	
	20	Al	14900	14900	
		As	5.7	5.7	
		Ba	66.4	66.4	
		Be	0.65	0.65	
		B	8.6	8.6	
		Cd	0.066	0.066	
		Ca	2150	2150	
		Cr	18.7	18.7	
		Co	3.6	3.6	
		Cu	6.9	6.9	
		Fe	19500	19500	✓

LDC #: 25916G 4

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: CR
2nd reviewer: [illegible]

METHOD: Trace Metals (EPA SW 846 Method 6010/6020/7000)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Have results been reported and calculated correctly?
Y N N/A Are results within the calibrated range of the instruments and within the linear range of the ICP?
Y N N/A Are all detection limits below the CRDL?

Detected analyte results for _____ were recalculated and verified using the following equation:

Concentration = (RD)(FV)(Dil) / (In. Vol.)

RD = Raw data concentration
FV = Final volume (ml)
In. Vol. = Initial volume (ml) or weight (G)
Dil = Dilution factor

Recalculation: see previous page

#	Sample ID	Analyte	Reported Concentration (mg/KG)	Calculated Concentration (mg/KG)	Acceptable (Y/N)
	20	Pb	4.8	4.8	Y
		Li	21.1	21.1	
		Mg	3650	3650	
		Mn	116	116	
		Hg	0.0065	0.0065	
		Mo	0.34	0.34	
		Ni	9.4	9.4	
		P	179	179	
		K	1300	1300	
		Se	0.045	0.045	
		Ag	0.047	0.047	
		Na	179	179	
		Sr	16.1	16.1	
		Tl	0.23	0.23	
		Sn	2.8	2.8	
		Ti	903	903	
		V	35.2	35.2	
		Zn	38.0	38.0	

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: April 12, 2011

LDC Report Date: August 2, 2011

Matrix: Soil/Water

Parameters: Wet Chemistry

Validation Level: Level IV

Laboratory, Area IV: Lancaster Laboratories

Sample Delivery Group (SDG): DE125

Sample Identification

SL-012-SA8N-SS-0.0-0.5
SL-015-SA8N-SS-0.0-0.5
SL-016-SA8N-SS-0.0-0.5
SL-018-SA8N-SS-0.0-0.5
SL-019-SA8N-SS-0.0-0.5
SL-020-SA8N-SS-0.0-0.5
SL-021-SA8N-SS-0.0-0.5
SL-022-SA8N-SS-0.0-0.5
SL-023-SA8N-SS-0.0-0.5
SL-036-SA8N-SS-0.0-0.5
SL-047-SA8N-SS-0.0-0.5
SL-048-SA8N-SS-0.0-0.5
SL-050-SA8N-SS-0.0-0.5
SL-131-SA8N-SS-0.0-0.5
EB01-SA8N-041211
SL-202-SA5A-SB-3.0-4.0
SL-206-SA5A-SB-4.0-5.0
SL-207-SA5A-SB-3.0-4.0
SL-227-SA5A-SB-3.0-4.0
SL-228-SA5A-SB-3.0-4.0

SL-012-SA8N-SS-0.0-0.5MS
SL-012-SA8N-SS-0.0-0.5DUP
SL-019-SA8N-SS-0.0-0.5MS
SL-019-SA8N-SS-0.0-0.5DUP
SL-227-SA5A-SB-3.0-4.0MS
SL-227-SA5A-SB-3.0-4.0DUP

Introduction

This data review covers 25 soil samples and one water sample listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 9012B for Cyanide, EPA Method 300.0 for Nitrate and Fluoride, EPA SW 846 Method 7199 for Hexavalent Chromium, EPA SW 846 Methods 9045C and 9040B for pH, and EPA Method 314.0 for Perchlorate.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review (January 2010).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met with the following exceptions:

Sample	Analyte	Total Time From Sample Collection Until Analysis	Required Holding Time From Sample Collection Until Analysis	Flag	A or P
EB01-SA8N-041211	pH	54.25 hours	48 hours	J (all detects) UJ (all non-detects)	P

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

All criteria for the initial calibration of each method were met.

III. Calibration Verification

Calibration verification frequency and analysis criteria were met for each method when applicable.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No contaminant concentrations were found in the initial, continuing and preparation blanks.

Sample EB01-SA8N-041211 was identified as an equipment blank. No contaminant concentrations were found.

V. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) analyses were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Analyte	%R (Limits)	Flag	A or P
SL-012-SA8N-SS-0.0-0.5MS (SL-012-SA8N-SS-0.0-0.5 SL-015-SA8N-SS-0.0-0.5 SL-016-SA8N-SS-0.0-0.5 SL-018-SA8N-SS-0.0-0.5 SL-019-SA8N-SS-0.0-0.5 SL-020-SA8N-SS-0.0-0.5 SL-021-SA8N-SS-0.0-0.5 SL-022-SA8N-SS-0.0-0.5 SL-023-SA8N-SS-0.0-0.5 SL-036-SA8N-SS-0.0-0.5)	Fluoride	60 (80-120)	J (all detects) UJ (all non-detects)	A

VI. Duplicates

Duplicate (DUP) sample analyses were reviewed for each matrix as applicable. Results were within QC limits.

VII. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Sample Result Verification

All sample result verifications were acceptable

All analytes reported below the RL were qualified as follows:

Sample	Analyte	Flag	A or P
All samples in SDG DE125	All analytes reported below the RL and above the MDL.	J (all detects)	A

IX. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

X. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Wet Chemistry - Data Qualification Summary - SDG DE125

SDG	Sample	Analyte	Flag	A or P	Reason (Code)
DE125	EB01-SA8N-041211	pH	J (all detects) UJ (all non-detects)	P	Technical holding times (H)
DE125	SL-012-SA8N-SS-0.0-0.5 SL-015-SA8N-SS-0.0-0.5 SL-016-SA8N-SS-0.0-0.5 SL-018-SA8N-SS-0.0-0.5 SL-019-SA8N-SS-0.0-0.5 SL-020-SA8N-SS-0.0-0.5 SL-021-SA8N-SS-0.0-0.5 SL-022-SA8N-SS-0.0-0.5 SL-023-SA8N-SS-0.0-0.5 SL-036-SA8N-SS-0.0-0.5	Fluoride	J (all detects) UJ (all non-detects)	A	Matrix spike analysis (%R) (Q)
DE125	SL-012-SA8N-SS-0.0-0.5 SL-015-SA8N-SS-0.0-0.5 SL-016-SA8N-SS-0.0-0.5 SL-018-SA8N-SS-0.0-0.5 SL-019-SA8N-SS-0.0-0.5 SL-020-SA8N-SS-0.0-0.5 SL-021-SA8N-SS-0.0-0.5 SL-022-SA8N-SS-0.0-0.5 SL-023-SA8N-SS-0.0-0.5 SL-036-SA8N-SS-0.0-0.5 SL-047-SA8N-SS-0.0-0.5 SL-048-SA8N-SS-0.0-0.5 SL-050-SA8N-SS-0.0-0.5 SL-131-SA8N-SS-0.0-0.5 EB01-SA8N-041211 SL-202-SA5A-SB-3.0-4.0 SL-206-SA5A-SB-4.0-5.0 SL-207-SA5A-SB-3.0-4.0 SL-227-SA5A-SB-3.0-4.0 SL-228-SA5A-SB-3.0-4.0	All analytes reported below the RL and above the MDL.	J (all detects)	A	Sample result verification (Z)

Santa Susana Field Laboratory
Wet Chemistry – Laboratory Blank Data Qualification Summary - SDG DE125

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Wet Chemistry - Field Blank Data Qualification Summary - SDG DE125

No Sample Data Qualified in this SDG

LDC #: 25916G6

SDG #: DE125

Laboratory: Lancaster Laboratories

VALIDATION COMPLETENESS WORKSHEET

Level IV

Date: 8-2-11

Page: 1 of 1

Reviewer: OL

2nd Reviewer: V

METHOD: (Analyte) Cyanide (EPA SW846 Method 9012B), Nitrate-~~N~~, Fluoride (EPA Method 300.0), Hexavalent Chromium (EPA SW846 Method 7199), pH (~~EPA Method 150.1~~/EPA SW846 Method 9045C/9040B), Perchlorate (EPA Method 314.0)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	SW	Sampling dates: 4/12/11
IIa.	Initial calibration	A	
IIb.	Calibration verification	A	
III.	Blanks	A	
IV	Matrix Spike/Matrix Spike Duplicates	SW	MS
V	Duplicates	A	DUP
VI.	Laboratory control samples	A	LCS/D
VII.	Sample result verification	A	
VIII.	Overall assessment of data	A	
IX.	Field duplicates	N	
X.	Field blanks	ND	EB=15

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: all soil except 15=water

1	SL-012-SA8N-SS-0.0-0.5	11	SL-047-SA8N-SS-0.0-0.5	21	(~~X~~1) MS	31	
2	SL-015-SA8N-SS-0.0-0.5	12	SL-048-SA8N-SS-0.0-0.5	22	↓ DUP	32	
3	SL-016-SA8N-SS-0.0-0.5	13	SL-050-SA8N-SS-0.0-0.5	23	(~~X~~5) MS	33	
4	SL-018-SA8N-SS-0.0-0.5	14	SL-131-SA8N-SS-0.0-0.5	24	↓ DUP	34	
5	SL-019-SA8N-SS-0.0-0.5	15	EB01-SA8N-041211	25	(~~X~~9) MS	35	
6	SL-020-SA8N-SS-0.0-0.5	16	SL-202-SA5A-SB-3.0-4.0	26	↓ DUP	36	
7	SL-021-SA8N-SS-0.0-0.5	17	SL-206-SA5A-SB-4.0-5.0	27		37	
8	SL-022-SA8N-SS-0.0-0.5	18	SL-207-SA5A-SB-3.0-4.0	28		38	
9	SL-023-SA8N-SS-0.0-0.5	19	SL-227-SA5A-SB-3.0-4.0	29		39	
10	SL-036-SA8N-SS-0.0-0.5	20	SL-228-SA5A-SB-3.0-4.0	30		40	

Notes:

LDC #: 2591666

VALIDATION FINDINGS CHECKLIST

Reviewer: CK
2nd Reviewer: W

Method: Inorganics (EPA Method See cover)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.		✓		
Cooler temperature criteria was met.	✓			
II. Calibration				
Were all instruments calibrated daily, each set-up time?	✓			
Were the proper number of standards used?	✓			
Were all initial calibration correlation coefficients > 0.995?	✓			
Were all initial and continuing calibration verification %Rs within the 90-110% QC limits?	✓			
Were titrant checks performed as required? (Level IV only)			✓	
Were balance checks performed as required? (Level IV only)			✓	
III. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.			✓	
IV. Matrix spike/Matrix spike duplicates and Duplicates				
Were a matrix spike (MS) and duplicate (DUP) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD or MS/DUP. Soil / Water.	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the 75-125 QC limits? If the sample concentration exceeded the spike concentration by a factor of 4 or more, no action was taken.		✓		
Were the MS/MSD or duplicate relative percent differences (RPD) ≤ 20% for waters and ≤ 35% for soil samples? A control limit of ≤ CRDL(≤ 2X CRDL for soil) was used for samples that were ≤ 5X the CRDL, including when only one of the duplicate sample values were < 5X the CRDL.	✓			
V. Laboratory control samples				
Was an LCS anaylzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the 80-120% (85-115% for Method 300.0) QC limits?	✓			
VI. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?		✓		
Were the performance evaluation (PE) samples within the acceptance limits?			✓	

LDC #: 2591666

VALIDATION FINDINGS CHECKLIST

Reviewer: CR
2nd Reviewer: ✓

Validation Area	Yes	No	NA	Findings/Comments
VII. Sample Result Verification				
Were RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
Were detection limits < RL?	✓			
VIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
IX. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target analytes were detected in the field duplicates.			✓	
X. Field blanks				
Field blanks were identified in this SDG.	✓			
Target analytes were detected in the field blanks.		✓		

LDC #: 25916G6

VALIDATION FINDINGS WORKSHEET
Sample Specific Analysis Reference

Reviewer: CR
2nd reviewer: V

All circled methods are applicable to each sample.

Sample ID	Matrix	Parameter														
1,5-8,11		pH	TDS	Cl	F	NO_3	~~NO_2~~	SO_4	PO_4	ALK	CN^-	NH_3	TKN	TOC	CR^{6+}	ClO_4
		pH	TDS	Cl	F	NO_3	NO_2	SO_4	PO_4	ALK	CN^-	NH_3	TKN	TOC	CR^{6+}	ClO_4
2-4,9,10,12-20		pH	TDS	Cl	F	NO_3	NO_2	SO_4	PO_4	ALK	CN^-	NH_3	TKN	TOC	CR^{6+}	ClO_4
		pH	TDS	Cl	F	NO_3	NO_2	SO_4	PO_4	ALK	CN^-	NH_3	TKN	TOC	CR^{6+}	ClO_4
		pH	TDS	Cl	F	NO_3	NO_2	SO_4	PO_4	ALK	CN^-	NH_3	TKN	TOC	CR^{6+}	ClO_4
QC: 21,22		pH	TDS	Cl	F	NO_3	NO_2	SO_4	PO_4	ALK	CN^-	NH_3	TKN	TOC	CR^{6+}	ClO_4
23,24		pH	TDS	Cl	F	NO_3	NO_2	SO_4	PO_4	ALK	CN^-	NH_3	TKN	TOC	CR^{6+}	ClO_4
25,26		pH	TDS	Cl	F	NO_3	NO_2	SO_4	PO_4	ALK	CN^-	NH_3	TKN	TOC	CR^{6+}	ClO_4
		pH	TDS	Cl	F	NO_3	NO_2	SO_4	PO_4	ALK	CN^-	NH_3	TKN	TOC	CR^{6+}	ClO_4
		pH	TDS	Cl	F	NO_3	NO_2	SO_4	PO_4	ALK	CN^-	NH_3	TKN	TOC	CR^{6+}	ClO_4
		pH	TDS	Cl	F	NO_3	NO_2	SO_4	PO_4	ALK	CN^-	NH_3	TKN	TOC	CR^{6+}	ClO_4
		pH	TDS	Cl	F	NO_3	NO_2	SO_4	PO_4	ALK	CN^-	NH_3	TKN	TOC	CR^{6+}	ClO_4
		pH	TDS	Cl	F	NO_3	NO_2	SO_4	PO_4	ALK	CN^-	NH_3	TKN	TOC	CR^{6+}	ClO_4
		pH	TDS	Cl	F	NO_3	NO_2	SO_4	PO_4	ALK	CN^-	NH_3	TKN	TOC	CR^{6+}	ClO_4
		pH	TDS	Cl	F	NO_3	NO_2	SO_4	PO_4	ALK	CN^-	NH_3	TKN	TOC	CR^{6+}	ClO_4
		pH	TDS	Cl	F	NO_3	NO_2	SO_4	PO_4	ALK	CN^-	NH_3	TKN	TOC	CR^{6+}	ClO_4
		pH	TDS	Cl	F	NO_3	NO_2	SO_4	PO_4	ALK	CN^-	NH_3	TKN	TOC	CR^{6+}	ClO_4
		pH	TDS	Cl	F	NO_3	NO_2	SO_4	PO_4	ALK	CN^-	NH_3	TKN	TOC	CR^{6+}	ClO_4
		pH	TDS	Cl	F	NO_3	NO_2	SO_4	PO_4	ALK	CN^-	NH_3	TKN	TOC	CR^{6+}	ClO_4
		pH	TDS	Cl	F	NO_3	NO_2	SO_4	PO_4	ALK	CN^-	NH_3	TKN	TOC	CR^{6+}	ClO_4
		pH	TDS	Cl	F	NO_3	NO_2	SO_4	PO_4	ALK	CN^-	NH_3	TKN	TOC	CR^{6+}	ClO_4
		pH	TDS	Cl	F	NO_3	NO_2	SO_4	PO_4	ALK	CN^-	NH_3	TKN	TOC	CR^{6+}	ClO_4
		pH	TDS	Cl	F	NO_3	NO_2	SO_4	PO_4	ALK	CN^-	NH_3	TKN	TOC	CR^{6+}	ClO_4
		pH	TDS	Cl	F	NO_3	NO_2	SO_4	PO_4	ALK	CN^-	NH_3	TKN	TOC	CR^{6+}	ClO_4
		pH	TDS	Cl	F	NO_3	NO_2	SO_4	PO_4	ALK	CN^-	NH_3	TKN	TOC	CR^{6+}	ClO_4
		pH	TDS	Cl	F	NO_3	NO_2	SO_4	PO_4	ALK	CN^-	NH_3	TKN	TOC	CR^{6+}	ClO_4

Comments:

LDC #: 259166

VALIDATION FINDINGS WORKSHEET
Technical Holding Times

Reviewer: CR
2nd reviewer: [illegible]

All circled dates have exceeded the technical holding time.
Y N N/A Were all samples preserved as applicable to each method ?
Y N N/A Were all cooler temperatures within validation criteria?

Method:		9040B					
Parameters:		pH					
Technical holding time:		48hrs					
Sample ID	Sampling date	Analysis date	Analysis date	Analysis date	Analysis date	Analysis date	Qualifier
15	4/12/11 16:00	4/14/11 20:30	(7 days) (54, 28 hr)				J/UJ/P (H)

LDC #: 25116G6

VALIDATION FINDINGS WORKSHEET
Matrix Spike Analysis

Page: 1 of 1
Reviewer: CR
2nd Reviewer: [illegible]

METHOD: Inorganics, Method See case

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a matrix spike analyzed for each matrix in this SDG?

Y N N/A Were matrix spike percent recoveries (%R) within the control limits of 75-125 (85-115% for Method 300.0)? If the sample concentration exceeded the spike concentration by a factor of 4 or more, no action was taken.

LEVEL IV ONLY:

Y N N/A Were recalculated results acceptable? See Level IV Recalculation Worksheet for recalculations.

#	Date	Matrix Spike ID	Matrix	Analyte	%R	Associated Samples	Qualifications
		21	S	F	60 (80-120)	1-10	J/UJ/A (Q)

Comments:

MS.6

LDC #: 2591666

Validation Findings Worksheet
Initial and Continuing Calibration Calculation Verification

Page: 1 of 1
Reviewer: CR
2nd Reviewer: [illegible]

Method: Inorganics, Method See Cover

The correlation coefficient (r) for the calibration of Cd was recalculated.Calibration date: 3/28/11

An initial or continuing calibration verification percent recovery (%R) was recalculated for each type of analysis using the following formula:

$$\%R = \frac{\text{Found} \times 100}{\text{True}}$$

Where, Found = concentration of each analyte measured in the analysis of the ICV or CCV solution
True = concentration of each analyte in the ICV or CCV source

Type of analysis	Analyte	Standard	Conc. (ug/L)	Response	Recalculated r or r^2	Reported r or r^2	Acceptable (Y/N)
Initial calibration	Cd	s1	2	0.004	0.9999	0.9999	Y
		s2	4.00	0.01			
		s3	10.00	0.025			
		s4	25.00	0.072			
		s5	100.00	0.292			
Calibration verification	F	CCV	1.5	1.4895	99	99	
Calibration verification	CN	↓	0.15	0.13570	90	90	
Calibration verification	Co^{2+}	↓	200	198.6892	99	99	↓

Comments: Refer to Calibration Verification findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25911068

VALIDATION FINDINGS WORKSHEET
Level IV Recalculation Worksheet

Reviewer: QR
2nd Reviewer: [illegible]

METHOD: Inorganics, Method See cover

Percent recoveries (%R) for a laboratory control sample and a matrix spike sample were recalculated using the following formula:

$$\%R = \frac{Found}{True} \times 100$$

Where, Found = concentration of each analyte measured in the analysis of the sample. For the matrix spike calculation, Found = SSR (spiked sample result) - SR (sample result).
True = concentration of each analyte in the source.

A sample and duplicate relative percent difference (RPD) was recalculated using the following formula:

$$RPD = \frac{|S-D|}{(S+D)/2} \times 100$$

Where, S = Original sample concentration
D = Duplicate sample concentration

Sample ID	Type of Analysis	Element	Found / S (units)	True / D (units)	Recalculated %R / RPD	Reported %R / RPD	Acceptable (Y/N)
LCS	Laboratory control sample	Cl04	22.4	25	90	—	Y
19	Matrix spike sample	96+	(SSR-SR) 41.3	40	103	103	
22	Duplicate sample	F	3.1	3.0	3	3	

Comments: Refer to appropriate worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25966 6

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: CR
2nd reviewer: [illegible]

METHOD: Inorganics, Method See cover

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Have results been reported and calculated correctly?
Y N N/A Are results within the calibrated range of the instruments?
Y N N/A Are all detection limits below the CRQL?

Compound (analyte) results for NO_3 / F reported with a positive detect were recalculated and verified using the following equation:

Concentration =

NO_3: $y = 0.7008x - 0.0140$

F: $y = 0.3444x - 0.0005$

Recalculation: 1: $NO_3 = \frac{\left(\frac{0.2+0.014}{0.7008} \times 50mL\right)}{4.92g(0.882)} = 3.5 mg/kg$

2: $F = \left(\frac{0.086+0.0005}{0.3444} \times 50\right) / 4.92g(0.855) = 3.0 mg/kg$

#	Sample ID	Analyte	Reported Concentration (mg/kg)	Calculated Concentration (mg/kg)	Acceptable (Y/N)
0.882	1	F	2.7	2.7	Y
		NO_3	3.5	3.5	
		pH	7.90	7.90	
0.855	2	F	3.0	~~2.9~~ 3.0	
		Cr^{6+}	0.50	0.50	
		pH	7.99	7.99	

Note:

RECALC.6

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	April 12, 2011
LDC Report Date:	August 10, 2011
Matrix:	Soil
Parameters:	Total Petroleum Hydrocarbons as Extractables
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE125

Sample Identification

SL-012-SA8N-SS-0.0-0.5
SL-019-SA8N-SS-0.0-0.5
SL-020-SA8N-SS-0.0-0.5
SL-021-SA8N-SS-0.0-0.5
SL-022-SA8N-SS-0.0-0.5
SL-036-SA8N-SS-0.0-0.5
SL-047-SA8N-SS-0.0-0.5

Introduction

This data review covers 7 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8015B for Total Petroleum Hydrocarbons (TPH) as Extractables.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0% .

III. Calibration Verification

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 20.0% QC limits.

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No total petroleum hydrocarbons as extractable contaminants were found in the method blanks with the following exceptions:

Method Blank ID	Extraction Date	Compound	Concentration	Associated Samples
PBLK22109	4/20/11	EFH (C30-C40) EFH (C21-C30)	0.92 mg/Kg 0.93 mg/Kg	All samples in SDG DE125

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated method blanks.

No field blanks were identified in this SDG.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VI. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VII. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE125	All compounds reported below the RL.	J (all detects)	A

X. System Performance

The system performance was acceptable.

XI. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XII. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Total Petroleum Hydrocarbons as Extractables - Data Qualification Summary - SDG DE125

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE125	SL-012-SA8N-SS-0.0-0.5 SL-019-SA8N-SS-0.0-0.5 SL-020-SA8N-SS-0.0-0.5 SL-021-SA8N-SS-0.0-0.5 SL-022-SA8N-SS-0.0-0.5 SL-036-SA8N-SS-0.0-0.5 SL-047-SA8N-SS-0.0-0.5	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
Total Petroleum Hydrocarbons as Extractables - Laboratory Blank Data Qualification Summary - SDG DE125

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Total Petroleum Hydrocarbons as Extractables - Field Blank Data Qualification Summary - SDG DE125

No Sample Data Qualified in this SDG

LDC #: 25916G8

SDG #: DE125

Laboratory: Lancaster Laboratories

VALIDATION COMPLETENESS WORKSHEET

Level IV

Date: 8/08/11

Page: 1 of 1

Reviewer: JVG

2nd Reviewer: [illegible]

METHOD: GC TPH as Extractables (EPA SW 846 Method 8015B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 4/12/11
II	Initial calibration	A	% RSD ≤ 20 %
III.	Calibration verification/ICV	A	CCV/ICV ≤ 20 %
IV.	Blanks	SW	
V	Surrogate recovery	A	
VI.	Matrix spike/Matrix spike duplicates	N	client spec
VII.	Laboratory control samples	A	LCS
VIII.	Target compound identification	A	
IX.	Compound Quantitation and ~~CRQLs~~ RLs	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	N	
XIII.	Field blanks	N	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:

Soil

1	SL-012-SA8N-SS-0.0-0.5	11	PBLK 22109	21		31	
2	SL-019-SA8N-SS-0.0-0.5	12		22		32	
3	SL-020-SA8N-SS-0.0-0.5	13		23		33	
4	SL-021-SA8N-SS-0.0-0.5	14		24		34	
5	SL-022-SA8N-SS-0.0-0.5	15		25		35	
6	SL-036-SA8N-SS-0.0-0.5	16		26		36	
7	SL-047-SA8N-SS-0.0-0.5	17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

LDC #: 25916 G8

VALIDATION FINDINGS CHECKLIST

Reviewer: JVG
2nd Reviewer: [illegible]

Method: ✓ GC ____ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Was a linear fit used for evaluation? If yes, were all percent relative standard deviations (%RSD) < 20%?	✓			
Was a curve fit used for evaluation? If Yes, what was the acceptance criteria used?		✓		
Did the initial calibration meet the curve fit acceptance criteria?			✓	
Were the RT windows properly established?	✓			
IV. Continuing calibration				
What type of continuing calibration calculation was performed? ✓ %D or ____ %R	✓			
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) < 20%.0 or percent recoveries 80-120%?	✓			
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.	✓			
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?	✓			
If the percent recovery (%R) of one or more surrogates was outside QC limits, was a reanalysis performed to confirm %R?			✓	
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.		✓		
Was a MS/MSD analyzed every 20 samples of each matrix?		✓		
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				

LDC #: 25916 G8

VALIDATION FINDINGS CHECKLIST

Reviewer: JM
2nd Reviewer: C

Validation Area	Yes	No	NA	Findings/Comments
Were performance evaluation (PE) samples performed?		✓		
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
X. Target compound identification				
Were the retention times of reported detects within the RT windows?	✓			
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.	✓	✓		
Target compounds were detected in the field duplicates.			✓	
XV. Field blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

LDC #: 25916 G8

VALIDATION FINDINGS WORKSHEET
Blanks

Reviewer: JVG
2nd Reviewer: [illegible]

METHOD: ✓ GC ___ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were all samples associated with a given method blank?
Y N N/A Was a method blank performed for each matrix and whenever a sample extraction procedure was performed?
Y N N/A Was a method blank performed with each extraction batch?
Y N N/A Were any contaminants found in the method blanks? If yes, please see findings below.

Level IV/D Only

Y N N/A (Gasoline and aromatics only)Was a method blank analyzed with each 24 hour batch?
Y N N/A Was a method blank analyzed for each analytical / extraction batch of ≤20 samples?

Blank extraction date: 4/20/11 **Blank analysis date:** 4/28/11 **Associated samples:** All

Conc. units: mg/kg

	Compound	Blank ID	Sample Identification						
5x		PBLK22109							
4.6	EFH (C_{30} - C_{40})	0.92		All results > 5x MB					
4.7	EFH (C_{21} - C_{30})	0.93							

Blank extraction date: ___ **Blank analysis date:** ___ **Associated samples:** ___

Conc. units: ___

Compound	Blank ID	Sample Identification						

ALL CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
All contaminants within five times the method blank concentration were qualified as not detected, "U".

LDC #: 25916 G 8

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: JVG
2nd Reviewer: [illegible]

METHOD: GC ✓ HPLC _____

The calibration factors (CF), average CF, and relative standard deviation (%RSD) were recalculated for compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

Where:
A = Area of compound
C = Concentration of compound
S = Standard deviation of calibration factors
X = Mean of calibration factors

#	Standard ID	Calibration Date	Compound	Reported (2002 std)	Recalculated (2002 std)	Reported Average RRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL	4/27/2011	EFH (C8-C40)	23757.59	23757.59	23827.72	23827.72	1.8	1.8
	H4623A								

C	A
288	6842185

Conc	EFH (C8-C40)
72.0	24287.83
144.0	24100.96
288.0	23757.59
576.0	23851.75
720.0	23140.47
X=	23827.72
S=	437.084

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC # 25916 G8

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: JVG
2nd Reviewer: C

METHOD: GC ✓ HPLC ____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration percent difference (%D) values were recalculated for the compounds identified below using the following calculation:

Percent difference (%D) = 100 * (N - C)/N

Where:
N = Initial Calibration Factor or Nominal Amount
C = Calibration Factor from Continuing Calibration Standard or Calculated Amount

#	Standard ID	Calibration Date	Compound	CCV Conc	Reported Conc	Recalculated Conc	Reported % D	Recalculated %D
1	J116.69R	4/28/2011	EFH (C8-C40)	287.98	310.37	310.37	7.8	7.8

	Compound	Area	CF
CCV1	EFH (C8-C40)	7395387	23827.72

LDC #: 25916 G8

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Page: 1 of 1
Reviewer: JVG
2nd reviewer: [illegible]

METHOD: ✓ GC ___ HPLC

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: # 1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
CB2	ZB-5	2.0	1.10	56	56	0
O-TPH	↓	↓	1.38	69	69	↓

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

LDC #: 25916 G 8

VALIDATION FINDINGS WORKSHEET

Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: JG
2nd Reviewer: [illegible]

METHOD: ✓ GC __HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

%Recovery = 100 * (SSC - SC)/SA

RPD =(({SSCLCS - SSCLCSD} * 2) / (SSCLCS + SSCLCSD))*100

Where SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory Control Sample
SC = Sample concentration
LCSD = Laboratory Control Sample duplicate

LCS/LCSD samples: LCS 22109

Compound	Spike Added (mg/kg)		Spike Sample Concentration (mg/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)										
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)										
2,4,6-Trinitrotoluene (8330)										
EFH (C_{30}-C_{40})	5.01	NA	4.28	NA	85	85	—		—	

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25916 G8

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: JLG
2nd Reviewer: [illegible]

METHOD: ✓ GC ___ HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= (A)(Fv)(Df) / (RF)(Vs or Ws)(%S/100)

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound In the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID. # 1 Compound Name EFH (C_{30}-C_{40}) (13.470 min - 15.420 min)

Concentration = (4163990)(0.5 ml) / (23827.7 r)(30.4 g)(0.852) = 32.6

≈ 33 mg/kg

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications

Comments:

SAMPCALCnew.wpd

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	April 12, 2011
LDC Report Date:	August 11, 2011
Matrix:	Soil
Parameters:	Explosives
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE125

Sample Identification

SL-012-SA8N-SS-0.0-0.5
SL-019-SA8N-SS-0.0-0.5
SL-020-SA8N-SS-0.0-0.5
SL-021-SA8N-SS-0.0-0.5
SL-022-SA8N-SS-0.0-0.5
SL-047-SA8N-SS-0.0-0.5

Introduction

This data review covers 6 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8330A for Explosives.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration of compounds was performed for the primary (quantitation) column and confirmation column as required by the method.

The percent relative standard deviations (%RSD) were less than or equal to 20.0% for all compounds.

In the case where the laboratory used a calibration curve to evaluate the compounds, all coefficients of determination (r^2) were greater than or equal to 0.990 .

Retention time windows were evaluated and considered technically acceptable.

III. Calibration Verification

Calibration verification was performed at the required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 20.0% QC limits.

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

Retention times (RT) of all compounds in the calibration standards were within QC limits.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No explosive contaminants were found in the method blanks.

No field blanks were identified in this SDG.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VI. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VII. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

LCS ID (Associated Samples)	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Flag	A or P
LCS10108 (SL-012-SA8N-SS-0.0-0.5 SL-019-SA8N-SS-0.0-0.5 SL-020-SA8N-SS-0.0-0.5 SL-021-SA8N-SS-0.0-0.5 SL-047-SA8N-SS-0.0-0.5 PBLK10108)	PETN	126 (80-120)	-	-	J (all detects)	P
LCS04116 (SL-022-SA8N-SS-0.0-0.5 PBLK04116)	Nitrobenzene PETN	124 (80-120) 124 (80-120)	- -	- -	J (all detects) J (all detects)	P

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE125	All compounds reported below the RL.	J (all detects)	A

X. System Performance

The system performance was acceptable.

XI. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XII. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Explosives - Data Qualification Summary - SDG DE125

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE125	SL-012-SA8N-SS-0.0-0.5 SL-019-SA8N-SS-0.0-0.5 SL-020-SA8N-SS-0.0-0.5 SL-021-SA8N-SS-0.0-0.5 SL-047-SA8N-SS-0.0-0.5	PETN	J (all detects)	P	Laboratory control samples (%R) (L)
DE125	SL-022-SA8N-SS-0.0-0.5	Nitrobenzene PETN	J (all detects) J (all detects)	P	Laboratory control samples (%R) (L)
DE125	SL-012-SA8N-SS-0.0-0.5 SL-019-SA8N-SS-0.0-0.5 SL-020-SA8N-SS-0.0-0.5 SL-021-SA8N-SS-0.0-0.5 SL-022-SA8N-SS-0.0-0.5 SL-047-SA8N-SS-0.0-0.5	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and RLs (Z)

Santa Susana Field Laboratory
Explosives - Laboratory Blank Data Qualification Summary - SDG DE125

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Explosives - Field Blank Data Qualification Summary - SDG DE125

No Sample Data Qualified in this SDG

LDC #: 25916G40

SDG #: DE125

Laboratory: Lancaster Laboratories

VALIDATION COMPLETENESS WORKSHEET

Level IV

Date: 8/08/11

Page: 1 of 1

Reviewer: DG

2nd Reviewer: C

METHOD: HPLC Explosives (EPA SW 846 Method 8330A)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 4/12/11
II	Initial calibration	A	% RSD ≤ 20 ✓ r✓
III.	Calibration verification/ICV	A	CCV/ICV ≤ 20 ✓
IV.	Blanks	A	
V	Surrogate recovery	A	
VI.	Matrix spike/Matrix spike duplicates	N	Client spec
VII.	Laboratory control samples	SW	LCS/D
VIII.	Target compound identification	A	
IX.	Compound Quantitation and ~~CRQLs~~ RLs	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	N	
XIII.	Field blanks	N	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:

Soil

1	SL-012-SA8N-SS-0.0-0.5	11	PBLK 10108	21		31	
2	SL-019-SA8N-SS-0.0-0.5	12 ✓	PBLK 04116	22		32	
3	SL-020-SA8N-SS-0.0-0.5	13		23		33	
4	SL-021-SA8N-SS-0.0-0.5	14		24		34	
5 ✓	SL-022-SA8N-SS-0.0-0.5	15		25		35	
6	SL-047-SA8N-SS-0.0-0.5	16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes: (All results reported from chromjack. ad)

LDC #: 25916 G40

VALIDATION FINDINGS CHECKLIST

Reviewer: JM
2nd Reviewer: C

Method: ____ GC ✓ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Was a linear fit used for evaluation? If yes, were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation? If Yes, what was the acceptance criteria used?		✓		
Did the initial calibration meet the curve fit acceptance criteria?			✓	
Were the RT windows properly established?	✓			
IV. Continuing calibration				
What type of continuing calibration calculation was performed? ✓ %D or ____ %R	✓			
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20%.0 or percent recoveries 80-120%?	✓			
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?	✓			
If the percent recovery (%R) of one or more surrogates was outside QC limits, was a reanalysis performed to confirm %R?			✓	
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.		✓		
Was a MS/MSD analyzed every 20 samples of each matrix?		✓		
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?		✓		
IX. Regional Quality Assurance and Quality Control				

LDC #: 25916G40

VALIDATION FINDINGS CHECKLIST

Reviewer: JM
2nd Reviewer: A

Validation Area	Yes	No	NA	Findings/Comments
Were performance evaluation (PE) samples performed?		✓		
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
X. Target compound identification				
Were the retention times of reported detects within the RT windows?	✓			
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XV. Field blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

VALIDATION FINDINGS WORKSHEET

METHOD: ____GC ___/HPLC

8310	8330	8151	8141	8141(Con't)	8021B
A. Acenaphthene	A. HMX	A. 2,4-D	A. Dichlorvos	V. Fensulfothion	V. Benzene
B. Acenaphthylene	B. RDX	B. 2,4-DB	B. Mevinphos	W. Bolstar	CC. Toluene
C. Anthracene	C. 1,3,5-Trinitrobenzene	C. 2,4,5-T	C. Demeton-O	X. EPN	EE. Ethyl Benzene
D. Benzo(a)anthracene	D. 1,3-Dinitrobenzene	D. 2,4,5-TP	D. Demeton-S	Y. Azinphos-methyl	SSS. O-Xylene
E. Benzo(a)pyrene	E. Tetryl	E. Dinoseb	E. Ethoprop	Z. Coumaphos	RRR. MP-Xylene
F. Benzo(b)fluoranthene	F. Nitrobenzene	F. Dichlorprop	F. Naled	AA. Parathion	GG. Total Xylene
G. Benzo(g,h,i)perylene	G. 2.4.6-Trinitrotoluene	G. Dicamba	G. Sulfotep	BB. Trichloronate	
H. Benzo(k)fluoranthene	H. 4-Amino-2,6-dinitrotoluene	H. Dalapon	H. Phorate	CC. Trichlorinate	
I. Chrysene	I. 2-Amino-4,6-dinitrotoluene	I. MCPP	I. Dimethoate	DD. Trifluralin	
J. Dibenz(a,h)anthracene	J. 2,4-Dinitrotoluene	J. MCPA	J. Diazinon	EE. Def	
K. Fluoranthene	K. 2,6-Dinitrotoluene	K. Pentachlorophenol	K. Disulfoton	FF. Prowl	
L. Fluorene	L. 2-Nitrotoluene	L. 2,4,5-TP (silvex)	L. Parathion-methyl	GG. Ethion	
M. Indeno(1,2,3-cd)pyrene	M. 3-Nitrotoluene	M. Silvex	M. Ronnel	HH. Famphur	
N. Naphthalene	N. 4-Nitrotoluene		N. Malathion	II. Phosmet	
O. Phenanthrene	O. Nitroglycerin		O. Chlorpyrifos	JJ. Tetrachlorvinphos	
P. Pyrene	P. PETN		P. Fenthion	KK. Demeton (total)	
Q.	Q		Q. Parathion-ethyl		
R.			R. Trichlornate		
S.			S. Merphos		
			T. Stirofos		
			U. Tokuthion		

Notes:_____

LSTNEW.WPD

LDC #: 25916G40

VALIDATION FINDINGS WORKSHEET
Laboratory Control Samples (LCS)

Page: 1 of 1
Reviewer: DVG
2nd Reviewer: [illegible]

METHOD: ___ GC ✓ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were a laboratory control samples (LCS) and laboratory control sample duplicate (LCSD) analyzed for each matrix in this SDG?

Y N N/A Were the LCS percent recoveries (%R) and relative percent differences (RPD) within the QC limits?

Level IV/D Only

Y N N/A Was an LCS analyzed every 20 samples for each matrix or whenever a sample extraction was performed?

#	LCS/LCSD ID	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
	LCS 10108	P	126 (80-120)	( )	( )	1-4, 6, PBLK 10108	J dets/P (L)
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
	LCS04116	F	124 (80-120)	( )	( )	5, PBLK04116	
		P	124 ( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
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			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		

LDC #: 25916 G40

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: JVG
2nd Reviewer: A

METHOD: GC _____ HPLC ✓

The calibration factors (CF), average CF, and relative standard deviation (%RSD) were recalculated for compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

Where:
A = Area of compound
C = Concentration of compound
S = Standard deviation of calibration factors
X = Mean of calibration factors

#	Standard ID	Calibration Date	Compound	Reported (2002 std)	Recalculated (2002 std)	Reported Average RRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL	5/3/2011	RDX	86.39	86.39	92.776	92.776	12.3	12.3
	X6329A		2,4,6-TNT	194.06	194.07	195.53	195.53	3.2	3.2

C	A
498.5	43066.9
500.5	97129.6

Conc	RDX
29.6	112.02
99.7	94.49
498.5	86.39
997.0	85.92
1994.0	85.06
X=	92.78
S=	11.408

	2,4,6-TNT
30.03	187.99
100.10	205.59
500.50	194.06
1001.00	194.93
2002.00	195.09
X=	195.53
S=	6.340

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC # 25916 G40

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: JVG
2nd Reviewer: [illegible]

METHOD: GC____HPLC ✓

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration percent difference (%D) values were recalculated for the compounds identified below using the following calculation:

Percent difference (%D) = 100 * (N - C)/N

Where:
N = Initial Calibration Factor or Nominal Amount
C = Calibration Factor from Continuing Calibration Standard or Calculated Amount

#	Standard ID	Calibration Date	Compound	CCV Conc	Reported Conc	Recalculated Conc	Reported % D	Recalculated %D
1	2E12119.39R	5/3/2011	RDX	987.00	914.98	914.98	7.3	7.3
			2,4,6-TNT	1001.00	996.77	996.78	0.4	0.4
2	2E12119.51R	5/3/2011	RDX	493.50	461.76	461.76	6.4	6.4
			2,4,6-TNT	500.50	495.32	495.33	1.0	1.0
3	2E12119.63R	5/4/2011	RDX	987.00	926.36	926.36	6.1	6.1
			2,4,6-TNT	1001.00	1008.00	1008.00	0.7	0.7

Compound	CF	CCV1 Area	CCV2 Area	CCV3 Area
RDX	92.776	84888	42840	85944
2,4,6-TNT	195.53	194902	96852	197097

LDC #: 25916 G 40

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Page: 1 of 1
Reviewer: JVG
2nd reviewer: A

METHOD: ___ GC ✓ HPLC

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
2-Nitro-m-xylene	Chrompack	2000	2322.4	116	116	0

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

LDC #: 25916 G40

VALIDATION FINDINGS WORKSHEET

Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Page: 1 of 1
Reviewer: JVG
2nd Reviewer:

METHOD: ___ GC ✓ HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

%Recovery = 100 * (SSC - SC)/SA

RPD =(({SSCLCS - SSCLCSD} * 2) / (SSCLCS + SSCLCSD))*100

Where SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory Control Sample
SC = Sample concentration
LCSD = Laboratory Control Sample duplicate

LCS/LCSD samples: LCS 10108

Compound	Spike Added (ug/kg)		Spike Sample Concentration (ug/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)										
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)	2000.25	NA	2179.66	NA	109	109				
2,4,6-Trinitrotoluene (8330)	1999.2	↓	2370.83	↓	119	119				

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25916 G 40

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: NG
2nd Reviewer: A

METHOD: __ GC ✓ HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= (A)(Fv)(Df) / (RF)(Vs or Ws)(%S/100)

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound In the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID._____ Compound Name MD

Concentration =_____

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications

Comments:

SAMPCALCnew.wpd

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	April 12, 2011
LDC Report Date:	August 9, 2011
Matrix:	Soil
Parameters:	Terphenyls
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE125

Sample Identification

SL-012-SA8N-SS-0.0-0.5
SL-019-SA8N-SS-0.0-0.5
SL-020-SA8N-SS-0.0-0.5
SL-021-SA8N-SS-0.0-0.5
SL-022-SA8N-SS-0.0-0.5
SL-047-SA8N-SS-0.0-0.5

Introduction

This data review covers 6 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8015B for Terphenyls.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0% .

III. Calibration Verification

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 20.0% QC limits.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No terphenyl contaminants were found in the method blanks.

No field blanks were identified in this SDG.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VI. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VII. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE125	All compounds reported below the RL.	J (all detects)	A

X. System Performance

The system performance was acceptable.

XI. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XII. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Terphenyls - Data Qualification Summary - SDG DE125

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE125	SL-012-SA8N-SS-0.0-0.5 SL-019-SA8N-SS-0.0-0.5 SL-020-SA8N-SS-0.0-0.5 SL-021-SA8N-SS-0.0-0.5 SL-022-SA8N-SS-0.0-0.5 SL-047-SA8N-SS-0.0-0.5	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
Terphenyls - Laboratory Blank Data Qualification Summary - SDG DE125

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Terphenyls - Field Blank Data Qualification Summary - SDG DE125

No Sample Data Qualified in this SDG

LDC #: 25916G41 **VALIDATION COMPLETENESS WORKSHEET** Date: 8/08/11

SDG #: DE125 Level IV Page: 1 of 1

Laboratory: Lancaster Laboratories Reviewer: [illegible]

2nd Reviewer: [illegible]

METHOD: GC Terphenyls (EPA SW 846 Method 8015B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 4/12/11
II	Initial calibration	A	% RSD ≤ 20 %
III.	Calibration verification ~~ICV~~	A	CCV ~~ICV~~ ≤ 20 %
IV.	Blanks	A	
V	Surrogate recovery	A	
VI.	Matrix spike/Matrix spike duplicates	N	Client Spec
VII.	Laboratory control samples	A	LCS
VIII.	Target compound identification	A	
IX.	Compound Quantitation and ~~CRQLs~~ RLs	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	N	
XIII.	Field blanks	N	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: Soil

1	SL-012-SA8N-SS-0.0-0.5	11	PBLK 22104	21		31	
2	SL-019-SA8N-SS-0.0-0.5	12		22		32	
3	SL-020-SA8N-SS-0.0-0.5	13		23		33	
4	SL-021-SA8N-SS-0.0-0.5	14		24		34	
5	SL-022-SA8N-SS-0.0-0.5	15		25		35	
6	SL-047-SA8N-SS-0.0-0.5	16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

LDC #: 25916 G41

VALIDATION FINDINGS CHECKLIST

Reviewer: JVG
2nd Reviewer: [illegible]

Method: ✓ GC ____ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Was a linear fit used for evaluation? If yes, were all percent relative standard deviations (%RSD) < 20%?	✓			
Was a curve fit used for evaluation? If Yes, what was the acceptance criteria used?		✓		
Did the initial calibration meet the curve fit acceptance criteria?			✓	
Were the RT windows properly established?	✓			
IV. Continuing calibration				
What type of continuing calibration calculation was performed? ✓ %D or ____ %R	✓			
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) < 20%.0 or percent recoveries 80-120%?	✓			
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?	✓			
If the percent recovery (%R) of one or more surrogates was outside QC limits, was a reanalysis performed to confirm %R?			✓	
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.		✓		
Was a MS/MSD analyzed every 20 samples of each matrix?		✓		
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				

LDC #: 25 916 641

VALIDATION FINDINGS CHECKLIST

Reviewer: JVG
2nd Reviewer: A

Validation Area	Yes	No	NA	Findings/Comments
Were performance evaluation (PE) samples performed?		✓		
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
X. Target compound identification				
Were the retention times of reported detects within the RT windows?	✓			
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XV. Field blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

LDC #: 25916 G41

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: JVG
2nd Reviewer: [illegible]

METHOD: GC ✓ HPLC _____

The calibration factors (CF), average CF, and relative standard deviation (%RSD) were recalculated for compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

Where:
A = Area of compound
C = Concentration of compound
S = Standard deviation of calibration factors
X = Mean of calibration factors

#	Standard ID	Calibration Date	Compound	Reported (15.52 std)	Recalculated (15.52 std)	Reported Average RRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL	4/18/2011	m-Terphenyl	34216.47	34216.47	33038.04	33038.04	2.4	2.4
	H6611B								

C	A
15.52	531039.6

Conc	m-Terphenyl
3.88	32598.79
7.76	32453.61
15.52	34216.47
31.04	33538.43
38.80	32382.91
X=	33038.04
S=	806.657

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC # 25916 G1

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Page: 1 of 1
Reviewer: JVG
2nd Reviewer: [illegible]

METHOD: GC ✓ HPLC____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration percent difference (%D) values were recalculated for the compounds identified below using the following calculation:

Percent difference (%D) = 100 * (N - C)/N

Where:
N = Initial Calibration Factor or Nominal Amount
C = Calibration Factor from Continuing Calibration Standard or Calculated Amount

#	Standard ID	Calibration Date	Compound	CCV Conc	Reported Conc	Recalculated Conc	Reported % D	Recalculated %D
1	R104.41R	4/19/2011	m-Terphenyl	31.04	31.66	31.66	2.0	2.0
2	R104.52R	4/20/2011	m-Terphenyl	31.04	32.09	32.09	3.4	3.4
3	R104.63R	4/20/2011	m-Terphenyl	31.04	32.13	32.13	3.5	3.5

	Compound	Area	CF
CCV1	m-Terphenyl	1045923	33038.04
CCV2	m-Terphenyl	1060351	33038.04
CCV3	m-Terphenyl	1061568	33038.04

LDC #: 25916 G4)

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Page: 1 of 1
Reviewer: JVB
2nd reviewer: CA

METHOD: ✓ GC ___ HPLC

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
n-Triacontane-d62 ✓	ZB-5	0.33	0.296	89	89	0

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

LDC #: 25 916 G4

VALIDATION FINDINGS WORKSHEET

Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Page: 1 of 1
Reviewer: SJG
2nd Reviewer: CA

METHOD: ___ GC ___HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

%Recovery = 100 * (SSC - SC)/SA

RPD =(({SSCLCS - SSCLCSD} * 2) / (SSCLCS + SSCLCSD))*100

Where SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory Control Sample
SC = Sample concentration
LCSD = Laboratory Control Sample duplicate

LCS/LCSD samples: LCS 22104

Compound	Spike Added (mg/kg)		Spike Sample Concentration (mg/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)										
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)										
2,4,6-Trinitrotoluene (8330)										
m-Terphenyl (8015)	1.68	NA	1.38	NA	82	82				

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25916 G 41

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: JVG
2nd Reviewer: [illegible]

METHOD: ✓ GC __ HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= (A)(Fv)(Df) / (RF)(Vs or Ws)(%S/100)

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound In the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID._____ Compound Name ND

Concentration =_____

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications

Comments: _____

SAMPCALCnew.wpd

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: April 12, 2011

LDC Report Date: August 9, 2011

Matrix: Soil

Parameters: Alcohols

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE125

Sample Identification

SL-012-SA8N-SS-0.0-0.5
SL-019-SA8N-SS-0.0-0.5
SL-020-SA8N-SS-0.0-0.5
SL-021-SA8N-SS-0.0-0.5
SL-022-SA8N-SS-0.0-0.5
SL-047-SA8N-SS-0.0-0.5

Introduction

This data review covers 6 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8015B for Alcohols.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0%.

Retention time windows were evaluated and considered technically acceptable.

III. Calibration Verification

Calibration verification was performed at required frequencies.

The percent differences (%D) of calibration factors in continuing standard mixtures were within the 20.0% QC limits.

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

Retention times (RT) of all compounds in the calibration standards were within QC limits.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No alcohol contaminants were found in the method blanks.

No field blanks were identified in this SDG.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VI. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VII. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE125	All compounds reported below the RL.	J (all detects)	A

X. System Performance

The system performance was acceptable.

XI. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XII. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Alcohols - Data Qualification Summary - SDG DE125

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE125	SL-012-SA8N-SS-0.0-0.5 SL-019-SA8N-SS-0.0-0.5 SL-020-SA8N-SS-0.0-0.5 SL-021-SA8N-SS-0.0-0.5 SL-022-SA8N-SS-0.0-0.5 SL-047-SA8N-SS-0.0-0.5	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
Alcohols - Laboratory Blank Data Qualification Summary - SDG DE125

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Alcohols - Field Blank Data Qualification Summary - SDG DE125

No Sample Data Qualified in this SDG

LDC #: 25916G43 **VALIDATION COMPLETENESS WORKSHEET** Date: 8/08/11
SDG #: DE125 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: JVG
2nd Reviewer: A

METHOD: GC Alcohols (EPA SW 846 Method 8015B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 4/12/11
II	Initial calibration	A	% RSD ≤ 20%
III.	Calibration verification/ICV	A	CCV/ICV ≤ 20%
IV.	Blanks	A	
V	Surrogate recovery	A	
VI.	Matrix spike/Matrix spike duplicates	N	Client Spec
VII.	Laboratory control samples	A	LCS
VIII.	Target compound identification	A	
IX.	Compound Quantitation and ~~CRQLs~~ RL	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	N	
XIII.	Field blanks	N	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: Soil

1	SL-012-SA8N-SS-0.0-0.5	11	PBLK 32103	21		31	
2	SL-019-SA8N-SS-0.0-0.5	12		22		32	
3	SL-020-SA8N-SS-0.0-0.5	13		23		33	
4	SL-021-SA8N-SS-0.0-0.5	14		24		34	
5	SL-022-SA8N-SS-0.0-0.5	15		25		35	
6	SL-047-SA8N-SS-0.0-0.5	16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

LDC #: 25916 G43

VALIDATION FINDINGS CHECKLIST

Reviewer: JVG
2nd Reviewer: C

Method: ✓ GC _____ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Was a linear fit used for evaluation? If yes, were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation? If Yes, what was the acceptance criteria used?		✓		
Did the initial calibration meet the curve fit acceptance criteria?			✓	
Were the RT windows properly established?	✓			
IV. Continuing calibration				
What type of continuing calibration calculation was performed? ✓ %D or ____ %R	✓			
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) < 20%.0 or percent recoveries 80-120%?	✓			
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?	✓			
If the percent recovery (%R) of one or more surrogates was outside QC limits, was a reanalysis performed to confirm %R?			✓	
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.		✓		
Was a MS/MSD analyzed every 20 samples of each matrix?		✓		
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				

LDC #: 25916 G43

VALIDATION FINDINGS CHECKLIST

Reviewer: JG
2nd Reviewer: [illegible]

Validation Area	Yes	No	NA	Findings/Comments
Were performance evaluation (PE) samples performed?		✓		
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
X. Target compound identification				
Were the retention times of reported detects within the RT windows?	✓			
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XV. Field blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

LDC #: 25916 G43

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: JVG
2nd Reviewer: [illegible]

METHOD: GC ✓ HPLC _____

The calibration factors (CF), average CF, and relative standard deviation (%RSD) were recalculated for compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

Where:
H = Height of compound
C = Concentration of compound
S = Standard deviation of calibration factors
X = Mean of calibration factors

#	Standard ID	Calibration Date	Compound	Reported (CF 5000 std)	Recalculated (CF 5000 std)	Reported Average RRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL	3/18/2011	Methanol	3.054	3.054	3.268	3.268	9.3	9.3
	H2739B								

C	H
5000	15272.39

Conc	Methanol
1000	3.325
2500	3.169
5000	3.054
10000	3.021
2.37	3.769
X=	3.268
S=	0.305

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC # 29169 93

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: JVG
2nd Reviewer: A

METHOD: GC ✓ HPLC_____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration percent difference (%D) values were recalculated for the compounds identified below using the following calculation:

Percent difference (%D) = 100 * (N - C)/N

Where: N = Initial Calibration Factor or Nominal Amount
C = Calibration Factor from Continuing Calibration Standard or Calculated Amount

#	Standard ID	Calibration Date	Compound	CCV Conc	Reported Conc	Recalculated Conc	Reported % D	Recalculated %D
1	0003	4/13/2011	Methanol	2500	2382.57	2252.49	9.9	9.9
	H2739B							
2	0012	4/13/2011	Methanol	2500	2538.03	2538.03	1.5	1.5
	H2739B							
3	0025	4/13/2011	Methanol	2500	2382.57	2553.33	2.1	2.1
	H2739B							

	Compound	Height	CF
CCV1	Methanol	7360	3.268
CCV2	Methanol	8293	3.268
CCV3	Methanol	8343	3.268

LDC #: 25916 G f3

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Page: 1 of 1
Reviewer: JVG
2nd reviewer: [illegible]

METHOD: ___ GC ___ HPLC

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: # 1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
Acetone	~~RTX-1301~~	2500	1762.1	70	70	0

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

LDC #: 25916 G43

VALIDATION FINDINGS WORKSHEET

Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: DVG
2nd Reviewer: A

METHOD: ✓ GC __HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

%Recovery = 100 * (SSC - SC)/SA

RPD =(({SSCLCS - SSCLCSD} * 2) / (SSCLCS + SSCLCSD))*100

Where SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory Control Sample
SC = Sample concentration
LCSD = Laboratory Control Sample duplicate

LCS/LCSD samples: LCS32103

Compound	Spike Added (ug/kg)		Spike Sample Concentration (ug/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)										
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)										
2,4,6-Trinitrotoluene (8330)										
Methanol (8015)	2500	NA	2103.6	NA	84	84	—			

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25 916 643

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: MC
2nd Reviewer: A

METHOD: ✓ GC __ HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= $\frac{(A)(Fv)(Df)}{(RF)(Vs \text{ or } Ws)(\%S/100)}$

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound In the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID._____ Compound Name MD

Concentration =_____

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications

Comments: _____

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Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	April 12, 2011
LDC Report Date:	August 10, 2011
Matrix:	Soil
Parameters:	Glycols
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE125

Sample Identification

SL-012-SA8N-SS-0.0-0.5
SL-015-SA8N-SS-0.0-0.5
SL-016-SA8N-SS-0.0-0.5
SL-019-SA8N-SS-0.0-0.5
SL-020-SA8N-SS-0.0-0.5
SL-021-SA8N-SS-0.0-0.5
SL-022-SA8N-SS-0.0-0.5
SL-047-SA8N-SS-0.0-0.5
SL-048-SA8N-SS-0.0-0.5
SL-050-SA8N-SS-0.0-0.5

Introduction

This data review covers 10 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8015B for Glycols.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0%.

Retention time windows were evaluated and considered technically acceptable.

III. Calibration Verification

Calibration verification was performed at required frequencies.

The percent differences (%D) of calibration factors in continuing standard mixtures were within the 20.0% QC limits.

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

Retention times (RT) of all compounds in the calibration standards were within QC limits.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No glycol contaminants were found in the method blanks.

No field blanks were identified in this SDG.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VI. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VII. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE125	All compounds reported below the RL.	J (all detects)	A

X. System Performance

The system performance was acceptable.

XI. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XII. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Glycols - Data Qualification Summary - SDG DE125

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE125	SL-012-SA8N-SS-0.0-0.5 SL-015-SA8N-SS-0.0-0.5 SL-016-SA8N-SS-0.0-0.5 SL-019-SA8N-SS-0.0-0.5 SL-020-SA8N-SS-0.0-0.5 SL-021-SA8N-SS-0.0-0.5 SL-022-SA8N-SS-0.0-0.5 SL-047-SA8N-SS-0.0-0.5 SL-048-SA8N-SS-0.0-0.5 SL-050-SA8N-SS-0.0-0.5	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
Glycols - Laboratory Blank Data Qualification Summary - SDG DE125

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Glycols - Field Blank Data Qualification Summary - SDG DE125

No Sample Data Qualified in this SDG

LDC #: 25~~786~~G45 (916)

SDG #: DE125

Laboratory: Lancaster Laboratories

VALIDATION COMPLETENESS WORKSHEET

Level IV

Date: 8/08/11

Page: 1 of 1

Reviewer: JG

2nd Reviewer: [illegible]

METHOD: GC Glycols (EPA SW 846 Method 8015B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 4/12/11
II	Initial calibration	A	% RSD ≤ 20%
III.	Calibration verification/ICV	A	CCV/ICV ≤ 20%
IV.	Blanks	A	
V	Surrogate recovery	A	
VI.	Matrix spike/Matrix spike duplicates	N	Client Spec
VII.	Laboratory control samples	A	LCS
VIII.	Target compound identification	A	
IX.	Compound Quantitation and ~~CRQLs~~ RL	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	N	
XIII.	Field blanks	N	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: Soil

1 1	SL-012-SA8N-SS-0.0-0.5	11 1	PBLK21105	21		31	
2 1	SL-015-SA8N-SS-0.0-0.5	12 1	PBLK01109	22		32	
3 1	SL-016-SA8N-SS-0.0-0.5	13 1	PBLK03110	23		33	
4 1	SL-019-SA8N-SS-0.0-0.5	14		24		34	
5 1	SL-020-SA8N-SS-0.0-0.5	15		25		35	
6 1	SL-021-SA8N-SS-0.0-0.5	16		26		36	
7 3	SL-022-SA8N-SS-0.0-0.5	17		27		37	
8 3	SL-047-SA8N-SS-0.0-0.5	18		28		38	
9 2	SL-048-SA8N-SS-0.0-0.5	19		29		39	
10 2	SL-050-SA8N-SS-0.0-0.5	20		30		40	

Notes:

LDC #: 25916 G45

VALIDATION FINDINGS CHECKLIST

Reviewer: JVL
2nd Reviewer: C

Method: ✓ GC _____ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Was a linear fit used for evaluation? If yes, were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation? If Yes, what was the acceptance criteria used?		✓		
Did the initial calibration meet the curve fit acceptance criteria?			✓	
Were the RT windows properly established?	✓			
IV. Continuing calibration				
What type of continuing calibration calculation was performed? ✓ %D or ____ %R	✓			
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20%.0 or percent recoveries 80-120%?	✓			
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?	✓			
If the percent recovery (%R) of one or more surrogates was outside QC limits, was a reanalysis performed to confirm %R?			✓	
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.		✓		
Was a MS/MSD analyzed every 20 samples of each matrix?		✓		
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				

LDC #: 25916 G45

VALIDATION FINDINGS CHECKLIST

Reviewer: JMB
2nd Reviewer: C

Validation Area	Yes	No	NA	Findings/Comments
Were performance evaluation (PE) samples performed?		✓		
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
X. Target compound identification				
Were the retention times of reported detects within the RT windows?	✓			
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XV. Field blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

LDC #: 25916 G45

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: JVG
2nd Reviewer: A

METHOD: GC / HPLC _____

The calibration factors (CF), average CF, and relative standard deviation (%RSD) were recalculated for compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

Where:
H = Height of compound
C = Concentration of compound
S = Standard deviation of calibration factors
X = Mean of calibration factors

#	Standard ID	Calibration Date	Compound	Reported (211.111 std)	Recalculated (211.111 std)	Reported Average RRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL	4/18/2011	Ethylene glycol	285.9390	285.9389	286.1358	286.1358	14.2	14.2
	H6612A	(GLF108A)							
2	ICAL	4/19/2011	Ethylene glycol	263.403	263.403	268.077	268.077	15.50	15.50
	H6612B	(GLF109A)							
3	ICAL	4/20/2011	Ethylene glycol	270.764	270.764	268.751	268.751	17.70	17.70
	H6612A	(GLF110A)							

	C	H
ICAL 1	211.111	60364.84
ICAL 2	211.111	55607.25
ICAL 3	211.111	57161.27

	ICAL1	ICAL2	ICAL3
Conc	Ethylene glycol	Ethylene glycol	Ethylene glycol
52.778	229.670	213.977	204.675
105.556	266.975	248.010	242.796
211.111	285.939	263.403	270.764
316.667	314.273	293.111	299.586
527.778	333.822	321.883	325.935
X=	286.1358	268.077	268.7512
S=	40.685	41.452	47.445

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC # 25916G45

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: JVG
2nd Reviewer: [illegible]

METHOD: GC ✓ HPLC ____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration percent difference (%D) values were recalculated for the compounds identified below using the following calculation:

Percent difference (%D) = 100 * (N - C)/N

Where: N = Initial Calibration Factor or Nominal Amount
C = Calibration Factor from Continuing Calibration Standard or Calculated Amount

#	Standard ID	Calibration Date	Compound	CCV Conc	Reported Conc	Recalculated Conc	Reported % D	Recalculated %D
1	F108.0022	4/18/2011	Ethylene glycol	105.56	106.34	106.34	0.7	0.7
2	F109B.0012	4/19/2011	Ethylene glycol	302.10	333.75	333.75	10.5	10.5
3	F110.0013	4/20/2011	Ethylene glycol	302.10	340.94	340.94	12.9	12.9

	Height	CF
CCV1	30428	286.14
CCV2	89471	268.08
CCV3	91628	268.75

LDC #: 25916 G45

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Page: 1 of 1
Reviewer: JVG
2nd reviewer: [illegible]

METHOD: ✓ GC ___ HPLC

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
Tetramethylene glycol	ZB-Wax	192	177	92	92	0

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

LDC #: 25916 G45

VALIDATION FINDINGS WORKSHEET

Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Page: 1 of 1
Reviewer: DVG
2nd Reviewer: [illegible]

METHOD: ___ GC ___ HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

%Recovery = 100 * (SSC - SC)/SA

RPD =(({SSCLCS - SSCLCSD} * 2) / (SSCLCS + SSCLCSD))*100

Where SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory Control Sample
SC = Sample concentration
LCSD = Laboratory Control Sample duplicate

LCS/LCSD samples: LCS21105

Compound	Spike Added (mg/kg)		Spike Sample Concentration (mg/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)										
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)										
2,4,6-Trinitrotoluene (8330)										
E. glycol (8015)	198.16	NA	206.24	NA	104	104				

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25916G 45

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: DVG
2nd Reviewer: [illegible]

METHOD: ✓ **GC** ___ **HPLC**

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= (A)(Fv)(Df) / (RF)(Vs or Ws)(%S/100)

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound In the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID._____ Compound Name ND

Concentration =_____

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications

Comments:

SAMPCALCnew.wpd

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	April 12, 2011
LDC Report Date:	August 10, 2011
Matrix:	Soil
Parameters:	Formaldehyde
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE125

Sample Identification

SL-012-SA8N-SS-0.0-0.5
SL-019-SA8N-SS-0.0-0.5
SL-020-SA8N-SS-0.0-0.5
SL-021-SA8N-SS-0.0-0.5
SL-022-SA8N-SS-0.0-0.5
SL-047-SA8N-SS-0.0-0.5

Introduction

This data review covers 6 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8315A for Formaldehyde.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0% .

III. Calibration Verification

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 20.0% QC limits.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No formaldehyde was found in the method blanks.

No field blanks were identified in this SDG.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VI. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VII. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE125	All compounds reported below the RL.	J (all detects)	A

X. System Performance

The system performance was acceptable.

XI. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XII. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Formaldehyde - Data Qualification Summary - SDG DE125

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE125	SL-012-SA8N-SS-0.0-0.5 SL-019-SA8N-SS-0.0-0.5 SL-020-SA8N-SS-0.0-0.5 SL-021-SA8N-SS-0.0-0.5 SL-022-SA8N-SS-0.0-0.5 SL-047-SA8N-SS-0.0-0.5	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
Formaldehyde - Laboratory Blank Data Qualification Summary - SDG DE125

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Formaldehyde - Field Blank Data Qualification Summary - SDG DE125

No Sample Data Qualified in this SDG

LDC #: 25916G71 **VALIDATION COMPLETENESS WORKSHEET** Date: 8/08/11
SDG #: DE125 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: HPLC Formaldehyde (EPA SW 846 Method 8315A)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 4/12/11
II	Initial calibration	A	% RSD ≤ 20%
III.	Calibration verification/~~ICV~~	A	CW(+/-) ≤ 20%
IV.	Blanks	A	
V	Surrogate recovery	A	
VI.	Matrix spike/Matrix spike duplicates	N	Client Spec
VII.	Laboratory control samples	A	LCS
VIII.	Target compound identification	A	
IX.	Compound Quantitation and ~~CRQLs~~ RLs	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	N	
XIII.	Field blanks	N	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: Soil

1	SL-012-SA8N-SS-0.0-0.5	11	PBLK04115	21		31	
2	SL-019-SA8N-SS-0.0-0.5	12		22		32	
3	SL-020-SA8N-SS-0.0-0.5	13		23		33	
4	SL-021-SA8N-SS-0.0-0.5	14		24		34	
5	SL-022-SA8N-SS-0.0-0.5	15		25		35	
6	SL-047-SA8N-SS-0.0-0.5	16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

LDC #: 25916 G 71

VALIDATION FINDINGS CHECKLIST

Reviewer: JVB
2nd Reviewer: [illegible]

Method: _____ GC ✓ _____ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Was a linear fit used for evaluation? If yes, were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation? If Yes, what was the acceptance criteria used?		✓		
Did the initial calibration meet the curve fit acceptance criteria?			✓	
Were the RT windows properly established?	✓			
IV. Continuing calibration				
What type of continuing calibration calculation was performed? ✓ %D or ____ %R	✓			
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20%.0 or percent recoveries 80-120%?	✓			
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?	✓			
If the percent recovery (%R) of one or more surrogates was outside QC limits, was a reanalysis performed to confirm %R?			✓	
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.		✓		
Was a MS/MSD analyzed every 20 samples of each matrix?		✓		
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				

LDC #: 25916 G7I

VALIDATION FINDINGS CHECKLIST

Reviewer: JVG
2nd Reviewer: C

Validation Area	Yes	No	NA	Findings/Comments
Were performance evaluation (PE) samples performed?		✓		
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
X. Target compound identification				
Were the retention times of reported detects within the RT windows?	✓			
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XV. Field blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

LDC #: 25916 G71

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: JVG
2nd Reviewer: C

METHOD: GC _____ HPLC ✓

The calibration factors (CF), average CF, and relative standard deviation (%RSD) were recalculated for compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

Where:
H = Height of compound
C = Concentration of compound
S = Standard deviation of calibration factors
X = Mean of calibration factors

#	Standard ID	Calibration Date	Compound	Reported (2002 std)	Recalculated (2002 std)	Reported Average RRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL	4/26/2011	Formaldehyde	62.42	62.42	59.00	59.00	4.0	4.0
	F6259A								

C	H
2002	124960.8

Conc	Ethylene glycol
500.5	56.45
1001.0	57.48
2002.0	62.42
6006.0	60.29
10010.0	58.38
X=	59.00
S=	2.375

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC # 25916 671

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: JVG
2nd Reviewer:

METHOD: GC____HPLC✓

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration percent difference (%D) values were recalculated for the compounds identified below using the following calculation:

Percent difference (%D) = 100 * (N - C)/N

Where:
N = Initial Calibration Factor or Nominal Amount
C = Calibration Factor from Continuing Calibration Standard or Calculated Amount

#	Standard ID	Calibration Date	Compound	CCV Conc	Reported Conc	Recalculated Conc	Reported % D	Recalculated %D
1	1F4117.20R	4/28/2011	Formaldehyde	2002.00	2148.13	2148.13	7.3	7.3

CCV1

Compound	Height	CF
Formaldehyde	126748	59.00

LDC #: 25916 G71

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Page: 1 of 1
Reviewer: JVG
2nd reviewer: CA

METHOD: ___ GC ✓ ___ HPLC

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: # 1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
Butyraldehyde	SVP-PAH	4000	3536.5	89	88.4	0

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

LDC #: 25916 & 71

VALIDATION FINDINGS WORKSHEET

Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: JVG

2nd Reviewer: [illegible]

METHOD: ✓ GC __HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

%Recovery = 100 * (SSC - SC)/SA

RPD =(({SSCLCS - SSCLCSD} * 2) / (SSCLCS + SSCLCSD))*100

Where SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory Control Sample
SC = Sample concentration
LCSD = Laboratory Control Sample duplicate

LCS/LCSD samples: LCS 04 115

Compound	Spike Added (ug/kg)		Spike Sample Concentration (ug/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)										
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)										
2,4,6-Trinitrotoluene (8330)										
Formaldehyde (8315A)	50 10	NA	490 & 12	NA	98	98				

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25916 G7)

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: NB
2nd Reviewer: A

METHOD: ___ GC ___ HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= $\frac{(A)(Fv)(Df)}{(RF)(Vs \text{ or } Ws)(\%S/100)}$

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound In the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID._____ Compound Name ND

Concentration =_____

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications

Comments:

SAMPCALCnew.wpd

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	April 12, 2011
LDC Report Date:	August 11, 2011
Matrix:	Soil
Parameters:	Perchlorate
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE125

Sample Identification

SL-016-SA8N-SS-0.0-0.5
SL-021-SA8N-SS-0.0-0.5
SL-050-SA8N-SS-0.0-0.5
SL-206-SA5A-SB-4.0-5.0
SL-228-SA5A-SB-3.0-4.0

Introduction

This data review covers 5 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 6850 for Perchlorate.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance check is not required by the method.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

A curve fit, based on the initial calibration, was established for quantitation. The coefficient of determination (r^2) was greater than or equal to 0.990 .

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

All of the continuing calibration percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were less than or equal to 15.0% for unlabeled compounds and less than or equal to 50.0% for labeled compounds.

The percent differences (%D) of the second source calibration standard were less than or equal to 15.0% for unlabeled compounds and less than or equal to 50.0% for labeled compounds.

The percent differences (%D) of the limit of detection verification (LODV) calibration standard were less than or equal to 50.0% for perchlorate.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No perchlorate was found in the method blanks.

No field blanks were identified in this SDG.

VI. Surrogate Spikes

Surrogate spikes were not required by the method.

VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE125	All compounds reported below the RL.	J (all detects)	A

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was acceptable.

XV. Overall Assessment

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Perchlorate - Data Qualification Summary - SDG DE125

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE125	SL-016-SA8N-SS-0.0-0.5 SL-021-SA8N-SS-0.0-0.5 SL-050-SA8N-SS-0.0-0.5 SL-206-SA5A-SB-4.0-5.0 SL-228-SA5A-SB-3.0-4.0	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and RLs (Z)

Santa Susana Field Laboratory
Perchlorate - Laboratory Blank Data Qualification Summary - SDG DE125

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Perchlorate - Field Blank Data Qualification Summary - SDG DE125

No Sample Data Qualified in this SDG

LDC #: 25916G87 **VALIDATION COMPLETENESS WORKSHEET** Date: 8/09/11
SDG #: DE125 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: SVG
2nd Reviewer: A

METHOD: LC/MS Perchlorate (EPA SW846 Method 6850)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 4/12/11
II.	GC/MS Instrument performance check	N	
III.	Initial calibration	A	r²
IV.	Continuing calibration/ICV	A	CCV/ICV ≤ 15% unlabeled ≤ 50% labeled LCMV ≤ 50
V.	Blanks	A	
VI.	Surrogate spikes	N	
VII.	Matrix spike/Matrix spike duplicates	N	Client spec
VIII.	Laboratory control samples	A	LCS
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A	
XI.	Target compound identification	A	
XII.	Compound quantitation/~~CRQL~~s RL's	A	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	A	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	N	
XVII.	Field blanks	N	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: Soil

1	SL-016-SA8N-SS-0.0-0.5	11	PBLK18108	21		31	
2	SL-021-SA8N-SS-0.0-0.5	12		22		32	
3	SL-050-SA8N-SS-0.0-0.5	13		23		33	
4	SL-206-SA5A-SB-4.0-5.0	14		24		34	
5	SL-228-SA5A-SB-3.0-4.0	15		25		35	
6		16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

LDC #: 25916 G87

VALIDATION FINDINGS CHECKLIST

Reviewer: JVR
2nd Reviewer: C

Method: ~~Semivolatiles~~ (EPA SW 846 Method ~~8270C~~) 8270D 6850

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. GC/MS Instrument performance check				
Were the DFTPP performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
III. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?		✓		
Was a curve fit used for evaluation?	✓			
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?	✓			
Were all percent relative standard deviations (%RSD) ≤ 30% and relative response factors (RRF) ≥ 0.05?			✓	
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓			
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Were all percent differences (%D) ≤ ~~25%~~ 15/50 and relative response factors (RRF) ≥ 0.05?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within QC limits?			✓	
If 2 or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R?			✓	
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.		✓		
Was a MS/MSD analyzed every 20 samples of each matrix?		✓		
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			

LDC #: 25 916 G 87

VALIDATION FINDINGS CHECKLIST

Reviewer: NG
2nd Reviewer: [illegible]

Validation Area	Yes	No	NA	Findings/Comments
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?		✓		
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
X. Internal standards				
Were internal standard area counts within -50% or +100% of the associated calibration standard?	✓			
Were retention times within ± 30 seconds from the associated calibration standard?	✓			
XI. Target compound identification				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?	✓			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	✓			
Were chromatogram peaks verified and accounted for?		✓		
XII. Compound quantitation/CRQLs				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	✓			
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XIII. Tentatively identified compounds (TICs)				
Were the major ions (> 10 percent relative intensity) in the reference spectrum evaluated in sample spectrum?			✓	
Were relative intensities of the major ions within ± 20% between the sample and the reference spectra?			✓	
Did the raw data indicate that the laboratory performed a library search for all required peaks in the chromatograms (samples and blanks)?		✓		
XIV. System performance				
System performance was found to be acceptable.	✓			
XV. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XVI. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XVII. Field blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

LDC # K916 G87

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: JVG
2nd Reviewer: [illegible]

METHOD: EPA SW 846 Method 6850

Parameter: Perchlorate

Order of regression: Linear

Date	Instrument	Compound	Points	y area ratio	x conc ratio	RF
18-Feb-11	LCMS A5	Perchlorate	Point 1	0.019476	0.02	0.9738
			Point 2	0.040512	0.04	1.0128
			Point 3	0.100518	0.10	1.0052
			Point 4	0.202802	0.20	1.0140
			Point 5	0.394227	0.40	0.9856
			Point 6	1.023635	1.00	1.0236
			Point 7	2.552726	2.50	1.0211
						1.0052

Regression Output: Regression Output:		Reported WLR	
Constant	-0.00304	c =	-0.00300
Std Err of Y Est	0.04		
R Squared	0.99997	r^2 =	0.999970
No. of Observations	6.00		
Degrees of Freedom	4.00		
		m =	0.1022
X Coefficient(s)	1.02234		
Std Err of Coef.	0.01		

LDC # 28 916 G87

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Calculation Verification

Reviewer: NG
2nd Reviewer: [illegible]

METHOD:LCMS Perchlorate (EPA SW 846 Method 6850)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
RRF = (Ax)(Cis)/(Ais)(Cx)

ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
Ax = Area of compound,

Cx = Concentration of compound,
Ais = Area of associated internal standard
Cis = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (IS)	CCV Conc	Reported Conc	Recalculated Conc	Reported % D	Recalculated %D
1	ms5p11010121	4/21/2011	Perchlorate (CLO4-18)	0.4	0.435	0.434	9	9
2	ms5p11010121	4/21/2011	Perchlorate (CLO4-18)	4	3.990	3.994	0	0

y=mx+b

	Response(y)	m	b	Conc(x)	Final conc
Sample #2	0.031239831	0.102234	-0.003	0.3349	3.3492
CCV1	0.041414732	0.102234	-0.003	0.4344	
CCV2	0.405337113	0.102234	-0.003	3.9941	

LDC #: 25916 687

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: JH
2nd Reviewer: [illegible]

METHOD: GC/MS ~~BNA~~ CLO4 (EPA SW 846 Method ~~8270C~~ 6850)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SC/SA

Where: SSC = Spike concentration
SA = Spike added

RPD = I LCSC - LCSDC I * 2/(LCSC + LCSDC)

LCSC = Laboraotry control sample concentration

LCSDC = Laboratory control sample duplicate concentration

LCS/LCSD samples: LCS 18108

Compound	Spike Added (ug/kg)		Spike Concentration (ug/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
~~Phenol~~ CLO4	100	NA	103	NA	103	103				
N-Nitroso-di-n-propylamine										
4-Chloro-3-methylphenol										
Acenaphthene										
Pentachlorophenol										
Pyrene										

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25916 G87

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: JVG
2nd reviewer: A

METHOD: GC/MS ~~BNA~~ CLOP (EPA SW 846 Method ~~8270C~~ 6850)

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

$$\text{Concentration} = \frac{(A_x)(I_s)(V_t)(DF)(2.0)}{(A_{is})(RRF)(V_o)(V_i)(\%S)}$$

A_x	=	Area of the characteristic ion (EICP) for the compound to be measured
A_{is}	=	Area of the characteristic ion (EICP) for the specific internal standard
I_s	=	Amount of internal standard added in nanograms (ng)
V_o	=	Volume or weight of sample extract in milliliters (ml) or grams (g).
V_i	=	Volume of extract injected in microliters (ul)
V_t	=	Volume of the concentrated extract in microliters (ul)
Df	=	Dilution Factor.
%S	=	Percent solids, applicable to soil and solid matrices only.
2.0	=	Factor of 2 to account for GPC cleanup

Example:

Sample I.D. 2, CLOP:

$$\text{Conc} = \frac{(288)(\cancel{10})(\quad)(\quad)(\quad)}{(9219)(\quad) + 0.0003)(\quad)(\quad)} \quad (10)$$

$$(0.102224)$$

$= 3.349$

$$\text{final conc.} = \frac{(3.349)}{(0.885)} = 3.8 \text{ ug/kg}$$

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification

SAMPLE DELIVERY GROUP

DE126

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
13-Apr-2011	TB-041311	6257888	TB	5030B	8015M	III
13-Apr-2011	TB-041311	6257888	TB	5030B	8260B	III
13-Apr-2011	TB-041311	6257888	TB	5030B	8260B SIM	III
13-Apr-2011	SL-046-SA8N-SS-0.0-0.5	6257880	N	3050B	6010B	III
13-Apr-2011	SL-046-SA8N-SS-0.0-0.5	6257880	N	3050B	6020	III
13-Apr-2011	SL-046-SA8N-SS-0.0-0.5	6257880	N	3060A	7199	III
13-Apr-2011	SL-046-SA8N-SS-0.0-0.5	6257880	N	3550B	8015M	III
13-Apr-2011	SL-046-SA8N-SS-0.0-0.5	6257880	N	3550B	8082	III
13-Apr-2011	SL-046-SA8N-SS-0.0-0.5	6257880	N	3550B	8270C	III
13-Apr-2011	SL-046-SA8N-SS-0.0-0.5	6257880	N	3550B	8270C SIM	III
13-Apr-2011	SL-046-SA8N-SS-0.0-0.5	6257880	N	Gen Prep	9045M	III
13-Apr-2011	SL-046-SA8N-SS-0.0-0.5	6257880	N	METHOD	300.0	III
13-Apr-2011	SL-046-SA8N-SS-0.0-0.5	6257880	N	METHOD	314.0	III
13-Apr-2011	SL-046-SA8N-SS-0.0-0.5	6257880	N	METHOD	7471A	III
13-Apr-2011	SL-204-SA5A-SB-4.0-5.0	6257885	N	3050B	6010B	III
13-Apr-2011	SL-204-SA5A-SB-4.0-5.0	6257885	N	3050B	6020	III
13-Apr-2011	SL-204-SA5A-SB-4.0-5.0	6257885	N	3060A	7199	III
13-Apr-2011	SL-204-SA5A-SB-4.0-5.0	6257885	N	3546	1625C	III
13-Apr-2011	SL-204-SA5A-SB-4.0-5.0	6257885	N	3550B	8015B	III
13-Apr-2011	SL-204-SA5A-SB-4.0-5.0	6257885	N	3550B	8015M	III
13-Apr-2011	SL-204-SA5A-SB-4.0-5.0	6257885	N	3550B	8082	III
13-Apr-2011	SL-204-SA5A-SB-4.0-5.0	6257885	N	3550B	8270C	III
13-Apr-2011	SL-204-SA5A-SB-4.0-5.0	6257885	N	3550B	8270C SIM	III
13-Apr-2011	SL-204-SA5A-SB-4.0-5.0	6257885	N	5035	8015M	III
13-Apr-2011	SL-204-SA5A-SB-4.0-5.0	6257885	N	5035	8260B	III
13-Apr-2011	SL-204-SA5A-SB-4.0-5.0	6257885	N	5035	8260B SIM	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
13-Apr-2011	SL-204-SA5A-SB-4.0-5.0	6257885	N	8330	8330A	III
13-Apr-2011	SL-204-SA5A-SB-4.0-5.0	6257885	N	Gen Prep	9045M	III
13-Apr-2011	SL-204-SA5A-SB-4.0-5.0	6257885	N	METHOD	300.0	III
13-Apr-2011	SL-204-SA5A-SB-4.0-5.0	6257885	N	METHOD	314.0	III
13-Apr-2011	SL-204-SA5A-SB-4.0-5.0	6257885	N	METHOD	6850	III
13-Apr-2011	SL-204-SA5A-SB-4.0-5.0	6257885	N	METHOD	7471A	III
13-Apr-2011	SL-204-SA5A-SB-4.0-5.0	6257885	N	METHOD	8015B	III
13-Apr-2011	SL-204-SA5A-SB-4.0-5.0	6257885	N	METHOD	8015M	III
13-Apr-2011	SL-204-SA5A-SB-4.0-5.0	6257885	N	METHOD	8315A	III
13-Apr-2011	SL-204-SA5A-SB-4.0-5.0	6257885	N	METHOD	9012B	III
13-Apr-2011	SL-027-SA8N-SS-0.0-0.5	6257874	N	3050B	6010B	III
13-Apr-2011	SL-027-SA8N-SS-0.0-0.5	6257874	N	3050B	6020	III
13-Apr-2011	SL-027-SA8N-SS-0.0-0.5	6257874	N	3060A	7199	III
13-Apr-2011	SL-027-SA8N-SS-0.0-0.5	6257874	N	3550B	8015M	III
13-Apr-2011	SL-027-SA8N-SS-0.0-0.5	6257874	N	3550B	8082	III
13-Apr-2011	SL-027-SA8N-SS-0.0-0.5	6257874	N	3550B	8270C	III
13-Apr-2011	SL-027-SA8N-SS-0.0-0.5	6257874	N	3550B	8270C SIM	III
13-Apr-2011	SL-027-SA8N-SS-0.0-0.5	6257874	N	Gen Prep	9045M	III
13-Apr-2011	SL-027-SA8N-SS-0.0-0.5	6257874	N	METHOD	300.0	III
13-Apr-2011	SL-027-SA8N-SS-0.0-0.5	6257874	N	METHOD	314.0	III
13-Apr-2011	SL-027-SA8N-SS-0.0-0.5	6257874	N	METHOD	7471A	III
13-Apr-2011	SL-027-SA8N-SS-0.0-0.5MS	6257875	MS	3050B	6010B	III
13-Apr-2011	SL-027-SA8N-SS-0.0-0.5MS	6257875	MS	3050B	6020	III
13-Apr-2011	SL-027-SA8N-SS-0.0-0.5MS	6257875	MS	3060A	7199	III
13-Apr-2011	SL-027-SA8N-SS-0.0-0.5MS	6257875	MS	3550B	8082	III
13-Apr-2011	SL-027-SA8N-SS-0.0-0.5MS	6257875	MS	3550B	8270C	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
13-Apr-2011	SL-027-SA8N-SS-0.0-0.5MS	6257875	MS	3550B	8270C SIM	III
13-Apr-2011	SL-027-SA8N-SS-0.0-0.5MS	6257875	MS	METHOD	300.0	III
13-Apr-2011	SL-027-SA8N-SS-0.0-0.5MS	6257875	MS	METHOD	314.0	III
13-Apr-2011	SL-027-SA8N-SS-0.0-0.5MS	6257875	MS	METHOD	7471A	III
13-Apr-2011	SL-027-SA8N-SS-0.0-0.5MSD	6257876	MSD	3050B	6010B	III
13-Apr-2011	SL-027-SA8N-SS-0.0-0.5MSD	6257876	MSD	3050B	6020	III
13-Apr-2011	SL-027-SA8N-SS-0.0-0.5MSD	6257876	MSD	3550B	8082	III
13-Apr-2011	SL-027-SA8N-SS-0.0-0.5MSD	6257876	MSD	3550B	8270C	III
13-Apr-2011	SL-027-SA8N-SS-0.0-0.5MSD	6257876	MSD	3550B	8270C SIM	III
13-Apr-2011	SL-027-SA8N-SS-0.0-0.5MSD	6257876	MSD	METHOD	7471A	III
13-Apr-2011	SL-027-SA8N-SS-0.0-0.5DUP	6257877	DUP	3050B	6010B	III
13-Apr-2011	SL-027-SA8N-SS-0.0-0.5DUP	6257877	DUP	3050B	6020	III
13-Apr-2011	SL-027-SA8N-SS-0.0-0.5DUP	6257877	DUP	3060A	7199	III
13-Apr-2011	SL-027-SA8N-SS-0.0-0.5DUP	6257877	DUP	Gen Prep	9045M	III
13-Apr-2011	SL-027-SA8N-SS-0.0-0.5DUP	6257877	DUP	METHOD	300.0	III
13-Apr-2011	SL-027-SA8N-SS-0.0-0.5DUP	6257877	DUP	METHOD	314.0	III
13-Apr-2011	SL-027-SA8N-SS-0.0-0.5DUP	6257877	DUP	METHOD	7471A	III
13-Apr-2011	SL-027-SA8N-SS-0.0-0.5MSD	P257874M320922A	MSD	3550B	8015M	III
13-Apr-2011	SL-027-SA8N-SS-0.0-0.5MS	P257874R320857A	MS	3550B	8015M	III
13-Apr-2011	DUP02-SA8N-QC-041311	6257873	FD	3050B	6010B	III
13-Apr-2011	DUP02-SA8N-QC-041311	6257873	FD	3050B	6020	III
13-Apr-2011	DUP02-SA8N-QC-041311	6257873	FD	3060A	7199	III
13-Apr-2011	DUP02-SA8N-QC-041311	6257873	FD	3550B	8082	III
13-Apr-2011	DUP02-SA8N-QC-041311	6257873	FD	3550B	8270C	III
13-Apr-2011	DUP02-SA8N-QC-041311	6257873	FD	3550B	8270C SIM	III
13-Apr-2011	DUP02-SA8N-QC-041311	6257873	FD	Gen Prep	9045M	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
13-Apr-2011	DUP02-SA8N-QC-041311	6257873	FD	METHOD	300.0	III
13-Apr-2011	DUP02-SA8N-QC-041311	6257873	FD	METHOD	314.0	III
13-Apr-2011	DUP02-SA8N-QC-041311	6257873	FD	METHOD	7471A	III
13-Apr-2011	DUP02-SA8N-QC-041311DUP	P257873D290915B	DUP	Gen Prep	9045M	III
13-Apr-2011	SL-028-SA8N-SS-0.0-0.5	6257878	N	3050B	6010B	III
13-Apr-2011	SL-028-SA8N-SS-0.0-0.5	6257878	N	3050B	6020	III
13-Apr-2011	SL-028-SA8N-SS-0.0-0.5	6257878	N	3060A	7199	III
13-Apr-2011	SL-028-SA8N-SS-0.0-0.5	6257878	N	3550B	8015M	III
13-Apr-2011	SL-028-SA8N-SS-0.0-0.5	6257878	N	3550B	8082	III
13-Apr-2011	SL-028-SA8N-SS-0.0-0.5	6257878	N	3550B	8270C	III
13-Apr-2011	SL-028-SA8N-SS-0.0-0.5	6257878	N	3550B	8270C SIM	III
13-Apr-2011	SL-028-SA8N-SS-0.0-0.5	6257878	N	Gen Prep	9045M	III
13-Apr-2011	SL-028-SA8N-SS-0.0-0.5	6257878	N	METHOD	300.0	III
13-Apr-2011	SL-028-SA8N-SS-0.0-0.5	6257878	N	METHOD	314.0	III
13-Apr-2011	SL-028-SA8N-SS-0.0-0.5	6257878	N	METHOD	7471A	III
13-Apr-2011	SL-205-SA5A-SB-4.0-5.0	6257886	N	3050B	6010B	III
13-Apr-2011	SL-205-SA5A-SB-4.0-5.0	6257886	N	3050B	6020	III
13-Apr-2011	SL-205-SA5A-SB-4.0-5.0	6257886	N	3060A	7199	III
13-Apr-2011	SL-205-SA5A-SB-4.0-5.0	6257886	N	3550B	8082	III
13-Apr-2011	SL-205-SA5A-SB-4.0-5.0	6257886	N	3550B	8270C	III
13-Apr-2011	SL-205-SA5A-SB-4.0-5.0	6257886	N	3550B	8270C SIM	III
13-Apr-2011	SL-205-SA5A-SB-4.0-5.0	6257886	N	5035	8260B	III
13-Apr-2011	SL-205-SA5A-SB-4.0-5.0	6257886	N	5035	8260B SIM	III
13-Apr-2011	SL-205-SA5A-SB-4.0-5.0	6257886	N	Gen Prep	9045M	III
13-Apr-2011	SL-205-SA5A-SB-4.0-5.0	6257886	N	METHOD	300.0	III
13-Apr-2011	SL-205-SA5A-SB-4.0-5.0	6257886	N	METHOD	314.0	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
13-Apr-2011	SL-205-SA5A-SB-4.0-5.0	6257886	N	METHOD	7471A	III
13-Apr-2011	SL-205-SA5A-SB-8.0-9.0	6257887	N	3050B	6010B	III
13-Apr-2011	SL-205-SA5A-SB-8.0-9.0	6257887	N	3050B	6020	III
13-Apr-2011	SL-205-SA5A-SB-8.0-9.0	6257887	N	3060A	7199	III
13-Apr-2011	SL-205-SA5A-SB-8.0-9.0	6257887	N	3550B	8082	III
13-Apr-2011	SL-205-SA5A-SB-8.0-9.0	6257887	N	3550B	8270C	III
13-Apr-2011	SL-205-SA5A-SB-8.0-9.0	6257887	N	3550B	8270C SIM	III
13-Apr-2011	SL-205-SA5A-SB-8.0-9.0	6257887	N	Gen Prep	9045M	III
13-Apr-2011	SL-205-SA5A-SB-8.0-9.0	6257887	N	METHOD	300.0	III
13-Apr-2011	SL-205-SA5A-SB-8.0-9.0	6257887	N	METHOD	314.0	III
13-Apr-2011	SL-205-SA5A-SB-8.0-9.0	6257887	N	METHOD	7471A	III
13-Apr-2011	SL-205-SA5A-SB-8.0-9.0DUP	P257887D270604B	DUP	METHOD	300.0	III
13-Apr-2011	SL-205-SA5A-SB-8.0-9.0DUP	P257887D271850B	DUP	METHOD	314.0	III
13-Apr-2011	SL-205-SA5A-SB-8.0-9.0DUP	P257887D291010B	DUP	Gen Prep	9045M	III
13-Apr-2011	SL-205-SA5A-SB-8.0-9.0MS	P257887R270618B	MS	METHOD	300.0	III
13-Apr-2011	SL-205-SA5A-SB-8.0-9.0MS	P257887R271912B	MS	METHOD	314.0	III
13-Apr-2011	EB02-SA8N-SS-041311	6257881	EB	3005A	6010B	III
13-Apr-2011	EB02-SA8N-SS-041311	6257881	EB	3020A	6020	III
13-Apr-2011	EB02-SA8N-SS-041311	6257881	EB	3510C	8082	III
13-Apr-2011	EB02-SA8N-SS-041311	6257881	EB	3510C	8270C	III
13-Apr-2011	EB02-SA8N-SS-041311	6257881	EB	3510C	8270C SIM	III
13-Apr-2011	EB02-SA8N-SS-041311	6257881	EB	Gen Prep	300.0	III
13-Apr-2011	EB02-SA8N-SS-041311	6257881	EB	Gen Prep	314.0	III
13-Apr-2011	EB02-SA8N-SS-041311	6257881	EB	Gen Prep	7199	III
13-Apr-2011	EB02-SA8N-SS-041311	6257881	EB	Gen Prep	8015M	III
13-Apr-2011	EB02-SA8N-SS-041311	6257881	EB	Gen Prep	9040B	III

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Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
13-Apr-2011	EB02-SA8N-SS-041311	6257881	EB	METHOD	7470A	III
13-Apr-2011	EB02-SA8N-SS-041311MSD	P257881M322309A	MSD	Gen Prep	8015M	III
13-Apr-2011	EB02-SA8N-SS-041311MS	P257881R322234A	MS	Gen Prep	8015M	III
13-Apr-2011	SL-032-SA8N-SS-0.0-0.5	6257879	N	3050B	6010B	III
13-Apr-2011	SL-032-SA8N-SS-0.0-0.5	6257879	N	3050B	6020	III
13-Apr-2011	SL-032-SA8N-SS-0.0-0.5	6257879	N	3060A	7199	III
13-Apr-2011	SL-032-SA8N-SS-0.0-0.5	6257879	N	3550B	8015M	III
13-Apr-2011	SL-032-SA8N-SS-0.0-0.5	6257879	N	3550B	8082	III
13-Apr-2011	SL-032-SA8N-SS-0.0-0.5	6257879	N	3550B	8270C	III
13-Apr-2011	SL-032-SA8N-SS-0.0-0.5	6257879	N	3550B	8270C SIM	III
13-Apr-2011	SL-032-SA8N-SS-0.0-0.5	6257879	N	Gen Prep	9045M	III
13-Apr-2011	SL-032-SA8N-SS-0.0-0.5	6257879	N	METHOD	300.0	III
13-Apr-2011	SL-032-SA8N-SS-0.0-0.5	6257879	N	METHOD	314.0	III
13-Apr-2011	SL-032-SA8N-SS-0.0-0.5	6257879	N	METHOD	6850	III
13-Apr-2011	SL-032-SA8N-SS-0.0-0.5	6257879	N	METHOD	7471A	III
13-Apr-2011	SL-061-SA5A-SB-4.0-5.0	6257884	N	3050B	6010B	III
13-Apr-2011	SL-061-SA5A-SB-4.0-5.0	6257884	N	3050B	6020	III
13-Apr-2011	SL-061-SA5A-SB-4.0-5.0	6257884	N	3060A	7199	III
13-Apr-2011	SL-061-SA5A-SB-4.0-5.0	6257884	N	3550B	8082	III
13-Apr-2011	SL-061-SA5A-SB-4.0-5.0	6257884	N	3550B	8270C	III
13-Apr-2011	SL-061-SA5A-SB-4.0-5.0	6257884	N	3550B	8270C SIM	III
13-Apr-2011	SL-061-SA5A-SB-4.0-5.0	6257884	N	5035	8260B	III
13-Apr-2011	SL-061-SA5A-SB-4.0-5.0	6257884	N	5035	8260B SIM	III
13-Apr-2011	SL-061-SA5A-SB-4.0-5.0	6257884	N	Gen Prep	9045M	III
13-Apr-2011	SL-061-SA5A-SB-4.0-5.0	6257884	N	METHOD	300.0	III
13-Apr-2011	SL-061-SA5A-SB-4.0-5.0	6257884	N	METHOD	314.0	III

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IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
13-Apr-2011	SL-061-SA5A-SB-4.0-5.0	6257884	N	METHOD	7471A	III
13-Apr-2011	SL-060-SA5A-SB-4.0-5.0	6257882	N	3050B	6010B	III
13-Apr-2011	SL-060-SA5A-SB-4.0-5.0	6257882	N	3050B	6020	III
13-Apr-2011	SL-060-SA5A-SB-4.0-5.0	6257882	N	3060A	7199	III
13-Apr-2011	SL-060-SA5A-SB-4.0-5.0	6257882	N	3550B	8082	III
13-Apr-2011	SL-060-SA5A-SB-4.0-5.0	6257882	N	3550B	8270C	III
13-Apr-2011	SL-060-SA5A-SB-4.0-5.0	6257882	N	3550B	8270C SIM	III
13-Apr-2011	SL-060-SA5A-SB-4.0-5.0	6257882	N	5035	8260B	III
13-Apr-2011	SL-060-SA5A-SB-4.0-5.0	6257882	N	5035	8260B SIM	III
13-Apr-2011	SL-060-SA5A-SB-4.0-5.0	6257882	N	Gen Prep	9045M	III
13-Apr-2011	SL-060-SA5A-SB-4.0-5.0	6257882	N	METHOD	300.0	III
13-Apr-2011	SL-060-SA5A-SB-4.0-5.0	6257882	N	METHOD	314.0	III
13-Apr-2011	SL-060-SA5A-SB-4.0-5.0	6257882	N	METHOD	7471A	III
13-Apr-2011	SL-060-SA5A-SB-8.0-9.0	6257883	N	3050B	6010B	III
13-Apr-2011	SL-060-SA5A-SB-8.0-9.0	6257883	N	3050B	6020	III
13-Apr-2011	SL-060-SA5A-SB-8.0-9.0	6257883	N	3060A	7199	III
13-Apr-2011	SL-060-SA5A-SB-8.0-9.0	6257883	N	3550B	8082	III
13-Apr-2011	SL-060-SA5A-SB-8.0-9.0	6257883	N	3550B	8270C	III
13-Apr-2011	SL-060-SA5A-SB-8.0-9.0	6257883	N	3550B	8270C SIM	III
13-Apr-2011	SL-060-SA5A-SB-8.0-9.0	6257883	N	Gen Prep	9045M	III
13-Apr-2011	SL-060-SA5A-SB-8.0-9.0	6257883	N	METHOD	300.0	III
13-Apr-2011	SL-060-SA5A-SB-8.0-9.0	6257883	N	METHOD	314.0	III
13-Apr-2011	SL-060-SA5A-SB-8.0-9.0	6257883	N	METHOD	6850	III
13-Apr-2011	SL-060-SA5A-SB-8.0-9.0	6257883	N	METHOD	7471A	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE126 **Laboratory: LL**

EDD Filename: DE126_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: DUP02-SA8N-QC-041311 **Collected:** 4/13/2011 10:15:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.6		0.94	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-027-SA8N-SS-0.0-0.5 **Collected:** 4/13/2011 10:10:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.6		0.94	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-028-SA8N-SS-0.0-0.5 **Collected:** 4/13/2011 10:30:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.9		0.97	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-032-SA8N-SS-0.0-0.5 **Collected:** 4/13/2011 12:55:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.2		0.86	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-046-SA8N-SS-0.0-0.5 **Collected:** 4/13/2011 8:40:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.4		0.88	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-060-SA5A-SB-4.0-5.0 **Collected:** 4/13/2011 4:05:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.9		0.93	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-060-SA5A-SB-8.0-9.0 **Collected:** 4/13/2011 4:11:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.6		0.90	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-061-SA5A-SB-4.0-5.0 **Collected:** 4/13/2011 2:28:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.2		0.91	MDL	1.1	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE126 **Laboratory: LL**

EDD Filename: DE126_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: GENCHEM
Method: 300.0 **Matrix:** SO

Sample ID: SL-204-SA5A-SB-4.0-5.0 *Collected:* 4/13/2011 9:19:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	21.6		0.90	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-205-SA5A-SB-4.0-5.0 *Collected:* 4/13/2011 11:14:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.8		0.92	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-205-SA5A-SB-8.0-9.0 *Collected:* 4/13/2011 11:22:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.5		0.92	MDL	1.1	PQL	mg/Kg	J	Q

Method Category: METALS
Method: 6010B **Matrix:** SO

Sample ID: DUP02-SA8N-QC-041311 *Collected:* 4/13/2011 10:15:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	3.46	J	1.15	MDL	11.5	PQL	mg/Kg	U	B

Sample ID: SL-027-SA8N-SS-0.0-0.5 *Collected:* 4/13/2011 10:10:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	3.09	J	1.18	MDL	11.8	PQL	mg/Kg	U	B

Sample ID: SL-028-SA8N-SS-0.0-0.5 *Collected:* 4/13/2011 10:30:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	4.91	J	1.01	MDL	5.99	PQL	mg/Kg	J	Z

Sample ID: SL-028-SA8N-SS-0.0-0.5 *Collected:* 4/13/2011 10:30:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.74	J	1.20	MDL	12.0	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE126 **Laboratory: LL**

EDD Filename: DE126_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B ***Matrix:*** SO

Sample ID: SL-032-SA8N-SS-0.0-0.5 ***Collected:*** 4/13/2011 12:55:00 ***Analysis Type:*** REA ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	3.82	J	0.898	MDL	5.35	PQL	mg/Kg	J	Z

Sample ID: SL-032-SA8N-SS-0.0-0.5 ***Collected:*** 4/13/2011 12:55:00 ***Analysis Type:*** REA2 ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.71	J	1.07	MDL	10.7	PQL	mg/Kg	U	B

Sample ID: SL-046-SA8N-SS-0.0-0.5 ***Collected:*** 4/13/2011 8:40:00 ***Analysis Type:*** REA ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	96.1	J	40.9	MDL	110	PQL	mg/Kg	J	Z

Sample ID: SL-046-SA8N-SS-0.0-0.5 ***Collected:*** 4/13/2011 8:40:00 ***Analysis Type:*** REA2 ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.22	J	1.10	MDL	11.0	PQL	mg/Kg	U	B

Sample ID: SL-060-SA5A-SB-4.0-5.0 ***Collected:*** 4/13/2011 4:05:00 ***Analysis Type:*** REA ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	3.26	J	0.977	MDL	5.81	PQL	mg/Kg	J	Z

Sample ID: SL-060-SA5A-SB-4.0-5.0 ***Collected:*** 4/13/2011 4:05:00 ***Analysis Type:*** REA2 ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.57	J	1.03	MDL	5.81	PQL	mg/Kg	J	Z
TIN	3.50	J	1.16	MDL	11.6	PQL	mg/Kg	U	B

Sample ID: SL-060-SA5A-SB-8.0-9.0 ***Collected:*** 4/13/2011 4:11:00 ***Analysis Type:*** REA ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	95.8	J	40.4	MDL	108	PQL	mg/Kg	J	Z
Zirconium	3.07	J	0.910	MDL	5.41	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE126 **Laboratory: LL**

EDD Filename: DE126_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-060-SA5A-SB-8.0-9.0 **Collected:** 4/13/2011 4:11:00 **Analysis Type:** REA2 **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.16	J	0.964	MDL	5.41	PQL	mg/Kg	J	Z
TIN	2.60	J	1.08	MDL	10.8	PQL	mg/Kg	U	B

Sample ID: SL-061-SA5A-SB-4.0-5.0 **Collected:** 4/13/2011 2:28:00 **Analysis Type:** REA **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	113	J	42.6	MDL	114	PQL	mg/Kg	J	Z
Zirconium	3.33	J	0.960	MDL	5.71	PQL	mg/Kg	J	Z

Sample ID: SL-061-SA5A-SB-4.0-5.0 **Collected:** 4/13/2011 2:28:00 **Analysis Type:** REA2 **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.20	J	1.02	MDL	5.71	PQL	mg/Kg	J	Z
TIN	2.84	J	1.14	MDL	11.4	PQL	mg/Kg	U	B

Sample ID: SL-204-SA5A-SB-4.0-5.0 **Collected:** 4/13/2011 9:19:00 **Analysis Type:** REA **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	3.72	J	0.949	MDL	5.65	PQL	mg/Kg	J	Z

Sample ID: SL-204-SA5A-SB-4.0-5.0 **Collected:** 4/13/2011 9:19:00 **Analysis Type:** REA2 **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.68	J	1.01	MDL	5.65	PQL	mg/Kg	J	Z
TIN	2.73	J	1.13	MDL	11.3	PQL	mg/Kg	U	B

Sample ID: SL-205-SA5A-SB-4.0-5.0 **Collected:** 4/13/2011 11:14:00 **Analysis Type:** REA **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	95.0	J	42.7	MDL	114	PQL	mg/Kg	J	Z
Zirconium	3.57	J	0.961	MDL	5.72	PQL	mg/Kg	J	Z

Sample ID: SL-205-SA5A-SB-4.0-5.0 **Collected:** 4/13/2011 11:14:00 **Analysis Type:** REA2 **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.53	J	1.02	MDL	5.72	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE126 **Laboratory: LL**

EDD Filename: DE126_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS
Method: 6010B **Matrix:** SO

Sample ID: SL-205-SA5A-SB-4.0-5.0 **Collected:** 4/13/2011 11:14:00 **Analysis Type:** REA2 **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.62	J	1.14	MDL	11.4	PQL	mg/Kg	U	B

Sample ID: SL-205-SA5A-SB-8.0-9.0 **Collected:** 4/13/2011 11:22:00 **Analysis Type:** REA **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	106	J	41.9	MDL	112	PQL	mg/Kg	J	Z
Zirconium	2.86	J	0.943	MDL	5.62	PQL	mg/Kg	J	Z

Sample ID: SL-205-SA5A-SB-8.0-9.0 **Collected:** 4/13/2011 11:22:00 **Analysis Type:** REA2 **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.78	J	0.999	MDL	5.62	PQL	mg/Kg	J	Z
TIN	2.70	J	1.12	MDL	11.2	PQL	mg/Kg	U	B

Method Category: METALS
Method: 6020 **Matrix:** SO

Sample ID: DUP02-SA8N-QC-041311 **Collected:** 4/13/2011 10:15:00 **Analysis Type:** REA4 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.738		0.0698	MDL	0.233	PQL	mg/Kg	J	Q
ARSENIC	6.75		0.0931	MDL	0.465	PQL	mg/Kg	J	Q
BERYLLIUM	0.895		0.0186	MDL	0.116	PQL	mg/Kg	J	E
CADMIUM	1.31		0.0465	MDL	0.116	PQL	mg/Kg	J	Q
CHROMIUM	36.1		0.140	MDL	0.465	PQL	mg/Kg	J	Q, E, A
COBALT	11.4		0.0233	MDL	0.116	PQL	mg/Kg	J	Q, E
COPPER	54.9		0.0768	MDL	0.465	PQL	mg/Kg	J	E
LEAD	29.3		0.0121	MDL	0.233	PQL	mg/Kg	J	E
NICKEL	26.0		0.116	MDL	0.465	PQL	mg/Kg	J	Q, E
SILVER	0.502		0.0140	MDL	0.116	PQL	mg/Kg	J	FD
THALLIUM	0.359		0.0349	MDL	0.116	PQL	mg/Kg	J	Q
VANADIUM	63.0		0.0256	MDL	0.116	PQL	mg/Kg	J	E
ZINC	188		0.652	MDL	3.49	PQL	mg/Kg	J	E

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE126 **Laboratory: LL**

EDD Filename: DE126_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: DUP02-SA8N-QC-041311 **Collected:** 4/13/2011 10:15:00 **Analysis Type:** REA6 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.200	J	0.0465	MDL	0.465	PQL	mg/Kg	J	Z

Sample ID: DUP02-SA8N-QC-041311 **Collected:** 4/13/2011 10:15:00 **Analysis Type:** REA7 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.630		0.0582	MDL	0.116	PQL	mg/Kg	J	E

Sample ID: DUP02-SA8N-QC-041311 **Collected:** 4/13/2011 10:15:00 **Analysis Type:** REA8 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	195		0.126	MDL	0.465	PQL	mg/Kg	J	E

Sample ID: SL-027-SA8N-SS-0.0-0.5 **Collected:** 4/13/2011 10:10:00 **Analysis Type:** REA4 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.678		0.0674	MDL	0.225	PQL	mg/Kg	J	Q
ARSENIC	7.19		0.0898	MDL	0.449	PQL	mg/Kg	J	Q
BERYLLIUM	0.970		0.0180	MDL	0.112	PQL	mg/Kg	J	E
CADMIUM	1.30		0.0449	MDL	0.112	PQL	mg/Kg	J	Q
CHROMIUM	39.7		0.135	MDL	0.449	PQL	mg/Kg	J	Q, E, A
COBALT	10.7		0.0225	MDL	0.112	PQL	mg/Kg	J	Q, E
COPPER	57.3		0.0741	MDL	0.449	PQL	mg/Kg	J	E
LEAD	31.2		0.0117	MDL	0.225	PQL	mg/Kg	J	E
NICKEL	28.5		0.112	MDL	0.449	PQL	mg/Kg	J	Q, E
SILVER	0.298		0.0135	MDL	0.112	PQL	mg/Kg	J	FD
THALLIUM	0.340		0.0337	MDL	0.112	PQL	mg/Kg	J	Q
VANADIUM	65.4		0.0247	MDL	0.112	PQL	mg/Kg	J	E
ZINC	182		0.629	MDL	3.37	PQL	mg/Kg	J	E

Sample ID: SL-027-SA8N-SS-0.0-0.5 **Collected:** 4/13/2011 10:10:00 **Analysis Type:** REA6 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.216	J	0.0449	MDL	0.449	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE126 **Laboratory: LL**

EDD Filename: DE126_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-027-SA8N-SS-0.0-0.5 **Collected:** 4/13/2011 10:10:00 **Analysis Type:** REA7 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.779		0.0562	MDL	0.112	PQL	mg/Kg	J	E

Sample ID: SL-027-SA8N-SS-0.0-0.5 **Collected:** 4/13/2011 10:10:00 **Analysis Type:** REA8 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	198		0.121	MDL	0.449	PQL	mg/Kg	J	E

Sample ID: SL-028-SA8N-SS-0.0-0.5 **Collected:** 4/13/2011 10:30:00 **Analysis Type:** REA4 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.240		0.0692	MDL	0.231	PQL	mg/Kg	J	Q
ARSENIC	5.05		0.0922	MDL	0.461	PQL	mg/Kg	J	Q
BERYLLIUM	0.630		0.0184	MDL	0.115	PQL	mg/Kg	J	E
CADMIUM	1.14		0.0461	MDL	0.115	PQL	mg/Kg	J	Q
CHROMIUM	25.0		0.138	MDL	0.461	PQL	mg/Kg	J	Q, E, A
COBALT	7.61		0.0231	MDL	0.115	PQL	mg/Kg	J	Q, E
COPPER	27.0		0.0761	MDL	0.461	PQL	mg/Kg	J	E
LEAD	22.8		0.0120	MDL	0.231	PQL	mg/Kg	J	E
NICKEL	17.5		0.115	MDL	0.461	PQL	mg/Kg	J	Q, E
SILVER	0.0961	J	0.0138	MDL	0.115	PQL	mg/Kg	J	Z
THALLIUM	0.278		0.0346	MDL	0.115	PQL	mg/Kg	J	Q
VANADIUM	43.2		0.0254	MDL	0.115	PQL	mg/Kg	J	E
ZINC	125		0.646	MDL	3.46	PQL	mg/Kg	J	E

Sample ID: SL-028-SA8N-SS-0.0-0.5 **Collected:** 4/13/2011 10:30:00 **Analysis Type:** REA6 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.177	J	0.0461	MDL	0.461	PQL	mg/Kg	J	Z

Sample ID: SL-028-SA8N-SS-0.0-0.5 **Collected:** 4/13/2011 10:30:00 **Analysis Type:** REA7 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.495		0.0577	MDL	0.115	PQL	mg/Kg	J	E

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE126 **Laboratory: LL**

EDD Filename: DE126_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 ***Matrix:*** SO

Sample ID: SL-028-SA8N-SS-0.0-0.5 ***Collected:*** 4/13/2011 10:30:00 ***Analysis Type:*** REA8 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	114		0.125	MDL	0.461	PQL	mg/Kg	J	E

Sample ID: SL-032-SA8N-SS-0.0-0.5 ***Collected:*** 4/13/2011 12:55:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.113	J	0.0642	MDL	0.214	PQL	mg/Kg	J	Z, Q
ARSENIC	7.70		0.0855	MDL	0.428	PQL	mg/Kg	J	Q
BERYLLIUM	0.894		0.0171	MDL	0.107	PQL	mg/Kg	J	E
CHROMIUM	28.9		0.128	MDL	0.428	PQL	mg/Kg	J	Q, E, A
COBALT	11.2		0.0214	MDL	0.107	PQL	mg/Kg	J	Q, E
COPPER	20.1		0.0706	MDL	0.428	PQL	mg/Kg	J	E
LEAD	15.2		0.0111	MDL	0.214	PQL	mg/Kg	J	E
NICKEL	19.8		0.107	MDL	0.428	PQL	mg/Kg	J	Q, E
SILVER	0.0537	J	0.0128	MDL	0.107	PQL	mg/Kg	J	Z
THALLIUM	0.475		0.0321	MDL	0.107	PQL	mg/Kg	J	Q
VANADIUM	52.9		0.0235	MDL	0.107	PQL	mg/Kg	J	E
ZINC	99.9		0.599	MDL	3.21	PQL	mg/Kg	J	E

Sample ID: SL-032-SA8N-SS-0.0-0.5 ***Collected:*** 4/13/2011 12:55:00 ***Analysis Type:*** REA5 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.274		0.0428	MDL	0.107	PQL	mg/Kg	J	Q

Sample ID: SL-032-SA8N-SS-0.0-0.5 ***Collected:*** 4/13/2011 12:55:00 ***Analysis Type:*** REA6 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.151	J	0.0428	MDL	0.428	PQL	mg/Kg	J	Z

Sample ID: SL-032-SA8N-SS-0.0-0.5 ***Collected:*** 4/13/2011 12:55:00 ***Analysis Type:*** REA7 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.687		0.0535	MDL	0.107	PQL	mg/Kg	J	E

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE126 **Laboratory: LL**

EDD Filename: DE126_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 ***Matrix:*** SO

Sample ID: SL-032-SA8N-SS-0.0-0.5 ***Collected:*** 4/13/2011 12:55:00 ***Analysis Type:*** REA8 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	137		0.115	MDL	0.428	PQL	mg/Kg	J	E

Sample ID: SL-046-SA8N-SS-0.0-0.5 ***Collected:*** 4/13/2011 8:40:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.472		0.0639	MDL	0.213	PQL	mg/Kg	J	Q
ARSENIC	6.22		0.0853	MDL	0.426	PQL	mg/Kg	J	Q
BERYLLIUM	0.880		0.0171	MDL	0.107	PQL	mg/Kg	J	E
CADMIUM	0.450		0.0426	MDL	0.107	PQL	mg/Kg	J	Q
CHROMIUM	35.1		0.128	MDL	0.426	PQL	mg/Kg	J	Q, E, A
COBALT	11.7		0.0213	MDL	0.107	PQL	mg/Kg	J	Q, E
COPPER	22.1		0.0703	MDL	0.426	PQL	mg/Kg	J	E
LEAD	14.9		0.0111	MDL	0.213	PQL	mg/Kg	J	E
NICKEL	23.6		0.107	MDL	0.426	PQL	mg/Kg	J	Q, E
SILVER	0.0697	J	0.0128	MDL	0.107	PQL	mg/Kg	J	Z
THALLIUM	0.428		0.0320	MDL	0.107	PQL	mg/Kg	J	Q
VANADIUM	61.9		0.0234	MDL	0.107	PQL	mg/Kg	J	E
ZINC	93.7		0.597	MDL	3.20	PQL	mg/Kg	J	E

Sample ID: SL-046-SA8N-SS-0.0-0.5 ***Collected:*** 4/13/2011 8:40:00 ***Analysis Type:*** REA6 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.263	J	0.0426	MDL	0.426	PQL	mg/Kg	J	Z

Sample ID: SL-046-SA8N-SS-0.0-0.5 ***Collected:*** 4/13/2011 8:40:00 ***Analysis Type:*** REA7 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.665		0.0533	MDL	0.107	PQL	mg/Kg	J	E

Sample ID: SL-046-SA8N-SS-0.0-0.5 ***Collected:*** 4/13/2011 8:40:00 ***Analysis Type:*** REA8 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	130		0.115	MDL	0.426	PQL	mg/Kg	J	E

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE126 **Laboratory: LL**

EDD Filename: DE126_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-060-SA5A-SB-4.0-5.0 **Collected:** 4/13/2011 4:05:00 **Analysis Type:** REA4 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0866	J	0.0691	MDL	0.230	PQL	mg/Kg	J	Z, Q
ARSENIC	16.9		0.0921	MDL	0.461	PQL	mg/Kg	J	Q
BERYLLIUM	1.40		0.0184	MDL	0.115	PQL	mg/Kg	J	E
CADMIUM	0.0696	J	0.0461	MDL	0.115	PQL	mg/Kg	J	Z, Q
CHROMIUM	41.5		0.138	MDL	0.461	PQL	mg/Kg	J	Q, E, A
COBALT	8.20		0.0230	MDL	0.115	PQL	mg/Kg	J	Q, E
COPPER	33.2		0.0760	MDL	0.461	PQL	mg/Kg	J	E
LEAD	16.4		0.0120	MDL	0.230	PQL	mg/Kg	J	E
NICKEL	27.0		0.115	MDL	0.461	PQL	mg/Kg	J	Q, E
SILVER	0.0443	J	0.0138	MDL	0.115	PQL	mg/Kg	J	Z
THALLIUM	0.487		0.0345	MDL	0.115	PQL	mg/Kg	J	Q
VANADIUM	62.4		0.0253	MDL	0.115	PQL	mg/Kg	J	E
ZINC	106		0.645	MDL	3.45	PQL	mg/Kg	J	E

Sample ID: SL-060-SA5A-SB-4.0-5.0 **Collected:** 4/13/2011 4:05:00 **Analysis Type:** REA6 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.171	J	0.0461	MDL	0.461	PQL	mg/Kg	J	Z

Sample ID: SL-060-SA5A-SB-4.0-5.0 **Collected:** 4/13/2011 4:05:00 **Analysis Type:** REA7 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.04		0.0576	MDL	0.115	PQL	mg/Kg	J	E

Sample ID: SL-060-SA5A-SB-4.0-5.0 **Collected:** 4/13/2011 4:05:00 **Analysis Type:** REA8 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	134		0.124	MDL	0.461	PQL	mg/Kg	J	E

Sample ID: SL-060-SA5A-SB-8.0-9.0 **Collected:** 4/13/2011 4:11:00 **Analysis Type:** REA4 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0868	J	0.0650	MDL	0.217	PQL	mg/Kg	J	Z, Q
ARSENIC	8.20		0.0866	MDL	0.433	PQL	mg/Kg	J	Q
BERYLLIUM	0.886		0.0173	MDL	0.108	PQL	mg/Kg	J	E

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE126 **Laboratory: LL**

EDD Filename: DE126_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-060-SA5A-SB-8.0-9.0 **Collected:** 4/13/2011 4:11:00 **Analysis Type:** REA4 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.172		0.0433	MDL	0.108	PQL	mg/Kg	J	Q
CHROMIUM	30.3		0.130	MDL	0.433	PQL	mg/Kg	J	Q, E, A
COBALT	9.45		0.0217	MDL	0.108	PQL	mg/Kg	J	Q, E
COPPER	17.7		0.0715	MDL	0.433	PQL	mg/Kg	J	E
LEAD	8.50		0.0113	MDL	0.217	PQL	mg/Kg	J	E
NICKEL	25.1		0.108	MDL	0.433	PQL	mg/Kg	J	Q, E
SILVER	0.0442	J	0.0130	MDL	0.108	PQL	mg/Kg	J	Z
THALLIUM	0.389		0.0325	MDL	0.108	PQL	mg/Kg	J	Q
VANADIUM	48.8		0.0238	MDL	0.108	PQL	mg/Kg	J	E
ZINC	72.0		0.606	MDL	3.25	PQL	mg/Kg	J	E

Sample ID: SL-060-SA5A-SB-8.0-9.0 **Collected:** 4/13/2011 4:11:00 **Analysis Type:** REA6 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.132	J	0.0433	MDL	0.433	PQL	mg/Kg	J	Z

Sample ID: SL-060-SA5A-SB-8.0-9.0 **Collected:** 4/13/2011 4:11:00 **Analysis Type:** REA7 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.869		0.0541	MDL	0.108	PQL	mg/Kg	J	E

Sample ID: SL-060-SA5A-SB-8.0-9.0 **Collected:** 4/13/2011 4:11:00 **Analysis Type:** REA8 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	136		0.117	MDL	0.433	PQL	mg/Kg	J	E

Sample ID: SL-061-SA5A-SB-4.0-5.0 **Collected:** 4/13/2011 2:28:00 **Analysis Type:** REA4 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0897	J	0.0659	MDL	0.220	PQL	mg/Kg	J	Z, Q
ARSENIC	8.78		0.0879	MDL	0.440	PQL	mg/Kg	J	Q
BERYLLIUM	1.03		0.0176	MDL	0.110	PQL	mg/Kg	J	E
CADMIUM	0.0835	J	0.0440	MDL	0.110	PQL	mg/Kg	J	Z, Q
CHROMIUM	33.5		0.132	MDL	0.440	PQL	mg/Kg	J	Q, E, A
COBALT	8.50		0.0220	MDL	0.110	PQL	mg/Kg	J	Q, E

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE126 **Laboratory: LL**

EDD Filename: DE126_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 ***Matrix:*** SO

Sample ID: SL-061-SA5A-SB-4.0-5.0 ***Collected:*** 4/13/2011 2:28:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	18.0		0.0725	MDL	0.440	PQL	mg/Kg	J	E
LEAD	9.84		0.0114	MDL	0.220	PQL	mg/Kg	J	E
NICKEL	24.9		0.110	MDL	0.440	PQL	mg/Kg	J	Q, E
SILVER	0.0526	J	0.0132	MDL	0.110	PQL	mg/Kg	J	Z
THALLIUM	0.351		0.0330	MDL	0.110	PQL	mg/Kg	J	Q
VANADIUM	52.0		0.0242	MDL	0.110	PQL	mg/Kg	J	E
ZINC	71.2		0.615	MDL	3.30	PQL	mg/Kg	J	E

Sample ID: SL-061-SA5A-SB-4.0-5.0 ***Collected:*** 4/13/2011 2:28:00 ***Analysis Type:*** REA6 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.144	J	0.0440	MDL	0.440	PQL	mg/Kg	J	Z

Sample ID: SL-061-SA5A-SB-4.0-5.0 ***Collected:*** 4/13/2011 2:28:00 ***Analysis Type:*** REA7 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.558		0.0549	MDL	0.110	PQL	mg/Kg	J	E

Sample ID: SL-061-SA5A-SB-4.0-5.0 ***Collected:*** 4/13/2011 2:28:00 ***Analysis Type:*** REA8 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	121		0.119	MDL	0.440	PQL	mg/Kg	J	E

Sample ID: SL-204-SA5A-SB-4.0-5.0 ***Collected:*** 4/13/2011 9:19:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0691	J	0.0665	MDL	0.222	PQL	mg/Kg	J	Z, Q
ARSENIC	7.68		0.0886	MDL	0.443	PQL	mg/Kg	J	Q
BERYLLIUM	0.892		0.0177	MDL	0.111	PQL	mg/Kg	J	E
CADMIUM	0.0509	J	0.0443	MDL	0.111	PQL	mg/Kg	J	Z, Q
CHROMIUM	25.7		0.133	MDL	0.443	PQL	mg/Kg	J	Q, E, A
COBALT	7.86		0.0222	MDL	0.111	PQL	mg/Kg	J	Q, E
COPPER	9.83		0.0731	MDL	0.443	PQL	mg/Kg	J	E
LEAD	7.92		0.0115	MDL	0.222	PQL	mg/Kg	J	E
NICKEL	17.1		0.111	MDL	0.443	PQL	mg/Kg	J	Q, E

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE126 **Laboratory: LL**

EDD Filename: DE126_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-204-SA5A-SB-4.0-5.0 **Collected:** 4/13/2011 9:19:00 **Analysis Type:** REA4 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
THALLIUM	0.297		0.0332	MDL	0.111	PQL	mg/Kg	J	Q
VANADIUM	50.0		0.0244	MDL	0.111	PQL	mg/Kg	J	E
ZINC	54.9		0.620	MDL	3.32	PQL	mg/Kg	J	E

Sample ID: SL-204-SA5A-SB-4.0-5.0 **Collected:** 4/13/2011 9:19:00 **Analysis Type:** REA6 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0982	J	0.0443	MDL	0.443	PQL	mg/Kg	J	Z

Sample ID: SL-204-SA5A-SB-4.0-5.0 **Collected:** 4/13/2011 9:19:00 **Analysis Type:** REA7 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.371		0.0554	MDL	0.111	PQL	mg/Kg	J	E

Sample ID: SL-204-SA5A-SB-4.0-5.0 **Collected:** 4/13/2011 9:19:00 **Analysis Type:** REA8 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	93.7		0.120	MDL	0.443	PQL	mg/Kg	J	E

Sample ID: SL-205-SA5A-SB-4.0-5.0 **Collected:** 4/13/2011 11:14:00 **Analysis Type:** REA4 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.114	J	0.0673	MDL	0.224	PQL	mg/Kg	J	Z, Q
ARSENIC	8.97		0.0897	MDL	0.449	PQL	mg/Kg	J	Q
BERYLLIUM	1.19		0.0179	MDL	0.112	PQL	mg/Kg	J	E
CADMIUM	0.0767	J	0.0449	MDL	0.112	PQL	mg/Kg	J	Z, Q
CHROMIUM	29.7		0.135	MDL	0.449	PQL	mg/Kg	J	Q, E, A
COBALT	19.1		0.0224	MDL	0.112	PQL	mg/Kg	J	Q, E
COPPER	15.9		0.0740	MDL	0.449	PQL	mg/Kg	J	E
LEAD	10.9		0.0117	MDL	0.224	PQL	mg/Kg	J	E
NICKEL	25.3		0.112	MDL	0.449	PQL	mg/Kg	J	Q, E
SILVER	0.0751	J	0.0135	MDL	0.112	PQL	mg/Kg	J	Z
THALLIUM	0.365		0.0337	MDL	0.112	PQL	mg/Kg	J	Q
VANADIUM	56.0		0.0247	MDL	0.112	PQL	mg/Kg	J	E
ZINC	69.4		0.628	MDL	3.37	PQL	mg/Kg	J	E

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE126 **Laboratory: LL**

EDD Filename: DE126_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-205-SA5A-SB-4.0-5.0 **Collected:** 4/13/2011 11:14:00 **Analysis Type:** REA6 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0597	J	0.0449	MDL	0.449	PQL	mg/Kg	J	Z

Sample ID: SL-205-SA5A-SB-4.0-5.0 **Collected:** 4/13/2011 11:14:00 **Analysis Type:** REA7 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.995		0.0561	MDL	0.112	PQL	mg/Kg	J	E

Sample ID: SL-205-SA5A-SB-4.0-5.0 **Collected:** 4/13/2011 11:14:00 **Analysis Type:** REA8 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	160		0.121	MDL	0.449	PQL	mg/Kg	J	E

Sample ID: SL-205-SA5A-SB-8.0-9.0 **Collected:** 4/13/2011 11:22:00 **Analysis Type:** REA4 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0776	J	0.0674	MDL	0.225	PQL	mg/Kg	J	Z, Q
ARSENIC	6.57		0.0898	MDL	0.449	PQL	mg/Kg	J	Q
BERYLLIUM	0.735		0.0180	MDL	0.112	PQL	mg/Kg	J	E
CHROMIUM	17.9		0.135	MDL	0.449	PQL	mg/Kg	J	Q, E, A
COBALT	5.45		0.0225	MDL	0.112	PQL	mg/Kg	J	Q, E
COPPER	10.7		0.0741	MDL	0.449	PQL	mg/Kg	J	E
LEAD	6.12		0.0117	MDL	0.225	PQL	mg/Kg	J	E
NICKEL	11.6		0.112	MDL	0.449	PQL	mg/Kg	J	Q, E
SILVER	0.0462	J	0.0135	MDL	0.112	PQL	mg/Kg	J	Z
THALLIUM	0.268		0.0337	MDL	0.112	PQL	mg/Kg	J	Q
VANADIUM	37.1		0.0247	MDL	0.112	PQL	mg/Kg	J	E
ZINC	43.7		0.629	MDL	3.37	PQL	mg/Kg	J	E

Sample ID: SL-205-SA5A-SB-8.0-9.0 **Collected:** 4/13/2011 11:22:00 **Analysis Type:** REA6 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0524	J	0.0449	MDL	0.449	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE126 **Laboratory: LL**

EDD Filename: DE126_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS
Method: 6020 **Matrix:** SO

Sample ID: SL-205-SA5A-SB-8.0-9.0 **Collected:** 4/13/2011 11:22:00 **Analysis Type:** REA7 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.446		0.0562	MDL	0.112	PQL	mg/Kg	J	E

Sample ID: SL-205-SA5A-SB-8.0-9.0 **Collected:** 4/13/2011 11:22:00 **Analysis Type:** REA8 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	68.3		0.121	MDL	0.449	PQL	mg/Kg	J	E

Method Category: METALS
Method: 7199 **Matrix:** SO

Sample ID: DUP02-SA8N-QC-041311 **Collected:** 4/13/2011 10:15:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.24	U	0.24	MDL	1.2	PQL	mg/Kg	UJ	FD

Sample ID: SL-027-SA8N-SS-0.0-0.5 **Collected:** 4/13/2011 10:10:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.65	J	0.24	MDL	1.2	PQL	mg/Kg	J	Z, FD

Sample ID: SL-028-SA8N-SS-0.0-0.5 **Collected:** 4/13/2011 10:30:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.70	J	0.24	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-046-SA8N-SS-0.0-0.5 **Collected:** 4/13/2011 8:40:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.58	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-060-SA5A-SB-4.0-5.0 **Collected:** 4/13/2011 4:05:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.50	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE126 **Laboratory: LL**

EDD Filename: DE126_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS
Method: 7199 **Matrix:** SO

Sample ID: SL-061-SA5A-SB-4.0-5.0 **Collected:** 4/13/2011 2:28:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.43	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Method Category: METALS
Method: 7471A **Matrix:** SO

Sample ID: DUP02-SA8N-QC-041311 **Collected:** 4/13/2011 10:15:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0795	J	0.0033	MDL	0.115	PQL	mg/Kg	J	Z

Sample ID: SL-027-SA8N-SS-0.0-0.5 **Collected:** 4/13/2011 10:10:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0873	J	0.0032	MDL	0.111	PQL	mg/Kg	J	Z

Sample ID: SL-028-SA8N-SS-0.0-0.5 **Collected:** 4/13/2011 10:30:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0341	J	0.0032	MDL	0.113	PQL	mg/Kg	J	Z

Sample ID: SL-032-SA8N-SS-0.0-0.5 **Collected:** 4/13/2011 12:55:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0494	J	0.0031	MDL	0.107	PQL	mg/Kg	J	Z

Sample ID: SL-046-SA8N-SS-0.0-0.5 **Collected:** 4/13/2011 8:40:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0155	J	0.0031	MDL	0.108	PQL	mg/Kg	J	Z

Sample ID: SL-060-SA5A-SB-4.0-5.0 **Collected:** 4/13/2011 4:05:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0078	J	0.0033	MDL	0.115	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE126 **Laboratory: LL**

EDD Filename: DE126_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS
Method: 7471A **Matrix:** SO

Sample ID: SL-204-SA5A-SB-4.0-5.0 **Collected:** 4/13/2011 9:19:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0058	J	0.0030	MDL	0.105	PQL	mg/Kg	J	Z

Sample ID: SL-205-SA5A-SB-4.0-5.0 **Collected:** 4/13/2011 11:14:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0035	J	0.0032	MDL	0.112	PQL	mg/Kg	J	Z

Sample ID: SL-205-SA5A-SB-8.0-9.0 **Collected:** 4/13/2011 11:22:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0060	J	0.0032	MDL	0.112	PQL	mg/Kg	J	Z

Method Category: SVOA
Method: 8015M **Matrix:** AQ

Sample ID: EB02-SA8N-SS-041311 **Collected:** 4/13/2011 12:15:00 **Analysis Type:** REA **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ETHYLENE GLYCOL	10	U	10	MDL	100	PQL	mg/L	UJ	Q
Propylene glycol	10	U	10	MDL	100	PQL	mg/L	UJ	Q

Method Category: SVOA
Method: 8015M **Matrix:** SO

Sample ID: SL-027-SA8N-SS-0.0-0.5 **Collected:** 4/13/2011 10:10:00 **Analysis Type:** REA2 **Dilution:** 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	3.6	J	2.3	MDL	7.0	PQL	mg/Kg	J	Z

Sample ID: SL-204-SA5A-SB-4.0-5.0 **Collected:** 4/13/2011 9:19:00 **Analysis Type:** REA2 **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C21-C30)	0.86	J	0.45	MDL	1.3	PQL	mg/Kg	U	B
EFH (C30-C40)	3.6		0.45	MDL	1.3	PQL	mg/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE126 **Laboratory: LL**

EDD Filename: DE126_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: SL-046-SA8N-SS-0.0-0.5 **Collected:** 4/13/2011 8:40:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	1.8	J	0.36	MDL	1.9	PQL	ug/Kg	J	Z
AROCLOR 1260	1.5	J	0.43	MDL	1.9	PQL	ug/Kg	J	Z
Aroclor 5460	2.2	J	1.1	MDL	3.6	PQL	ug/Kg	J	Z

Sample ID: SL-205-SA5A-SB-4.0-5.0 **Collected:** 4/13/2011 11:14:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5460	1.7	J	1.1	MDL	3.8	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8270C **Matrix: SO**

Sample ID: DUP02-SA8N-QC-041311 **Collected:** 4/13/2011 10:15:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	55	J	20	MDL	200	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	66	J	20	MDL	200	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	98	J	20	MDL	200	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	51	J	20	MDL	200	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	37	J	20	MDL	200	PQL	ug/Kg	J	Z
CHRYSENE	91	J	20	MDL	200	PQL	ug/Kg	J	Z
FLUORANTHENE	45	J	20	MDL	200	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	47	J	20	MDL	200	PQL	ug/Kg	J	Z
PYRENE	67	J	20	MDL	200	PQL	ug/Kg	J	Z

Sample ID: SL-027-SA8N-SS-0.0-0.5 **Collected:** 4/13/2011 10:10:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZIDINE	1400	U	1400	MDL	3900	PQL	ug/Kg	UJ	Q

Sample ID: SL-028-SA8N-SS-0.0-0.5 **Collected:** 4/13/2011 10:30:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	22	J	20	MDL	200	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	24	J	20	MDL	200	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE126 **Laboratory: LL**

EDD Filename: DE126_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SL-028-SA8N-SS-0.0-0.5 **Collected:** 4/13/2011 10:30:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	30	J	20	MDL	400	PQL	ug/Kg	J	Z
CHRYSENE	28	J	20	MDL	200	PQL	ug/Kg	J	Z
FLUORANTHENE	34	J	20	MDL	200	PQL	ug/Kg	J	Z
PYRENE	28	J	20	MDL	200	PQL	ug/Kg	J	Z

Sample ID: SL-032-SA8N-SS-0.0-0.5 **Collected:** 4/13/2011 12:55:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	32	J	18	MDL	360	PQL	ug/Kg	J	Z

Sample ID: SL-046-SA8N-SS-0.0-0.5 **Collected:** 4/13/2011 8:40:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	29	J	18	MDL	360	PQL	ug/Kg	J	Z

Sample ID: SL-060-SA5A-SB-4.0-5.0 **Collected:** 4/13/2011 4:05:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	26	J	19	MDL	380	PQL	ug/Kg	J	Z

Sample ID: SL-060-SA5A-SB-8.0-9.0 **Collected:** 4/13/2011 4:11:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	20	J	19	MDL	370	PQL	ug/Kg	J	Z

Sample ID: SL-204-SA5A-SB-4.0-5.0 **Collected:** 4/13/2011 9:19:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	19	J	19	MDL	370	PQL	ug/Kg	J	Z

Sample ID: SL-205-SA5A-SB-8.0-9.0 **Collected:** 4/13/2011 11:22:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	24	J	19	MDL	380	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE126 **Laboratory: LL**

EDD Filename: DE126_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA
Method: 8270C SIM **Matrix:** AQ

Sample ID: EB02-SA8N-SS-041311 **Collected:** 4/13/2011 12:15:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Diethylphthalate	0.13	J	0.051	MDL	1.0	PQL	ug/L	J	Z
Di-n-butylphthalate	0.53	J	0.051	MDL	1.0	PQL	ug/L	J	Z
Di-n-octylphthalate	3.0		0.051	MDL	1.0	PQL	ug/L	J	L
NAPHTHALENE	0.034	J	0.030	MDL	0.051	PQL	ug/L	J	Z
PHENANTHRENE	0.018	J	0.010	MDL	0.051	PQL	ug/L	J	Z

Method Category: SVOA
Method: 8270C SIM **Matrix:** SO

Sample ID: DUP02-SA8N-QC-041311 **Collected:** 4/13/2011 10:15:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	1.4	J	0.78	MDL	2.0	PQL	ug/Kg	J	Z
ACENAPHTHYLENE	0.63	J	0.39	MDL	2.0	PQL	ug/Kg	J	Z
ANTHRACENE	1.5	J	0.39	MDL	2.0	PQL	ug/Kg	J	Z, FD
BIS(2-ETHYLHEXYL)PHTHALATE	260		7.0	MDL	21	PQL	ug/Kg	J	FD
Butylbenzylphthalate	8.8	J	7.0	MDL	21	PQL	ug/Kg	J	Z, FD
DIBENZO(A,H)ANTHRACENE	1.3	J	0.78	MDL	2.0	PQL	ug/Kg	J	Z
Di-n-octylphthalate	230		7.0	MDL	21	PQL	ug/Kg	J	FD

Sample ID: SL-027-SA8N-SS-0.0-0.5 **Collected:** 4/13/2011 10:10:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	1.3	J	0.78	MDL	2.0	PQL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	1.8	J	0.78	MDL	2.0	PQL	ug/Kg	J	Z
ACENAPHTHYLENE	0.51	J	0.39	MDL	2.0	PQL	ug/Kg	J	Z
ANTHRACENE	0.82	J	0.39	MDL	2.0	PQL	ug/Kg	J	Z, FD
BIS(2-ETHYLHEXYL)PHTHALATE	41		7.1	MDL	21	PQL	ug/Kg	J	FD
Butylbenzylphthalate	7.1	U	7.1	MDL	21	PQL	ug/Kg	UJ	FD
DIBENZO(A,H)ANTHRACENE	0.98	J	0.78	MDL	2.0	PQL	ug/Kg	J	Z
Di-n-octylphthalate	7.1	U	7.1	MDL	21	PQL	ug/Kg	UJ	FD

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE126 **Laboratory: LL**

EDD Filename: DE126_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C SIM **Matrix:** SO

Sample ID: SL-028-SA8N-SS-0.0-0.5 **Collected:** 4/13/2011 10:30:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	1.1	J	0.80	MDL	2.0	PQL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	1.6	J	0.80	MDL	2.0	PQL	ug/Kg	J	Z
ACENAPHTHYLENE	0.56	J	0.40	MDL	2.0	PQL	ug/Kg	J	Z
ANTHRACENE	1.7	J	0.40	MDL	2.0	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	1.5	J	0.80	MDL	2.0	PQL	ug/Kg	J	Z

Sample ID: SL-032-SA8N-SS-0.0-0.5 **Collected:** 4/13/2011 12:55:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-METHYLNAPHTHALENE	1.3	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
ACENAPHTHYLENE	0.51	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z
ANTHRACENE	1.3	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-046-SA8N-SS-0.0-0.5 **Collected:** 4/13/2011 8:40:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	0.59	J	0.37	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	1.2	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.4	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	0.92	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.6	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	1.1	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
NAPHTHALENE	1.3	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: SL-060-SA5A-SB-4.0-5.0 **Collected:** 4/13/2011 4:05:00 **Analysis Type:** RES **Dilution:** 0.84

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	1.0	J	0.23	MDL	3.9	PQL	ug/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE126 **Laboratory: LL**

EDD Filename: DE126_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **VOA**

Method: **8260B** ***Matrix:*** **SO**

Sample ID: **SL-061-SA5A-SB-4.0-5.0** ***Collected:*** **4/13/2011 2:28:00** ***Analysis Type:*** **RES** ***Dilution:*** **0.83**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	1.3	J	0.23	MDL	3.8	PQL	ug/Kg	U	B

Sample ID: **SL-204-SA5A-SB-4.0-5.0** ***Collected:*** **4/13/2011 9:19:00** ***Analysis Type:*** **RES** ***Dilution:*** **0.86**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	3.6	J	0.23	MDL	3.9	PQL	ug/Kg	U	B

Sample ID: **SL-205-SA5A-SB-4.0-5.0** ***Collected:*** **4/13/2011 11:14:00** ***Analysis Type:*** **RES** ***Dilution:*** **0.87**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.65	J	0.24	MDL	4.0	PQL	ug/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE126 **Laboratory: LL**

EDD Filename: DE126_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
*#	Professional Judgment
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Verification Correlation Coefficient
C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE126 **Laboratory: LL**

EDD Filename: DE126_v1 **eQAPP Name: CDM_SSFL_110509**

F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation
L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery Lower Estimation

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE126 **Laboratory: LL**

EDD Filename: DE126_v1 **eQAPP Name: CDM_SSFL_110509**

R	Continuing Calibration Verification Percent Recovery Lower Rejection
R	Continuing Calibration Verification Percent Recovery Upper Estimation
R	Continuing Calibration Verification Percent Recovery Upper Rejection
R	Continuing Calibration Verification Relative Response Factor
R	Initial Calibration Relative Response Factor
R	Initial Calibration Verification Percent Recovery Lower Estimation
R	Initial Calibration Verification Percent Recovery Lower Rejection
R	Initial Calibration Verification Percent Recovery Upper Estimation
R	Initial Calibration Verification Percent Recovery Upper Rejection
R	Initial Calibration Verification Relative Response Factor
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control Outlier Reports

DE126

Method Blank Outlier Report

Lab Reporting Batch ID: DE126 **Laboratory: LL**

EDD Filename: DE126_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **6010B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P11108BB220014	4/26/2011 12:14:00 AM	PHOSPHORUS	1.32 mg/Kg	DUP02-SA8N-QC-041311 SL-027-SA8N-SS-0.0-0.5 SL-028-SA8N-SS-0.0-0.5 SL-032-SA8N-SS-0.0-0.5 SL-046-SA8N-SS-0.0-0.5 SL-060-SA5A-SB-4.0-5.0 SL-060-SA5A-SB-8.0-9.0 SL-061-SA5A-SB-4.0-5.0 SL-204-SA5A-SB-4.0-5.0 SL-205-SA5A-SB-4.0-5.0 SL-205-SA5A-SB-8.0-9.0
P11108BB220410	4/27/2011 4:10:00 AM	LITHIUM TIN	0.30 mg/Kg 1.42 mg/Kg	DUP02-SA8N-QC-041311 SL-027-SA8N-SS-0.0-0.5 SL-028-SA8N-SS-0.0-0.5 SL-032-SA8N-SS-0.0-0.5 SL-046-SA8N-SS-0.0-0.5 SL-060-SA5A-SB-4.0-5.0 SL-060-SA5A-SB-8.0-9.0 SL-061-SA5A-SB-4.0-5.0 SL-204-SA5A-SB-4.0-5.0 SL-205-SA5A-SB-4.0-5.0 SL-205-SA5A-SB-8.0-9.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
DUP02-SA8N-QC-041311(REA2)	TIN	3.46 mg/Kg	3.46U mg/Kg
SL-027-SA8N-SS-0.0-0.5(REA2)	TIN	3.09 mg/Kg	3.09U mg/Kg
SL-028-SA8N-SS-0.0-0.5(REA2)	TIN	2.74 mg/Kg	2.74U mg/Kg
SL-032-SA8N-SS-0.0-0.5(REA2)	TIN	2.71 mg/Kg	2.71U mg/Kg
SL-046-SA8N-SS-0.0-0.5(REA2)	TIN	2.22 mg/Kg	2.22U mg/Kg
SL-060-SA5A-SB-4.0-5.0(REA2)	TIN	3.50 mg/Kg	3.50U mg/Kg
SL-060-SA5A-SB-8.0-9.0(REA2)	TIN	2.60 mg/Kg	2.60U mg/Kg
SL-061-SA5A-SB-4.0-5.0(REA2)	TIN	2.84 mg/Kg	2.84U mg/Kg
SL-204-SA5A-SB-4.0-5.0(REA2)	TIN	2.73 mg/Kg	2.73U mg/Kg
SL-205-SA5A-SB-4.0-5.0(REA2)	TIN	2.62 mg/Kg	2.62U mg/Kg
SL-205-SA5A-SB-8.0-9.0(REA2)	TIN	2.70 mg/Kg	2.70U mg/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE126 **Laboratory: LL**

EDD Filename: DE126_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P11126AB220909A	4/22/2011 9:09:00 AM	COPPER	0.119 mg/Kg	DUP02-SA8N-QC-041311 SL-027-SA8N-SS-0.0-0.5 SL-028-SA8N-SS-0.0-0.5 SL-032-SA8N-SS-0.0-0.5 SL-046-SA8N-SS-0.0-0.5 SL-060-SA5A-SB-4.0-5.0 SL-060-SA5A-SB-8.0-9.0 SL-061-SA5A-SB-4.0-5.0 SL-204-SA5A-SB-4.0-5.0 SL-205-SA5A-SB-4.0-5.0 SL-205-SA5A-SB-8.0-9.0

Method: 8015M
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P09092AB320241A	4/28/2011 2:41:00 AM	EFH (C21-C30) EFH (C30-C40)	0.93 mg/Kg 0.92 mg/Kg	SL-027-SA8N-SS-0.0-0.5 SL-028-SA8N-SS-0.0-0.5 SL-032-SA8N-SS-0.0-0.5 SL-046-SA8N-SS-0.0-0.5 SL-204-SA5A-SB-4.0-5.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-204-SA5A-SB-4.0-5.0(REA2)	EFH (C21-C30)	0.86 mg/Kg	1.3U mg/Kg
SL-204-SA5A-SB-4.0-5.0(REA2)	EFH (C30-C40)	3.6 mg/Kg	3.6U mg/Kg

Method: 8260B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB29B211235A	4/19/2011 12:35:00 PM	METHYLENE CHLORIDE TOLUENE	3.4 ug/Kg 0.11 ug/Kg	SL-060-SA5A-SB-4.0-5.0 SL-061-SA5A-SB-4.0-5.0 SL-204-SA5A-SB-4.0-5.0 SL-205-SA5A-SB-4.0-5.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-060-SA5A-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.0 ug/Kg	3.9U ug/Kg
SL-061-SA5A-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.3 ug/Kg	3.8U ug/Kg
SL-204-SA5A-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	3.6 ug/Kg	3.9U ug/Kg
SL-205-SA5A-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.65 ug/Kg	4.0U ug/Kg

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE126 **Laboratory: LL**

EDD Filename: DE126_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8015M
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
EB02-SA8N-SS-041311MS EB02-SA8N-SS-041311MSD (EB02-SA8N-SS-041311)	ETHYLENE GLYCOL Propylene glycol	80 90	85 90	89.00-125.00 91.00-128.00	- -	ETHYLENE GLYCOL Propylene glycol	J(all detects) UJ(all non-detects)

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-027-SA8N-SS-0.0-0.5MS SL-027-SA8N-SS-0.0-0.5MSD (SL-027-SA8N-SS-0.0-0.5)	BENZIDINE	30	-	35.00-141.00	41 (30.00)	BENZIDINE	J (all detects) UJ (all non-detects)

Method: 8270C SIM
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-027-SA8N-SS-0.0-0.5MS SL-027-SA8N-SS-0.0-0.5MSD (SL-027-SA8N-SS-0.0-0.5)	ACENAPHTHENE Butylbenzylphthalate	106 -	106 448	63.00-105.00 57.00-173.00	- 116 (30.00)	ACENAPHTHENE Butylbenzylphthalate	J(all detects)

Method: 8082
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-027-SA8N-SS-0.0-0.5MS SL-027-SA8N-SS-0.0-0.5MSD (SL-027-SA8N-SS-0.0-0.5)	AROCLOR 1016 AROCLOR 1260	0 0	0 0	29.00-146.00 39.00-149.00	- -	AROCLOR 1016 AROCLOR 1260	No Qual Diluted Out

Method: 8015M
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-027-SA8N-SS-0.0-0.5MS SL-027-SA8N-SS-0.0-0.5MSD (SL-027-SA8N-SS-0.0-0.5)	EFH (C21-C30) EFH (C30-C40)	-11 -1743	-128 -1815	49.00-123.00 49.00-123.00	21 (20.00) -	EFH (C21-C30) EFH (C30-C40)	No Qual, >4x

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE126 **Laboratory: LL**

EDD Filename: DE126_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-027-SA8N-SS-0.0-0.5MS	ARSENIC	133	134	75.00-125.00	-	ARSENIC	
SL-027-SA8N-SS-0.0-0.5MSD	CADMIUM	151	-	75.00-125.00	-	CADMIUM	
(DUP02-SA8N-QC-041311	CHROMIUM	-	158	75.00-125.00	-	CHROMIUM	
SL-027-SA8N-SS-0.0-0.5	COBALT	129	-	75.00-125.00	-	COBALT	
SL-028-SA8N-SS-0.0-0.5	LEAD	196	-	75.00-125.00	-	LEAD	
SL-032-SA8N-SS-0.0-0.5	NICKEL	146	159	75.00-125.00	-	NICKEL	
SL-046-SA8N-SS-0.0-0.5	THALLIUM	-	127	75.00-125.00	-	THALLIUM	J(all detects)
SL-060-SA5A-SB-4.0-5.0	VANADIUM	140	-	75.00-125.00	-	VANADIUM	
SL-060-SA5A-SB-8.0-9.0	ZINC	313	214	75.00-125.00	-	ZINC	Pb, V, Zn
SL-061-SA5A-SB-4.0-5.0							No Qual, >4x
SL-204-SA5A-SB-4.0-5.0							
SL-205-SA5A-SB-4.0-5.0							
SL-205-SA5A-SB-8.0-9.0)							
SL-027-SA8N-SS-0.0-0.5MS	ANTIMONY	34	37	75.00-125.00	-	ANTIMONY	
SL-027-SA8N-SS-0.0-0.5MSD	COPPER	63	-	75.00-125.00	-	COPPER	
(DUP02-SA8N-QC-041311							
SL-027-SA8N-SS-0.0-0.5							
SL-028-SA8N-SS-0.0-0.5							
SL-032-SA8N-SS-0.0-0.5							
SL-046-SA8N-SS-0.0-0.5							J(all detects)
SL-060-SA5A-SB-4.0-5.0							UJ(all non-detects)
SL-060-SA5A-SB-8.0-9.0							
SL-061-SA5A-SB-4.0-5.0							Cu No Qual, >4x
SL-204-SA5A-SB-4.0-5.0							
SL-205-SA5A-SB-4.0-5.0							
SL-205-SA5A-SB-8.0-9.0)							
SL-027-SA8N-SS-0.0-0.5MS	BARIUM	-142	11	75.00-125.00	-	BARIUM	
SL-027-SA8N-SS-0.0-0.5MSD							
(DUP02-SA8N-QC-041311							
SL-027-SA8N-SS-0.0-0.5							
SL-028-SA8N-SS-0.0-0.5							
SL-032-SA8N-SS-0.0-0.5							
SL-046-SA8N-SS-0.0-0.5							No Qual, >4x
SL-060-SA5A-SB-4.0-5.0							
SL-060-SA5A-SB-8.0-9.0							
SL-061-SA5A-SB-4.0-5.0							
SL-204-SA5A-SB-4.0-5.0							
SL-205-SA5A-SB-4.0-5.0							
SL-205-SA5A-SB-8.0-9.0)							

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-027-SA8N-SS-0.0-0.5MS	ALUMINUM	2687	2319	75.00-125.00	-	ALUMINUM	
SL-027-SA8N-SS-0.0-0.5MSD	CALCIUM	588	612	75.00-125.00	-	CALCIUM	
(DUP02-SA8N-QC-041311	IRON	1156	1231	75.00-125.00	-	IRON	
SL-027-SA8N-SS-0.0-0.5	MAGNESIUM	345	329	75.00-125.00	-	MAGNESIUM	
SL-028-SA8N-SS-0.0-0.5	POTASSIUM	131	148	75.00-125.00	-	POTASSIUM	
SL-032-SA8N-SS-0.0-0.5							
SL-046-SA8N-SS-0.0-0.5							No Qual, >4x
SL-060-SA5A-SB-4.0-5.0							
SL-060-SA5A-SB-8.0-9.0							
SL-061-SA5A-SB-4.0-5.0							
SL-204-SA5A-SB-4.0-5.0							
SL-205-SA5A-SB-4.0-5.0							
SL-205-SA5A-SB-8.0-9.0)							

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE126 **Laboratory: LL**

EDD Filename: DE126_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-027-SA8N-SS-0.0-0.5MS **SL-027-SA8N-SS-0.0-0.5MSD** (DUP02-SA8N-QC-041311 SL-027-SA8N-SS-0.0-0.5 SL-028-SA8N-SS-0.0-0.5 SL-032-SA8N-SS-0.0-0.5 SL-046-SA8N-SS-0.0-0.5 SL-060-SA5A-SB-4.0-5.0 SL-060-SA5A-SB-8.0-9.0 SL-061-SA5A-SB-4.0-5.0 SL-204-SA5A-SB-4.0-5.0 SL-205-SA5A-SB-4.0-5.0 SL-205-SA5A-SB-8.0-9.0)	PHOSPHORUS	-36	136	75.00-125.00	-	PHOSPHORUS	No Qual, >4x
SL-027-SA8N-SS-0.0-0.5MSD (DUP02-SA8N-QC-041311 SL-027-SA8N-SS-0.0-0.5 SL-028-SA8N-SS-0.0-0.5 SL-032-SA8N-SS-0.0-0.5 SL-046-SA8N-SS-0.0-0.5 SL-060-SA5A-SB-4.0-5.0 SL-060-SA5A-SB-8.0-9.0 SL-061-SA5A-SB-4.0-5.0 SL-204-SA5A-SB-4.0-5.0 SL-205-SA5A-SB-4.0-5.0 SL-205-SA5A-SB-8.0-9.0)	MANGANESE	-	70	75.00-125.00	-	MANGANESE	No Qual, >4x

Method: 300.0
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-027-SA8N-SS-0.0-0.5MS (DUP02-SA8N-QC-041311 SL-027-SA8N-SS-0.0-0.5 SL-028-SA8N-SS-0.0-0.5 SL-032-SA8N-SS-0.0-0.5 SL-046-SA8N-SS-0.0-0.5 SL-060-SA5A-SB-4.0-5.0 SL-060-SA5A-SB-8.0-9.0 SL-061-SA5A-SB-4.0-5.0 SL-204-SA5A-SB-4.0-5.0 SL-205-SA5A-SB-4.0-5.0)	FLUORIDE	62	-	80.00-120.00	-	FLUORIDE	J(all detects) UJ(all non-detects)
SL-205-SA5A-SB-8.0-9.0MS (SL-205-SA5A-SB-8.0-9.0)	FLUORIDE	55	-	80.00-120.00	-	FLUORIDE	J(all detects) UJ(all non-detects)

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE126 **Laboratory: LL**

EDD Filename: DE126_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **6010B**

Matrix: **SO**

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-027-SA8N-SS-0.0-0.5MS	TITANIUM	369	342	75.00-125.00	-	TITANIUM	
SL-027-SA8N-SS-0.0-0.5MSD							
(DUP02-SA8N-QC-041311							
SL-027-SA8N-SS-0.0-0.5							
SL-028-SA8N-SS-0.0-0.5							
SL-032-SA8N-SS-0.0-0.5							
SL-046-SA8N-SS-0.0-0.5							No Qual, >4x
SL-060-SA5A-SB-4.0-5.0							
SL-060-SA5A-SB-8.0-9.0							
SL-061-SA5A-SB-4.0-5.0							
SL-204-SA5A-SB-4.0-5.0							
SL-205-SA5A-SB-4.0-5.0							
SL-205-SA5A-SB-8.0-9.0)							

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE126 **Laboratory: LL**

EDD Filename: DE126_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 300.0
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-205-SA5A-SB-8.0-9.0DUP (SL-205-SA5A-SB-8.0-9.0)	FLUORIDE	54	20.00	No Qual OK by difference

Method: 6020
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-027-SA8N-SS-0.0-0.5DUP (DUP02-SA8N-QC-041311 SL-027-SA8N-SS-0.0-0.5 SL-028-SA8N-SS-0.0-0.5 SL-032-SA8N-SS-0.0-0.5 SL-046-SA8N-SS-0.0-0.5 SL-060-SA5A-SB-4.0-5.0 SL-060-SA5A-SB-8.0-9.0 SL-061-SA5A-SB-4.0-5.0 SL-204-SA5A-SB-4.0-5.0 SL-205-SA5A-SB-4.0-5.0 SL-205-SA5A-SB-8.0-9.0)	BARIUM	29	20.00	J(all detects) UJ(all non-detects) Se, Tl No Qual OK by difference
	BERYLLIUM	21	20.00	
	CHROMIUM	26	20.00	
	COBALT	28	20.00	
	COPPER	30	20.00	
	LEAD	32	20.00	
	MOLYBDENUM	27	20.00	
	NICKEL	25	20.00	
	SELENIUM	25	20.00	
	THALLIUM	21	20.00	
	VANADIUM	24	20.00	
	ZINC	21	20.00	

Method: 7199
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-027-SA8N-SS-0.0-0.5DUP (DUP02-SA8N-QC-041311 SL-027-SA8N-SS-0.0-0.5 SL-028-SA8N-SS-0.0-0.5 SL-032-SA8N-SS-0.0-0.5 SL-046-SA8N-SS-0.0-0.5 SL-060-SA5A-SB-4.0-5.0 SL-060-SA5A-SB-8.0-9.0 SL-061-SA5A-SB-4.0-5.0 SL-204-SA5A-SB-4.0-5.0 SL-205-SA5A-SB-4.0-5.0 SL-205-SA5A-SB-8.0-9.0)	HEXAVALENT CHROMIUM	45	20.00	No Qual OK by difference

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE126 **Laboratory: LL**

EDD Filename: DE126_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7471A
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-027-SA8N-SS-0.0-0.5DUP (DUP02-SA8N-QC-041311 SL-027-SA8N-SS-0.0-0.5 SL-028-SA8N-SS-0.0-0.5 SL-032-SA8N-SS-0.0-0.5 SL-046-SA8N-SS-0.0-0.5 SL-060-SA5A-SB-4.0-5.0 SL-060-SA5A-SB-8.0-9.0 SL-061-SA5A-SB-4.0-5.0 SL-204-SA5A-SB-4.0-5.0 SL-205-SA5A-SB-4.0-5.0 SL-205-SA5A-SB-8.0-9.0)	MERCURY	71	20.00	No Qual OK by difference

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE126 **Laboratory: LL**

EDD Filename: DE126_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C SIM
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P6WDLCSQ262022 (EB02-SA8N-SS-041311)	ACENAPHTHENE Di-n-octylphthalate	116 154	- -	74.00-109.00 57.00-145.00	- -	ACENAPHTHENE Di-n-octylphthalate	J (all detects)

Method: 8270C
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P8WCLCSY261402 (EB02-SA8N-SS-041311)	1,2-Diphenylhydrazine/Azobenzen	-	118	78.00-116.00	-	1,2-Diphenylhydrazine/Azobenz	J(all detects)

Method: 8082
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11096AQ241416A **P11096AY241357A** (EB02-SA8N-SS-041311)	Aroclor 5442	86	94	35.00-84.00	-	Aroclor 5432, 5442, 5460	J(all detects)

Method: 8260B
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
LCS1Y14Q210248A **LCS1Y14Y210309A** (TB-041311)	2-Chloro-1,1,1-trifluoroethane	123	124	77.00-120.00	-	2-Chloro-1,1,1-trifluoroethane	J(all detects)

Method: 8330A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11080AQ242114A (SL-204-SA5A-SB-4.0-5.0)	PETN	126	-	80.00-120.00	-	PETN	J(all detects)

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE126 **Laboratory: LL**

EDD Filename: DE126_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **6020**
Matrix: **SO**

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11126AQ220912A (DUP02-SA8N-QC-041311 SL-027-SA8N-SS-0.0-0.5 SL-028-SA8N-SS-0.0-0.5 SL-032-SA8N-SS-0.0-0.5 SL-046-SA8N-SS-0.0-0.5 SL-060-SA5A-SB-4.0-5.0 SL-060-SA5A-SB-8.0-9.0 SL-061-SA5A-SB-4.0-5.0 SL-204-SA5A-SB-4.0-5.0 SL-205-SA5A-SB-4.0-5.0 SL-205-SA5A-SB-8.0-9.0)	ANTIMONY	73	-	80.00-120.00	-	ANTIMONY	No Qual SRM within QC limits

Field Duplicate RPD Report

Lab Reporting Batch ID: DE126 **Laboratory: LL**

EDD Filename: DE126_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 160.3M
Matrix: SO

Analyte	Concentration (%)		Sample RPD	eQAPP RPD	Flag
	SL-027-SA8N-SS-0.0-0.5	DUP02-SA8N-QC-041311			
MOISTURE	15.2	14.9	2		No Qualifiers Applied

Method: 300.0
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-027-SA8N-SS-0.0-0.5	DUP02-SA8N-QC-041311			
FLUORIDE	2.6	1.6	48	50.00	No Qualifiers Applied

Method: 6010B
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-027-SA8N-SS-0.0-0.5	DUP02-SA8N-QC-041311			
ALUMINUM	27200	23600	14	50.00	No Qualifiers Applied
BORON	23.6	15.2	43	50.00	
CALCIUM	26900	25400	6	50.00	
IRON	29600	48200	48	50.00	
LITHIUM	25.1	21.6	15	50.00	
MAGNESIUM	7940	7060	12	50.00	
MANGANESE	444	459	3	50.00	
PHOSPHORUS	1580	1430	10	50.00	
POTASSIUM	6680	6340	5	50.00	
SODIUM	219	219	0	50.00	
STRONTIUM	111	112	1	50.00	
TIN	3.09	3.46	11	50.00	
TITANIUM	1360	1350	1	50.00	
Zirconium	7.09	6.37	11	50.00	

Method: 6020
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-027-SA8N-SS-0.0-0.5	DUP02-SA8N-QC-041311			
ANTIMONY	0.678	0.738	8	50.00	No Qualifiers Applied
ARSENIC	7.19	6.75	6	50.00	
BARIUM	198	195	2	50.00	
BERYLLIUM	0.970	0.895	8	50.00	
CADMIUM	1.30	1.31	1	50.00	
CHROMIUM	39.7	36.1	9	50.00	
COBALT	10.7	11.4	6	50.00	
COPPER	57.3	54.9	4	50.00	
LEAD	31.2	29.3	6	50.00	
MOLYBDENUM	0.779	0.630	21	50.00	
NICKEL	28.5	26.0	9	50.00	
SELENIUM	0.216	0.200	8	50.00	
THALLIUM	0.340	0.359	5	50.00	
VANADIUM	65.4	63.0	4	50.00	
ZINC	182	188	3	50.00	
SILVER	0.298	0.502	51	50.00	J(all detects)

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Field Duplicate RPD Report

Lab Reporting Batch ID: DE126 **Laboratory: LL**

EDD Filename: DE126_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7199
Matrix: SO

Analyte	Concentration (mg/Kg) SL-027-SA8N-SS-0.0-0.5	Concentration (mg/Kg) DUP02-SA8N-QC-041311	Sample RPD	eQAPP RPD	Flag
HEXAVALENT CHROMIUM	0.65	1.2 U	200	50.00	J(all detects) UJ(all non-detects)

Method: 7471A
Matrix: SO

Analyte	Concentration (mg/Kg) SL-027-SA8N-SS-0.0-0.5	Concentration (mg/Kg) DUP02-SA8N-QC-041311	Sample RPD	eQAPP RPD	Flag
MERCURY	0.0873	0.0795	9	50.00	No Qualifiers Applied

Method: 8270C SIM
Matrix: SO

Analyte	Concentration (ug/Kg) SL-027-SA8N-SS-0.0-0.5	Concentration (ug/Kg) DUP02-SA8N-QC-041311	Sample RPD	eQAPP RPD	Flag
1-METHYLNAPHTHALENE	1.3	1.4	7	50.00	No Qualifiers Applied
2-METHYLNAPHTHALENE	1.8	2.5	33	50.00	
ACENAPHTHYLENE	0.51	0.63	21	50.00	
DIBENZO(A,H)ANTHRACENE	0.98	1.3	28	50.00	
NAPHTHALENE	3.9	4.6	16	50.00	
PHENANTHRENE	4.9	7.3	39	50.00	
ANTHRACENE	0.82	1.5	59	50.00	J(all detects) UJ(all non-detects)
BIS(2-ETHYLHEXYL)PHTHALATE	41	260	146	50.00	
Butylbenzylphthalate	21 U	8.8	200	50.00	
Di-n-octylphthalate	21 U	230	200	50.00	

Method: 9045M
Matrix: SO

Analyte	Concentration (pH unit) SL-027-SA8N-SS-0.0-0.5	Concentration (pH unit) DUP02-SA8N-QC-041311	Sample RPD	eQAPP RPD	Flag
PH	8.27	8.21	1	50.00	No Qualifiers Applied

Method: ASTM D1498
Matrix: SO

Analyte	Concentration (mV) SL-027-SA8N-SS-0.0-0.5	Concentration (mV) DUP02-SA8N-QC-041311	Sample RPD	eQAPP RPD	Flag
Oxidation Reduction Potential	312	329	5		No Qualifiers Applied

Reporting Limit Outliers

Lab Reporting Batch ID: DE126 **Laboratory: LL**

EDD Filename: DE126_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C SIM
Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB02-SA8N-SS-041311	Diethylphthalate	J	0.13	1.0	PQL	ug/L	J (all detects)
	Di-n-butylphthalate	J	0.53	1.0	PQL	ug/L	
	NAPHTHALENE	J	0.034	0.051	PQL	ug/L	
	PHENANTHRENE	J	0.018	0.051	PQL	ug/L	

Method: 6010B
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP02-SA8N-QC-041311	TIN	J	3.46	11.5	PQL	mg/Kg	J (all detects)
SL-027-SA8N-SS-0.0-0.5	TIN	J	3.09	11.8	PQL	mg/Kg	J (all detects)
SL-028-SA8N-SS-0.0-0.5	TIN	J	2.74	12.0	PQL	mg/Kg	J (all detects)
	Zirconium	J	4.91	5.99	PQL	mg/Kg	
SL-032-SA8N-SS-0.0-0.5	TIN	J	2.71	10.7	PQL	mg/Kg	J (all detects)
	Zirconium	J	3.82	5.35	PQL	mg/Kg	
SL-046-SA8N-SS-0.0-0.5	SODIUM	J	96.1	110	PQL	mg/Kg	J (all detects)
	TIN	J	2.22	11.0	PQL	mg/Kg	
SL-060-SA5A-SB-4.0-5.0	BORON	J	1.57	5.81	PQL	mg/Kg	J (all detects)
	TIN	J	3.50	11.6	PQL	mg/Kg	
	Zirconium	J	3.26	5.81	PQL	mg/Kg	
SL-060-SA5A-SB-8.0-9.0	BORON	J	2.16	5.41	PQL	mg/Kg	J (all detects)
	SODIUM	J	95.8	108	PQL	mg/Kg	
	TIN	J	2.60	10.8	PQL	mg/Kg	
	Zirconium	J	3.07	5.41	PQL	mg/Kg	
SL-061-SA5A-SB-4.0-5.0	BORON	J	2.20	5.71	PQL	mg/Kg	J (all detects)
	SODIUM	J	113	114	PQL	mg/Kg	
	TIN	J	2.84	11.4	PQL	mg/Kg	
	Zirconium	J	3.33	5.71	PQL	mg/Kg	
SL-204-SA5A-SB-4.0-5.0	BORON	J	2.68	5.65	PQL	mg/Kg	J (all detects)
	TIN	J	2.73	11.3	PQL	mg/Kg	
	Zirconium	J	3.72	5.65	PQL	mg/Kg	
SL-205-SA5A-SB-4.0-5.0	BORON	J	2.53	5.72	PQL	mg/Kg	J (all detects)
	SODIUM	J	95.0	114	PQL	mg/Kg	
	TIN	J	2.62	11.4	PQL	mg/Kg	
	Zirconium	J	3.57	5.72	PQL	mg/Kg	
SL-205-SA5A-SB-8.0-9.0	BORON	J	1.78	5.62	PQL	mg/Kg	J (all detects)
	SODIUM	J	106	112	PQL	mg/Kg	
	TIN	J	2.70	11.2	PQL	mg/Kg	
	Zirconium	J	2.86	5.62	PQL	mg/Kg	

Method: 6020
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP02-SA8N-QC-041311	SELENIUM	J	0.200	0.465	PQL	mg/Kg	J (all detects)

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Reporting Limit Outliers

Lab Reporting Batch ID: DE126 **Laboratory: LL**

EDD Filename: DE126_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-027-SA8N-SS-0.0-0.5	SELENIUM	J	0.216	0.449	PQL	mg/Kg	J (all detects)
SL-028-SA8N-SS-0.0-0.5	SELENIUM	J	0.177	0.461	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0961	0.115	PQL	mg/Kg	
SL-032-SA8N-SS-0.0-0.5	ANTIMONY	J	0.113	0.214	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.151	0.428	PQL	mg/Kg	
	SILVER	J	0.0537	0.107	PQL	mg/Kg	
SL-046-SA8N-SS-0.0-0.5	SELENIUM	J	0.263	0.426	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0697	0.107	PQL	mg/Kg	
SL-060-SA5A-SB-4.0-5.0	ANTIMONY	J	0.0866	0.230	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0696	0.115	PQL	mg/Kg	
	SELENIUM	J	0.171	0.461	PQL	mg/Kg	
	SILVER	J	0.0443	0.115	PQL	mg/Kg	
SL-060-SA5A-SB-8.0-9.0	ANTIMONY	J	0.0868	0.217	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.132	0.433	PQL	mg/Kg	
	SILVER	J	0.0442	0.108	PQL	mg/Kg	
SL-061-SA5A-SB-4.0-5.0	ANTIMONY	J	0.0897	0.220	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0835	0.110	PQL	mg/Kg	
	SELENIUM	J	0.144	0.440	PQL	mg/Kg	
	SILVER	J	0.0526	0.110	PQL	mg/Kg	
SL-204-SA5A-SB-4.0-5.0	ANTIMONY	J	0.0691	0.222	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0509	0.111	PQL	mg/Kg	
	SELENIUM	J	0.0982	0.443	PQL	mg/Kg	
SL-205-SA5A-SB-4.0-5.0	ANTIMONY	J	0.114	0.224	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0767	0.112	PQL	mg/Kg	
	SELENIUM	J	0.0597	0.449	PQL	mg/Kg	
	SILVER	J	0.0751	0.112	PQL	mg/Kg	
SL-205-SA5A-SB-8.0-9.0	ANTIMONY	J	0.0776	0.225	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0524	0.449	PQL	mg/Kg	
	SILVER	J	0.0462	0.112	PQL	mg/Kg	

Method: 7199
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-027-SA8N-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.65	1.2	PQL	mg/Kg	J (all detects)
SL-028-SA8N-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.70	1.2	PQL	mg/Kg	J (all detects)
SL-046-SA8N-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.58	1.1	PQL	mg/Kg	J (all detects)
SL-060-SA5A-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.50	1.2	PQL	mg/Kg	J (all detects)
SL-061-SA5A-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.43	1.1	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE126 **Laboratory: LL**

EDD Filename: DE126_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7471A
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP02-SA8N-QC-041311	MERCURY	J	0.0795	0.115	PQL	mg/Kg	J (all detects)
SL-027-SA8N-SS-0.0-0.5	MERCURY	J	0.0873	0.111	PQL	mg/Kg	J (all detects)
SL-028-SA8N-SS-0.0-0.5	MERCURY	J	0.0341	0.113	PQL	mg/Kg	J (all detects)
SL-032-SA8N-SS-0.0-0.5	MERCURY	J	0.0494	0.107	PQL	mg/Kg	J (all detects)
SL-046-SA8N-SS-0.0-0.5	MERCURY	J	0.0155	0.108	PQL	mg/Kg	J (all detects)
SL-060-SA5A-SB-4.0-5.0	MERCURY	J	0.0078	0.115	PQL	mg/Kg	J (all detects)
SL-204-SA5A-SB-4.0-5.0	MERCURY	J	0.0058	0.105	PQL	mg/Kg	J (all detects)
SL-205-SA5A-SB-4.0-5.0	MERCURY	J	0.0035	0.112	PQL	mg/Kg	J (all detects)
SL-205-SA5A-SB-8.0-9.0	MERCURY	J	0.0060	0.112	PQL	mg/Kg	J (all detects)

Method: 8015M
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-027-SA8N-SS-0.0-0.5	EFH (C15-C20)	J	3.6	7.0	PQL	mg/Kg	J (all detects)
SL-204-SA5A-SB-4.0-5.0	EFH (C21-C30)	J	0.86	1.3	PQL	mg/Kg	J (all detects)

Method: 8082
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-046-SA8N-SS-0.0-0.5	AROCLOR 1254 AROCLOR 1260 Aroclor 5460	J J J	1.8 1.5 2.2	1.9 1.9 3.6	PQL PQL PQL	ug/Kg ug/Kg ug/Kg	J (all detects)
SL-205-SA5A-SB-4.0-5.0	Aroclor 5460	J	1.7	3.8	PQL	ug/Kg	J (all detects)

Method: 8260B
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-060-SA5A-SB-4.0-5.0	METHYLENE CHLORIDE	J	1.0	3.9	PQL	ug/Kg	J (all detects)
SL-061-SA5A-SB-4.0-5.0	METHYLENE CHLORIDE	J	1.3	3.8	PQL	ug/Kg	J (all detects)
SL-204-SA5A-SB-4.0-5.0	METHYLENE CHLORIDE	J	3.6	3.9	PQL	ug/Kg	J (all detects)
SL-205-SA5A-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.65	4.0	PQL	ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE126 **Laboratory: LL**

EDD Filename: DE126_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP02-SA8N-QC-041311	BENZO(A)ANTHRACENE	J	55	200	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	66	200	PQL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	98	200	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	51	200	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	37	200	PQL	ug/Kg	
	CHRYSENE	J	91	200	PQL	ug/Kg	
	FLUORANTHENE	J	45	200	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	47	200	PQL	ug/Kg	
	PYRENE	J	67	200	PQL	ug/Kg	
SL-028-SA8N-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	22	200	PQL	ug/Kg	J (all detects)
	BENZO(B)FLUORANTHENE	J	24	200	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	30	400	PQL	ug/Kg	
	CHRYSENE	J	28	200	PQL	ug/Kg	
	FLUORANTHENE	J	34	200	PQL	ug/Kg	
	PYRENE	J	28	200	PQL	ug/Kg	
SL-032-SA8N-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	32	360	PQL	ug/Kg	J (all detects)
SL-046-SA8N-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	29	360	PQL	ug/Kg	J (all detects)
SL-060-SA5A-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	26	380	PQL	ug/Kg	J (all detects)
SL-060-SA5A-SB-8.0-9.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	20	370	PQL	ug/Kg	J (all detects)
SL-204-SA5A-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	19	370	PQL	ug/Kg	J (all detects)
SL-205-SA5A-SB-8.0-9.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	24	380	PQL	ug/Kg	J (all detects)

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP02-SA8N-QC-041311	1-METHYLNAPHTHALENE	J	1.4	2.0	PQL	ug/Kg	J (all detects)
	ACENAPHTHYLENE	J	0.63	2.0	PQL	ug/Kg	
	ANTHRACENE	J	1.5	2.0	PQL	ug/Kg	
	Butylbenzylphthalate	J	8.8	21	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	1.3	2.0	PQL	ug/Kg	
SL-027-SA8N-SS-0.0-0.5	1-METHYLNAPHTHALENE	J	1.3	2.0	PQL	ug/Kg	J (all detects)
	2-METHYLNAPHTHALENE	J	1.8	2.0	PQL	ug/Kg	
	ACENAPHTHYLENE	J	0.51	2.0	PQL	ug/Kg	
	ANTHRACENE	J	0.82	2.0	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	0.98	2.0	PQL	ug/Kg	
SL-028-SA8N-SS-0.0-0.5	1-METHYLNAPHTHALENE	J	1.1	2.0	PQL	ug/Kg	J (all detects)
	2-METHYLNAPHTHALENE	J	1.6	2.0	PQL	ug/Kg	
	ACENAPHTHYLENE	J	0.56	2.0	PQL	ug/Kg	
	ANTHRACENE	J	1.7	2.0	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	1.5	2.0	PQL	ug/Kg	
SL-032-SA8N-SS-0.0-0.5	2-METHYLNAPHTHALENE	J	1.3	1.8	PQL	ug/Kg	J (all detects)
	ACENAPHTHYLENE	J	0.51	1.8	PQL	ug/Kg	
	ANTHRACENE	J	1.3	1.8	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE126 **Laboratory: LL**

EDD Filename: DE126_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8270C SIM**

Matrix: **SO**

SampleID	*Analyte*	*Lab Qual*	*Result*	*Reporting Limit*	*RL Type*	*Units*	*Flag*
SL-046-SA8N-SS-0.0-0.5	ANTHRACENE	J	0.59	1.8	PQL	ug/Kg	J (all detects)
	BENZO(A)ANTHRACENE	J	1.2	1.8	PQL	ug/Kg	
	BENZO(A)PYRENE	J	1.4	1.8	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	0.92	1.8	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	1.6	1.8	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.1	1.8	PQL	ug/Kg	
	NAPHTHALENE	J	1.3	1.8	PQL	ug/Kg	

LDC #: 25916H4 **VALIDATION COMPLETENESS WORKSHEET** Date: 8-3-11

SDG #: DE126 ADR

Laboratory: Lancaster Laboratories

Reviewer: CR

2nd Reviewer: A

METHOD: Metals (EPA SW 846 Method 6010B/6020A/7000)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	N	Sampling dates:
II.	ICP/MS Tune	—	
III.	Calibration	—	
IV.	Blanks	A	No Quals
V.	ICP Interference Check Sample (ICS) Analysis	N	
VI.	Matrix Spike Analysis	N	MS/D (Al, Ba, Ca, Co, Fe, Pb, Mg, Mn, P, K, Ti, V, Zn x/x)
VII.	Duplicate Sample Analysis	N	D (Hg, Se, Tl, Sx RL) Mo.
VIII.	Laboratory Control Samples (LCS)	A	LCS
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	SW	Cr: 16% (J/UJ/A)
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	—	
XV	Field Blanks	ND	EB=6

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:

1	DUP02-SA8N-QC-041311 D	11	SL-205-SA5A-SB-4.0-5.0	21		31	
2	SL-027-SA8N-SS-0.0-0.5 D	12	SL-205-SA5A-SB-8.0-9.0	22		32	
3	SL-028-SA8N-SS-0.0-0.5	13	SL-027-SA8N-SS-0.0-0.5MS	23		33	
4	SL-032-SA8N-SS-0.0-0.5	14	SL-027-SA8N-SS-0.0-0.5MSD	24		34	
5	SL-046-SA8N-SS-0.0-0.5	15	SL-027-SA8N-SS-0.0-0.5DUP	25		35	
6	EB02-SA8N-SS-041311	16		26		36	
7	SL-060-SA5A-SB-4.0-5.0	17		27		37	
8	SL-060-SA5A-SB-8.0-9.0	18		28		38	
9	SL-061-SA5A-SB-4.0-5.0	19		29		39	
10	SL-204-SA5A-SB-4.0-5.0	20		30		40	

Notes:

SAMPLE DELIVERY GROUP

DE128

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
14-Apr-2011	TB-041411	6259092	TB	5030B	8015M	III
14-Apr-2011	TB-041411	6259092	TB	5030B	8260B	III
14-Apr-2011	TB-041411	6259092	TB	5030B	8260B SIM	III
14-Apr-2011	SL-058-SA5A-SB-3.0-4.0	6259085	N	3050B	6010B	III
14-Apr-2011	SL-058-SA5A-SB-3.0-4.0	6259085	N	3050B	6020	III
14-Apr-2011	SL-058-SA5A-SB-3.0-4.0	6259085	N	3060A	7199	III
14-Apr-2011	SL-058-SA5A-SB-3.0-4.0	6259085	N	3550B	8082	III
14-Apr-2011	SL-058-SA5A-SB-3.0-4.0	6259085	N	3550B	8270C	III
14-Apr-2011	SL-058-SA5A-SB-3.0-4.0	6259085	N	3550B	8270C SIM	III
14-Apr-2011	SL-058-SA5A-SB-3.0-4.0	6259085	N	5035	8260B	III
14-Apr-2011	SL-058-SA5A-SB-3.0-4.0	6259085	N	5035	8260B SIM	III
14-Apr-2011	SL-058-SA5A-SB-3.0-4.0	6259085	N	Gen Prep	9045M	III
14-Apr-2011	SL-058-SA5A-SB-3.0-4.0	6259085	N	METHOD	300.0	III
14-Apr-2011	SL-058-SA5A-SB-3.0-4.0	6259085	N	METHOD	314.0	III
14-Apr-2011	SL-058-SA5A-SB-3.0-4.0	6259085	N	METHOD	7471A	III
14-Apr-2011	SL-058-SA5A-SB-3.0-4.0MS	6259086	MS	3050B	6010B	III
14-Apr-2011	SL-058-SA5A-SB-3.0-4.0MS	6259086	MS	3050B	6020	III
14-Apr-2011	SL-058-SA5A-SB-3.0-4.0MS	6259086	MS	3060A	7199	III
14-Apr-2011	SL-058-SA5A-SB-3.0-4.0MS	6259086	MS	3550B	8082	III
14-Apr-2011	SL-058-SA5A-SB-3.0-4.0MS	6259086	MS	3550B	8270C	III
14-Apr-2011	SL-058-SA5A-SB-3.0-4.0MS	6259086	MS	3550B	8270C SIM	III
14-Apr-2011	SL-058-SA5A-SB-3.0-4.0MS	6259086	MS	5035	8260B	III
14-Apr-2011	SL-058-SA5A-SB-3.0-4.0MS	6259086	MS	5035	8260B SIM	III
14-Apr-2011	SL-058-SA5A-SB-3.0-4.0MS	6259086	MS	METHOD	300.0	III
14-Apr-2011	SL-058-SA5A-SB-3.0-4.0MS	6259086	MS	METHOD	314.0	III
14-Apr-2011	SL-058-SA5A-SB-3.0-4.0MS	6259086	MS	METHOD	7471A	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
14-Apr-2011	SL-058-SA5A-SB-3.0-4.0MSD	6259087	MSD	3050B	6010B	III
14-Apr-2011	SL-058-SA5A-SB-3.0-4.0MSD	6259087	MSD	3050B	6020	III
14-Apr-2011	SL-058-SA5A-SB-3.0-4.0MSD	6259087	MSD	3550B	8082	III
14-Apr-2011	SL-058-SA5A-SB-3.0-4.0MSD	6259087	MSD	3550B	8270C	III
14-Apr-2011	SL-058-SA5A-SB-3.0-4.0MSD	6259087	MSD	3550B	8270C SIM	III
14-Apr-2011	SL-058-SA5A-SB-3.0-4.0MSD	6259087	MSD	5035	8260B	III
14-Apr-2011	SL-058-SA5A-SB-3.0-4.0MSD	6259087	MSD	5035	8260B SIM	III
14-Apr-2011	SL-058-SA5A-SB-3.0-4.0MSD	6259087	MSD	METHOD	7471A	III
14-Apr-2011	SL-058-SA5A-SB-3.0-4.0DUP	6259088	DUP	3050B	6010B	III
14-Apr-2011	SL-058-SA5A-SB-3.0-4.0DUP	6259088	DUP	3050B	6020	III
14-Apr-2011	SL-058-SA5A-SB-3.0-4.0DUP	6259088	DUP	3060A	7199	III
14-Apr-2011	SL-058-SA5A-SB-3.0-4.0DUP	6259088	DUP	Gen Prep	9045M	III
14-Apr-2011	SL-058-SA5A-SB-3.0-4.0DUP	6259088	DUP	METHOD	300.0	III
14-Apr-2011	SL-058-SA5A-SB-3.0-4.0DUP	6259088	DUP	METHOD	314.0	III
14-Apr-2011	SL-058-SA5A-SB-3.0-4.0DUP	6259088	DUP	METHOD	7471A	III
14-Apr-2011	DUP14-SA5A-QC-041411	6259084	FD	3050B	6010B	III
14-Apr-2011	DUP14-SA5A-QC-041411	6259084	FD	3050B	6020	III
14-Apr-2011	DUP14-SA5A-QC-041411	6259084	FD	3060A	7199	III
14-Apr-2011	DUP14-SA5A-QC-041411	6259084	FD	3550B	8082	III
14-Apr-2011	DUP14-SA5A-QC-041411	6259084	FD	3550B	8270C	III
14-Apr-2011	DUP14-SA5A-QC-041411	6259084	FD	3550B	8270C SIM	III
14-Apr-2011	DUP14-SA5A-QC-041411	6259084	FD	5035	8260B	III
14-Apr-2011	DUP14-SA5A-QC-041411	6259084	FD	5035	8260B SIM	III
14-Apr-2011	DUP14-SA5A-QC-041411	6259084	FD	Gen Prep	9045M	III
14-Apr-2011	DUP14-SA5A-QC-041411	6259084	FD	METHOD	300.0	III
14-Apr-2011	DUP14-SA5A-QC-041411	6259084	FD	METHOD	314.0	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
14-Apr-2011	DUP14-SA5A-QC-041411	6259084	FD	METHOD	7471A	III
14-Apr-2011	SL-059-SA5A-SB-3.0-4.0	6259089	N	3050B	6010B	III
14-Apr-2011	SL-059-SA5A-SB-3.0-4.0	6259089	N	3050B	6020	III
14-Apr-2011	SL-059-SA5A-SB-3.0-4.0	6259089	N	3060A	7199	III
14-Apr-2011	SL-059-SA5A-SB-3.0-4.0	6259089	N	3550B	8082	III
14-Apr-2011	SL-059-SA5A-SB-3.0-4.0	6259089	N	3550B	8270C	III
14-Apr-2011	SL-059-SA5A-SB-3.0-4.0	6259089	N	3550B	8270C SIM	III
14-Apr-2011	SL-059-SA5A-SB-3.0-4.0	6259089	N	5035	8260B	III
14-Apr-2011	SL-059-SA5A-SB-3.0-4.0	6259089	N	5035	8260B SIM	III
14-Apr-2011	SL-059-SA5A-SB-3.0-4.0	6259089	N	Gen Prep	9045M	III
14-Apr-2011	SL-059-SA5A-SB-3.0-4.0	6259089	N	METHOD	300.0	III
14-Apr-2011	SL-059-SA5A-SB-3.0-4.0	6259089	N	METHOD	314.0	III
14-Apr-2011	SL-059-SA5A-SB-3.0-4.0	6259089	N	METHOD	7471A	III
14-Apr-2011	SL-065-SA5A-SB-4.0-5.0	6259090	N	3050B	6010B	III
14-Apr-2011	SL-065-SA5A-SB-4.0-5.0	6259090	N	3050B	6020	III
14-Apr-2011	SL-065-SA5A-SB-4.0-5.0	6259090	N	3060A	7199	III
14-Apr-2011	SL-065-SA5A-SB-4.0-5.0	6259090	N	3550B	8082	III
14-Apr-2011	SL-065-SA5A-SB-4.0-5.0	6259090	N	3550B	8270C	III
14-Apr-2011	SL-065-SA5A-SB-4.0-5.0	6259090	N	3550B	8270C SIM	III
14-Apr-2011	SL-065-SA5A-SB-4.0-5.0	6259090	N	5035	8260B	III
14-Apr-2011	SL-065-SA5A-SB-4.0-5.0	6259090	N	5035	8260B SIM	III
14-Apr-2011	SL-065-SA5A-SB-4.0-5.0	6259090	N	Gen Prep	9045M	III
14-Apr-2011	SL-065-SA5A-SB-4.0-5.0	6259090	N	METHOD	300.0	III
14-Apr-2011	SL-065-SA5A-SB-4.0-5.0	6259090	N	METHOD	314.0	III
14-Apr-2011	SL-065-SA5A-SB-4.0-5.0	6259090	N	METHOD	7471A	III
14-Apr-2011	SL-242-SA5A-SB-2.5-3.5	6259091	N	3050B	6010B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
14-Apr-2011	SL-242-SA5A-SB-2.5-3.5	6259091	N	3050B	6020	III
14-Apr-2011	SL-242-SA5A-SB-2.5-3.5	6259091	N	3060A	7199	III
14-Apr-2011	SL-242-SA5A-SB-2.5-3.5	6259091	N	3546	1625C	III
14-Apr-2011	SL-242-SA5A-SB-2.5-3.5	6259091	N	3550B	8015B	III
14-Apr-2011	SL-242-SA5A-SB-2.5-3.5	6259091	N	3550B	8015M	III
14-Apr-2011	SL-242-SA5A-SB-2.5-3.5	6259091	N	3550B	8082	III
14-Apr-2011	SL-242-SA5A-SB-2.5-3.5	6259091	N	3550B	8270C	III
14-Apr-2011	SL-242-SA5A-SB-2.5-3.5	6259091	N	3550B	8270C SIM	III
14-Apr-2011	SL-242-SA5A-SB-2.5-3.5	6259091	N	5035	8015M	III
14-Apr-2011	SL-242-SA5A-SB-2.5-3.5	6259091	N	5035	8260B	III
14-Apr-2011	SL-242-SA5A-SB-2.5-3.5	6259091	N	5035	8260B SIM	III
14-Apr-2011	SL-242-SA5A-SB-2.5-3.5	6259091	N	8330	8330A	III
14-Apr-2011	SL-242-SA5A-SB-2.5-3.5	6259091	N	Gen Prep	9045M	III
14-Apr-2011	SL-242-SA5A-SB-2.5-3.5	6259091	N	METHOD	300.0	III
14-Apr-2011	SL-242-SA5A-SB-2.5-3.5	6259091	N	METHOD	314.0	III
14-Apr-2011	SL-242-SA5A-SB-2.5-3.5	6259091	N	METHOD	7471A	III
14-Apr-2011	SL-242-SA5A-SB-2.5-3.5	6259091	N	METHOD	8015B	III
14-Apr-2011	SL-242-SA5A-SB-2.5-3.5	6259091	N	METHOD	8015M	III
14-Apr-2011	SL-242-SA5A-SB-2.5-3.5	6259091	N	METHOD	8315A	III
14-Apr-2011	SL-242-SA5A-SB-2.5-3.5	6259091	N	METHOD	9012B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE128 **Laboratory: LL**

EDD Filename: DE128_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: DUP14-SA5A-QC-041411 **Collected:** 4/14/2011 10:16:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.4		0.88	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-058-SA5A-SB-3.0-4.0 **Collected:** 4/14/2011 10:09:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.1		0.88	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-059-SA5A-SB-3.0-4.0 **Collected:** 4/14/2011 11:06:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.3		0.90	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-065-SA5A-SB-4.0-5.0 **Collected:** 4/14/2011 12:58:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	0.89	U	0.89	MDL	1.1	PQL	mg/Kg	UJ	Q

Sample ID: SL-242-SA5A-SB-2.5-3.5 **Collected:** 4/14/2011 3:54:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.6		0.92	MDL	1.2	PQL	mg/Kg	J	Q
Nitrate-NO3	1.0	J	0.92	MDL	1.7	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: DUP14-SA5A-QC-041411 **Collected:** 4/14/2011 10:16:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	15900		5.40	MDL	21.5	PQL	mg/Kg	J	E
BORON	1.17	J	0.955	MDL	5.36	PQL	mg/Kg	J	Z, FD
CALCIUM	3090		6.58	MDL	21.5	PQL	mg/Kg	J	E
IRON	25600		5.05	MDL	21.5	PQL	mg/Kg	J	E
LITHIUM	33.8		0.24	MDL	2.1	PQL	mg/Kg	J	Q
MAGNESIUM	5820		2.72	MDL	10.7	PQL	mg/Kg	J	E

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE128 **Laboratory: LL**

EDD Filename: DE128_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: **DUP14-SA5A-QC-041411** ***Collected:*** **4/14/2011 10:16:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	503		0.601	MDL	10.7	PQL	mg/Kg	J	Q
POTASSIUM	2680		19.3	MDL	53.6	PQL	mg/Kg	J	Q
TIN	3.24	J	1.07	MDL	10.7	PQL	mg/Kg	U	B
Zirconium	1.12	J	0.901	MDL	5.36	PQL	mg/Kg	J	Z

Sample ID: **SL-058-SA5A-SB-3.0-4.0** ***Collected:*** **4/14/2011 10:09:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	15600		5.42	MDL	21.5	PQL	mg/Kg	J	E
BORON	2.40	J	0.959	MDL	5.39	PQL	mg/Kg	J	Z, FD
CALCIUM	2350		6.60	MDL	21.5	PQL	mg/Kg	J	E
IRON	21100		5.07	MDL	21.5	PQL	mg/Kg	J	E
LITHIUM	25.5		0.24	MDL	2.2	PQL	mg/Kg	J	Q
MAGNESIUM	4690		2.74	MDL	10.8	PQL	mg/Kg	J	E
PHOSPHORUS	368		0.603	MDL	10.8	PQL	mg/Kg	J	Q
POTASSIUM	2980		19.4	MDL	53.9	PQL	mg/Kg	J	Q
SODIUM	79.9	J	40.2	MDL	108	PQL	mg/Kg	J	Z
TIN	2.90	J	1.08	MDL	10.8	PQL	mg/Kg	U	B
Zirconium	1.28	J	0.905	MDL	5.39	PQL	mg/Kg	J	Z

Sample ID: **SL-059-SA5A-SB-3.0-4.0** ***Collected:*** **4/14/2011 11:06:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	21400		5.61	MDL	22.3	PQL	mg/Kg	J	E
BORON	1.95	J	0.993	MDL	5.58	PQL	mg/Kg	J	Z
CALCIUM	2610		6.84	MDL	22.3	PQL	mg/Kg	J	E
IRON	26300		5.26	MDL	22.3	PQL	mg/Kg	J	E
LITHIUM	34.2		0.25	MDL	2.2	PQL	mg/Kg	J	Q
MAGNESIUM	5650		2.84	MDL	11.2	PQL	mg/Kg	J	E
PHOSPHORUS	293		0.625	MDL	11.2	PQL	mg/Kg	J	Q
POTASSIUM	2670		20.1	MDL	55.8	PQL	mg/Kg	J	Q
SODIUM	105	J	41.6	MDL	112	PQL	mg/Kg	J	Z
TIN	3.13	J	1.12	MDL	11.2	PQL	mg/Kg	U	B
Zirconium	1.38	J	0.938	MDL	5.58	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE128 **Laboratory: LL**

EDD Filename: DE128_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS
Method: 6010B **Matrix:** SO

Sample ID: SL-065-SA5A-SB-4.0-5.0 **Collected:** 4/14/2011 12:58:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	15900		5.44	MDL	21.6	PQL	mg/Kg	J	E
BORON	1.07	J	0.963	MDL	5.41	PQL	mg/Kg	J	Z
CALCIUM	3170		6.63	MDL	21.6	PQL	mg/Kg	J	E
IRON	25500		5.10	MDL	21.6	PQL	mg/Kg	J	E
LITHIUM	28.9		0.24	MDL	2.2	PQL	mg/Kg	J	Q
MAGNESIUM	5940		2.75	MDL	10.8	PQL	mg/Kg	J	E
PHOSPHORUS	520		0.606	MDL	10.8	PQL	mg/Kg	J	Q
POTASSIUM	3090		19.5	MDL	54.1	PQL	mg/Kg	J	Q
SODIUM	90.0	J	40.4	MDL	108	PQL	mg/Kg	J	Z
TIN	2.97	J	1.08	MDL	10.8	PQL	mg/Kg	U	B
Zirconium	1.21	J	0.909	MDL	5.41	PQL	mg/Kg	J	Z

Sample ID: SL-242-SA5A-SB-2.5-3.5 **Collected:** 4/14/2011 3:54:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	24400		5.64	MDL	22.4	PQL	mg/Kg	J	E
BORON	1.44	J	0.998	MDL	5.61	PQL	mg/Kg	J	Z
CALCIUM	2500		6.87	MDL	22.4	PQL	mg/Kg	J	E
IRON	26800		5.28	MDL	22.4	PQL	mg/Kg	J	E
LITHIUM	33.2		0.25	MDL	2.2	PQL	mg/Kg	J	Q
MAGNESIUM	5660		2.85	MDL	11.2	PQL	mg/Kg	J	E
PHOSPHORUS	190		0.628	MDL	11.2	PQL	mg/Kg	J	Q
POTASSIUM	1930		20.2	MDL	56.1	PQL	mg/Kg	J	Q
TIN	3.31	J	1.12	MDL	11.2	PQL	mg/Kg	U	B
Zirconium	1.64	J	0.942	MDL	5.61	PQL	mg/Kg	J	Z

Method Category: METALS
Method: 6020 **Matrix:** SO

Sample ID: DUP14-SA5A-QC-041411 **Collected:** 4/14/2011 10:16:00 **Analysis Type:** REA **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.166	J	0.0433	MDL	0.433	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE128 **Laboratory: LL**

EDD Filename: DE128_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: DUP14-SA5A-QC-041411 **Collected:** 4/14/2011 10:16:00 **Analysis Type:** REA3 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	87.0		0.117	MDL	0.433	PQL	mg/Kg	J	E

Sample ID: DUP14-SA5A-QC-041411 **Collected:** 4/14/2011 10:16:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0650	U	0.0650	MDL	0.217	PQL	mg/Kg	UJ	Q, FD
ARSENIC	8.17		0.0867	MDL	0.433	PQL	mg/Kg	J	Q, E, E
BERYLLIUM	0.769		0.0173	MDL	0.108	PQL	mg/Kg	J	Q, E
CADMIUM	0.0684	J	0.0433	MDL	0.108	PQL	mg/Kg	J	Z
CHROMIUM	21.3		0.130	MDL	0.433	PQL	mg/Kg	J	Q, E
COPPER	12.5		0.0715	MDL	0.433	PQL	mg/Kg	J	Q, E, E
LEAD	6.85		0.0113	MDL	0.217	PQL	mg/Kg	J	Q, E
NICKEL	19.2		0.108	MDL	0.433	PQL	mg/Kg	J	Q, E
SILVER	0.0147	J	0.0130	MDL	0.108	PQL	mg/Kg	J	Z, FD
THALLIUM	0.359		0.0325	MDL	0.108	PQL	mg/Kg	J	Q
VANADIUM	39.8		0.0238	MDL	0.108	PQL	mg/Kg	J	Q, E
ZINC	74.5		0.607	MDL	3.25	PQL	mg/Kg	J	E

Sample ID: SL-058-SA5A-SB-3.0-4.0 **Collected:** 4/14/2011 10:09:00 **Analysis Type:** REA **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.152	J	0.0440	MDL	0.440	PQL	mg/Kg	J	Z

Sample ID: SL-058-SA5A-SB-3.0-4.0 **Collected:** 4/14/2011 10:09:00 **Analysis Type:** REA3 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	99.0		0.119	MDL	0.440	PQL	mg/Kg	J	E

Sample ID: SL-058-SA5A-SB-3.0-4.0 **Collected:** 4/14/2011 10:09:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0723	J	0.0659	MDL	0.220	PQL	mg/Kg	J	Z, Q, FD
ARSENIC	5.46		0.0879	MDL	0.440	PQL	mg/Kg	J	Q, E, E
BERYLLIUM	0.661		0.0176	MDL	0.110	PQL	mg/Kg	J	Q, E
CADMIUM	0.102	J	0.0440	MDL	0.110	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE128 **Laboratory: LL**

EDD Filename: DE128_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-058-SA5A-SB-3.0-4.0 *Collected:* 4/14/2011 10:09:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHROMIUM	21.1		0.132	MDL	0.440	PQL	mg/Kg	J	Q, E
COPPER	12.5		0.0725	MDL	0.440	PQL	mg/Kg	J	Q, E, E
LEAD	6.18		0.0114	MDL	0.220	PQL	mg/Kg	J	Q, E
NICKEL	16.2		0.110	MDL	0.440	PQL	mg/Kg	J	Q, E
SILVER	0.0289	J	0.0132	MDL	0.110	PQL	mg/Kg	J	Z, FD
THALLIUM	0.263		0.0330	MDL	0.110	PQL	mg/Kg	J	Q
VANADIUM	36.4		0.0242	MDL	0.110	PQL	mg/Kg	J	Q, E
ZINC	58.7		0.615	MDL	3.30	PQL	mg/Kg	J	E

Sample ID: SL-059-SA5A-SB-3.0-4.0 *Collected:* 4/14/2011 11:06:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.143	J	0.0442	MDL	0.442	PQL	mg/Kg	J	Z

Sample ID: SL-059-SA5A-SB-3.0-4.0 *Collected:* 4/14/2011 11:06:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	125		0.119	MDL	0.442	PQL	mg/Kg	J	E

Sample ID: SL-059-SA5A-SB-3.0-4.0 *Collected:* 4/14/2011 11:06:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0663	U	0.0663	MDL	0.221	PQL	mg/Kg	UJ	Q
ARSENIC	8.20		0.0884	MDL	0.442	PQL	mg/Kg	J	Q, E, E
BERYLLIUM	1.07		0.0177	MDL	0.111	PQL	mg/Kg	J	Q, E
CADMIUM	0.101	J	0.0442	MDL	0.111	PQL	mg/Kg	J	Z
CHROMIUM	29.4		0.133	MDL	0.442	PQL	mg/Kg	J	Q, E
COPPER	13.4		0.0729	MDL	0.442	PQL	mg/Kg	J	Q, E, E
LEAD	8.86		0.0115	MDL	0.221	PQL	mg/Kg	J	Q, E
NICKEL	21.4		0.111	MDL	0.442	PQL	mg/Kg	J	Q, E
SILVER	0.0316	J	0.0133	MDL	0.111	PQL	mg/Kg	J	Z
THALLIUM	0.336		0.0332	MDL	0.111	PQL	mg/Kg	J	Q
VANADIUM	51.1		0.0243	MDL	0.111	PQL	mg/Kg	J	Q, E
ZINC	69.7		0.619	MDL	3.32	PQL	mg/Kg	J	E

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE128 **Laboratory: LL**

EDD Filename: DE128_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 ***Matrix:*** SO

Sample ID: SL-065-SA5A-SB-4.0-5.0 ***Collected:*** 4/14/2011 12:58:00 ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.129	J	0.0446	MDL	0.446	PQL	mg/Kg	J	Z

Sample ID: SL-065-SA5A-SB-4.0-5.0 ***Collected:*** 4/14/2011 12:58:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	83.6		0.120	MDL	0.446	PQL	mg/Kg	J	E

Sample ID: SL-065-SA5A-SB-4.0-5.0 ***Collected:*** 4/14/2011 12:58:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0669	U	0.0669	MDL	0.223	PQL	mg/Kg	UJ	Q
ARSENIC	6.25		0.0892	MDL	0.446	PQL	mg/Kg	J	Q, E, E
BERYLLIUM	0.561		0.0178	MDL	0.111	PQL	mg/Kg	J	Q, E
CADMIUM	0.0569	J	0.0446	MDL	0.111	PQL	mg/Kg	J	Z
CHROMIUM	25.4		0.134	MDL	0.446	PQL	mg/Kg	J	Q, E
COPPER	13.4		0.0736	MDL	0.446	PQL	mg/Kg	J	Q, E, E
LEAD	5.98		0.0116	MDL	0.223	PQL	mg/Kg	J	Q, E
NICKEL	19.0		0.111	MDL	0.446	PQL	mg/Kg	J	Q, E
SILVER	0.0242	J	0.0134	MDL	0.111	PQL	mg/Kg	J	Z
THALLIUM	0.292		0.0334	MDL	0.111	PQL	mg/Kg	J	Q
VANADIUM	40.6		0.0245	MDL	0.111	PQL	mg/Kg	J	Q, E
ZINC	64.6		0.624	MDL	3.34	PQL	mg/Kg	J	E

Sample ID: SL-242-SA5A-SB-2.5-3.5 ***Collected:*** 4/14/2011 3:54:00 ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0900	J	0.0448	MDL	0.448	PQL	mg/Kg	J	Z

Sample ID: SL-242-SA5A-SB-2.5-3.5 ***Collected:*** 4/14/2011 3:54:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	95.7		0.121	MDL	0.448	PQL	mg/Kg	J	E

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE128 **Laboratory: LL**

EDD Filename: DE128_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS
Method: 6020 **Matrix:** SO

Sample ID: SL-242-SA5A-SB-2.5-3.5 **Collected:** 4/14/2011 3:54:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0673	U	0.0673	MDL	0.224	PQL	mg/Kg	UJ	Q
ARSENIC	7.28		0.0897	MDL	0.448	PQL	mg/Kg	J	Q, E, E
BERYLLIUM	0.922		0.0179	MDL	0.112	PQL	mg/Kg	J	Q, E
CADMIUM	0.0491	J	0.0448	MDL	0.112	PQL	mg/Kg	J	Z
CHROMIUM	22.6		0.135	MDL	0.448	PQL	mg/Kg	J	Q, E
COPPER	10.8		0.0740	MDL	0.448	PQL	mg/Kg	J	Q, E, E
LEAD	7.57		0.0117	MDL	0.224	PQL	mg/Kg	J	Q, E
NICKEL	15.3		0.112	MDL	0.448	PQL	mg/Kg	J	Q, E
SILVER	0.0423	J	0.0135	MDL	0.112	PQL	mg/Kg	J	Z
THALLIUM	0.239		0.0336	MDL	0.112	PQL	mg/Kg	J	Q
VANADIUM	43.6		0.0247	MDL	0.112	PQL	mg/Kg	J	Q, E
ZINC	52.6		0.628	MDL	3.36	PQL	mg/Kg	J	E

Method Category: METALS
Method: 7199 **Matrix:** SO

Sample ID: DUP14-SA5A-QC-041411 **Collected:** 4/14/2011 10:16:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.40	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-058-SA5A-SB-3.0-4.0 **Collected:** 4/14/2011 10:09:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.52	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-065-SA5A-SB-4.0-5.0 **Collected:** 4/14/2011 12:58:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.51	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE128 **Laboratory: LL**

EDD Filename: DE128_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS
Method: 7471A **Matrix: SO**

Sample ID: SL-059-SA5A-SB-3.0-4.0 **Collected: 4/14/2011 11:06:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0058	J	0.0031	MDL	0.110	PQL	mg/Kg	J	Z

Sample ID: SL-065-SA5A-SB-4.0-5.0 **Collected: 4/14/2011 12:58:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0164	J	0.0031	MDL	0.110	PQL	mg/Kg	J	Z

Sample ID: SL-242-SA5A-SB-2.5-3.5 **Collected: 4/14/2011 3:54:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0176	J	0.0033	MDL	0.115	PQL	mg/Kg	J	Z

Method Category: SVOA
Method: 1625C **Matrix: SO**

Sample ID: SL-242-SA5A-SB-2.5-3.5 **Collected: 4/14/2011 3:54:00** **Analysis Type: RES-BASE/NEUTRAL** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	33.4	J	18.9	MDL	37.9	PQL	ng/Kg	J	Z

Method Category: SVOA
Method: 8015M **Matrix: SO**

Sample ID: SL-242-SA5A-SB-2.5-3.5 **Collected: 4/14/2011 3:54:00** **Analysis Type: REA2S** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C21-C30)	1.4		0.46	MDL	1.4	PQL	mg/Kg	U	B

Method Category: SVOA
Method: 8270C **Matrix: SO**

Sample ID: SL-058-SA5A-SB-3.0-4.0 **Collected: 4/14/2011 10:09:00** **Analysis Type: RES-BASE/NEUTRAL** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZIDINE	1300	U	1300	MDL	3700	PQL	ug/Kg	UJ	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE128 **Laboratory: LL**

EDD Filename: DE128_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA
Method: 8270C **Matrix:** SO

Method Category: SVOA
Method: 8270C SIM **Matrix:** SO

Sample ID: DUP14-SA5A-QC-041411 *Collected:* 4/14/2011 10:16:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NAPHTHALENE	0.73	U	0.73	MDL	1.8	PQL	ug/Kg	UJ	FD

Sample ID: SL-058-SA5A-SB-3.0-4.0 *Collected:* 4/14/2011 10:09:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NAPHTHALENE	0.81	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z, FD

Sample ID: SL-065-SA5A-SB-4.0-5.0 *Collected:* 4/14/2011 12:58:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NAPHTHALENE	1.7	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z

Method Category: SVOA
Method: 8330A **Matrix:** SO

Sample ID: SL-242-SA5A-SB-2.5-3.5 *Collected:* 4/14/2011 3:54:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HMX	220	J	120	MDL	350	PQL	ug/Kg	J	Z

Method Category: VOA
Method: 8260B **Matrix:** SO

Sample ID: DUP14-SA5A-QC-041411 *Collected:* 4/14/2011 10:16:00 *Analysis Type:* RES *Dilution:* 1.01

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	1.0	J	0.27	MDL	4.4	PQL	ug/Kg	UJ	B, FD

Sample ID: SL-058-SA5A-SB-3.0-4.0 *Collected:* 4/14/2011 10:09:00 *Analysis Type:* RES *Dilution:* 0.95

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.42	J	0.25	MDL	4.2	PQL	ug/Kg	UJ	B, FD

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE128 **Laboratory: LL**

EDD Filename: DE128_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **VOA**

Method: **8260B** ***Matrix:*** **SO**

Sample ID: **SL-059-SA5A-SB-3.0-4.0** ***Collected:*** **4/14/2011 11:06:00** ***Analysis Type:*** **RES** ***Dilution:*** **0.87**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.60	J	0.24	MDL	3.9	PQL	ug/Kg	U	B

Sample ID: **SL-065-SA5A-SB-4.0-5.0** ***Collected:*** **4/14/2011 12:58:00** ***Analysis Type:*** **RES** ***Dilution:*** **0.85**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.56	J	0.23	MDL	3.8	PQL	ug/Kg	U	B

Sample ID: **SL-242-SA5A-SB-2.5-3.5** ***Collected:*** **4/14/2011 3:54:00** ***Analysis Type:*** **RES** ***Dilution:*** **0.88**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.56	J	0.24	MDL	4.1	PQL	ug/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE128 **Laboratory: LL**

EDD Filename: DE128_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
*#	Professional Judgment
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Verification Correlation Coefficient
C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE128 **Laboratory: LL**

EDD Filename: DE128_v1 **eQAPP Name: CDM_SSFL_110509**

F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation
L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery Lower Estimation

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE128 **Laboratory: LL**

EDD Filename: DE128_v1 **eQAPP Name: CDM_SSFL_110509**

R	Continuing Calibration Verification Percent Recovery Lower Rejection
R	Continuing Calibration Verification Percent Recovery Upper Estimation
R	Continuing Calibration Verification Percent Recovery Upper Rejection
R	Continuing Calibration Verification Relative Response Factor
R	Initial Calibration Relative Response Factor
R	Initial Calibration Verification Percent Recovery Lower Estimation
R	Initial Calibration Verification Percent Recovery Lower Rejection
R	Initial Calibration Verification Percent Recovery Upper Estimation
R	Initial Calibration Verification Percent Recovery Upper Rejection
R	Initial Calibration Verification Relative Response Factor
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control Outlier Reports

DE128

Method Blank Outlier Report

Lab Reporting Batch ID: DE128 **Laboratory: LL**

EDD Filename: DE128_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P11208EB221610	4/27/2011 4:10:00 PM	ALUMINUM CALCIUM IRON LITHIUM PHOSPHORUS TIN	6.31 mg/Kg 12.3 mg/Kg 5.24 mg/Kg 0.56 mg/Kg 1.45 mg/Kg 1.82 mg/Kg	DUP14-SA5A-QC-041411 SL-058-SA5A-SB-3.0-4.0 SL-059-SA5A-SB-3.0-4.0 SL-065-SA5A-SB-4.0-5.0 SL-242-SA5A-SB-2.5-3.5

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
DUP14-SA5A-QC-041411(RES)	TIN	3.24 mg/Kg	3.24U mg/Kg
SL-058-SA5A-SB-3.0-4.0(RES)	TIN	2.90 mg/Kg	2.90U mg/Kg
SL-059-SA5A-SB-3.0-4.0(RES)	TIN	3.13 mg/Kg	3.13U mg/Kg
SL-065-SA5A-SB-4.0-5.0(RES)	TIN	2.97 mg/Kg	2.97U mg/Kg
SL-242-SA5A-SB-2.5-3.5(RES)	TIN	3.31 mg/Kg	3.31U mg/Kg

Method: 6020
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P11226BB221152A	4/26/2011 11:52:00 AM	VANADIUM	0.0667 mg/Kg	DUP14-SA5A-QC-041411 SL-058-SA5A-SB-3.0-4.0 SL-059-SA5A-SB-3.0-4.0 SL-065-SA5A-SB-4.0-5.0 SL-242-SA5A-SB-2.5-3.5

Method: 8015B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P09095AB322157A	4/20/2011 9:57:00 PM	METHANOL	100 ug/Kg	SL-242-SA5A-SB-2.5-3.5

Method: 8015M
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P09092AB320241A	4/28/2011 2:41:00 AM	EFH (C21-C30) EFH (C30-C40)	0.93 mg/Kg 0.92 mg/Kg	SL-242-SA5A-SB-2.5-3.5

Method Blank Outlier Report

Lab Reporting Batch ID: DE128 **Laboratory: LL**

EDD Filename: DE128_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8015M**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-242-SA5A-SB-2.5-3.5(REA2S)	EFH (C21-C30)	1.4 mg/Kg	1.4U mg/Kg

Method: **8260B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB29B211235A	4/19/2011 12:35:00 PM	METHYLENE CHLORIDE TOLUENE	3.4 ug/Kg 0.11 ug/Kg	DUP14-SA5A-QC-041411 SL-058-SA5A-SB-3.0-4.0 SL-059-SA5A-SB-3.0-4.0 SL-065-SA5A-SB-4.0-5.0 SL-242-SA5A-SB-2.5-3.5

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
DUP14-SA5A-QC-041411(RES)	METHYLENE CHLORIDE	1.0 ug/Kg	4.4U ug/Kg
SL-058-SA5A-SB-3.0-4.0(RES)	METHYLENE CHLORIDE	0.42 ug/Kg	4.2U ug/Kg
SL-059-SA5A-SB-3.0-4.0(RES)	METHYLENE CHLORIDE	0.60 ug/Kg	3.9U ug/Kg
SL-065-SA5A-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.56 ug/Kg	3.8U ug/Kg
SL-242-SA5A-SB-2.5-3.5(RES)	METHYLENE CHLORIDE	0.56 ug/Kg	4.1U ug/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE128 **Laboratory: LL**

EDD Filename: DE128_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-058-SA5A-SB-3.0-4.0MSD (DUP14-SA5A-QC-041411 SL-058-SA5A-SB-3.0-4.0 SL-059-SA5A-SB-3.0-4.0 SL-065-SA5A-SB-4.0-5.0 SL-242-SA5A-SB-2.5-3.5)	THALLIUM	-	134	75.00-125.00	-	THALLIUM	J (all detects)
SL-058-SA5A-SB-3.0-4.0MS **SL-058-SA5A-SB-3.0-4.0MSD** (DUP14-SA5A-QC-041411 SL-058-SA5A-SB-3.0-4.0 SL-059-SA5A-SB-3.0-4.0 SL-065-SA5A-SB-4.0-5.0 SL-242-SA5A-SB-2.5-3.5)	ANTIMONY	34	28	75.00-125.00	-	ANTIMONY	J(all detects) UJ(all non-detects) Post Spike = 75%
SL-058-SA5A-SB-3.0-4.0MSD (DUP14-SA5A-QC-041411 SL-058-SA5A-SB-3.0-4.0 SL-059-SA5A-SB-3.0-4.0 SL-065-SA5A-SB-4.0-5.0 SL-242-SA5A-SB-2.5-3.5)	ARSENIC BERYLLIUM CHROMIUM COPPER LEAD NICKEL VANADIUM ZINC	- - - - - - - -	471 148 228 182 302 188 287 276	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	71 (20.00) 25 (20.00) 37 (20.00) 27 (20.00) 51 (20.00) 24 (20.00) 36 (20.00) 22 (20.00)	ARSENIC BERYLLIUM CHROMIUM COPPER LEAD NICKEL VANADIUM ZINC	J(all detects) UJ(all non-detects) Zn No Qual %R, >4x
SL-058-SA5A-SB-3.0-4.0MSD (DUP14-SA5A-QC-041411 SL-058-SA5A-SB-3.0-4.0 SL-059-SA5A-SB-3.0-4.0 SL-065-SA5A-SB-4.0-5.0 SL-242-SA5A-SB-2.5-3.5)	BARIUM	-	336	75.00-125.00	21 (20.00)	BARIUM	J(all detects) UJ(all non-detects) No Qual %R, >4x

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-058-SA5A-SB-3.0-4.0MS **SL-058-SA5A-SB-3.0-4.0MSD** (DUP14-SA5A-QC-041411 SL-058-SA5A-SB-3.0-4.0 SL-059-SA5A-SB-3.0-4.0 SL-065-SA5A-SB-4.0-5.0 SL-242-SA5A-SB-2.5-3.5)	LITHIUM MANGANESE PHOSPHORUS POTASSIUM TITANIUM	- 146 151 141 314	126 254 - - 477	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	- - - - -	LITHIUM MANGANESE PHOSPHORUS POTASSIUM TITANIUM	J(all detects) Mn, Ti No Qual, >4x
SL-058-SA5A-SB-3.0-4.0MS **SL-058-SA5A-SB-3.0-4.0MSD** (DUP14-SA5A-QC-041411 SL-058-SA5A-SB-3.0-4.0 SL-059-SA5A-SB-3.0-4.0 SL-065-SA5A-SB-4.0-5.0 SL-242-SA5A-SB-2.5-3.5)	ALUMINUM CALCIUM IRON MAGNESIUM	739 166 252 191	6132 576 21588 1884	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	51 (20.00) 46 (20.00) 71 (20.00) 53 (20.00)	ALUMINUM CALCIUM IRON MAGNESIUM	J(all detects) UJ(all non-detects) No Qual %R, >4x

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-058-SA5A-SB-3.0-4.0MSD (SL-058-SA5A-SB-3.0-4.0)	2,4-DINITROPHENOL	-	-	20.00-143.00	35 (30.00)	2,4-DINITROPHENOL	J(all detects)

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE128 **Laboratory: LL**

EDD Filename: DE128_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-058-SA5A-SB-3.0-4.0MS **SL-058-SA5A-SB-3.0-4.0MSD** (SL-058-SA5A-SB-3.0-4.0)	BENZIDINE	14	24	35.00-141.00	53 (30.00)	BENZIDINE	J(all detects) UJ(all non-detects)

Method: 300.0
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-058-SA5A-SB-3.0-4.0MS (DUP14-SA5A-QC-041411 SL-058-SA5A-SB-3.0-4.0 SL-059-SA5A-SB-3.0-4.0 SL-065-SA5A-SB-4.0-5.0 SL-242-SA5A-SB-2.5-3.5)	FLUORIDE	38	-	80.00-120.00	-	FLUORIDE	J(all detects) UJ(all non-detects)

Method: 8260B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-058-SA5A-SB-3.0-4.0MSD (SL-058-SA5A-SB-3.0-4.0)	Chlorotrifluoroethylene	-	-	70.00-130.00	32 (30.00)	Chlorotrifluoroethylene	J(all detects)

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE128 **Laboratory: LL**

EDD Filename: DE128_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-058-SA5A-SB-3.0-4.0DUP (DUP14-SA5A-QC-041411 SL-058-SA5A-SB-3.0-4.0 SL-059-SA5A-SB-3.0-4.0 SL-065-SA5A-SB-4.0-5.0 SL-242-SA5A-SB-2.5-3.5)	BORON	26	20.00	No Qual
	Zirconium	52	20.00	OK by difference

Method: 6020
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-058-SA5A-SB-3.0-4.0DUP (DUP14-SA5A-QC-041411 SL-058-SA5A-SB-3.0-4.0 SL-059-SA5A-SB-3.0-4.0 SL-065-SA5A-SB-4.0-5.0 SL-242-SA5A-SB-2.5-3.5)	ARSENIC	21	20.00	J(all detects)
	CADMIUM	43	20.00	UJ(all non-detects)
	COPPER	24	20.00	
	SILVER	73	20.00	Cd, Ag, Tl
	THALLIUM	22	20.00	No Qual
				OK by difference

Method: 7199
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-058-SA5A-SB-3.0-4.0DUP (DUP14-SA5A-QC-041411 SL-058-SA5A-SB-3.0-4.0 SL-059-SA5A-SB-3.0-4.0 SL-065-SA5A-SB-4.0-5.0 SL-242-SA5A-SB-2.5-3.5)	HEXAVALENT CHROMIUM	48	20.00	No Qual OK by difference

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE128 **Laboratory: LL**

EDD Filename: DE128_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8260B
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
LCS1Y14Q210248A **LCS1Y14Y210309A** (TB-041411)	2-Chloro-1,1,1-trifluoroethane	123	124	77.00-120.00	-	2-Chloro-1,1,1-trifluoroethane	J(all detects)

Method: 8330A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11081AQ241745A (SL-242-SA5A-SB-2.5-3.5)	2,6-DINITROTOLUENE PETN	121 127	- -	80.00-120.00 80.00-120.00	- -	2,6-DINITROTOLUENE PETN	J (all detects)

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11226BQ221155A (DUP14-SA5A-QC-041411 SL-058-SA5A-SB-3.0-4.0 SL-059-SA5A-SB-3.0-4.0 SL-065-SA5A-SB-4.0-5.0 SL-242-SA5A-SB-2.5-3.5)	ANTIMONY	69	-	80.00-120.00	-	ANTIMONY	No Qual SRM within QC limits

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Field Duplicate RPD Report

Lab Reporting Batch ID: DE128 **Laboratory: LL**

EDD Filename: DE128_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 160.3M
Matrix: SO

Analyte	Concentration (%) SL-058-SA5A-SB-3.0-4.0	Concentration (%) DUP14-SA5A-QC-041411	Sample RPD	eQAPP RPD	Flag
MOISTURE	9.0	8.6	5		No Qualifiers Applied

Method: 300.0
Matrix: SO

Analyte	Concentration (mg/Kg) SL-058-SA5A-SB-3.0-4.0	Concentration (mg/Kg) DUP14-SA5A-QC-041411	Sample RPD	eQAPP RPD	Flag
FLUORIDE	1.1	1.4	24	50.00	No Qualifiers Applied

Method: 6010B
Matrix: SO

Analyte	Concentration (mg/Kg) SL-058-SA5A-SB-3.0-4.0	Concentration (mg/Kg) DUP14-SA5A-QC-041411	Sample RPD	eQAPP RPD	Flag
ALUMINUM	15600	15900	2	50.00	No Qualifiers Applied
CALCIUM	2350	3090	27	50.00	
IRON	21100	25600	19	50.00	
LITHIUM	25.5	33.8	28	50.00	
MAGNESIUM	4690	5820	22	50.00	
MANGANESE	261	334	25	50.00	
PHOSPHORUS	368	503	31	50.00	
POTASSIUM	2980	2680	11	50.00	
SODIUM	79.9	111	33	50.00	
STRONTIUM	17.8	18.1	2	50.00	
TIN	2.90	3.24	11	50.00	
TITANIUM	1010	1200	17	50.00	
Zirconium	1.28	1.12	13	50.00	
BORON	2.40	1.17	69	50.00	J(all detects)

Method: 6020
Matrix: SO

Analyte	Concentration (mg/Kg) SL-058-SA5A-SB-3.0-4.0	Concentration (mg/Kg) DUP14-SA5A-QC-041411	Sample RPD	eQAPP RPD	Flag
ARSENIC	5.46	8.17	40	50.00	No Qualifiers Applied
BARIUM	99.0	87.0	13	50.00	
BERYLLIUM	0.661	0.769	15	50.00	
CADMIUM	0.102	0.0684	39	50.00	
CHROMIUM	21.1	21.3	1	50.00	
COBALT	7.02	10.9	43	50.00	
COPPER	12.5	12.5	0	50.00	
LEAD	6.18	6.85	10	50.00	
MOLYBDENUM	0.469	0.530	12	50.00	
NICKEL	16.2	19.2	17	50.00	
SELENIUM	0.152	0.166	9	50.00	
THALLIUM	0.263	0.359	31	50.00	
VANADIUM	36.4	39.8	9	50.00	
ZINC	58.7	74.5	24	50.00	
ANTIMONY	0.0723	0.217 U	200	50.00	J(all detects)
SILVER	0.0289	0.0147	65	50.00	UJ(all non-detects)

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Field Duplicate RPD Report

Lab Reporting Batch ID: DE128 **Laboratory: LL**

EDD Filename: DE128_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7199
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-058-SA5A-SB-3.0-4.0	DUP14-SA5A-QC-041411			
HEXAVALENT CHROMIUM	0.52	0.40	26	50.00	No Qualifiers Applied

Method: 8260B
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-058-SA5A-SB-3.0-4.0	DUP14-SA5A-QC-041411			
METHYLENE CHLORIDE	0.42	1.0	82	50.00	J(all detects)

Method: 8270C SIM
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-058-SA5A-SB-3.0-4.0	DUP14-SA5A-QC-041411			
NAPHTHALENE	0.81	1.8 U	200	50.00	J(all detects) UJ(all non-detects)

Method: 9045M
Matrix: SO

Analyte	Concentration (pH unit)		Sample RPD	eQAPP RPD	Flag
	SL-058-SA5A-SB-3.0-4.0	DUP14-SA5A-QC-041411			
PH	6.47	6.46	0	50.00	No Qualifiers Applied

Method: ASTM D1498
Matrix: SO

Analyte	Concentration (mV)		Sample RPD	eQAPP RPD	Flag
	SL-058-SA5A-SB-3.0-4.0	DUP14-SA5A-QC-041411			
Oxidation Reduction Potential	451	426	6		No Qualifiers Applied

Reporting Limit Outliers

Lab Reporting Batch ID: DE128 **Laboratory: LL**

EDD Filename: DE128_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1625C
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-242-SA5A-SB-2.5-3.5	N-NITROSODIMETHYLAMINE	J	33.4	37.9	PQL	ng/Kg	J (all detects)

Method: 300.0
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-242-SA5A-SB-2.5-3.5	Nitrate-NO3	J	1.0	1.7	PQL	mg/Kg	J (all detects)

Method: 6010B
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP14-SA5A-QC-041411	BORON	J	1.17	5.36	PQL	mg/Kg	J (all detects)
	TIN	J	3.24	10.7	PQL	mg/Kg	
	Zirconium	J	1.12	5.36	PQL	mg/Kg	
SL-058-SA5A-SB-3.0-4.0	BORON	J	2.40	5.39	PQL	mg/Kg	J (all detects)
	SODIUM	J	79.9	108	PQL	mg/Kg	
	TIN	J	2.90	10.8	PQL	mg/Kg	
	Zirconium	J	1.28	5.39	PQL	mg/Kg	
SL-059-SA5A-SB-3.0-4.0	BORON	J	1.95	5.58	PQL	mg/Kg	J (all detects)
	SODIUM	J	105	112	PQL	mg/Kg	
	TIN	J	3.13	11.2	PQL	mg/Kg	
	Zirconium	J	1.38	5.58	PQL	mg/Kg	
SL-065-SA5A-SB-4.0-5.0	BORON	J	1.07	5.41	PQL	mg/Kg	J (all detects)
	SODIUM	J	90.0	108	PQL	mg/Kg	
	TIN	J	2.97	10.8	PQL	mg/Kg	
	Zirconium	J	1.21	5.41	PQL	mg/Kg	
SL-242-SA5A-SB-2.5-3.5	BORON	J	1.44	5.61	PQL	mg/Kg	J (all detects)
	TIN	J	3.31	11.2	PQL	mg/Kg	
	Zirconium	J	1.64	5.61	PQL	mg/Kg	

Method: 6020
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP14-SA5A-QC-041411	CADMIUM	J	0.0684	0.108	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.166	0.433	PQL	mg/Kg	
	SILVER	J	0.0147	0.108	PQL	mg/Kg	
SL-058-SA5A-SB-3.0-4.0	ANTIMONY	J	0.0723	0.220	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.102	0.110	PQL	mg/Kg	
	SELENIUM	J	0.152	0.440	PQL	mg/Kg	
	SILVER	J	0.0289	0.110	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE128 **Laboratory: LL**

EDD Filename: DE128_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-059-SA5A-SB-3.0-4.0	CADMIUM	J	0.101	0.111	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.143	0.442	PQL	mg/Kg	
	SILVER	J	0.0316	0.111	PQL	mg/Kg	
SL-065-SA5A-SB-4.0-5.0	CADMIUM	J	0.0569	0.111	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.129	0.446	PQL	mg/Kg	
	SILVER	J	0.0242	0.111	PQL	mg/Kg	
SL-242-SA5A-SB-2.5-3.5	CADMIUM	J	0.0491	0.112	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0900	0.448	PQL	mg/Kg	
	SILVER	J	0.0423	0.112	PQL	mg/Kg	

Method: 7199
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP14-SA5A-QC-041411	HEXAVALENT CHROMIUM	J	0.40	1.1	PQL	mg/Kg	J (all detects)
SL-058-SA5A-SB-3.0-4.0	HEXAVALENT CHROMIUM	J	0.52	1.1	PQL	mg/Kg	J (all detects)
SL-065-SA5A-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.51	1.1	PQL	mg/Kg	J (all detects)

Method: 7471A
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-059-SA5A-SB-3.0-4.0	MERCURY	J	0.0058	0.110	PQL	mg/Kg	J (all detects)
SL-065-SA5A-SB-4.0-5.0	MERCURY	J	0.0164	0.110	PQL	mg/Kg	J (all detects)
SL-242-SA5A-SB-2.5-3.5	MERCURY	J	0.0176	0.115	PQL	mg/Kg	J (all detects)

Method: 8260B
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP14-SA5A-QC-041411	METHYLENE CHLORIDE	J	1.0	4.4	PQL	ug/Kg	J (all detects)
SL-058-SA5A-SB-3.0-4.0	METHYLENE CHLORIDE	J	0.42	4.2	PQL	ug/Kg	J (all detects)
SL-059-SA5A-SB-3.0-4.0	METHYLENE CHLORIDE	J	0.60	3.9	PQL	ug/Kg	J (all detects)
SL-065-SA5A-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.56	3.8	PQL	ug/Kg	J (all detects)
SL-242-SA5A-SB-2.5-3.5	METHYLENE CHLORIDE	J	0.56	4.1	PQL	ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE128 **Laboratory: LL**

EDD Filename: DE128_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8270C SIM**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-058-SA5A-SB-3.0-4.0	NAPHTHALENE	J	0.81	1.8	PQL	ug/Kg	J (all detects)
SL-065-SA5A-SB-4.0-5.0	NAPHTHALENE	J	1.7	1.9	PQL	ug/Kg	J (all detects)

Method: **8330A**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-242-SA5A-SB-2.5-3.5	HMX	J	220	350	PQL	ug/Kg	J (all detects)

LDC #: 25916J4

SDG #: DE128

Laboratory: Lancaster Laboratories

VALIDATION COMPLETENESS WORKSHEET

ADR

Date: 8-3-11

Reviewer: CR

2nd Reviewer: C

METHOD: Metals (EPA SW 846 Method 6010B/6020A/7000)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	N	Sampling dates:
II.	ICP/MS Tune	—	
III.	Calibration	—	
IV.	Blanks	A	No Quals
V.	ICP Interference Check Sample (ICS) Analysis	N	
VI.	Matrix Spike Analysis	N	MS/D (Al, Ca, Ba, Fe, Mg, Mn, Ti, Zn >4x)
VII.	Duplicate Sample Analysis	N	Dup (B, Cd, Ag, Tl, Zn <5xRL)
VIII.	Laboratory Control Samples (LCS)	A	LCS
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	A	
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	—	
XV	Field Blanks	—	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:

1	DUP14-SA5A-QC-041411 ?	11		21		31	
2	SL-058-SA5A-SB-3.0-4.0 ?	12		22		32	
3	SL-059-SA5A-SB-3.0-4.0	13		23		33	
4	SL-065-SA5A-SB-4.0-5.0	14		24		34	
5	SL-242-SA5A-SB-2.5-3.5	15		25		35	
6	SL-058-SA5A-SB-3.0-4.0MS	16		26		36	
7	SL-058-SA5A-SB-3.0-4.0MSD	17		27		37	
8	SL-058-SA5A-SB-3.0-4.0DUP	18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

SAMPLE DELIVERY GROUP

DE129

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
15-Apr-2011	TB-041511	6260138	TB	5030B	8015M	III
15-Apr-2011	TB-041511	6260138	TB	5030B	8260B	III
15-Apr-2011	TB-041511	6260138	TB	5030B	8260B SIM	III
15-Apr-2011	SL-141-SA8N-SS-0.0-0.5	6260133	N	3050B	6010B	III
15-Apr-2011	SL-141-SA8N-SS-0.0-0.5	6260133	N	3050B	6020	III
15-Apr-2011	SL-141-SA8N-SS-0.0-0.5	6260133	N	3060A	7199	III
15-Apr-2011	SL-141-SA8N-SS-0.0-0.5	6260133	N	3546	1625C	III
15-Apr-2011	SL-141-SA8N-SS-0.0-0.5	6260133	N	3550B	8015B	III
15-Apr-2011	SL-141-SA8N-SS-0.0-0.5	6260133	N	3550B	8015M	III
15-Apr-2011	SL-141-SA8N-SS-0.0-0.5	6260133	N	3550B	8082	III
15-Apr-2011	SL-141-SA8N-SS-0.0-0.5	6260133	N	3550B	8270C	III
15-Apr-2011	SL-141-SA8N-SS-0.0-0.5	6260133	N	3550B	8270C SIM	III
15-Apr-2011	SL-141-SA8N-SS-0.0-0.5	6260133	N	8330	8330A	III
15-Apr-2011	SL-141-SA8N-SS-0.0-0.5	6260133	N	Gen Prep	9045M	III
15-Apr-2011	SL-141-SA8N-SS-0.0-0.5	6260133	N	METHOD	300.0	III
15-Apr-2011	SL-141-SA8N-SS-0.0-0.5	6260133	N	METHOD	314.0	III
15-Apr-2011	SL-141-SA8N-SS-0.0-0.5	6260133	N	METHOD	7471A	III
15-Apr-2011	SL-141-SA8N-SS-0.0-0.5	6260133	N	METHOD	8015B	III
15-Apr-2011	SL-141-SA8N-SS-0.0-0.5	6260133	N	METHOD	8015M	III
15-Apr-2011	SL-141-SA8N-SS-0.0-0.5	6260133	N	METHOD	8315A	III
15-Apr-2011	SL-141-SA8N-SS-0.0-0.5	6260133	N	METHOD	9012B	III
15-Apr-2011	SL-062-SA8N-SS-0.0-0.5	6260131	N	3050B	6010B	III
15-Apr-2011	SL-062-SA8N-SS-0.0-0.5	6260131	N	3050B	6020	III
15-Apr-2011	SL-062-SA8N-SS-0.0-0.5	6260131	N	3060A	7199	III
15-Apr-2011	SL-062-SA8N-SS-0.0-0.5	6260131	N	3546	1625C	III
15-Apr-2011	SL-062-SA8N-SS-0.0-0.5	6260131	N	3550B	8015B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
15-Apr-2011	SL-062-SA8N-SS-0.0-0.5	6260131	N	3550B	8015M	III
15-Apr-2011	SL-062-SA8N-SS-0.0-0.5	6260131	N	3550B	8082	III
15-Apr-2011	SL-062-SA8N-SS-0.0-0.5	6260131	N	3550B	8270C	III
15-Apr-2011	SL-062-SA8N-SS-0.0-0.5	6260131	N	3550B	8270C SIM	III
15-Apr-2011	SL-062-SA8N-SS-0.0-0.5	6260131	N	8330	8330A	III
15-Apr-2011	SL-062-SA8N-SS-0.0-0.5	6260131	N	Gen Prep	9045M	III
15-Apr-2011	SL-062-SA8N-SS-0.0-0.5	6260131	N	METHOD	300.0	III
15-Apr-2011	SL-062-SA8N-SS-0.0-0.5	6260131	N	METHOD	314.0	III
15-Apr-2011	SL-062-SA8N-SS-0.0-0.5	6260131	N	METHOD	7471A	III
15-Apr-2011	SL-062-SA8N-SS-0.0-0.5	6260131	N	METHOD	8015B	III
15-Apr-2011	SL-062-SA8N-SS-0.0-0.5	6260131	N	METHOD	8015M	III
15-Apr-2011	SL-062-SA8N-SS-0.0-0.5	6260131	N	METHOD	8315A	III
15-Apr-2011	SL-062-SA8N-SS-0.0-0.5	6260131	N	METHOD	9012B	III
15-Apr-2011	SL-062-SA8N-SS-0.0-0.5DUP	P260131D271804B	DUP	METHOD	300.0	III
15-Apr-2011	SL-062-SA8N-SS-0.0-0.5DUP	P260131D271931B	DUP	METHOD	314.0	III
15-Apr-2011	SL-062-SA8N-SS-0.0-0.5MS	P260131R271819B	MS	METHOD	300.0	III
15-Apr-2011	SL-062-SA8N-SS-0.0-0.5MS	P260131R271953B	MS	METHOD	314.0	III
15-Apr-2011	SL-052-SA5A-SB-4.0-5.0	6260136	N	3050B	6010B	III
15-Apr-2011	SL-052-SA5A-SB-4.0-5.0	6260136	N	3050B	6020	III
15-Apr-2011	SL-052-SA5A-SB-4.0-5.0	6260136	N	3060A	7199	III
15-Apr-2011	SL-052-SA5A-SB-4.0-5.0	6260136	N	3546	1625C	III
15-Apr-2011	SL-052-SA5A-SB-4.0-5.0	6260136	N	3550B	8015B	III
15-Apr-2011	SL-052-SA5A-SB-4.0-5.0	6260136	N	3550B	8015M	III
15-Apr-2011	SL-052-SA5A-SB-4.0-5.0	6260136	N	3550B	8082	III
15-Apr-2011	SL-052-SA5A-SB-4.0-5.0	6260136	N	3550B	8270C	III
15-Apr-2011	SL-052-SA5A-SB-4.0-5.0	6260136	N	3550B	8270C SIM	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
15-Apr-2011	SL-052-SA5A-SB-4.0-5.0	6260136	N	5035	8015M	III
15-Apr-2011	SL-052-SA5A-SB-4.0-5.0	6260136	N	5035	8260B	III
15-Apr-2011	SL-052-SA5A-SB-4.0-5.0	6260136	N	5035	8260B SIM	III
15-Apr-2011	SL-052-SA5A-SB-4.0-5.0	6260136	N	8330	8330A	III
15-Apr-2011	SL-052-SA5A-SB-4.0-5.0	6260136	N	Gen Prep	9045M	III
15-Apr-2011	SL-052-SA5A-SB-4.0-5.0	6260136	N	METHOD	300.0	III
15-Apr-2011	SL-052-SA5A-SB-4.0-5.0	6260136	N	METHOD	314.0	III
15-Apr-2011	SL-052-SA5A-SB-4.0-5.0	6260136	N	METHOD	7471A	III
15-Apr-2011	SL-052-SA5A-SB-4.0-5.0	6260136	N	METHOD	8015B	III
15-Apr-2011	SL-052-SA5A-SB-4.0-5.0	6260136	N	METHOD	8015M	III
15-Apr-2011	SL-052-SA5A-SB-4.0-5.0	6260136	N	METHOD	8315A	III
15-Apr-2011	SL-052-SA5A-SB-4.0-5.0	6260136	N	METHOD	9012B	III
15-Apr-2011	SL-052-SA5A-SB-4.0-5.0DUP	P260136D291100A	DUP	Gen Prep	9045M	III
15-Apr-2011	SL-067-SA8N-SS-0.0-0.5	6260132	N	3050B	6010B	III
15-Apr-2011	SL-067-SA8N-SS-0.0-0.5	6260132	N	3050B	6020	III
15-Apr-2011	SL-067-SA8N-SS-0.0-0.5	6260132	N	3060A	7199	III
15-Apr-2011	SL-067-SA8N-SS-0.0-0.5	6260132	N	3546	1625C	III
15-Apr-2011	SL-067-SA8N-SS-0.0-0.5	6260132	N	3550B	8015B	III
15-Apr-2011	SL-067-SA8N-SS-0.0-0.5	6260132	N	3550B	8015M	III
15-Apr-2011	SL-067-SA8N-SS-0.0-0.5	6260132	N	3550B	8082	III
15-Apr-2011	SL-067-SA8N-SS-0.0-0.5	6260132	N	3550B	8270C	III
15-Apr-2011	SL-067-SA8N-SS-0.0-0.5	6260132	N	3550B	8270C SIM	III
15-Apr-2011	SL-067-SA8N-SS-0.0-0.5	6260132	N	8330	8330A	III
15-Apr-2011	SL-067-SA8N-SS-0.0-0.5	6260132	N	Gen Prep	9045M	III
15-Apr-2011	SL-067-SA8N-SS-0.0-0.5	6260132	N	METHOD	300.0	III
15-Apr-2011	SL-067-SA8N-SS-0.0-0.5	6260132	N	METHOD	314.0	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
15-Apr-2011	SL-067-SA8N-SS-0.0-0.5	6260132	N	METHOD	7471A	III
15-Apr-2011	SL-067-SA8N-SS-0.0-0.5	6260132	N	METHOD	8015B	III
15-Apr-2011	SL-067-SA8N-SS-0.0-0.5	6260132	N	METHOD	8015M	III
15-Apr-2011	SL-067-SA8N-SS-0.0-0.5	6260132	N	METHOD	8315A	III
15-Apr-2011	SL-067-SA8N-SS-0.0-0.5	6260132	N	METHOD	9012B	III
15-Apr-2011	SL-243-SA5A-SB-4.0-5.0	6260137	N	3050B	6010B	III
15-Apr-2011	SL-243-SA5A-SB-4.0-5.0	6260137	N	3050B	6020	III
15-Apr-2011	SL-243-SA5A-SB-4.0-5.0	6260137	N	3060A	7199	III
15-Apr-2011	SL-243-SA5A-SB-4.0-5.0	6260137	N	3546	1625C	III
15-Apr-2011	SL-243-SA5A-SB-4.0-5.0	6260137	N	3550B	8015B	III
15-Apr-2011	SL-243-SA5A-SB-4.0-5.0	6260137	N	3550B	8015M	III
15-Apr-2011	SL-243-SA5A-SB-4.0-5.0	6260137	N	3550B	8082	III
15-Apr-2011	SL-243-SA5A-SB-4.0-5.0	6260137	N	3550B	8270C	III
15-Apr-2011	SL-243-SA5A-SB-4.0-5.0	6260137	N	3550B	8270C SIM	III
15-Apr-2011	SL-243-SA5A-SB-4.0-5.0	6260137	N	5035	8015M	III
15-Apr-2011	SL-243-SA5A-SB-4.0-5.0	6260137	N	5035	8260B	III
15-Apr-2011	SL-243-SA5A-SB-4.0-5.0	6260137	N	5035	8260B SIM	III
15-Apr-2011	SL-243-SA5A-SB-4.0-5.0	6260137	N	8330	8330A	III
15-Apr-2011	SL-243-SA5A-SB-4.0-5.0	6260137	N	Gen Prep	9045M	III
15-Apr-2011	SL-243-SA5A-SB-4.0-5.0	6260137	N	METHOD	300.0	III
15-Apr-2011	SL-243-SA5A-SB-4.0-5.0	6260137	N	METHOD	314.0	III
15-Apr-2011	SL-243-SA5A-SB-4.0-5.0	6260137	N	METHOD	7471A	III
15-Apr-2011	SL-243-SA5A-SB-4.0-5.0	6260137	N	METHOD	8015B	III
15-Apr-2011	SL-243-SA5A-SB-4.0-5.0	6260137	N	METHOD	8015M	III
15-Apr-2011	SL-243-SA5A-SB-4.0-5.0	6260137	N	METHOD	8315A	III
15-Apr-2011	SL-243-SA5A-SB-4.0-5.0	6260137	N	METHOD	9012B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
15-Apr-2011	SL-044-SA5A-SB-3.0-4.0	6260135	N	3050B	6010B	III
15-Apr-2011	SL-044-SA5A-SB-3.0-4.0	6260135	N	3050B	6020	III
15-Apr-2011	SL-044-SA5A-SB-3.0-4.0	6260135	N	3060A	7199	III
15-Apr-2011	SL-044-SA5A-SB-3.0-4.0	6260135	N	3550B	8082	III
15-Apr-2011	SL-044-SA5A-SB-3.0-4.0	6260135	N	3550B	8270C	III
15-Apr-2011	SL-044-SA5A-SB-3.0-4.0	6260135	N	3550B	8270C SIM	III
15-Apr-2011	SL-044-SA5A-SB-3.0-4.0	6260135	N	5035	8260B	III
15-Apr-2011	SL-044-SA5A-SB-3.0-4.0	6260135	N	5035	8260B SIM	III
15-Apr-2011	SL-044-SA5A-SB-3.0-4.0	6260135	N	Gen Prep	9045M	III
15-Apr-2011	SL-044-SA5A-SB-3.0-4.0	6260135	N	METHOD	300.0	III
15-Apr-2011	SL-044-SA5A-SB-3.0-4.0	6260135	N	METHOD	314.0	III
15-Apr-2011	SL-044-SA5A-SB-3.0-4.0	6260135	N	METHOD	7471A	III
15-Apr-2011	SL-041-SA5A-SB-4.0-5.0	6260134	N	3050B	6010B	III
15-Apr-2011	SL-041-SA5A-SB-4.0-5.0	6260134	N	3050B	6020	III
15-Apr-2011	SL-041-SA5A-SB-4.0-5.0	6260134	N	3060A	7199	III
15-Apr-2011	SL-041-SA5A-SB-4.0-5.0	6260134	N	3550B	8082	III
15-Apr-2011	SL-041-SA5A-SB-4.0-5.0	6260134	N	3550B	8270C	III
15-Apr-2011	SL-041-SA5A-SB-4.0-5.0	6260134	N	3550B	8270C SIM	III
15-Apr-2011	SL-041-SA5A-SB-4.0-5.0	6260134	N	5035	8260B	III
15-Apr-2011	SL-041-SA5A-SB-4.0-5.0	6260134	N	5035	8260B SIM	III
15-Apr-2011	SL-041-SA5A-SB-4.0-5.0	6260134	N	Gen Prep	9045M	III
15-Apr-2011	SL-041-SA5A-SB-4.0-5.0	6260134	N	METHOD	300.0	III
15-Apr-2011	SL-041-SA5A-SB-4.0-5.0	6260134	N	METHOD	314.0	III
15-Apr-2011	SL-041-SA5A-SB-4.0-5.0	6260134	N	METHOD	7471A	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE129 **Laboratory: LL**

EDD Filename: DE129_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: SL-041-SA5A-SB-4.0-5.0 **Collected:** 4/15/2011 3:38:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	0.90	U	0.90	MDL	1.1	PQL	mg/Kg	UJ	Q

Sample ID: SL-044-SA5A-SB-3.0-4.0 **Collected:** 4/15/2011 12:27:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	0.89	U	0.89	MDL	1.1	PQL	mg/Kg	UJ	Q

Sample ID: SL-052-SA5A-SB-4.0-5.0 **Collected:** 4/15/2011 9:34:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.7		0.92	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-062-SA8N-SS-0.0-0.5 **Collected:** 4/15/2011 9:05:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.4		0.91	MDL	1.1	PQL	mg/Kg	J	Q
Nitrate-NO3	1.0	J	0.91	MDL	1.7	PQL	mg/Kg	J	Z

Sample ID: SL-067-SA8N-SS-0.0-0.5 **Collected:** 4/15/2011 10:35:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.4		0.98	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-141-SA8N-SS-0.0-0.5 **Collected:** 4/15/2011 8:35:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	3.2		0.92	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-243-SA5A-SB-4.0-5.0 **Collected:** 4/15/2011 10:46:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.6		0.92	MDL	1.1	PQL	mg/Kg	J	Q
Nitrate-NO3	1.0	J	0.92	MDL	1.7	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE129 **Laboratory: LL**

EDD Filename: DE129_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B ***Matrix:*** SO

Sample ID: SL-041-SA5A-SB-4.0-5.0 ***Collected:*** 4/15/2011 3:38:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	68.0	J	41.2	MDL	111	PQL	mg/Kg	J	Z
TIN	2.86	J	1.11	MDL	11.1	PQL	mg/Kg	U	B

Sample ID: SL-044-SA5A-SB-3.0-4.0 ***Collected:*** 4/15/2011 12:27:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.39	J	0.968	MDL	5.44	PQL	mg/Kg	J	Z
SODIUM	92.1	J	40.6	MDL	109	PQL	mg/Kg	J	Z
TIN	2.87	J	1.09	MDL	10.9	PQL	mg/Kg	U	B
Zirconium	1.83	J	0.914	MDL	5.44	PQL	mg/Kg	J	Z

Sample ID: SL-052-SA5A-SB-4.0-5.0 ***Collected:*** 4/15/2011 9:34:00 ***Analysis Type:*** REA2 ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	3.00	J	1.14	MDL	11.4	PQL	mg/Kg	U	B
Zirconium	2.38	J	0.957	MDL	5.70	PQL	mg/Kg	J	Z

Sample ID: SL-062-SA8N-SS-0.0-0.5 ***Collected:*** 4/15/2011 9:05:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.46	J	1.09	MDL	10.9	PQL	mg/Kg	U	B
Zirconium	3.42	J	0.917	MDL	5.46	PQL	mg/Kg	J	Z

Sample ID: SL-067-SA8N-SS-0.0-0.5 ***Collected:*** 4/15/2011 10:35:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.46	J	1.17	MDL	11.7	PQL	mg/Kg	U	B
Zirconium	3.37	J	0.979	MDL	5.83	PQL	mg/Kg	J	Z

Sample ID: SL-141-SA8N-SS-0.0-0.5 ***Collected:*** 4/15/2011 8:35:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.48	J	1.10	MDL	11.0	PQL	mg/Kg	U	B
Zirconium	3.49	J	0.924	MDL	5.50	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE129 **Laboratory: LL**

EDD Filename: DE129_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS
Method: 6010B **Matrix:** SO

Sample ID: SL-243-SA5A-SB-4.0-5.0 **Collected:** 4/15/2011 10:46:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.11	J	0.971	MDL	5.45	PQL	mg/Kg	J	Z
SODIUM	97.4	J	40.7	MDL	109	PQL	mg/Kg	J	Z
TIN	2.91	J	1.09	MDL	10.9	PQL	mg/Kg	U	B
Zirconium	2.04	J	0.916	MDL	5.45	PQL	mg/Kg	J	Z

Method Category: METALS
Method: 6020 **Matrix:** SO

Sample ID: SL-041-SA5A-SB-4.0-5.0 **Collected:** 4/15/2011 3:38:00 **Analysis Type:** REA **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.102	J	0.0446	MDL	0.446	PQL	mg/Kg	J	Z

Sample ID: SL-041-SA5A-SB-4.0-5.0 **Collected:** 4/15/2011 3:38:00 **Analysis Type:** REA2 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.402		0.0558	MDL	0.112	PQL	mg/Kg	J	E

Sample ID: SL-041-SA5A-SB-4.0-5.0 **Collected:** 4/15/2011 3:38:00 **Analysis Type:** REA3 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	87.8		0.121	MDL	0.446	PQL	mg/Kg	J	A

Sample ID: SL-041-SA5A-SB-4.0-5.0 **Collected:** 4/15/2011 3:38:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0670	U	0.0670	MDL	0.223	PQL	mg/Kg	UJ	Q
ARSENIC	5.89		0.0893	MDL	0.446	PQL	mg/Kg	J	Q
CADMIUM	0.0446	U	0.0446	MDL	0.112	PQL	mg/Kg	UJ	E
CHROMIUM	20.7		0.134	MDL	0.446	PQL	mg/Kg	J	E, A
COBALT	5.61		0.0223	MDL	0.112	PQL	mg/Kg	J	A
COPPER	7.66		0.0737	MDL	0.446	PQL	mg/Kg	J	Q, A
LEAD	5.97		0.0116	MDL	0.223	PQL	mg/Kg	J	E, A
NICKEL	11.8		0.112	MDL	0.446	PQL	mg/Kg	J	Q, A
SILVER	0.0366	J	0.0134	MDL	0.112	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE129 **Laboratory: LL**

EDD Filename: DE129_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-041-SA5A-SB-4.0-5.0 **Collected:** 4/15/2011 3:38:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
THALLIUM	0.232		0.0335	MDL	0.112	PQL	mg/Kg	J	Q
VANADIUM	39.2		0.0246	MDL	0.112	PQL	mg/Kg	J	A
ZINC	52.0		0.625	MDL	3.35	PQL	mg/Kg	J	A

Sample ID: SL-044-SA5A-SB-3.0-4.0 **Collected:** 4/15/2011 12:27:00 **Analysis Type:** REA **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0903	J	0.0440	MDL	0.440	PQL	mg/Kg	J	Z

Sample ID: SL-044-SA5A-SB-3.0-4.0 **Collected:** 4/15/2011 12:27:00 **Analysis Type:** REA2 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.373		0.0549	MDL	0.110	PQL	mg/Kg	J	E

Sample ID: SL-044-SA5A-SB-3.0-4.0 **Collected:** 4/15/2011 12:27:00 **Analysis Type:** REA3 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	97.1		0.119	MDL	0.440	PQL	mg/Kg	J	A

Sample ID: SL-044-SA5A-SB-3.0-4.0 **Collected:** 4/15/2011 12:27:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0659	U	0.0659	MDL	0.220	PQL	mg/Kg	UJ	Q
ARSENIC	6.76		0.0879	MDL	0.440	PQL	mg/Kg	J	Q
CADMIUM	0.0779	J	0.0440	MDL	0.110	PQL	mg/Kg	J	Z, E, Q
CHROMIUM	22.7		0.132	MDL	0.440	PQL	mg/Kg	J	E, A
COBALT	7.57		0.0220	MDL	0.110	PQL	mg/Kg	J	A
COPPER	12.5		0.0725	MDL	0.440	PQL	mg/Kg	J	Q, A
LEAD	7.10		0.0114	MDL	0.220	PQL	mg/Kg	J	E, A
NICKEL	16.0		0.110	MDL	0.440	PQL	mg/Kg	J	Q, A
SILVER	0.0729	J	0.0132	MDL	0.110	PQL	mg/Kg	J	Z
THALLIUM	0.318		0.0330	MDL	0.110	PQL	mg/Kg	J	Q
VANADIUM	42.3		0.0242	MDL	0.110	PQL	mg/Kg	J	A
ZINC	62.6		0.615	MDL	3.30	PQL	mg/Kg	J	A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE129 **Laboratory: LL**

EDD Filename: DE129_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-052-SA5A-SB-4.0-5.0 **Collected:** 4/15/2011 9:34:00 **Analysis Type:** REA4 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.136	J	0.0684	MDL	0.228	PQL	mg/Kg	J	Z
SILVER	0.0347	J	0.0137	MDL	0.114	PQL	mg/Kg	J	Z

Sample ID: SL-052-SA5A-SB-4.0-5.0 **Collected:** 4/15/2011 9:34:00 **Analysis Type:** REA6 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0808	J	0.0456	MDL	0.456	PQL	mg/Kg	J	Z

Sample ID: SL-062-SA8N-SS-0.0-0.5 **Collected:** 4/15/2011 9:05:00 **Analysis Type:** REA **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.275	J	0.0445	MDL	0.445	PQL	mg/Kg	J	Z

Sample ID: SL-062-SA8N-SS-0.0-0.5 **Collected:** 4/15/2011 9:05:00 **Analysis Type:** REA2 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.326		0.0556	MDL	0.111	PQL	mg/Kg	J	E

Sample ID: SL-062-SA8N-SS-0.0-0.5 **Collected:** 4/15/2011 9:05:00 **Analysis Type:** REA3 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	99.0		0.120	MDL	0.445	PQL	mg/Kg	J	A

Sample ID: SL-062-SA8N-SS-0.0-0.5 **Collected:** 4/15/2011 9:05:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.141	J	0.0668	MDL	0.223	PQL	mg/Kg	J	Z, Q
ARSENIC	5.23		0.0890	MDL	0.445	PQL	mg/Kg	J	Q
CADMIUM	0.226		0.0445	MDL	0.111	PQL	mg/Kg	J	E, Q
CHROMIUM	31.3		0.134	MDL	0.445	PQL	mg/Kg	J	E, A
COBALT	10.3		0.0223	MDL	0.111	PQL	mg/Kg	J	A
COPPER	16.4		0.0734	MDL	0.445	PQL	mg/Kg	J	Q, A
LEAD	9.74		0.0116	MDL	0.223	PQL	mg/Kg	J	E, A
NICKEL	19.3		0.111	MDL	0.445	PQL	mg/Kg	J	Q, A
SILVER	0.0290	J	0.0134	MDL	0.111	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE129 **Laboratory: LL**

EDD Filename: DE129_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-062-SA8N-SS-0.0-0.5 **Collected:** 4/15/2011 9:05:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
THALLIUM	0.356		0.0334	MDL	0.111	PQL	mg/Kg	J	Q
VANADIUM	59.6		0.0245	MDL	0.111	PQL	mg/Kg	J	A
ZINC	75.9		0.623	MDL	3.34	PQL	mg/Kg	J	A

Sample ID: SL-067-SA8N-SS-0.0-0.5 **Collected:** 4/15/2011 10:35:00 **Analysis Type:** REA **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.298	J	0.0480	MDL	0.480	PQL	mg/Kg	J	Z

Sample ID: SL-067-SA8N-SS-0.0-0.5 **Collected:** 4/15/2011 10:35:00 **Analysis Type:** REA2 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.320		0.0600	MDL	0.120	PQL	mg/Kg	J	E

Sample ID: SL-067-SA8N-SS-0.0-0.5 **Collected:** 4/15/2011 10:35:00 **Analysis Type:** REA3 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	102		0.130	MDL	0.480	PQL	mg/Kg	J	A

Sample ID: SL-067-SA8N-SS-0.0-0.5 **Collected:** 4/15/2011 10:35:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.172	J	0.0720	MDL	0.240	PQL	mg/Kg	J	Z, Q
ARSENIC	5.15		0.0960	MDL	0.480	PQL	mg/Kg	J	Q
CADMIUM	0.270		0.0480	MDL	0.120	PQL	mg/Kg	J	E, Q
CHROMIUM	31.8		0.144	MDL	0.480	PQL	mg/Kg	J	E, A
COBALT	9.63		0.0240	MDL	0.120	PQL	mg/Kg	J	A
COPPER	16.5		0.0792	MDL	0.480	PQL	mg/Kg	J	Q, A
LEAD	10.9		0.0125	MDL	0.240	PQL	mg/Kg	J	E, A
NICKEL	19.1		0.120	MDL	0.480	PQL	mg/Kg	J	Q, A
SILVER	0.0214	J	0.0144	MDL	0.120	PQL	mg/Kg	J	Z
THALLIUM	0.347		0.0360	MDL	0.120	PQL	mg/Kg	J	Q
VANADIUM	59.3		0.0264	MDL	0.120	PQL	mg/Kg	J	A
ZINC	72.9		0.672	MDL	3.60	PQL	mg/Kg	J	A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE129 **Laboratory: LL**

EDD Filename: DE129_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-141-SA8N-SS-0.0-0.5 **Collected:** 4/15/2011 8:35:00 **Analysis Type:** REA **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.262	J	0.0453	MDL	0.453	PQL	mg/Kg	J	Z

Sample ID: SL-141-SA8N-SS-0.0-0.5 **Collected:** 4/15/2011 8:35:00 **Analysis Type:** REA2 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.297		0.0566	MDL	0.113	PQL	mg/Kg	J	E

Sample ID: SL-141-SA8N-SS-0.0-0.5 **Collected:** 4/15/2011 8:35:00 **Analysis Type:** REA3 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	82.4		0.122	MDL	0.453	PQL	mg/Kg	J	A

Sample ID: SL-141-SA8N-SS-0.0-0.5 **Collected:** 4/15/2011 8:35:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0680	U	0.0680	MDL	0.227	PQL	mg/Kg	UJ	Q
ARSENIC	4.73		0.0906	MDL	0.453	PQL	mg/Kg	J	Q
CADMIUM	0.173		0.0453	MDL	0.113	PQL	mg/Kg	J	E, Q
CHROMIUM	26.7		0.136	MDL	0.453	PQL	mg/Kg	J	E, A
COBALT	8.46		0.0227	MDL	0.113	PQL	mg/Kg	J	A
COPPER	13.9		0.0748	MDL	0.453	PQL	mg/Kg	J	Q, A
LEAD	8.63		0.0118	MDL	0.227	PQL	mg/Kg	J	E, A
NICKEL	15.8		0.113	MDL	0.453	PQL	mg/Kg	J	Q, A
SILVER	0.0311	J	0.0136	MDL	0.113	PQL	mg/Kg	J	Z
THALLIUM	0.290		0.0340	MDL	0.113	PQL	mg/Kg	J	Q
VANADIUM	50.3		0.0249	MDL	0.113	PQL	mg/Kg	J	A
ZINC	64.1		0.634	MDL	3.40	PQL	mg/Kg	J	A

Sample ID: SL-243-SA5A-SB-4.0-5.0 **Collected:** 4/15/2011 10:46:00 **Analysis Type:** REA **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0567	J	0.0436	MDL	0.436	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE129 **Laboratory: LL**

EDD Filename: DE129_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS
Method: 6020 **Matrix:** SO

Sample ID: SL-243-SA5A-SB-4.0-5.0 **Collected:** 4/15/2011 10:46:00 **Analysis Type:** REA2 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.518		0.0545	MDL	0.109	PQL	mg/Kg	J	E

Sample ID: SL-243-SA5A-SB-4.0-5.0 **Collected:** 4/15/2011 10:46:00 **Analysis Type:** REA3 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	82.8		0.118	MDL	0.436	PQL	mg/Kg	J	A

Sample ID: SL-243-SA5A-SB-4.0-5.0 **Collected:** 4/15/2011 10:46:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0655	U	0.0655	MDL	0.218	PQL	mg/Kg	UJ	Q
ARSENIC	5.17		0.0873	MDL	0.436	PQL	mg/Kg	J	Q
CADMIUM	0.0436	U	0.0436	MDL	0.109	PQL	mg/Kg	UJ	E
CHROMIUM	19.0		0.131	MDL	0.436	PQL	mg/Kg	J	E, A
COBALT	5.76		0.0218	MDL	0.109	PQL	mg/Kg	J	A
COPPER	7.59		0.0720	MDL	0.436	PQL	mg/Kg	J	Q, A
LEAD	6.04		0.0113	MDL	0.218	PQL	mg/Kg	J	E, A
NICKEL	12.1		0.109	MDL	0.436	PQL	mg/Kg	J	Q, A
SILVER	0.0492	J	0.0131	MDL	0.109	PQL	mg/Kg	J	Z
THALLIUM	0.190		0.0327	MDL	0.109	PQL	mg/Kg	J	Q
VANADIUM	37.9		0.0240	MDL	0.109	PQL	mg/Kg	J	A
ZINC	41.9		0.611	MDL	3.27	PQL	mg/Kg	J	A

Method Category: METALS
Method: 7199 **Matrix:** SO

Sample ID: SL-044-SA5A-SB-3.0-4.0 **Collected:** 4/15/2011 12:27:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.38	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-052-SA5A-SB-4.0-5.0 **Collected:** 4/15/2011 9:34:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.42	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE129 **Laboratory: LL**

EDD Filename: DE129_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS
Method: 7199 **Matrix: SO**

Sample ID: SL-062-SA8N-SS-0.0-0.5 **Collected: 4/15/2011 9:05:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.48	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-067-SA8N-SS-0.0-0.5 **Collected: 4/15/2011 10:35:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.43	J	0.24	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-141-SA8N-SS-0.0-0.5 **Collected: 4/15/2011 8:35:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.85	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-243-SA5A-SB-4.0-5.0 **Collected: 4/15/2011 10:46:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.40	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Method Category: METALS
Method: 7471A **Matrix: SO**

Sample ID: SL-052-SA5A-SB-4.0-5.0 **Collected: 4/15/2011 9:34:00** **Analysis Type: REA** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0049	J	0.0031	MDL	0.109	PQL	mg/Kg	J	Z

Sample ID: SL-067-SA8N-SS-0.0-0.5 **Collected: 4/15/2011 10:35:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0054	J	0.0034	MDL	0.119	PQL	mg/Kg	J	Z, Q

Sample ID: SL-141-SA8N-SS-0.0-0.5 **Collected: 4/15/2011 8:35:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0166	J	0.0032	MDL	0.112	PQL	mg/Kg	J	Z, Q

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE129 **Laboratory: LL**

EDD Filename: DE129_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS
Method: 7471A **Matrix:** SO

Sample ID: SL-243-SA5A-SB-4.0-5.0 **Collected:** 4/15/2011 10:46:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0102	J	0.0031	MDL	0.109	PQL	mg/Kg	J	Z, Q

Method Category: SVOA
Method: 1625C **Matrix:** SO

Sample ID: SL-052-SA5A-SB-4.0-5.0 **Collected:** 4/15/2011 9:34:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	28.9	J	18.9	MDL	37.9	PQL	ng/Kg	J	Z

Sample ID: SL-141-SA8N-SS-0.0-0.5 **Collected:** 4/15/2011 8:35:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	37.2	J	18.9	MDL	37.8	PQL	ng/Kg	J	Z

Method Category: SVOA
Method: 8015M **Matrix:** SO

Sample ID: SL-052-SA5A-SB-4.0-5.0 **Collected:** 4/15/2011 9:34:00 **Analysis Type:** REA2 **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	0.80	J	0.46	MDL	1.4	PQL	mg/Kg	J	Z

Sample ID: SL-243-SA5A-SB-4.0-5.0 **Collected:** 4/15/2011 10:46:00 **Analysis Type:** REA2 **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	0.76	J	0.45	MDL	1.4	PQL	mg/Kg	J	Z

Method Category: SVOA
Method: 8082 **Matrix:** SO

Sample ID: SL-062-SA8N-SS-0.0-0.5 **Collected:** 4/15/2011 9:05:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	2.5	J	1.9	MDL	9.6	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE129 **Laboratory: LL**

EDD Filename: DE129_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA
Method: 8082 **Matrix:** SO

Sample ID: SL-067-SA8N-SS-0.0-0.5 *Collected:* 4/15/2011 10:35:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	1.4	J	0.40	MDL	2.1	PQL	ug/Kg	J	Z
AROCLOR 1260	0.58	J	0.47	MDL	2.1	PQL	ug/Kg	J	Z

Method Category: SVOA
Method: 8270C **Matrix:** SO

Sample ID: SL-041-SA5A-SB-4.0-5.0 *Collected:* 4/15/2011 3:38:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	25	J	19	MDL	380	PQL	ug/Kg	J	Z

Sample ID: SL-044-SA5A-SB-3.0-4.0 *Collected:* 4/15/2011 12:27:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	18	J	18	MDL	370	PQL	ug/Kg	J	Z

Sample ID: SL-062-SA8N-SS-0.0-0.5 *Collected:* 4/15/2011 9:05:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	31	J	19	MDL	380	PQL	ug/Kg	J	Z

Sample ID: SL-067-SA8N-SS-0.0-0.5 *Collected:* 4/15/2011 10:35:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	21	J	20	MDL	410	PQL	ug/Kg	J	Z

Method Category: SVOA
Method: 8270C SIM **Matrix:** SO

Sample ID: SL-052-SA5A-SB-4.0-5.0 *Collected:* 4/15/2011 9:34:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	9.0	J	6.9	MDL	21	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE129 **Laboratory: LL**

EDD Filename: DE129_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA
Method: 8270C SIM **Matrix:** SO

Sample ID: SL-062-SA8N-SS-0.0-0.5 *Collected:* 4/15/2011 9:05:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	1.2	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
CHRYSENE	1.2	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z
FLUORANTHENE	1.5	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
NAPHTHALENE	0.92	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
PHENANTHRENE	1.1	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
PYRENE	1.3	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-067-SA8N-SS-0.0-0.5 *Collected:* 4/15/2011 10:35:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHRYSENE	0.47	J	0.41	MDL	2.0	PQL	ug/Kg	J	Z

Sample ID: SL-141-SA8N-SS-0.0-0.5 *Collected:* 4/15/2011 8:35:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHRYSENE	0.45	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z

Method Category: VOA
Method: 8015B **Matrix:** SO

Sample ID: SL-141-SA8N-SS-0.0-0.5 *Collected:* 4/15/2011 8:35:00 *Analysis Type:* REA3 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
m-Terphenyl	1.7	U	1.7	MDL	4.0	PQL	mg/Kg	UJ	S
O-TERPHENYL	1.7	U	1.7	MDL	4.0	PQL	mg/Kg	UJ	S
p-Terphenyl	1.7	U	1.7	MDL	4.0	PQL	mg/Kg	UJ	S

Method Category: VOA
Method: 8260B **Matrix:** SO

Sample ID: SL-041-SA5A-SB-4.0-5.0 *Collected:* 4/15/2011 3:38:00 *Analysis Type:* RES *Dilution:* 0.91

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.50	J	0.25	MDL	4.1	PQL	ug/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE129 **Laboratory: LL**

EDD Filename: DE129_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: VOA

Method: 8260B ***Matrix:*** SO

Sample ID: SL-044-SA5A-SB-3.0-4.0 ***Collected:*** 4/15/2011 12:27:00 ***Analysis Type:*** RES ***Dilution:*** 0.89

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.42	J	0.24	MDL	4.0	PQL	ug/Kg	U	B

Sample ID: SL-052-SA5A-SB-4.0-5.0 ***Collected:*** 4/15/2011 9:34:00 ***Analysis Type:*** RES ***Dilution:*** 0.87

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.34	J	0.24	MDL	4.0	PQL	ug/Kg	U	B

Sample ID: SL-243-SA5A-SB-4.0-5.0 ***Collected:*** 4/15/2011 10:46:00 ***Analysis Type:*** RES ***Dilution:*** 0.87

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.51	J	0.24	MDL	4.0	PQL	ug/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE129 **Laboratory: LL**

EDD Filename: DE129_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
*#	Professional Judgment
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Verification Correlation Coefficient
C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE129 **Laboratory: LL**

EDD Filename: DE129_v1 **eQAPP Name: CDM_SSFL_110509**

F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation
L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery Lower Estimation

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE129 **Laboratory: LL**

EDD Filename: DE129_v1 **eQAPP Name: CDM_SSFL_110509**

R	Continuing Calibration Verification Percent Recovery Lower Rejection
R	Continuing Calibration Verification Percent Recovery Upper Estimation
R	Continuing Calibration Verification Percent Recovery Upper Rejection
R	Continuing Calibration Verification Relative Response Factor
R	Initial Calibration Relative Response Factor
R	Initial Calibration Verification Percent Recovery Lower Estimation
R	Initial Calibration Verification Percent Recovery Lower Rejection
R	Initial Calibration Verification Percent Recovery Upper Estimation
R	Initial Calibration Verification Percent Recovery Upper Rejection
R	Initial Calibration Verification Relative Response Factor
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control Outlier Reports

DE129

Method Blank Outlier Report

Lab Reporting Batch ID: DE129 **Laboratory: LL**

EDD Filename: DE129_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **6010B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P11208CB221812	4/27/2011 6:12:00 PM	ALUMINUM CALCIUM LITHIUM PHOSPHORUS TIN	5.43 mg/Kg 10.0 mg/Kg 0.41 mg/Kg 1.22 mg/Kg 1.33 mg/Kg	SL-041-SA5A-SB-4.0-5.0 SL-044-SA5A-SB-3.0-4.0 SL-062-SA8N-SS-0.0-0.5 SL-067-SA8N-SS-0.0-0.5 SL-141-SA8N-SS-0.0-0.5 SL-243-SA5A-SB-4.0-5.0
P11608AB220149	4/28/2011 1:49:00 AM	PHOSPHORUS TIN	1.26 mg/Kg 1.48 mg/Kg	SL-052-SA5A-SB-4.0-5.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-041-SA5A-SB-4.0-5.0(RES)	TIN	2.86 mg/Kg	2.86U mg/Kg
SL-044-SA5A-SB-3.0-4.0(RES)	TIN	2.87 mg/Kg	2.87U mg/Kg
SL-052-SA5A-SB-4.0-5.0(REA2)	TIN	3.00 mg/Kg	3.00U mg/Kg
SL-062-SA8N-SS-0.0-0.5(RES)	TIN	2.46 mg/Kg	2.46U mg/Kg
SL-067-SA8N-SS-0.0-0.5(RES)	TIN	2.46 mg/Kg	2.46U mg/Kg
SL-141-SA8N-SS-0.0-0.5(RES)	TIN	2.48 mg/Kg	2.48U mg/Kg
SL-243-SA5A-SB-4.0-5.0(RES)	TIN	2.91 mg/Kg	2.91U mg/Kg

Method: **6020**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P11226AB221105A	4/25/2011 11:05:00 AM	VANADIUM	0.0708 mg/Kg	SL-041-SA5A-SB-4.0-5.0 SL-044-SA5A-SB-3.0-4.0 SL-062-SA8N-SS-0.0-0.5 SL-067-SA8N-SS-0.0-0.5 SL-141-SA8N-SS-0.0-0.5 SL-243-SA5A-SB-4.0-5.0
P11626AB220808A	4/27/2011 8:08:00 AM	VANADIUM	0.0532 mg/Kg	SL-052-SA5A-SB-4.0-5.0

Method: **8260B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB32B211301A	4/21/2011 1:01:00 PM	METHYLENE CHLORIDE	0.46 ug/Kg	SL-041-SA5A-SB-4.0-5.0 SL-044-SA5A-SB-3.0-4.0 SL-052-SA5A-SB-4.0-5.0 SL-243-SA5A-SB-4.0-5.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-041-SA5A-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.50 ug/Kg	4.1U ug/Kg

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Method Blank Outlier Report

Lab Reporting Batch ID: DE129 **Laboratory: LL**

EDD Filename: DE129_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8260B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-044-SA5A-SB-3.0-4.0(RES)	METHYLENE CHLORIDE	0.42 ug/Kg	4.0U ug/Kg
SL-052-SA5A-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.34 ug/Kg	4.0U ug/Kg
SL-243-SA5A-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.51 ug/Kg	4.0U ug/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE129 **Laboratory: LL**

EDD Filename: DE129_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **300.0**
Matrix: **SO**

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-062-SA8N-SS-0.0-0.5MS (SL-041-SA5A-SB-4.0-5.0 SL-044-SA5A-SB-3.0-4.0 SL-052-SA5A-SB-4.0-5.0 SL-062-SA8N-SS-0.0-0.5 SL-067-SA8N-SS-0.0-0.5 SL-141-SA8N-SS-0.0-0.5 SL-243-SA5A-SB-4.0-5.0)	FLUORIDE	77	-	80.00-120.00	-	FLUORIDE	J (all detects) UJ (all non-detects)

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE129 **Laboratory: LL**

EDD Filename: DE129_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 300.0
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-062-SA8N-SS-0.0-0.5DUP (SL-041-SA5A-SB-4.0-5.0 SL -044-SA5A-SB-3.0-4.0 SL -052-SA5A-SB-4.0-5.0 SL -062-SA8N-SS-0.0-0.5 SL -067-SA8N-SS-0.0-0.5 SL -141-SA8N-SS-0.0-0.5 SL -243-SA5A-SB-4.0-5.0)	FLUORIDE	25	20.00	No Qual OK by difference

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE129 | **Laboratory: LL**

EDD Filename: DE129_v1 | **eQAPP Name: CDM_SSFL_110509**

Method: 8260B
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
LCS1Y14Q210248A **LCS1Y14Y210309A** (TB-041511)	2-Chloro-1,1,1-trifluoroethane	123	124	77.00-120.00	-	2-Chloro-1,1,1-trifluoroethane	J(all detects)

Method: 8330A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11081AQ241745A (SL-052-SA5A-SB-4.0-5.0 SL -062-SA8N-SS-0.0-0.5 SL -067-SA8N-SS-0.0-0.5 SL -141-SA8N-SS-0.0-0.5 SL -243-SA5A-SB-4.0-5.0)	2,6-DINITROTOLUENE PETN	121 127	- -	80.00-120.00 80.00-120.00	- -	2,6-DINITROTOLUENE PETN	J (all detects)

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11226AQ221108A (SL-041-SA5A-SB-4.0-5.0 SL -044-SA5A-SB-3.0-4.0 SL -062-SA8N-SS-0.0-0.5 SL -067-SA8N-SS-0.0-0.5 SL -141-SA8N-SS-0.0-0.5 SL -243-SA5A-SB-4.0-5.0)	ANTIMONY	66	-	80.00-120.00	-	ANTIMONY	No Qual SRM within QC limits
P11626AQ220811A (SL-052-SA5A-SB-4.0-5.0)	ANTIMONY	121	-	80.00-120.00	-	ANTIMONY	No Qual SRM within QC limits

Surrogate Outlier Report

Lab Reporting Batch ID: DE129 **Laboratory: LL**

EDD Filename: DE129_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8015B**
Matrix: **SO**

Sample ID	*Surrogate*	*Sample % Recovery*	*% Recovery Limits*	*Affected Compounds*	*Flag*
SL-141-SA8N-SS-0.0-0.5	n-Triacontane-d62	48	50.00-150.00	All Target Analytes	J (all detects) UJ (all non-detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE129 **Laboratory: LL**

EDD Filename: DE129_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1625C
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-052-SA5A-SB-4.0-5.0	N-NITROSODIMETHYLAMINE	J	28.9	37.9	PQL	ng/Kg	J (all detects)
SL-141-SA8N-SS-0.0-0.5	N-NITROSODIMETHYLAMINE	J	37.2	37.8	PQL	ng/Kg	J (all detects)

Method: 300.0
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-062-SA8N-SS-0.0-0.5	Nitrate-NO3	J	1.0	1.7	PQL	mg/Kg	J (all detects)
SL-243-SA5A-SB-4.0-5.0	Nitrate-NO3	J	1.0	1.7	PQL	mg/Kg	J (all detects)

Method: 6010B
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-041-SA5A-SB-4.0-5.0	SODIUM	J	68.0	111	PQL	mg/Kg	J (all detects)
	TIN	J	2.86	11.1	PQL	mg/Kg	
SL-044-SA5A-SB-3.0-4.0	BORON	J	1.39	5.44	PQL	mg/Kg	J (all detects)
	SODIUM	J	92.1	109	PQL	mg/Kg	
	TIN	J	2.87	10.9	PQL	mg/Kg	
	Zirconium	J	1.83	5.44	PQL	mg/Kg	
SL-052-SA5A-SB-4.0-5.0	TIN	J	3.00	11.4	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.38	5.70	PQL	mg/Kg	
SL-062-SA8N-SS-0.0-0.5	TIN	J	2.46	10.9	PQL	mg/Kg	J (all detects)
	Zirconium	J	3.42	5.46	PQL	mg/Kg	
SL-067-SA8N-SS-0.0-0.5	TIN	J	2.46	11.7	PQL	mg/Kg	J (all detects)
	Zirconium	J	3.37	5.83	PQL	mg/Kg	
SL-141-SA8N-SS-0.0-0.5	TIN	J	2.48	11.0	PQL	mg/Kg	J (all detects)
	Zirconium	J	3.49	5.50	PQL	mg/Kg	
SL-243-SA5A-SB-4.0-5.0	BORON	J	1.11	5.45	PQL	mg/Kg	J (all detects)
	SODIUM	J	97.4	109	PQL	mg/Kg	
	TIN	J	2.91	10.9	PQL	mg/Kg	
	Zirconium	J	2.04	5.45	PQL	mg/Kg	

Method: 6020
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-041-SA5A-SB-4.0-5.0	SELENIUM	J	0.102	0.446	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0366	0.112	PQL	mg/Kg	
SL-044-SA5A-SB-3.0-4.0	CADMIUM	J	0.0779	0.110	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0903	0.440	PQL	mg/Kg	
	SILVER	J	0.0729	0.110	PQL	mg/Kg	

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Reporting Limit Outliers

Lab Reporting Batch ID: DE129 **Laboratory: LL**

EDD Filename: DE129_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-052-SA5A-SB-4.0-5.0	ANTIMONY	J	0.136	0.228	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0808	0.456	PQL	mg/Kg	
	SILVER	J	0.0347	0.114	PQL	mg/Kg	
SL-062-SA8N-SS-0.0-0.5	ANTIMONY	J	0.141	0.223	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.275	0.445	PQL	mg/Kg	
	SILVER	J	0.0290	0.111	PQL	mg/Kg	
SL-067-SA8N-SS-0.0-0.5	ANTIMONY	J	0.172	0.240	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.298	0.480	PQL	mg/Kg	
	SILVER	J	0.0214	0.120	PQL	mg/Kg	
SL-141-SA8N-SS-0.0-0.5	SELENIUM	J	0.262	0.453	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0311	0.113	PQL	mg/Kg	
SL-243-SA5A-SB-4.0-5.0	SELENIUM	J	0.0567	0.436	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0492	0.109	PQL	mg/Kg	

Method: 7199
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-044-SA5A-SB-3.0-4.0	HEXAVALENT CHROMIUM	J	0.38	1.1	PQL	mg/Kg	J (all detects)
SL-052-SA5A-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.42	1.2	PQL	mg/Kg	J (all detects)
SL-062-SA8N-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.48	1.1	PQL	mg/Kg	J (all detects)
SL-067-SA8N-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.43	1.2	PQL	mg/Kg	J (all detects)
SL-141-SA8N-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.85	1.1	PQL	mg/Kg	J (all detects)
SL-243-SA5A-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.40	1.1	PQL	mg/Kg	J (all detects)

Method: 7471A
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-052-SA5A-SB-4.0-5.0	MERCURY	J	0.0049	0.109	PQL	mg/Kg	J (all detects)
SL-067-SA8N-SS-0.0-0.5	MERCURY	J	0.0054	0.119	PQL	mg/Kg	J (all detects)
SL-141-SA8N-SS-0.0-0.5	MERCURY	J	0.0166	0.112	PQL	mg/Kg	J (all detects)
SL-243-SA5A-SB-4.0-5.0	MERCURY	J	0.0102	0.109	PQL	mg/Kg	J (all detects)

Method: 8015M
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-052-SA5A-SB-4.0-5.0	EFH (C30-C40)	J	0.80	1.4	PQL	mg/Kg	J (all detects)

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Reporting Limit Outliers

Lab Reporting Batch ID: DE129 **Laboratory: LL**

EDD Filename: DE129_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8015M
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-243-SA5A-SB-4.0-5.0	EFH (C30-C40)	J	0.76	1.4	PQL	mg/Kg	J (all detects)

Method: 8082
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-062-SA8N-SS-0.0-0.5	AROCLOR 1254	J	2.5	9.6	PQL	ug/Kg	J (all detects)
SL-067-SA8N-SS-0.0-0.5	AROCLOR 1254 AROCLOR 1260	J J	1.4 0.58	2.1 2.1	PQL PQL	ug/Kg ug/Kg	J (all detects)

Method: 8260B
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-041-SA5A-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.50	4.1	PQL	ug/Kg	J (all detects)
SL-044-SA5A-SB-3.0-4.0	METHYLENE CHLORIDE	J	0.42	4.0	PQL	ug/Kg	J (all detects)
SL-052-SA5A-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.34	4.0	PQL	ug/Kg	J (all detects)
SL-243-SA5A-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.51	4.0	PQL	ug/Kg	J (all detects)

Method: 8270C
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-041-SA5A-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	25	380	PQL	ug/Kg	J (all detects)
SL-044-SA5A-SB-3.0-4.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	18	370	PQL	ug/Kg	J (all detects)
SL-062-SA8N-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	31	380	PQL	ug/Kg	J (all detects)
SL-067-SA8N-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	21	410	PQL	ug/Kg	J (all detects)

Method: 8270C SIM
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-052-SA5A-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	9.0	21	PQL	ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE129 **Laboratory: LL**

EDD Filename: DE129_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8270C SIM**

Matrix: **SO**

SampleID	*Analyte*	*Lab Qual*	*Result*	*Reporting Limit*	*RL Type*	*Units*	*Flag*
SL-062-SA8N-SS-0.0-0.5	BENZO(B)FLUORANTHENE	J	1.2	1.9	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	1.2	1.9	PQL	ug/Kg	
	FLUORANTHENE	J	1.5	1.9	PQL	ug/Kg	
	NAPHTHALENE	J	0.92	1.9	PQL	ug/Kg	
	PHENANTHRENE	J	1.1	1.9	PQL	ug/Kg	
	PYRENE	J	1.3	1.9	PQL	ug/Kg	
SL-067-SA8N-SS-0.0-0.5	CHRYSENE	J	0.47	2.0	PQL	ug/Kg	J (all detects)
SL-141-SA8N-SS-0.0-0.5	CHRYSENE	J	0.45	1.9	PQL	ug/Kg	J (all detects)

LDC #: 25916K4 **VALIDATION COMPLETENESS WORKSHEET** Date: 8-3-11

SDG #: DE129 ADR

Laboratory: Lancaster Laboratories

Reviewer: OR

2nd Reviewer: C

METHOD: Metals (EPA SW 846 Method 6010B/6020A/7000)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	N	Sampling dates:
II.	ICP/MS Tune	—	
III.	Calibration	—	
IV.	Blanks	A	No Quals
V.	ICP Interference Check Sample (ICS) Analysis	N	
VI.	Matrix Spike Analysis	N	MS/D (#1-5,7 associated w/ SDG: DE127)(#6: client specific
VII.	Duplicate Sample Analysis	N	Dup ↓
VIII.	Laboratory Control Samples (LCS)	A	LCS
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	—	(1-5,7 associated w/ DE127)
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	—	
XV	Field Blanks	—	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:

1	SL-062-SA8N-SS-0.0-0.5	11		21		31	
2	SL-067-SA8N-SS-0.0-0.5	12		22		32	
3	SL-141-SA8N-SS-0.0-0.5	13		23		33	
4	SL-041-SA5A-SB-4.0-5.0	14		24		34	
5	SL-044-SA5A-SB-3.0-4.0	15		25		35	
6	SL-052-SA5A-SB-4.0-5.0	16		26		36	
7	SL-243-SA5A-SB-4.0-5.0	17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

SAMPLE DELIVERY GROUP

DE130

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
18-Apr-2011	TB-041811	6261706	TB	5030B	8015M	IV
18-Apr-2011	TB-041811	6261706	TB	5030B	8260B	IV
18-Apr-2011	TB-041811	6261706	TB	5030B	8260B SIM	IV
18-Apr-2011	SL-085-SA8N-SS-0.0-0.5	6261698	N	3050B	6010B	IV
18-Apr-2011	SL-085-SA8N-SS-0.0-0.5	6261698	N	3050B	6020	IV
18-Apr-2011	SL-085-SA8N-SS-0.0-0.5	6261698	N	3060A	7199	IV
18-Apr-2011	SL-085-SA8N-SS-0.0-0.5	6261698	N	3546	1625C	IV
18-Apr-2011	SL-085-SA8N-SS-0.0-0.5	6261698	N	3550B	8015B	IV
18-Apr-2011	SL-085-SA8N-SS-0.0-0.5	6261698	N	3550B	8015M	IV
18-Apr-2011	SL-085-SA8N-SS-0.0-0.5	6261698	N	3550B	8082	IV
18-Apr-2011	SL-085-SA8N-SS-0.0-0.5	6261698	N	3550B	8270C	IV
18-Apr-2011	SL-085-SA8N-SS-0.0-0.5	6261698	N	3550B	8270C SIM	IV
18-Apr-2011	SL-085-SA8N-SS-0.0-0.5	6261698	N	8330	8330A	IV
18-Apr-2011	SL-085-SA8N-SS-0.0-0.5	6261698	N	METHOD	300.0	IV
18-Apr-2011	SL-085-SA8N-SS-0.0-0.5	6261698	N	METHOD	314.0	IV
18-Apr-2011	SL-085-SA8N-SS-0.0-0.5	6261698	N	METHOD	7471A	IV
18-Apr-2011	SL-085-SA8N-SS-0.0-0.5	6261698	N	METHOD	8015B	IV
18-Apr-2011	SL-085-SA8N-SS-0.0-0.5	6261698	N	METHOD	8015M	IV
18-Apr-2011	SL-085-SA8N-SS-0.0-0.5	6261698	N	METHOD	8315A	IV
18-Apr-2011	SL-085-SA8N-SS-0.0-0.5	6261698	N	METHOD	9012B	IV
18-Apr-2011	SL-071-SA8N-SS-0.0-0.5	6261696	N	3050B	6010B	IV
18-Apr-2011	SL-071-SA8N-SS-0.0-0.5	6261696	N	3050B	6020	IV
18-Apr-2011	SL-071-SA8N-SS-0.0-0.5	6261696	N	3060A	7199	IV
18-Apr-2011	SL-071-SA8N-SS-0.0-0.5	6261696	N	3546	1625C	IV
18-Apr-2011	SL-071-SA8N-SS-0.0-0.5	6261696	N	3550B	8015B	IV
18-Apr-2011	SL-071-SA8N-SS-0.0-0.5	6261696	N	3550B	8015M	IV

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
18-Apr-2011	SL-071-SA8N-SS-0.0-0.5	6261696	N	3550B	8082	IV
18-Apr-2011	SL-071-SA8N-SS-0.0-0.5	6261696	N	3550B	8270C	IV
18-Apr-2011	SL-071-SA8N-SS-0.0-0.5	6261696	N	3550B	8270C SIM	IV
18-Apr-2011	SL-071-SA8N-SS-0.0-0.5	6261696	N	8330	8330A	IV
18-Apr-2011	SL-071-SA8N-SS-0.0-0.5	6261696	N	METHOD	300.0	IV
18-Apr-2011	SL-071-SA8N-SS-0.0-0.5	6261696	N	METHOD	314.0	IV
18-Apr-2011	SL-071-SA8N-SS-0.0-0.5	6261696	N	METHOD	7471A	IV
18-Apr-2011	SL-071-SA8N-SS-0.0-0.5	6261696	N	METHOD	8015B	IV
18-Apr-2011	SL-071-SA8N-SS-0.0-0.5	6261696	N	METHOD	8015M	IV
18-Apr-2011	SL-071-SA8N-SS-0.0-0.5	6261696	N	METHOD	8315A	IV
18-Apr-2011	SL-071-SA8N-SS-0.0-0.5	6261696	N	METHOD	9012B	IV
18-Apr-2011	SL-032-SA5A-SB-3.0-4.0	6261702	N	3050B	6010B	IV
18-Apr-2011	SL-032-SA5A-SB-3.0-4.0	6261702	N	3050B	6020	IV
18-Apr-2011	SL-032-SA5A-SB-3.0-4.0	6261702	N	3060A	7199	IV
18-Apr-2011	SL-032-SA5A-SB-3.0-4.0	6261702	N	3550B	8082	IV
18-Apr-2011	SL-032-SA5A-SB-3.0-4.0	6261702	N	3550B	8270C	IV
18-Apr-2011	SL-032-SA5A-SB-3.0-4.0	6261702	N	3550B	8270C SIM	IV
18-Apr-2011	SL-032-SA5A-SB-3.0-4.0	6261702	N	5035	8260B	IV
18-Apr-2011	SL-032-SA5A-SB-3.0-4.0	6261702	N	5035	8260B SIM	IV
18-Apr-2011	SL-032-SA5A-SB-3.0-4.0	6261702	N	METHOD	300.0	IV
18-Apr-2011	SL-032-SA5A-SB-3.0-4.0	6261702	N	METHOD	314.0	IV
18-Apr-2011	SL-032-SA5A-SB-3.0-4.0	6261702	N	METHOD	7471A	IV
18-Apr-2011	SL-057-SA8N-SS-0.0-0.5	6261695	N	3050B	6010B	IV
18-Apr-2011	SL-057-SA8N-SS-0.0-0.5	6261695	N	3050B	6020	IV
18-Apr-2011	SL-057-SA8N-SS-0.0-0.5	6261695	N	3060A	7199	IV
18-Apr-2011	SL-057-SA8N-SS-0.0-0.5	6261695	N	3546	1625C	IV

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
18-Apr-2011	SL-057-SA8N-SS-0.0-0.5	6261695	N	3550B	8015B	IV
18-Apr-2011	SL-057-SA8N-SS-0.0-0.5	6261695	N	3550B	8015M	IV
18-Apr-2011	SL-057-SA8N-SS-0.0-0.5	6261695	N	3550B	8082	IV
18-Apr-2011	SL-057-SA8N-SS-0.0-0.5	6261695	N	3550B	8270C	IV
18-Apr-2011	SL-057-SA8N-SS-0.0-0.5	6261695	N	3550B	8270C SIM	IV
18-Apr-2011	SL-057-SA8N-SS-0.0-0.5	6261695	N	8330	8330A	IV
18-Apr-2011	SL-057-SA8N-SS-0.0-0.5	6261695	N	METHOD	300.0	IV
18-Apr-2011	SL-057-SA8N-SS-0.0-0.5	6261695	N	METHOD	314.0	IV
18-Apr-2011	SL-057-SA8N-SS-0.0-0.5	6261695	N	METHOD	7471A	IV
18-Apr-2011	SL-057-SA8N-SS-0.0-0.5	6261695	N	METHOD	8015B	IV
18-Apr-2011	SL-057-SA8N-SS-0.0-0.5	6261695	N	METHOD	8015M	IV
18-Apr-2011	SL-057-SA8N-SS-0.0-0.5	6261695	N	METHOD	8315A	IV
18-Apr-2011	SL-057-SA8N-SS-0.0-0.5	6261695	N	METHOD	9012B	IV
18-Apr-2011	SL-080-SA8N-SS-0.0-0.5	6261697	N	3050B	6010B	IV
18-Apr-2011	SL-080-SA8N-SS-0.0-0.5	6261697	N	3050B	6020	IV
18-Apr-2011	SL-080-SA8N-SS-0.0-0.5	6261697	N	3060A	7199	IV
18-Apr-2011	SL-080-SA8N-SS-0.0-0.5	6261697	N	3546	1625C	IV
18-Apr-2011	SL-080-SA8N-SS-0.0-0.5	6261697	N	3550B	8015B	IV
18-Apr-2011	SL-080-SA8N-SS-0.0-0.5	6261697	N	3550B	8015M	IV
18-Apr-2011	SL-080-SA8N-SS-0.0-0.5	6261697	N	3550B	8082	IV
18-Apr-2011	SL-080-SA8N-SS-0.0-0.5	6261697	N	3550B	8270C	IV
18-Apr-2011	SL-080-SA8N-SS-0.0-0.5	6261697	N	3550B	8270C SIM	IV
18-Apr-2011	SL-080-SA8N-SS-0.0-0.5	6261697	N	8330	8330A	IV
18-Apr-2011	SL-080-SA8N-SS-0.0-0.5	6261697	N	METHOD	300.0	IV
18-Apr-2011	SL-080-SA8N-SS-0.0-0.5	6261697	N	METHOD	314.0	IV
18-Apr-2011	SL-080-SA8N-SS-0.0-0.5	6261697	N	METHOD	7471A	IV

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
18-Apr-2011	SL-080-SA8N-SS-0.0-0.5	6261697	N	METHOD	8015B	IV
18-Apr-2011	SL-080-SA8N-SS-0.0-0.5	6261697	N	METHOD	8015M	IV
18-Apr-2011	SL-080-SA8N-SS-0.0-0.5	6261697	N	METHOD	8315A	IV
18-Apr-2011	SL-080-SA8N-SS-0.0-0.5	6261697	N	METHOD	9012B	IV
18-Apr-2011	SL-080-SA8N-SS-0.0-0.5MSD	P261697M322219A	MSD	METHOD	8015B	IV
18-Apr-2011	SL-080-SA8N-SS-0.0-0.5MS	P261697R322204A	MS	METHOD	8015B	IV
18-Apr-2011	SL-056-SA8N-SS-0.0-0.5	6261694	N	3050B	6010B	IV
18-Apr-2011	SL-056-SA8N-SS-0.0-0.5	6261694	N	3050B	6020	IV
18-Apr-2011	SL-056-SA8N-SS-0.0-0.5	6261694	N	3060A	7199	IV
18-Apr-2011	SL-056-SA8N-SS-0.0-0.5	6261694	N	3546	1625C	IV
18-Apr-2011	SL-056-SA8N-SS-0.0-0.5	6261694	N	3550B	8015B	IV
18-Apr-2011	SL-056-SA8N-SS-0.0-0.5	6261694	N	3550B	8015M	IV
18-Apr-2011	SL-056-SA8N-SS-0.0-0.5	6261694	N	3550B	8082	IV
18-Apr-2011	SL-056-SA8N-SS-0.0-0.5	6261694	N	3550B	8270C	IV
18-Apr-2011	SL-056-SA8N-SS-0.0-0.5	6261694	N	3550B	8270C SIM	IV
18-Apr-2011	SL-056-SA8N-SS-0.0-0.5	6261694	N	8330	8330A	IV
18-Apr-2011	SL-056-SA8N-SS-0.0-0.5	6261694	N	METHOD	300.0	IV
18-Apr-2011	SL-056-SA8N-SS-0.0-0.5	6261694	N	METHOD	314.0	IV
18-Apr-2011	SL-056-SA8N-SS-0.0-0.5	6261694	N	METHOD	7471A	IV
18-Apr-2011	SL-056-SA8N-SS-0.0-0.5	6261694	N	METHOD	8015B	IV
18-Apr-2011	SL-056-SA8N-SS-0.0-0.5	6261694	N	METHOD	8015M	IV
18-Apr-2011	SL-056-SA8N-SS-0.0-0.5	6261694	N	METHOD	8315A	IV
18-Apr-2011	SL-056-SA8N-SS-0.0-0.5	6261694	N	METHOD	9012B	IV
18-Apr-2011	SL-056-SA8N-SS-0.0-0.5DUP	P261694D270153A	DUP	METHOD	314.0	IV
18-Apr-2011	SL-056-SA8N-SS-0.0-0.5DUP	P261694D271245A	DUP	METHOD	300.0	IV
18-Apr-2011	SL-056-SA8N-SS-0.0-0.5MSD	P261694M241837A	MSD	3550B	8082	IV

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
18-Apr-2011	SL-056-SA8N-SS-0.0-0.5MS	P261694R241818A	MS	3550B	8082	IV
18-Apr-2011	SL-056-SA8N-SS-0.0-0.5MS	P261694R270215A	MS	METHOD	314.0	IV
18-Apr-2011	SL-056-SA8N-SS-0.0-0.5MS	P261694R271259A	MS	METHOD	300.0	IV
18-Apr-2011	EB05-SA8N-SS-041811	6261701	EB	3005A	6010B	IV
18-Apr-2011	EB05-SA8N-SS-041811	6261701	EB	3020A	6020	IV
18-Apr-2011	EB05-SA8N-SS-041811	6261701	EB	3510C	8015B	IV
18-Apr-2011	EB05-SA8N-SS-041811	6261701	EB	3510C	8015M	IV
18-Apr-2011	EB05-SA8N-SS-041811	6261701	EB	3510C	8082	IV
18-Apr-2011	EB05-SA8N-SS-041811	6261701	EB	3510C	8270C	IV
18-Apr-2011	EB05-SA8N-SS-041811	6261701	EB	3510C	8270C SIM	IV
18-Apr-2011	EB05-SA8N-SS-041811	6261701	EB	3520C	1625C	IV
18-Apr-2011	EB05-SA8N-SS-041811	6261701	EB	8330	8330A	IV
18-Apr-2011	EB05-SA8N-SS-041811	6261701	EB	Gen Prep	300.0	IV
18-Apr-2011	EB05-SA8N-SS-041811	6261701	EB	Gen Prep	314.0	IV
18-Apr-2011	EB05-SA8N-SS-041811	6261701	EB	Gen Prep	7199	IV
18-Apr-2011	EB05-SA8N-SS-041811	6261701	EB	Gen Prep	8015B	IV
18-Apr-2011	EB05-SA8N-SS-041811	6261701	EB	Gen Prep	8015M	IV
18-Apr-2011	EB05-SA8N-SS-041811	6261701	EB	METHOD	7470A	IV
18-Apr-2011	EB05-SA8N-SS-041811	6261701	EB	METHOD	8315A	IV
18-Apr-2011	EB05-SA8N-SS-041811	6261701	EB	METHOD	9012B	IV
18-Apr-2011	SL-254-SA5A-SB-2.5-3.5	6261705	N	3050B	6010B	IV
18-Apr-2011	SL-254-SA5A-SB-2.5-3.5	6261705	N	3050B	6020	IV
18-Apr-2011	SL-254-SA5A-SB-2.5-3.5	6261705	N	3060A	7199	IV
18-Apr-2011	SL-254-SA5A-SB-2.5-3.5	6261705	N	3550B	8082	IV
18-Apr-2011	SL-254-SA5A-SB-2.5-3.5	6261705	N	3550B	8270C	IV
18-Apr-2011	SL-254-SA5A-SB-2.5-3.5	6261705	N	3550B	8270C SIM	IV

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
18-Apr-2011	SL-254-SA5A-SB-2.5-3.5	6261705	N	5035	8260B	IV
18-Apr-2011	SL-254-SA5A-SB-2.5-3.5	6261705	N	5035	8260B SIM	IV
18-Apr-2011	SL-254-SA5A-SB-2.5-3.5	6261705	N	METHOD	300.0	IV
18-Apr-2011	SL-254-SA5A-SB-2.5-3.5	6261705	N	METHOD	314.0	IV
18-Apr-2011	SL-254-SA5A-SB-2.5-3.5	6261705	N	METHOD	7471A	IV
18-Apr-2011	SL-254-SA5A-SB-2.5-3.5DUP	P261705D271604B	DUP	METHOD	300.0	IV
18-Apr-2011	SL-254-SA5A-SB-2.5-3.5MS	P261705R271646B	MS	METHOD	300.0	IV
18-Apr-2011	SL-086-SA8N-SS-0.0-0.5	6261699	N	3050B	6010B	IV
18-Apr-2011	SL-086-SA8N-SS-0.0-0.5	6261699	N	3050B	6020	IV
18-Apr-2011	SL-086-SA8N-SS-0.0-0.5	6261699	N	3060A	7199	IV
18-Apr-2011	SL-086-SA8N-SS-0.0-0.5	6261699	N	3550B	8082	IV
18-Apr-2011	SL-086-SA8N-SS-0.0-0.5	6261699	N	3550B	8270C	IV
18-Apr-2011	SL-086-SA8N-SS-0.0-0.5	6261699	N	3550B	8270C SIM	IV
18-Apr-2011	SL-086-SA8N-SS-0.0-0.5	6261699	N	METHOD	300.0	IV
18-Apr-2011	SL-086-SA8N-SS-0.0-0.5	6261699	N	METHOD	314.0	IV
18-Apr-2011	SL-086-SA8N-SS-0.0-0.5	6261699	N	METHOD	7471A	IV
18-Apr-2011	EB13-SA5A-SB-041811	6261707	EB	3005A	6010B	IV
18-Apr-2011	EB13-SA5A-SB-041811	6261707	EB	3020A	6020	IV
18-Apr-2011	EB13-SA5A-SB-041811	6261707	EB	3510C	8082	IV
18-Apr-2011	EB13-SA5A-SB-041811	6261707	EB	3510C	8270C	IV
18-Apr-2011	EB13-SA5A-SB-041811	6261707	EB	3510C	8270C SIM	IV
18-Apr-2011	EB13-SA5A-SB-041811	6261707	EB	5030B	8260B	IV
18-Apr-2011	EB13-SA5A-SB-041811	6261707	EB	5030B	8260B SIM	IV
18-Apr-2011	EB13-SA5A-SB-041811	6261707	EB	Gen Prep	300.0	IV
18-Apr-2011	EB13-SA5A-SB-041811	6261707	EB	Gen Prep	314.0	IV
18-Apr-2011	EB13-SA5A-SB-041811	6261707	EB	Gen Prep	7199	IV

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
18-Apr-2011	EB13-SA5A-SB-041811	6261707	EB	METHOD	7470A	IV
18-Apr-2011	SL-132-SA8N-SS-0.0-0.5	6261700	N	3050B	6010B	IV
18-Apr-2011	SL-132-SA8N-SS-0.0-0.5	6261700	N	3050B	6020	IV
18-Apr-2011	SL-132-SA8N-SS-0.0-0.5	6261700	N	3060A	7199	IV
18-Apr-2011	SL-132-SA8N-SS-0.0-0.5	6261700	N	3546	1625C	IV
18-Apr-2011	SL-132-SA8N-SS-0.0-0.5	6261700	N	3550B	8015B	IV
18-Apr-2011	SL-132-SA8N-SS-0.0-0.5	6261700	N	3550B	8015M	IV
18-Apr-2011	SL-132-SA8N-SS-0.0-0.5	6261700	N	3550B	8082	IV
18-Apr-2011	SL-132-SA8N-SS-0.0-0.5	6261700	N	3550B	8270C	IV
18-Apr-2011	SL-132-SA8N-SS-0.0-0.5	6261700	N	3550B	8270C SIM	IV
18-Apr-2011	SL-132-SA8N-SS-0.0-0.5	6261700	N	8330	8330A	IV
18-Apr-2011	SL-132-SA8N-SS-0.0-0.5	6261700	N	METHOD	300.0	IV
18-Apr-2011	SL-132-SA8N-SS-0.0-0.5	6261700	N	METHOD	314.0	IV
18-Apr-2011	SL-132-SA8N-SS-0.0-0.5	6261700	N	METHOD	7471A	IV
18-Apr-2011	SL-132-SA8N-SS-0.0-0.5	6261700	N	METHOD	8015B	IV
18-Apr-2011	SL-132-SA8N-SS-0.0-0.5	6261700	N	METHOD	8015M	IV
18-Apr-2011	SL-132-SA8N-SS-0.0-0.5	6261700	N	METHOD	8315A	IV
18-Apr-2011	SL-132-SA8N-SS-0.0-0.5	6261700	N	METHOD	9012B	IV
18-Apr-2011	SL-132-SA8N-SS-0.0-0.5DUP	P261700D271504B	DUP	METHOD	9012B	IV
18-Apr-2011	SL-132-SA8N-SS-0.0-0.5MS	P261700R271506B	MS	METHOD	9012B	IV
18-Apr-2011	SL-174-SA5A-SB-2.0-3.0	6261704	N	3050B	6010B	IV
18-Apr-2011	SL-174-SA5A-SB-2.0-3.0	6261704	N	3050B	6020	IV
18-Apr-2011	SL-174-SA5A-SB-2.0-3.0	6261704	N	3060A	7199	IV
18-Apr-2011	SL-174-SA5A-SB-2.0-3.0	6261704	N	3550B	8082	IV
18-Apr-2011	SL-174-SA5A-SB-2.0-3.0	6261704	N	3550B	8270C	IV
18-Apr-2011	SL-174-SA5A-SB-2.0-3.0	6261704	N	3550B	8270C SIM	IV

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
18-Apr-2011	SL-174-SA5A-SB-2.0-3.0	6261704	N	5035	8260B	IV
18-Apr-2011	SL-174-SA5A-SB-2.0-3.0	6261704	N	5035	8260B SIM	IV
18-Apr-2011	SL-174-SA5A-SB-2.0-3.0	6261704	N	METHOD	300.0	IV
18-Apr-2011	SL-174-SA5A-SB-2.0-3.0	6261704	N	METHOD	314.0	IV
18-Apr-2011	SL-174-SA5A-SB-2.0-3.0	6261704	N	METHOD	7471A	IV
18-Apr-2011	SL-172-SA5A-SB-4.0-5.0	6261703	N	3050B	6010B	IV
18-Apr-2011	SL-172-SA5A-SB-4.0-5.0	6261703	N	3050B	6020	IV
18-Apr-2011	SL-172-SA5A-SB-4.0-5.0	6261703	N	3060A	7199	IV
18-Apr-2011	SL-172-SA5A-SB-4.0-5.0	6261703	N	3550B	8082	IV
18-Apr-2011	SL-172-SA5A-SB-4.0-5.0	6261703	N	3550B	8270C	IV
18-Apr-2011	SL-172-SA5A-SB-4.0-5.0	6261703	N	3550B	8270C SIM	IV
18-Apr-2011	SL-172-SA5A-SB-4.0-5.0	6261703	N	5035	8260B	IV
18-Apr-2011	SL-172-SA5A-SB-4.0-5.0	6261703	N	5035	8260B SIM	IV
18-Apr-2011	SL-172-SA5A-SB-4.0-5.0	6261703	N	METHOD	300.0	IV
18-Apr-2011	SL-172-SA5A-SB-4.0-5.0	6261703	N	METHOD	314.0	IV
18-Apr-2011	SL-172-SA5A-SB-4.0-5.0	6261703	N	METHOD	7471A	IV

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE130 **Laboratory: LL**

EDD Filename: PrepDE130_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **GENCHEM**

Method: **300.0** ***Matrix:*** **SO**

Sample ID: **SL-032-SA5A-SB-3.0-4.0** ***Collected:*** **4/18/2011 9:14:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	0.93	U	0.93	MDL	1.2	PQL	mg/Kg	UJ	Q

Sample ID: **SL-056-SA8N-SS-0.0-0.5** ***Collected:*** **4/18/2011 10:55:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.1		0.93	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: **SL-057-SA8N-SS-0.0-0.5** ***Collected:*** **4/18/2011 10:10:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.4		0.90	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: **SL-071-SA8N-SS-0.0-0.5** ***Collected:*** **4/18/2011 8:35:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.7		0.94	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: **SL-080-SA8N-SS-0.0-0.5** ***Collected:*** **4/18/2011 10:30:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.4		0.97	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: **SL-085-SA8N-SS-0.0-0.5** ***Collected:*** **4/18/2011 8:15:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.1		0.92	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: **SL-086-SA8N-SS-0.0-0.5** ***Collected:*** **4/18/2011 12:55:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.5		0.94	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: **SL-132-SA8N-SS-0.0-0.5** ***Collected:*** **4/18/2011 2:00:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.5		0.87	MDL	1.1	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE130 **Laboratory: LL**

EDD Filename: PrepDE130_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: SL-172-SA5A-SB-4.0-5.0 *Collected:* 4/18/2011 3:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.1		0.96	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-174-SA5A-SB-2.0-3.0 *Collected:* 4/18/2011 3:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	0.89	U	0.89	MDL	1.1	PQL	mg/Kg	UJ	Q

Sample ID: SL-254-SA5A-SB-2.5-3.5 *Collected:* 4/18/2011 12:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.9		0.89	MDL	1.1	PQL	mg/Kg	J	Q

Method Category: GENCHEM

Method: 9012B **Matrix:** SO

Sample ID: SL-071-SA8N-SS-0.0-0.5 *Collected:* 4/18/2011 8:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CYANIDE	0.23	J	0.21	MDL	0.58	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 6010B **Matrix:** AQ

Sample ID: EB05-SA8N-SS-041811 *Collected:* 4/18/2011 12:00:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	0.0221	J	0.0138	MDL	0.0500	PQL	mg/L	U	B
CALCIUM	0.0949	J	0.0702	MDL	0.200	PQL	mg/L	J	Z

Sample ID: EB13-SA5A-SB-041811 *Collected:* 4/18/2011 1:30:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	0.0151	J	0.0138	MDL	0.0500	PQL	mg/L	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE130 **Laboratory: LL**

EDD Filename: PrepDE130_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6010B** ***Matrix:*** **SO**

Sample ID: **SL-032-SA5A-SB-3.0-4.0** ***Collected:*** **4/18/2011 9:14:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	2700		20.7	MDL	57.4	PQL	mg/Kg	J	Q
SODIUM	86.0	J	42.8	MDL	115	PQL	mg/Kg	J	Z
TIN	3.04	J	1.15	MDL	11.5	PQL	mg/Kg	U	B
Zirconium	1.18	J	0.964	MDL	5.74	PQL	mg/Kg	J	Z

Sample ID: **SL-056-SA8N-SS-0.0-0.5** ***Collected:*** **4/18/2011 10:55:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	6.50		1.02	MDL	5.72	PQL	mg/Kg	U	F
POTASSIUM	6360		20.6	MDL	57.2	PQL	mg/Kg	J	Q
TIN	2.66	J	1.14	MDL	11.4	PQL	mg/Kg	U	B
Zirconium	2.59	J	0.961	MDL	5.72	PQL	mg/Kg	J	Z

Sample ID: **SL-057-SA8N-SS-0.0-0.5** ***Collected:*** **4/18/2011 10:10:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	8.34		0.971	MDL	5.45	PQL	mg/Kg	U	F
POTASSIUM	7080		19.6	MDL	54.5	PQL	mg/Kg	J	Q
TIN	2.62	J	1.09	MDL	10.9	PQL	mg/Kg	U	B
Zirconium	2.22	J	0.916	MDL	5.45	PQL	mg/Kg	J	Z

Sample ID: **SL-071-SA8N-SS-0.0-0.5** ***Collected:*** **4/18/2011 8:35:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.62	J	1.03	MDL	5.80	PQL	mg/Kg	U	F
POTASSIUM	3630		20.9	MDL	58.0	PQL	mg/Kg	J	Q
SODIUM	82.1	J	43.2	MDL	116	PQL	mg/Kg	J	Z
TIN	2.79	J	1.16	MDL	11.6	PQL	mg/Kg	U	B

Sample ID: **SL-080-SA8N-SS-0.0-0.5** ***Collected:*** **4/18/2011 10:30:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	6.98		1.07	MDL	6.01	PQL	mg/Kg	U	F
POTASSIUM	5910		21.6	MDL	60.1	PQL	mg/Kg	J	Q
TIN	2.47	J	1.20	MDL	12.0	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE130 **Laboratory: LL**

EDD Filename: PrepDE130_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6010B** ***Matrix:*** **SO**

Sample ID: **SL-080-SA8N-SS-0.0-0.5** ***Collected:*** **4/18/2011 10:30:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	3.01	J	1.01	MDL	6.01	PQL	mg/Kg	J	Z

Sample ID: **SL-085-SA8N-SS-0.0-0.5** ***Collected:*** **4/18/2011 8:15:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.36	J	1.02	MDL	5.72	PQL	mg/Kg	U	F
POTASSIUM	4160		20.6	MDL	57.2	PQL	mg/Kg	J	Q
SODIUM	85.5	J	42.6	MDL	114	PQL	mg/Kg	J	Z
TIN	2.62	J	1.14	MDL	11.4	PQL	mg/Kg	U	B
Zirconium	1.44	J	0.960	MDL	5.72	PQL	mg/Kg	J	Z

Sample ID: **SL-086-SA8N-SS-0.0-0.5** ***Collected:*** **4/18/2011 12:55:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	8.31		1.01	MDL	5.66	PQL	mg/Kg	U	F
POTASSIUM	7200		20.4	MDL	56.6	PQL	mg/Kg	J	Q
TIN	2.52	J	1.13	MDL	11.3	PQL	mg/Kg	U	B
Zirconium	2.07	J	0.950	MDL	5.66	PQL	mg/Kg	J	Z

Sample ID: **SL-132-SA8N-SS-0.0-0.5** ***Collected:*** **4/18/2011 2:00:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	5.01	J	0.962	MDL	5.40	PQL	mg/Kg	U	F
POTASSIUM	5620		19.5	MDL	54.0	PQL	mg/Kg	J	Q
TIN	2.58	J	1.08	MDL	10.8	PQL	mg/Kg	U	B
Zirconium	3.97	J	0.908	MDL	5.40	PQL	mg/Kg	J	Z

Sample ID: **SL-172-SA5A-SB-4.0-5.0** ***Collected:*** **4/18/2011 3:45:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	2600		21.2	MDL	58.9	PQL	mg/Kg	J	Q
SODIUM	91.8	J	44.0	MDL	118	PQL	mg/Kg	J	Z
TIN	2.84	J	1.18	MDL	11.8	PQL	mg/Kg	U	B
Zirconium	1.50	J	0.990	MDL	5.89	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE130 **Laboratory: LL**

EDD Filename: PrepDE130_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-174-SA5A-SB-2.0-3.0 *Collected:* 4/18/2011 3:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	3480		19.6	MDL	54.5	PQL	mg/Kg	J	Q
TIN	2.93	J	1.09	MDL	10.9	PQL	mg/Kg	U	B

Sample ID: SL-254-SA5A-SB-2.5-3.5 *Collected:* 4/18/2011 12:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	1230		19.7	MDL	54.6	PQL	mg/Kg	J	Q
TIN	2.99	J	1.09	MDL	10.9	PQL	mg/Kg	U	B
Zirconium	1.17	J	0.918	MDL	5.46	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-032-SA5A-SB-3.0-4.0 *Collected:* 4/18/2011 9:14:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.217	J	0.0454	MDL	0.454	PQL	mg/Kg	J	Z

Sample ID: SL-032-SA5A-SB-3.0-4.0 *Collected:* 4/18/2011 9:14:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.121	J	0.0682	MDL	0.227	PQL	mg/Kg	J	Z, Q
ARSENIC	5.79		0.0909	MDL	0.454	PQL	mg/Kg	J	Q
CHROMIUM	12.7		0.136	MDL	0.454	PQL	mg/Kg	J	A
COBALT	5.89		0.0227	MDL	0.114	PQL	mg/Kg	J	A
COPPER	6.81		0.0750	MDL	0.454	PQL	mg/Kg	J	A
LEAD	5.11		0.0118	MDL	0.227	PQL	mg/Kg	J	A
NICKEL	8.94		0.114	MDL	0.454	PQL	mg/Kg	J	A
SILVER	0.0243	J	0.0136	MDL	0.114	PQL	mg/Kg	J	Z
VANADIUM	27.7		0.0250	MDL	0.114	PQL	mg/Kg	J	A, Q

Sample ID: SL-056-SA8N-SS-0.0-0.5 *Collected:* 4/18/2011 10:55:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.231	J	0.0693	MDL	0.231	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE130 **Laboratory: LL**

EDD Filename: PrepDE130_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 ***Matrix:*** SO

Sample ID: SL-056-SA8N-SS-0.0-0.5 ***Collected:*** 4/18/2011 10:55:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	6.18		0.0924	MDL	0.462	PQL	mg/Kg	J	Q
CHROMIUM	30.5		0.139	MDL	0.462	PQL	mg/Kg	J	A
COBALT	10.3		0.0231	MDL	0.116	PQL	mg/Kg	J	A
COPPER	16.9		0.0763	MDL	0.462	PQL	mg/Kg	J	A
LEAD	10.7		0.0120	MDL	0.231	PQL	mg/Kg	J	A
NICKEL	19.1		0.116	MDL	0.462	PQL	mg/Kg	J	A
SILVER	0.0468	J	0.0139	MDL	0.116	PQL	mg/Kg	J	Z
VANADIUM	57.9		0.0254	MDL	0.116	PQL	mg/Kg	J	A, Q

Sample ID: SL-057-SA8N-SS-0.0-0.5 ***Collected:*** 4/18/2011 10:10:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.376	J	0.0445	MDL	0.445	PQL	mg/Kg	J	Z

Sample ID: SL-057-SA8N-SS-0.0-0.5 ***Collected:*** 4/18/2011 10:10:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.226		0.0667	MDL	0.222	PQL	mg/Kg	J	Q
ARSENIC	5.87		0.0890	MDL	0.445	PQL	mg/Kg	J	Q
CHROMIUM	31.1		0.133	MDL	0.445	PQL	mg/Kg	J	A
COBALT	10.7		0.0222	MDL	0.111	PQL	mg/Kg	J	A
COPPER	17.8		0.0734	MDL	0.445	PQL	mg/Kg	J	A
LEAD	10.0		0.0116	MDL	0.222	PQL	mg/Kg	J	A
NICKEL	19.8		0.111	MDL	0.445	PQL	mg/Kg	J	A
SILVER	0.0356	J	0.0133	MDL	0.111	PQL	mg/Kg	J	Z
VANADIUM	59.9		0.0245	MDL	0.111	PQL	mg/Kg	J	A, Q

Sample ID: SL-071-SA8N-SS-0.0-0.5 ***Collected:*** 4/18/2011 8:35:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.224	J	0.0464	MDL	0.464	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE130 **Laboratory: LL**

EDD Filename: PrepDE130_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6020** ***Matrix:*** **SO**

Sample ID: **SL-071-SA8N-SS-0.0-0.5** ***Collected:*** **4/18/2011 8:35:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.111	J	0.0696	MDL	0.232	PQL	mg/Kg	J	Z, Q
ARSENIC	4.32		0.0927	MDL	0.464	PQL	mg/Kg	J	Q
CHROMIUM	14.3		0.139	MDL	0.464	PQL	mg/Kg	J	A
COBALT	5.44		0.0232	MDL	0.116	PQL	mg/Kg	J	A
COPPER	8.95		0.0765	MDL	0.464	PQL	mg/Kg	J	A
LEAD	12.6		0.0121	MDL	0.232	PQL	mg/Kg	J	A
NICKEL	10.5		0.116	MDL	0.464	PQL	mg/Kg	J	A
SILVER	0.0362	J	0.0139	MDL	0.116	PQL	mg/Kg	J	Z
VANADIUM	29.6		0.0255	MDL	0.116	PQL	mg/Kg	J	A, Q

Sample ID: **SL-080-SA8N-SS-0.0-0.5** ***Collected:*** **4/18/2011 10:30:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.136	J	0.0721	MDL	0.240	PQL	mg/Kg	J	Z, Q
ARSENIC	5.83		0.0961	MDL	0.481	PQL	mg/Kg	J	Q
CHROMIUM	27.7		0.144	MDL	0.481	PQL	mg/Kg	J	A
COBALT	8.71		0.0240	MDL	0.120	PQL	mg/Kg	J	A
COPPER	16.1		0.0793	MDL	0.481	PQL	mg/Kg	J	A
LEAD	9.10		0.0125	MDL	0.240	PQL	mg/Kg	J	A
NICKEL	17.3		0.120	MDL	0.481	PQL	mg/Kg	J	A
SILVER	0.0269	J	0.0144	MDL	0.120	PQL	mg/Kg	J	Z
VANADIUM	52.2		0.0264	MDL	0.120	PQL	mg/Kg	J	A, Q

Sample ID: **SL-085-SA8N-SS-0.0-0.5** ***Collected:*** **4/18/2011 8:15:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.202	J	0.0453	MDL	0.453	PQL	mg/Kg	J	Z

Sample ID: **SL-085-SA8N-SS-0.0-0.5** ***Collected:*** **4/18/2011 8:15:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.136	J	0.0679	MDL	0.226	PQL	mg/Kg	J	Z, Q
ARSENIC	4.88		0.0906	MDL	0.453	PQL	mg/Kg	J	Q
CHROMIUM	19.0		0.136	MDL	0.453	PQL	mg/Kg	J	A
COBALT	6.61		0.0226	MDL	0.113	PQL	mg/Kg	J	A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE130 **Laboratory: LL**

EDD Filename: PrepDE130_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6020** ***Matrix:*** **SO**

Sample ID: SL-085-SA8N-SS-0.0-0.5 ***Collected:*** 4/18/2011 8:15:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	12.6		0.0747	MDL	0.453	PQL	mg/Kg	J	A
LEAD	14.4		0.0118	MDL	0.226	PQL	mg/Kg	J	A
NICKEL	13.4		0.113	MDL	0.453	PQL	mg/Kg	J	A
VANADIUM	35.3		0.0249	MDL	0.113	PQL	mg/Kg	J	A, Q

Sample ID: SL-086-SA8N-SS-0.0-0.5 ***Collected:*** 4/18/2011 12:55:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.323	J	0.0461	MDL	0.461	PQL	mg/Kg	J	Z

Sample ID: SL-086-SA8N-SS-0.0-0.5 ***Collected:*** 4/18/2011 12:55:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.205	J	0.0692	MDL	0.231	PQL	mg/Kg	J	Z, Q
ARSENIC	5.81		0.0923	MDL	0.461	PQL	mg/Kg	J	Q
CHROMIUM	30.2		0.138	MDL	0.461	PQL	mg/Kg	J	A
COBALT	9.89		0.0231	MDL	0.115	PQL	mg/Kg	J	A
COPPER	17.3		0.0761	MDL	0.461	PQL	mg/Kg	J	A
LEAD	10.8		0.0120	MDL	0.231	PQL	mg/Kg	J	A
NICKEL	19.6		0.115	MDL	0.461	PQL	mg/Kg	J	A
SILVER	0.0278	J	0.0138	MDL	0.115	PQL	mg/Kg	J	Z
VANADIUM	58.9		0.0254	MDL	0.115	PQL	mg/Kg	J	A, Q

Sample ID: SL-132-SA8N-SS-0.0-0.5 ***Collected:*** 4/18/2011 2:00:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.397	J	0.0424	MDL	0.424	PQL	mg/Kg	J	Z

Sample ID: SL-132-SA8N-SS-0.0-0.5 ***Collected:*** 4/18/2011 2:00:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.255		0.0636	MDL	0.212	PQL	mg/Kg	J	Q
ARSENIC	5.17		0.0848	MDL	0.424	PQL	mg/Kg	J	Q
CHROMIUM	24.8		0.127	MDL	0.424	PQL	mg/Kg	J	A
COBALT	9.31		0.0212	MDL	0.106	PQL	mg/Kg	J	A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE130 **Laboratory: LL**

EDD Filename: PrepDE130_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6020** ***Matrix:*** **SO**

Sample ID: **SL-132-SA8N-SS-0.0-0.5** ***Collected:*** **4/18/2011 2:00:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	16.2		0.0700	MDL	0.424	PQL	mg/Kg	J	A
LEAD	8.70		0.0110	MDL	0.212	PQL	mg/Kg	J	A
NICKEL	15.6		0.106	MDL	0.424	PQL	mg/Kg	J	A
SILVER	0.0462	J	0.0127	MDL	0.106	PQL	mg/Kg	J	Z
VANADIUM	48.2		0.0233	MDL	0.106	PQL	mg/Kg	J	A, Q

Sample ID: **SL-172-SA5A-SB-4.0-5.0** ***Collected:*** **4/18/2011 3:45:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.112	J	0.0467	MDL	0.467	PQL	mg/Kg	J	Z

Sample ID: **SL-172-SA5A-SB-4.0-5.0** ***Collected:*** **4/18/2011 3:45:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0766	J	0.0700	MDL	0.233	PQL	mg/Kg	J	Z, Q
ARSENIC	3.97		0.0934	MDL	0.467	PQL	mg/Kg	J	Q
CHROMIUM	19.4		0.140	MDL	0.467	PQL	mg/Kg	J	A
COBALT	5.02		0.0233	MDL	0.117	PQL	mg/Kg	J	A
COPPER	8.22		0.0770	MDL	0.467	PQL	mg/Kg	J	A
LEAD	5.21		0.0121	MDL	0.233	PQL	mg/Kg	J	A
NICKEL	12.1		0.117	MDL	0.467	PQL	mg/Kg	J	A
SILVER	0.0296	J	0.0140	MDL	0.117	PQL	mg/Kg	J	Z
VANADIUM	37.3		0.0257	MDL	0.117	PQL	mg/Kg	J	A, Q

Sample ID: **SL-174-SA5A-SB-2.0-3.0** ***Collected:*** **4/18/2011 3:05:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.178	J	0.0436	MDL	0.436	PQL	mg/Kg	J	Z

Sample ID: **SL-174-SA5A-SB-2.0-3.0** ***Collected:*** **4/18/2011 3:05:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.157	J	0.0654	MDL	0.218	PQL	mg/Kg	J	Z, Q
ARSENIC	5.55		0.0872	MDL	0.436	PQL	mg/Kg	J	Q
CHROMIUM	25.9		0.131	MDL	0.436	PQL	mg/Kg	J	A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE130 **Laboratory: LL**

EDD Filename: PrepDE130_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 ***Matrix:*** SO

Sample ID: SL-174-SA5A-SB-2.0-3.0 ***Collected:*** 4/18/2011 3:05:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COBALT	7.53		0.0218	MDL	0.109	PQL	mg/Kg	J	A
COPPER	12.8		0.0720	MDL	0.436	PQL	mg/Kg	J	A
LEAD	7.37		0.0113	MDL	0.218	PQL	mg/Kg	J	A
NICKEL	14.4		0.109	MDL	0.436	PQL	mg/Kg	J	A
SILVER	0.0167	J	0.0131	MDL	0.109	PQL	mg/Kg	J	Z
VANADIUM	45.2		0.0240	MDL	0.109	PQL	mg/Kg	J	A, Q

Sample ID: SL-254-SA5A-SB-2.5-3.5 ***Collected:*** 4/18/2011 12:45:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.143	J	0.0433	MDL	0.433	PQL	mg/Kg	J	Z

Sample ID: SL-254-SA5A-SB-2.5-3.5 ***Collected:*** 4/18/2011 12:45:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.128	J	0.0649	MDL	0.216	PQL	mg/Kg	J	Z, Q
ARSENIC	5.10		0.0866	MDL	0.433	PQL	mg/Kg	J	Q
CHROMIUM	20.1		0.130	MDL	0.433	PQL	mg/Kg	J	A
COBALT	3.77		0.0216	MDL	0.108	PQL	mg/Kg	J	A
COPPER	5.48		0.0714	MDL	0.433	PQL	mg/Kg	J	A
LEAD	5.67		0.0113	MDL	0.216	PQL	mg/Kg	J	A
NICKEL	7.55		0.108	MDL	0.433	PQL	mg/Kg	J	A
SILVER	0.0348	J	0.0130	MDL	0.108	PQL	mg/Kg	J	Z
VANADIUM	39.9		0.0238	MDL	0.108	PQL	mg/Kg	J	A, Q

Method Category: METALS

Method: 7199 ***Matrix:*** SO

Sample ID: SL-071-SA8N-SS-0.0-0.5 ***Collected:*** 4/18/2011 8:35:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.48	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE130 **Laboratory: LL**

EDD Filename: PrepDE130_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 7199 **Matrix: SO**

Sample ID: SL-085-SA8N-SS-0.0-0.5 *Collected:* 4/18/2011 8:15:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.61	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-086-SA8N-SS-0.0-0.5 *Collected:* 4/18/2011 12:55:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.45	J	0.24	MDL	1.2	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 7471A **Matrix: SO**

Sample ID: SL-032-SA5A-SB-3.0-4.0 *Collected:* 4/18/2011 9:14:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0057	J	0.0032	MDL	0.111	PQL	mg/Kg	J	Z

Sample ID: SL-056-SA8N-SS-0.0-0.5 *Collected:* 4/18/2011 10:55:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0111	J	0.0033	MDL	0.115	PQL	mg/Kg	J	Z

Sample ID: SL-057-SA8N-SS-0.0-0.5 *Collected:* 4/18/2011 10:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0138	J	0.0032	MDL	0.111	PQL	mg/Kg	J	Z

Sample ID: SL-071-SA8N-SS-0.0-0.5 *Collected:* 4/18/2011 8:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0449	J	0.0033	MDL	0.114	PQL	mg/Kg	J	Z

Sample ID: SL-080-SA8N-SS-0.0-0.5 *Collected:* 4/18/2011 10:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0249	J	0.0033	MDL	0.116	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE130 **Laboratory: LL**

EDD Filename: PrepDE130_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 7471A **Matrix: SO**

Sample ID: SL-086-SA8N-SS-0.0-0.5 *Collected:* 4/18/2011 12:55:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0106	J	0.0032	MDL	0.112	PQL	mg/Kg	J	Z

Sample ID: SL-132-SA8N-SS-0.0-0.5 *Collected:* 4/18/2011 2:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0896	J	0.0030	MDL	0.104	PQL	mg/Kg	J	Z

Sample ID: SL-172-SA5A-SB-4.0-5.0 *Collected:* 4/18/2011 3:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0179	J	0.0032	MDL	0.113	PQL	mg/Kg	J	Z

Sample ID: SL-174-SA5A-SB-2.0-3.0 *Collected:* 4/18/2011 3:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0119	J	0.0031	MDL	0.108	PQL	mg/Kg	J	Z

Sample ID: SL-254-SA5A-SB-2.5-3.5 *Collected:* 4/18/2011 12:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0143	J	0.0031	MDL	0.108	PQL	mg/Kg	J	Z

Method Category: SVOA

Method: 1625C **Matrix: AQ**

Sample ID: EB05-SA8N-SS-041811 *Collected:* 4/18/2011 12:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	0.565	J	0.484	MDL	0.967	PQL	ng/L	J	Z, L, S

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE130 **Laboratory: LL**

EDD Filename: PrepDE130_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1625C **Matrix: SO**

Sample ID: SL-071-SA8N-SS-0.0-0.5 *Collected:* 4/18/2011 8:35:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	22.1	J	19.2	MDL	38.4	PQL	ng/Kg	J	Z

Sample ID: SL-080-SA8N-SS-0.0-0.5 *Collected:* 4/18/2011 10:30:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	38.2	J	20.1	MDL	40.2	PQL	ng/Kg	J	Z

Sample ID: SL-085-SA8N-SS-0.0-0.5 *Collected:* 4/18/2011 8:15:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	252	J	190	MDL	380	PQL	ng/Kg	J	Z

Method Category: SVOA

Method: 8082 **Matrix: AQ**

Sample ID: EB05-SA8N-SS-041811 *Collected:* 4/18/2011 12:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	0.098	U	0.098	MDL	0.49	PQL	ug/L	UJ	C

Sample ID: EB13-SA5A-SB-041811 *Collected:* 4/18/2011 1:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	0.097	U	0.097	MDL	0.48	PQL	ug/L	UJ	C

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: SL-032-SA5A-SB-3.0-4.0 *Collected:* 4/18/2011 9:14:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	1.2	U	1.2	MDL	3.8	PQL	ug/Kg	UJ	C

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE130 **Laboratory: LL**

EDD Filename: PrepDE130_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **8082** ***Matrix:*** **SO**

Sample ID: **SL-056-SA8N-SS-0.0-0.5** ***Collected:*** **4/18/2011 10:55:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	3.3		0.38	MDL	2.0	PQL	ug/Kg	J	*XIII
Aroclor 5432	1.2	U	1.2	MDL	3.8	PQL	ug/Kg	UJ	C
Aroclor 5460	2.7	J	1.2	MDL	3.8	PQL	ug/Kg	J	Z

Sample ID: **SL-057-SA8N-SS-0.0-0.5** ***Collected:*** **4/18/2011 10:10:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	C

Sample ID: **SL-071-SA8N-SS-0.0-0.5** ***Collected:*** **4/18/2011 8:35:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	1.6	J	0.46	MDL	2.0	PQL	ug/Kg	J	Z
Aroclor 5432	1.2	U	1.2	MDL	3.9	PQL	ug/Kg	UJ	C
Aroclor 5460	2.0	J	1.2	MDL	3.9	PQL	ug/Kg	J	Z

Sample ID: **SL-080-SA8N-SS-0.0-0.5** ***Collected:*** **4/18/2011 10:30:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	1.2	U	1.2	MDL	4.0	PQL	ug/Kg	UJ	C
Aroclor 5460	2.9	J	1.2	MDL	4.0	PQL	ug/Kg	J	Z

Sample ID: **SL-085-SA8N-SS-0.0-0.5** ***Collected:*** **4/18/2011 8:15:00** ***Analysis Type:*** **RES** ***Dilution:*** **5**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	5.8	U	5.8	MDL	19	PQL	ug/Kg	UJ	C

Sample ID: **SL-086-SA8N-SS-0.0-0.5** ***Collected:*** **4/18/2011 12:55:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	0.76	J	0.39	MDL	2.0	PQL	ug/Kg	J	Z
AROCLOR 1260	0.72	J	0.46	MDL	2.0	PQL	ug/Kg	J	Z
Aroclor 5432	1.2	U	1.2	MDL	3.9	PQL	ug/Kg	UJ	C

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE130 **Laboratory: LL**

EDD Filename: PrepDE130_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **8082** ***Matrix:*** **SO**

Sample ID: **SL-132-SA8N-SS-0.0-0.5** ***Collected:*** **4/18/2011 2:00:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	C

Sample ID: **SL-172-SA5A-SB-4.0-5.0** ***Collected:*** **4/18/2011 3:45:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	1.2	U	1.2	MDL	4.0	PQL	ug/Kg	UJ	C

Sample ID: **SL-174-SA5A-SB-2.0-3.0** ***Collected:*** **4/18/2011 3:05:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	C

Sample ID: **SL-254-SA5A-SB-2.5-3.5** ***Collected:*** **4/18/2011 12:45:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	C

Method Category: **SVOA**

Method: **8270C** ***Matrix:*** **AQ**

Sample ID: **EB05-SA8N-SS-041811** ***Collected:*** **4/18/2011 12:00:00** ***Analysis Type:*** **RES-ACID** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZOIC ACID	6	U	6	MDL	15	PQL	ug/L	UJ	E

Sample ID: **EB13-SA5A-SB-041811** ***Collected:*** **4/18/2011 1:30:00** ***Analysis Type:*** **RES-ACID** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZOIC ACID	6	U	6	MDL	15	PQL	ug/L	UJ	E

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE130 **Laboratory: LL**

EDD Filename: PrepDE130_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **8270C** ***Matrix:*** **SO**

Sample ID: **SL-032-SA5A-SB-3.0-4.0** ***Collected:*** **4/18/2011 9:14:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZIDINE	1400	U	1400	MDL	3900	PQL	ug/Kg	UJ	C

Sample ID: **SL-056-SA8N-SS-0.0-0.5** ***Collected:*** **4/18/2011 10:55:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	24	J	19	MDL	390	PQL	ug/Kg	J	Z

Sample ID: **SL-071-SA8N-SS-0.0-0.5** ***Collected:*** **4/18/2011 8:35:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	31	J	20	MDL	390	PQL	ug/Kg	J	Z

Sample ID: **SL-080-SA8N-SS-0.0-0.5** ***Collected:*** **4/18/2011 10:30:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	30	J	20	MDL	400	PQL	ug/Kg	J	Z

Sample ID: **SL-085-SA8N-SS-0.0-0.5** ***Collected:*** **4/18/2011 8:15:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	32	J	19	MDL	380	PQL	ug/Kg	J	Z
FLUORANTHENE	57	J	19	MDL	190	PQL	ug/Kg	J	Z
PHENANTHRENE	41	J	19	MDL	190	PQL	ug/Kg	J	Z
PYRENE	55	J	19	MDL	190	PQL	ug/Kg	J	Z

Sample ID: **SL-086-SA8N-SS-0.0-0.5** ***Collected:*** **4/18/2011 12:55:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZIDINE	1400	U	1400	MDL	3900	PQL	ug/Kg	UJ	C

Sample ID: **SL-132-SA8N-SS-0.0-0.5** ***Collected:*** **4/18/2011 2:00:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZIDINE	1300	U	1300	MDL	3600	PQL	ug/Kg	UJ	C
BIS(2-ETHYLHEXYL)PHTHALATE	37	J	18	MDL	360	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE130 **Laboratory: LL**

EDD Filename: PrepDE130_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SL-172-SA5A-SB-4.0-5.0 *Collected:* 4/18/2011 3:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZIDINE	1400	U	1400	MDL	4000	PQL	ug/Kg	UJ	C

Sample ID: SL-174-SA5A-SB-2.0-3.0 *Collected:* 4/18/2011 3:05:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZIDINE	1300	U	1300	MDL	3700	PQL	ug/Kg	UJ	C

Sample ID: SL-254-SA5A-SB-2.5-3.5 *Collected:* 4/18/2011 12:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZIDINE	1300	U	1300	MDL	3700	PQL	ug/Kg	UJ	C

Method Category: SVOA

Method: 8270C SIM **Matrix:** AQ

Sample ID: EB05-SA8N-SS-041811 *Collected:* 4/18/2011 12:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	0.019	U	0.019	MDL	0.096	PQL	ug/L	UJ	C
BIS(2-ETHYLHEXYL)PHTHALATE	0.72	J	0.096	MDL	1.9	PQL	ug/L	J	Z
Butylbenzylphthalate	0.33	J	0.096	MDL	1.9	PQL	ug/L	J	Z
Di-n-butylphthalate	0.37	J	0.096	MDL	1.9	PQL	ug/L	J	Z
Di-n-octylphthalate	0.52	J	0.096	MDL	1.9	PQL	ug/L	J	Z, C

Sample ID: EB13-SA5A-SB-041811 *Collected:* 4/18/2011 1:30:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	0.010	U	0.010	MDL	0.050	PQL	ug/L	UJ	C
BIS(2-ETHYLHEXYL)PHTHALATE	0.30	J	0.050	MDL	1.0	PQL	ug/L	J	Z
Di-n-butylphthalate	0.32	J	0.050	MDL	1.0	PQL	ug/L	J	Z
Di-n-octylphthalate	0.27	J	0.050	MDL	1.0	PQL	ug/L	J	Z, C
NAPHTHALENE	0.031	J	0.030	MDL	0.050	PQL	ug/L	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE130 **Laboratory: LL**

EDD Filename: PrepDE130_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **8270C SIM** ***Matrix:*** **SO**

Sample ID: **SL-032-SA5A-SB-3.0-4.0** ***Collected:*** **4/18/2011 9:14:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	0.77	U	0.77	MDL	1.9	PQL	ug/Kg	UJ	C
Di-n-octylphthalate	7.0	U	7.0	MDL	21	PQL	ug/Kg	UJ	C

Sample ID: **SL-056-SA8N-SS-0.0-0.5** ***Collected:*** **4/18/2011 10:55:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	1.1	J	0.78	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.3	J	0.78	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	2.6		0.78	MDL	1.9	PQL	ug/Kg	J	C
BENZO(K)FLUORANTHENE	1.0	J	0.78	MDL	1.9	PQL	ug/Kg	J	Z
CHRYSENE	1.8	J	0.39	MDL	1.9	PQL	ug/Kg	J	Z
Di-n-octylphthalate	7.0	U	7.0	MDL	21	PQL	ug/Kg	UJ	C
INDENO(1,2,3-CD)PYRENE	1.4	J	0.78	MDL	1.9	PQL	ug/Kg	J	Z
PHENANTHRENE	1.0	J	0.78	MDL	1.9	PQL	ug/Kg	J	Z
PYRENE	1.8	J	0.78	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: **SL-057-SA8N-SS-0.0-0.5** ***Collected:*** **4/18/2011 10:10:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	0.75	U	0.75	MDL	1.9	PQL	ug/Kg	UJ	C
CHRYSENE	0.41	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z
Di-n-octylphthalate	6.7	U	6.7	MDL	20	PQL	ug/Kg	UJ	C
NAPHTHALENE	1.2	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: **SL-071-SA8N-SS-0.0-0.5** ***Collected:*** **4/18/2011 8:35:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	1.9	J	0.78	MDL	2.0	PQL	ug/Kg	J	Z, C
BENZO(G,H,I)PERYLENE	1.1	J	0.78	MDL	2.0	PQL	ug/Kg	J	Z
CHRYSENE	1.5	J	0.39	MDL	2.0	PQL	ug/Kg	J	Z
Di-n-octylphthalate	7.0	U	7.0	MDL	21	PQL	ug/Kg	UJ	C
FLUORANTHENE	1.4	J	0.78	MDL	2.0	PQL	ug/Kg	J	Z
FLUORENE	1.5	J	0.78	MDL	2.0	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	0.79	J	0.78	MDL	2.0	PQL	ug/Kg	J	Z
NAPHTHALENE	1.6	J	0.78	MDL	2.0	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE130 **Laboratory: LL**

EDD Filename: PrepDE130_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **8270C SIM** ***Matrix:*** **SO**

Sample ID: **SL-071-SA8N-SS-0.0-0.5** ***Collected:*** **4/18/2011 8:35:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHENANTHRENE	1.2	J	0.78	MDL	2.0	PQL	ug/Kg	J	Z
PYRENE	1.3	J	0.78	MDL	2.0	PQL	ug/Kg	J	Z

Sample ID: **SL-080-SA8N-SS-0.0-0.5** ***Collected:*** **4/18/2011 10:30:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	1.0	J	0.81	MDL	2.0	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.2	J	0.81	MDL	2.0	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	2.3		0.81	MDL	2.0	PQL	ug/Kg	J	C
BENZO(G,H,I)PERYLENE	1.5	J	0.81	MDL	2.0	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	0.94	J	0.81	MDL	2.0	PQL	ug/Kg	J	Z
Di-n-octylphthalate	7.3	U	7.3	MDL	22	PQL	ug/Kg	UJ	C
INDENO(1,2,3-CD)PYRENE	1.2	J	0.81	MDL	2.0	PQL	ug/Kg	J	Z
NAPHTHALENE	1.0	J	0.81	MDL	2.0	PQL	ug/Kg	J	Z
PHENANTHRENE	1.4	J	0.81	MDL	2.0	PQL	ug/Kg	J	Z
PYRENE	1.9	J	0.81	MDL	2.0	PQL	ug/Kg	J	Z

Sample ID: **SL-085-SA8N-SS-0.0-0.5** ***Collected:*** **4/18/2011 8:15:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	0.61	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	6.2		0.77	MDL	1.9	PQL	ug/Kg	J	C
Di-n-octylphthalate	6.9	U	6.9	MDL	21	PQL	ug/Kg	UJ	C
INDENO(1,2,3-CD)PYRENE	1.7	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
NAPHTHALENE	1.1	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: **SL-086-SA8N-SS-0.0-0.5** ***Collected:*** **4/18/2011 12:55:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	0.78	U	0.78	MDL	2.0	PQL	ug/Kg	UJ	C
CHRYSENE	0.52	J	0.39	MDL	2.0	PQL	ug/Kg	J	Z
Di-n-octylphthalate	7.1	U	7.1	MDL	21	PQL	ug/Kg	UJ	C
NAPHTHALENE	1.2	J	0.78	MDL	2.0	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE130 **Laboratory: LL**

EDD Filename: PrepDE130_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C SIM **Matrix: SO**

Sample ID: SL-132-SA8N-SS-0.0-0.5 *Collected:* 4/18/2011 2:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	0.88	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	8.3		0.73	MDL	1.8	PQL	ug/Kg	J	C
Di-n-octylphthalate	6.6	U	6.6	MDL	20	PQL	ug/Kg	UJ	C
NAPHTHALENE	1.1	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-172-SA5A-SB-4.0-5.0 *Collected:* 4/18/2011 3:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	0.80	U	0.80	MDL	2.0	PQL	ug/Kg	UJ	C
Di-n-octylphthalate	7.2	U	7.2	MDL	22	PQL	ug/Kg	UJ	C

Sample ID: SL-174-SA5A-SB-2.0-3.0 *Collected:* 4/18/2011 3:05:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	0.74	U	0.74	MDL	1.9	PQL	ug/Kg	UJ	C
Di-n-octylphthalate	6.7	U	6.7	MDL	20	PQL	ug/Kg	UJ	C

Sample ID: SL-254-SA5A-SB-2.5-3.5 *Collected:* 4/18/2011 12:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	0.74	U	0.74	MDL	1.9	PQL	ug/Kg	UJ	C
Di-n-octylphthalate	6.7	U	6.7	MDL	20	PQL	ug/Kg	UJ	C

Method Category: SVOA

Method: 8330A **Matrix: AQ**

Sample ID: EB05-SA8N-SS-041811 *Collected:* 4/18/2011 12:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Tetryl	0.40	U	0.40	MDL	0.60	PQL	ug/L	UJ	L

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE130 **Laboratory: LL**

EDD Filename: PrepDE130_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **8330A** ***Matrix:*** **SO**

Sample ID: **SL-132-SA8N-SS-0.0-0.5** ***Collected:*** **4/18/2011 2:00:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,6-DINITROTOLUENE	43	U	43	MDL	130	PQL	ug/Kg	UJ	C

Method Category: **VOA**

Method: **8260B** ***Matrix:*** **AQ**

Sample ID: **EB13-SA5A-SB-041811** ***Collected:*** **4/18/2011 1:30:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROETHANE	1	U	1	MDL	5	PQL	ug/L	UJ	C
ACETONE	6	U	6	MDL	20	PQL	ug/L	UJ	C
CARBON TETRACHLORIDE	1	U	1	MDL	5	PQL	ug/L	UJ	C
DICHLORODIFLUOROMETHANE	2	U	2	MDL	5	PQL	ug/L	UJ	C, C
TRICHLOROFLUOROMETHANE	2	U	2	MDL	5	PQL	ug/L	UJ	C

Sample ID: **TB-041811** ***Collected:*** **4/18/2011 12:00:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROETHANE	1	U	1	MDL	5	PQL	ug/L	UJ	C
ACETONE	6	U	6	MDL	20	PQL	ug/L	UJ	C
CARBON TETRACHLORIDE	1	U	1	MDL	5	PQL	ug/L	UJ	C
DICHLORODIFLUOROMETHANE	2	U	2	MDL	5	PQL	ug/L	UJ	C, C
TRICHLOROFLUOROMETHANE	2	U	2	MDL	5	PQL	ug/L	UJ	C

Method Category: **VOA**

Method: **8260B** ***Matrix:*** **SO**

Sample ID: **SL-032-SA5A-SB-3.0-4.0** ***Collected:*** **4/18/2011 9:14:00** ***Analysis Type:*** **RES** ***Dilution:*** **0.89**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-BUTANONE (MEK)	1.3	U	1.3	MDL	8.3	PQL	ug/Kg	UJ	C
2-HEXANONE	1.7	U	1.7	MDL	8.3	PQL	ug/Kg	UJ	C
4-METHYL-2-PENTANONE (MIBK)	0.40	U	0.40	MDL	8.3	PQL	ug/Kg	UJ	C
BROMOCHLOROMETHANE	0.34	U	0.34	MDL	4.1	PQL	ug/Kg	UJ	C
N-BUTYLBENZENE	0.12	U	0.12	MDL	4.1	PQL	ug/Kg	UJ	C

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE130 **Laboratory: LL**

EDD Filename: PrepDE130_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **VOA**

Method: **8260B** ***Matrix:*** **SO**

Sample ID: **SL-172-SA5A-SB-4.0-5.0** ***Collected:*** **4/18/2011 3:45:00** ***Analysis Type:*** **RES** ***Dilution:*** **0.88**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-BUTANONE (MEK)	1.3	U	1.3	MDL	8.5	PQL	ug/Kg	UJ	C
2-HEXANONE	1.7	U	1.7	MDL	8.5	PQL	ug/Kg	UJ	C
4-METHYL-2-PENTANONE (MIBK)	0.41	U	0.41	MDL	8.5	PQL	ug/Kg	UJ	C
BROMOCHLOROMETHANE	0.35	U	0.35	MDL	4.2	PQL	ug/Kg	UJ	C
METHYLENE CHLORIDE	0.65	J	0.25	MDL	4.2	PQL	ug/Kg	U	B
N-BUTYLBENZENE	0.13	U	0.13	MDL	4.2	PQL	ug/Kg	UJ	C

Sample ID: **SL-174-SA5A-SB-2.0-3.0** ***Collected:*** **4/18/2011 3:05:00** ***Analysis Type:*** **RES** ***Dilution:*** **0.9**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-BUTANONE (MEK)	1.2	U	1.2	MDL	8.0	PQL	ug/Kg	UJ	C
2-HEXANONE	1.6	U	1.6	MDL	8.0	PQL	ug/Kg	UJ	C
4-METHYL-2-PENTANONE (MIBK)	0.39	U	0.39	MDL	8.0	PQL	ug/Kg	UJ	C
BROMOCHLOROMETHANE	0.33	U	0.33	MDL	4.0	PQL	ug/Kg	UJ	C
METHYLENE CHLORIDE	0.51	J	0.24	MDL	4.0	PQL	ug/Kg	U	B
N-BUTYLBENZENE	0.12	U	0.12	MDL	4.0	PQL	ug/Kg	UJ	C

Sample ID: **SL-254-SA5A-SB-2.5-3.5** ***Collected:*** **4/18/2011 12:45:00** ***Analysis Type:*** **RES** ***Dilution:*** **0.83**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-BUTANONE (MEK)	1.1	U	1.1	MDL	7.4	PQL	ug/Kg	UJ	C
2-HEXANONE	1.5	U	1.5	MDL	7.4	PQL	ug/Kg	UJ	C
4-METHYL-2-PENTANONE (MIBK)	0.36	U	0.36	MDL	7.4	PQL	ug/Kg	UJ	C
BROMOCHLOROMETHANE	0.31	U	0.31	MDL	3.7	PQL	ug/Kg	UJ	C
METHYLENE CHLORIDE	0.47	J	0.22	MDL	3.7	PQL	ug/Kg	U	B
N-BUTYLBENZENE	0.11	U	0.11	MDL	3.7	PQL	ug/Kg	UJ	C

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE130 **Laboratory: LL**

EDD Filename: PrepDE130_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Laboratory Triplicate Precision
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
*XIII	Compound Quantitation and CRQL
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Verification Correlation Coefficient
C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Verification Percent Recovery Upper Rejection
E	Laboratory Control Precision
E	Laboratory Duplicate Precision

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE130 **Laboratory: LL**

EDD Filename: PrepDE130_v1 **eQAPP Name: CDM_SSFL_110509**

E	Matrix Spike Precision
F	Equipment Blank Contamination
F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation
L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Q	Matrix Spike Upper Rejection

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE130 **Laboratory: LL**

EDD Filename: PrepDE130_v1 **eQAPP Name: CDM_SSFL_110509**

R	Continuing Calibration Verification Percent Recovery Lower Estimation
R	Continuing Calibration Verification Percent Recovery Lower Rejection
R	Continuing Calibration Verification Percent Recovery Upper Estimation
R	Continuing Calibration Verification Percent Recovery Upper Rejection
R	Continuing Calibration Verification Relative Response Factor
R	Initial Calibration Relative Response Factor
R	Initial Calibration Verification Percent Recovery Lower Estimation
R	Initial Calibration Verification Percent Recovery Lower Rejection
R	Initial Calibration Verification Percent Recovery Upper Estimation
R	Initial Calibration Verification Percent Recovery Upper Rejection
R	Initial Calibration Verification Relative Response Factor
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

Level III ADR Outliers
(including Manual Review Outliers)

Quality Control Outlier Reports

DE130

Method Blank Outlier Report

Lab Reporting Batch ID: DE130 **Laboratory: LL**

EDD Filename: DE130_v1. **eQAPP Name: CDM_SSFL_110509**

Method: **6010B**
Matrix: **AQ**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P11748AB221924	4/29/2011 7:24:00 PM	BORON	0.0156 mg/L	EB05-SA8N-SS-041811 EB13-SA5A-SB-041811

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
EB05-SA8N-SS-041811(REA2)	BORON	0.0221 mg/L	0.0221U mg/L
EB13-SA5A-SB-041811(REA2)	BORON	0.0151 mg/L	0.0151U mg/L

Method: **6010B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P11608AB220149	4/28/2011 1:49:00 AM	PHOSPHORUS TIN	1.26 mg/Kg 1.48 mg/Kg	SL-032-SA5A-SB-3.0-4.0 SL-056-SA8N-SS-0.0-0.5 SL-057-SA8N-SS-0.0-0.5 SL-071-SA8N-SS-0.0-0.5 SL-080-SA8N-SS-0.0-0.5 SL-085-SA8N-SS-0.0-0.5 SL-086-SA8N-SS-0.0-0.5 SL-132-SA8N-SS-0.0-0.5 SL-172-SA5A-SB-4.0-5.0 SL-174-SA5A-SB-2.0-3.0 SL-254-SA5A-SB-2.5-3.5

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-032-SA5A-SB-3.0-4.0(RES)	TIN	3.04 mg/Kg	3.04U mg/Kg
SL-056-SA8N-SS-0.0-0.5(RES)	TIN	2.66 mg/Kg	2.66U mg/Kg
SL-057-SA8N-SS-0.0-0.5(RES)	TIN	2.62 mg/Kg	2.62U mg/Kg
SL-071-SA8N-SS-0.0-0.5(RES)	TIN	2.79 mg/Kg	2.79U mg/Kg
SL-080-SA8N-SS-0.0-0.5(RES)	TIN	2.47 mg/Kg	2.47U mg/Kg
SL-085-SA8N-SS-0.0-0.5(RES)	TIN	2.62 mg/Kg	2.62U mg/Kg
SL-086-SA8N-SS-0.0-0.5(RES)	TIN	2.52 mg/Kg	2.52U mg/Kg
SL-132-SA8N-SS-0.0-0.5(RES)	TIN	2.58 mg/Kg	2.58U mg/Kg
SL-172-SA5A-SB-4.0-5.0(RES)	TIN	2.84 mg/Kg	2.84U mg/Kg
SL-174-SA5A-SB-2.0-3.0(RES)	TIN	2.93 mg/Kg	2.93U mg/Kg
SL-254-SA5A-SB-2.5-3.5(RES)	TIN	2.99 mg/Kg	2.99U mg/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE130 **Laboratory: LL**

EDD Filename: DE130_v1. **eQAPP Name: CDM_SSFL_110509**

Method: **6020**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P11626AB220808A	4/27/2011 8:08:00 AM	VANADIUM	0.0532 mg/Kg	SL-032-SA5A-SB-3.0-4.0 SL-056-SA8N-SS-0.0-0.5 SL-057-SA8N-SS-0.0-0.5 SL-071-SA8N-SS-0.0-0.5 SL-080-SA8N-SS-0.0-0.5 SL-085-SA8N-SS-0.0-0.5 SL-086-SA8N-SS-0.0-0.5 SL-132-SA8N-SS-0.0-0.5 SL-172-SA5A-SB-4.0-5.0 SL-174-SA5A-SB-2.0-3.0 SL-254-SA5A-SB-2.5-3.5

Method: **8015B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P09095AB322157A	4/20/2011 9:57:00 PM	METHANOL	100 ug/Kg	SL-056-SA8N-SS-0.0-0.5 SL-057-SA8N-SS-0.0-0.5 SL-071-SA8N-SS-0.0-0.5 SL-080-SA8N-SS-0.0-0.5 SL-085-SA8N-SS-0.0-0.5 SL-132-SA8N-SS-0.0-0.5

Method: **8260B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB32B211301A	4/21/2011 1:01:00 PM	METHYLENE CHLORIDE	0.46 ug/Kg	SL-032-SA5A-SB-3.0-4.0 SL-172-SA5A-SB-4.0-5.0 SL-174-SA5A-SB-2.0-3.0 SL-254-SA5A-SB-2.5-3.5

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-172-SA5A-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.65 ug/Kg	4.2U ug/Kg
SL-174-SA5A-SB-2.0-3.0(RES)	METHYLENE CHLORIDE	0.51 ug/Kg	4.0U ug/Kg
SL-254-SA5A-SB-2.5-3.5(RES)	METHYLENE CHLORIDE	0.47 ug/Kg	3.7U ug/Kg

Equipment Rinsate Blank Outlier Report

Lab Reporting Batch ID: DE130 **Laboratory: LL**

EDD Filename: DE130_v1. **eQAPP Name: CDM_SSFL_110509**

Method: **6010B**
Matrix: **SO**

Equipment Blank Sample ID	Collected Date	Analyte	Result	Associated Samples
EB05-SA8N-SS-041811 (REA2)	4/18/2011 12:00:00 PM	BORON CALCIUM	0.0221 mg/L 0.0949 mg/L	SL-056-SA8N-SS-0.0-0.5 SL-057-SA8N-SS-0.0-0.5 SL-071-SA8N-SS-0.0-0.5 SL-080-SA8N-SS-0.0-0.5 SL-085-SA8N-SS-0.0-0.5 SL-086-SA8N-SS-0.0-0.5 SL-132-SA8N-SS-0.0-0.5

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-056-SA8N-SS-0.0-0.5(RES)	BORON	6.50 mg/Kg	6.50U mg/Kg
SL-057-SA8N-SS-0.0-0.5(RES)	BORON	8.34 mg/Kg	8.34U mg/Kg
SL-071-SA8N-SS-0.0-0.5(RES)	BORON	1.62 mg/Kg	1.62U mg/Kg
SL-080-SA8N-SS-0.0-0.5(RES)	BORON	6.98 mg/Kg	6.98U mg/Kg
SL-085-SA8N-SS-0.0-0.5(RES)	BORON	2.36 mg/Kg	2.36U mg/Kg
SL-086-SA8N-SS-0.0-0.5(RES)	BORON	8.31 mg/Kg	8.31U mg/Kg
SL-132-SA8N-SS-0.0-0.5(RES)	BORON	5.01 mg/Kg	5.01U mg/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE130 **Laboratory: LL**

EDD Filename: DE130_v1. **eQAPP Name: CDM_SSFL_110509**

Method: **300.0**

Matrix: **SO**

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-056-SA8N-SS-0.0-0.5MS (SL-032-SA5A-SB-3.0-4.0 SL-056-SA8N-SS-0.0-0.5 SL-057-SA8N-SS-0.0-0.5 SL-071-SA8N-SS-0.0-0.5 SL-080-SA8N-SS-0.0-0.5 SL-085-SA8N-SS-0.0-0.5 SL-086-SA8N-SS-0.0-0.5 SL-132-SA8N-SS-0.0-0.5 SL-172-SA5A-SB-4.0-5.0 SL-174-SA5A-SB-2.0-3.0)	FLUORIDE	75	-	80.00-120.00	-	FLUORIDE	J (all detects) UJ (all non-detects)
SL-254-SA5A-SB-2.5-3.5MS (SL-254-SA5A-SB-2.5-3.5)	FLUORIDE	36	-	80.00-120.00	-	FLUORIDE	J(all detects) UJ(all non-detects)

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE130 **Laboratory: LL**

EDD Filename: DE130_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 1625C
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P0WFLCSQ261308 (EB05-SA8N-SS-041811)	N-NITROSODIMETHYLAMINE	60	-	70.00-130.00	-	N-NITROSODIMETHYLAMINE	J (all detects) UJ (all non-detects)

Method: 8330A
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11092AQ240556A P11092AY240638A (EB05-SA8N-SS-041811)	Tetryl	50	56	72.00-141.00	-	Tetryl	J(all detects) UJ(all non-detects)

Method: 8082
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11114AQ242158A P11114AY242139A (EB05-SA8N-SS-041811 EB13-SA5A-SB-041811)	Aroclor 5442	92	96	35.00-84.00	-	Aroclor 5432 Aroclor 5442 Aroclor 5460	J(all detects)

Method: 8270C
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P2WJLCSY261109 (EB05-SA8N-SS-041811 EB13-SA5A-SB-041811)	BENZOIC ACID	-	-	10.00-69.00	31 (30.00)	BENZOIC ACID	J(all detects) UJ(all non-detects)

Method: 8260B
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
LCSY25Q211111A (EB13-SA5A-SB-041811 TB-041811)	CARBON TETRACHLORIDE TRICHLOROFLUOROMETHANE	126 130	- -	75.00-123.00 64.00-129.00	- -	CARBON TETRACHLORIDE TRICHLOROFLUOROMETHAN	J(all detects)

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE130 **Laboratory: LL**

EDD Filename: DE130_v1. **eQAPP Name: CDM_SSFL_110509**

Method: **8330A**
Matrix: **SO**

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11164AQ240658A	NITROBENZENE	124	-	80.00-120.00	-	NITROBENZENE	
(SL-056-SA8N-SS-0.0-0.5	PETN	124	-	80.00-120.00	-	PETN	
SL-057-SA8N-SS-0.0-0.5							
SL-071-SA8N-SS-0.0-0.5							J(all detects)
SL-080-SA8N-SS-0.0-0.5							
SL-085-SA8N-SS-0.0-0.5							
SL-132-SA8N-SS-0.0-0.5)							

Surrogate Outlier Report

Lab Reporting Batch ID: DE130 **Laboratory: LL**

EDD Filename: DE130_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 1625C
Matrix: AQ

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
EB05-SA8N-SS-041811	N-Nitrosodimethylamine-d6	171	50.00-150.00	All Target Analytes	J (all detects)

Method: 8082
Matrix: AQ

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
EB13-SA5A-SB-041811	DECACHLOROBIPHENYL	125	45.00-120.00	All Target Analytes	J(all detects)

Method: 8082
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-085-SA8N-SS-0.0-0.5	DECACHLOROBIPHENYL	135	45.00-120.00	All Target Analytes	No Qual, Diluted Out
SL-172-SA5A-SB-4.0-5.0	DECACHLOROBIPHENYL	129	45.00-120.00	All Target Analytes	J(all detects)
SL-174-SA5A-SB-2.0-3.0	DECACHLOROBIPHENYL	132	45.00-120.00	All Target Analytes	J(all detects)
SL-254-SA5A-SB-2.5-3.5	DECACHLOROBIPHENYL	130	45.00-120.00	All Target Analytes	J(all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE130 **Laboratory: LL**

EDD Filename: DE130_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 1625C

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB05-SA8N-SS-041811	N-NITROSODIMETHYLAMINE	J	0.565	0.967	PQL	ng/L	J (all detects)

Method: 6010B

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB05-SA8N-SS-041811	BORON	J	0.0221	0.0500	PQL	mg/L	J (all detects)
	CALCIUM	J	0.0949	0.200	PQL	mg/L	
EB13-SA5A-SB-041811	BORON	J	0.0151	0.0500	PQL	mg/L	J (all detects)

Method: 8270C SIM

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB05-SA8N-SS-041811	BIS(2-ETHYLHEXYL)PHTHALATE	J	0.72	1.9	PQL	ug/L	J (all detects)
	Butylbenzylphthalate	J	0.33	1.9	PQL	ug/L	
	Di-n-butylphthalate	J	0.37	1.9	PQL	ug/L	
	Di-n-octylphthalate	J	0.52	1.9	PQL	ug/L	
EB13-SA5A-SB-041811	BIS(2-ETHYLHEXYL)PHTHALATE	J	0.30	1.0	PQL	ug/L	J (all detects)
	Di-n-butylphthalate	J	0.32	1.0	PQL	ug/L	
	Di-n-octylphthalate	J	0.27	1.0	PQL	ug/L	
	NAPHTHALENE	J	0.031	0.050	PQL	ug/L	

Method: 1625C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-071-SA8N-SS-0.0-0.5	N-NITROSODIMETHYLAMINE	J	22.1	38.4	PQL	ng/Kg	J (all detects)
SL-080-SA8N-SS-0.0-0.5	N-NITROSODIMETHYLAMINE	J	38.2	40.2	PQL	ng/Kg	J (all detects)
SL-085-SA8N-SS-0.0-0.5	N-NITROSODIMETHYLAMINE	J	252	380	PQL	ng/Kg	J (all detects)

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-032-SA5A-SB-3.0-4.0	SODIUM	J	86.0	115	PQL	mg/Kg	J (all detects)
	TIN	J	3.04	11.5	PQL	mg/Kg	
	Zirconium	J	1.18	5.74	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE130 **Laboratory: LL**

EDD Filename: DE130_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-056-SA8N-SS-0.0-0.5	TIN	J	2.66	11.4	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.59	5.72	PQL	mg/Kg	
SL-057-SA8N-SS-0.0-0.5	TIN	J	2.62	10.9	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.22	5.45	PQL	mg/Kg	
SL-071-SA8N-SS-0.0-0.5	BORON	J	1.62	5.80	PQL	mg/Kg	J (all detects)
	SODIUM	J	82.1	116	PQL	mg/Kg	
	TIN	J	2.79	11.6	PQL	mg/Kg	
SL-080-SA8N-SS-0.0-0.5	TIN	J	2.47	12.0	PQL	mg/Kg	J (all detects)
	Zirconium	J	3.01	6.01	PQL	mg/Kg	
SL-085-SA8N-SS-0.0-0.5	BORON	J	2.36	5.72	PQL	mg/Kg	J (all detects)
	SODIUM	J	85.5	114	PQL	mg/Kg	
	TIN	J	2.62	11.4	PQL	mg/Kg	
	Zirconium	J	1.44	5.72	PQL	mg/Kg	
SL-086-SA8N-SS-0.0-0.5	TIN	J	2.52	11.3	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.07	5.66	PQL	mg/Kg	
SL-132-SA8N-SS-0.0-0.5	BORON	J	5.01	5.40	PQL	mg/Kg	J (all detects)
	TIN	J	2.58	10.8	PQL	mg/Kg	
	Zirconium	J	3.97	5.40	PQL	mg/Kg	
SL-172-SA5A-SB-4.0-5.0	SODIUM	J	91.8	118	PQL	mg/Kg	J (all detects)
	TIN	J	2.84	11.8	PQL	mg/Kg	
	Zirconium	J	1.50	5.89	PQL	mg/Kg	
SL-174-SA5A-SB-2.0-3.0	TIN	J	2.93	10.9	PQL	mg/Kg	J (all detects)
SL-254-SA5A-SB-2.5-3.5	TIN	J	2.99	10.9	PQL	mg/Kg	J (all detects)
	Zirconium	J	1.17	5.46	PQL	mg/Kg	

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-032-SA5A-SB-3.0-4.0	ANTIMONY	J	0.121	0.227	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.217	0.454	PQL	mg/Kg	
	SILVER	J	0.0243	0.114	PQL	mg/Kg	
SL-056-SA8N-SS-0.0-0.5	SILVER	J	0.0468	0.116	PQL	mg/Kg	J (all detects)
SL-057-SA8N-SS-0.0-0.5	SELENIUM	J	0.376	0.445	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0356	0.111	PQL	mg/Kg	
SL-071-SA8N-SS-0.0-0.5	ANTIMONY	J	0.111	0.232	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.224	0.464	PQL	mg/Kg	
	SILVER	J	0.0362	0.116	PQL	mg/Kg	
SL-080-SA8N-SS-0.0-0.5	ANTIMONY	J	0.136	0.240	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0269	0.120	PQL	mg/Kg	
SL-085-SA8N-SS-0.0-0.5	ANTIMONY	J	0.136	0.226	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.202	0.453	PQL	mg/Kg	
SL-086-SA8N-SS-0.0-0.5	ANTIMONY	J	0.205	0.231	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.323	0.461	PQL	mg/Kg	
	SILVER	J	0.0278	0.115	PQL	mg/Kg	
SL-132-SA8N-SS-0.0-0.5	SELENIUM	J	0.397	0.424	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0462	0.106	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE130 **Laboratory: LL**

EDD Filename: DE130_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-172-SA5A-SB-4.0-5.0	ANTIMONY	J	0.0766	0.233	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.112	0.467	PQL	mg/Kg	
	SILVER	J	0.0296	0.117	PQL	mg/Kg	
SL-174-SA5A-SB-2.0-3.0	ANTIMONY	J	0.157	0.218	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.178	0.436	PQL	mg/Kg	
	SILVER	J	0.0167	0.109	PQL	mg/Kg	
SL-254-SA5A-SB-2.5-3.5	ANTIMONY	J	0.128	0.216	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.143	0.433	PQL	mg/Kg	
	SILVER	J	0.0348	0.108	PQL	mg/Kg	

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-071-SA8N-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.48	1.2	PQL	mg/Kg	J (all detects)
SL-085-SA8N-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.61	1.2	PQL	mg/Kg	J (all detects)
SL-086-SA8N-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.45	1.2	PQL	mg/Kg	J (all detects)

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-032-SA5A-SB-3.0-4.0	MERCURY	J	0.0057	0.111	PQL	mg/Kg	J (all detects)
SL-056-SA8N-SS-0.0-0.5	MERCURY	J	0.0111	0.115	PQL	mg/Kg	J (all detects)
SL-057-SA8N-SS-0.0-0.5	MERCURY	J	0.0138	0.111	PQL	mg/Kg	J (all detects)
SL-071-SA8N-SS-0.0-0.5	MERCURY	J	0.0449	0.114	PQL	mg/Kg	J (all detects)
SL-080-SA8N-SS-0.0-0.5	MERCURY	J	0.0249	0.116	PQL	mg/Kg	J (all detects)
SL-086-SA8N-SS-0.0-0.5	MERCURY	J	0.0106	0.112	PQL	mg/Kg	J (all detects)
SL-132-SA8N-SS-0.0-0.5	MERCURY	J	0.0896	0.104	PQL	mg/Kg	J (all detects)
SL-172-SA5A-SB-4.0-5.0	MERCURY	J	0.0179	0.113	PQL	mg/Kg	J (all detects)
SL-174-SA5A-SB-2.0-3.0	MERCURY	J	0.0119	0.108	PQL	mg/Kg	J (all detects)
SL-254-SA5A-SB-2.5-3.5	MERCURY	J	0.0143	0.108	PQL	mg/Kg	J (all detects)

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-056-SA8N-SS-0.0-0.5	Aroclor 5460	J	2.7	3.8	PQL	ug/Kg	J (all detects)
SL-071-SA8N-SS-0.0-0.5	AROCLOR 1260	J	1.6	2.0	PQL	ug/Kg	J (all detects)
	Aroclor 5460	J	2.0	3.9	PQL	ug/Kg	
SL-080-SA8N-SS-0.0-0.5	Aroclor 5460	J	2.9	4.0	PQL	ug/Kg	J (all detects)

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Reporting Limit Outliers

Lab Reporting Batch ID: DE130 **Laboratory: LL**

EDD Filename: DE130_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-086-SA8N-SS-0.0-0.5	AROCLOR 1254	J	0.76	2.0	PQL	ug/Kg	J (all detects)
	AROCLOR 1260	J	0.72	2.0	PQL	ug/Kg	

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-172-SA5A-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.65	4.2	PQL	ug/Kg	J (all detects)
SL-174-SA5A-SB-2.0-3.0	METHYLENE CHLORIDE	J	0.51	4.0	PQL	ug/Kg	J (all detects)
SL-254-SA5A-SB-2.5-3.5	METHYLENE CHLORIDE	J	0.47	3.7	PQL	ug/Kg	J (all detects)

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-056-SA8N-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	24	390	PQL	ug/Kg	J (all detects)
SL-071-SA8N-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	31	390	PQL	ug/Kg	J (all detects)
SL-080-SA8N-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	30	400	PQL	ug/Kg	J (all detects)
SL-085-SA8N-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	32	380	PQL	ug/Kg	J (all detects)
	FLUORANTHENE	J	57	190	PQL	ug/Kg	
	PHENANTHRENE	J	41	190	PQL	ug/Kg	
	PYRENE	J	55	190	PQL	ug/Kg	
SL-132-SA8N-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	37	360	PQL	ug/Kg	J (all detects)

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-056-SA8N-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	1.1	1.9	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	1.3	1.9	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	1.0	1.9	PQL	ug/Kg	
	CHRYSENE	J	1.8	1.9	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.4	1.9	PQL	ug/Kg	
	PHENANTHRENE	J	1.0	1.9	PQL	ug/Kg	
	PYRENE	J	1.8	1.9	PQL	ug/Kg	
SL-057-SA8N-SS-0.0-0.5	CHRYSENE	J	0.41	1.9	PQL	ug/Kg	J (all detects)
	NAPHTHALENE	J	1.2	1.9	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE130 **Laboratory: LL**

EDD Filename: DE130_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-071-SA8N-SS-0.0-0.5	BENZO(B)FLUORANTHENE	J	1.9	2.0	PQL	ug/Kg	J (all detects)
	BENZO(G,H,I)PERYLENE	J	1.1	2.0	PQL	ug/Kg	
	CHRYSENE	J	1.5	2.0	PQL	ug/Kg	
	FLUORANTHENE	J	1.4	2.0	PQL	ug/Kg	
	FLUORENE	J	1.5	2.0	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	0.79	2.0	PQL	ug/Kg	
	NAPHTHALENE	J	1.6	2.0	PQL	ug/Kg	
	PHENANTHRENE	J	1.2	2.0	PQL	ug/Kg	
	PYRENE	J	1.3	2.0	PQL	ug/Kg	
SL-080-SA8N-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	1.0	2.0	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	1.2	2.0	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.5	2.0	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	0.94	2.0	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.2	2.0	PQL	ug/Kg	
	NAPHTHALENE	J	1.0	2.0	PQL	ug/Kg	
	PHENANTHRENE	J	1.4	2.0	PQL	ug/Kg	
	PYRENE	J	1.9	2.0	PQL	ug/Kg	
SL-085-SA8N-SS-0.0-0.5	ANTHRACENE	J	0.61	1.9	PQL	ug/Kg	J (all detects)
	INDENO(1,2,3-CD)PYRENE	J	1.7	1.9	PQL	ug/Kg	
	NAPHTHALENE	J	1.1	1.9	PQL	ug/Kg	
SL-086-SA8N-SS-0.0-0.5	CHRYSENE	J	0.52	2.0	PQL	ug/Kg	J (all detects)
	NAPHTHALENE	J	1.2	2.0	PQL	ug/Kg	
SL-132-SA8N-SS-0.0-0.5	ANTHRACENE	J	0.88	1.8	PQL	ug/Kg	J (all detects)
	NAPHTHALENE	J	1.1	1.8	PQL	ug/Kg	

Method: 9012B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-071-SA8N-SS-0.0-0.5	CYANIDE	J	0.23	0.58	PQL	mg/Kg	J (all detects)

Enclosure II

Level IV Validation Reports

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	April 18, 2011
LDC Report Date:	August 31, 2011
Matrix:	Soil/Water
Parameters:	Volatiles
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE130

Sample Identification

SL-032-SA5A-SB-3.0-4.0
SL-172-SA5A-SB-4.0-5.0
SL-174-SA5A-SB-2.0-3.0
SL-254-SA5A-SB-2.5-3.5
TB-041811
EB13-SA5A-SB-041811

Introduction

This data review covers 4 soil samples and 2 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8260B for Volatiles.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 30.0% for all compounds.

In the case where the laboratory used a calibration curve to evaluate the compounds, all coefficients of determination (r^2) were greater than or equal to 0.990 .

Average relative response factors (RRF) for all compounds were within method and validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs) and 25.0% for all other compounds with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
4/21/11	2-Butanone 4-Methyl-2-pentanone 2-Hexanone n-Butylbenzene	26 45 57 26	All soil samples in SDG DE130	J (all detects) UJ (all non-detects)	A
4/22/11	Dichlorodifluoromethane Trichlorofluoromethane Carbon tetrachloride 1,2-Dichloroethane	37 37 36 34	All water samples in SDG DE130	J (all detects) UJ (all non-detects)	A

The percent differences (%D) of the second source calibration standard were less than or equal to 25.0% for all compounds with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
3/1/11	Bromochloromethane	36	All soil samples in SDG DE130	J (all detects) UJ (all non-detects)	A
2/10/11	Dichlorodifluoromethane Acetone	30 28	All water samples in SDG DE130	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A

All of the continuing calibration relative response factors (RRF) were within method and validation criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No volatile contaminants were found in the method blanks with the following exceptions:

Method Blank ID	Analysis Date	Compound TIC (RT in minutes)	Concentration	Associated Samples
VBLKB32	4/21/11	Methylene chloride	0.46 ug/Kg	All soil samples in SDG DE130

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated method blanks with the following exceptions:

Sample	Compound TIC (RT in minutes)	Reported Concentration	Modified Final Concentration
SL-172-SA5A-SB-4.0-5.0	Methylene chloride	0.65 ug/Kg	4.2U ug/Kg
SL-174-SA5A-SB-2.0-3.0	Methylene chloride	0.51 ug/Kg	4.0U ug/Kg
SL-254-SA5A-SB-2.5-3.5	Methylene chloride	0.47 ug/Kg	3.7U ug/Kg

Sample TB-041811 was identified as a trip blank. No volatile contaminants were found.

Sample EB13-SA5A-SB-041811 was identified as an equipment blank. No volatile contaminants were found.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

LCS ID (Associated Samples)	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Flag	A or P
LCS/DY25 (TB-041811 EB13-SA5A-SB-041811 VBLKY25)	Trichlorofluoromethane Carbon tetrachloride	130 (64-129) 126 (75-123)	- -	- -	J (all detects) J (all detects)	P

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE130	All compounds reported below the RL.	J (all detects)	A

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was acceptable.

XV. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Volatiles - Data Qualification Summary - SDG DE130

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE130	SL-032-SA5A-SB-3.0-4.0 SL-172-SA5A-SB-4.0-5.0 SL-174-SA5A-SB-2.0-3.0 SL-254-SA5A-SB-2.5-3.5	2-Butanone 4-Methyl-2-pentanone 2-Hexanone n-Butylbenzene	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D) (C)
DE130	TB-041811 EB13-SA5A-SB-041811	Dichlorodifluoromethane Trichlorofluoromethane Carbon tetrachloride 1,2-Dichloroethane	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D) (C)
DE130	SL-032-SA5A-SB-3.0-4.0 SL-172-SA5A-SB-4.0-5.0 SL-174-SA5A-SB-2.0-3.0 SL-254-SA5A-SB-2.5-3.5	Bromochloromethane	J (all detects) UJ (all non-detects)	A	Continuing calibration (ICV %D) (C)
DE130	TB-041811 EB13-SA5A-SB-041811	Dichlorodifluoromethane Acetone	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A	Continuing calibration (ICV %D) (C)
DE130	TB-041811 EB13-SA5A-SB-041811	Trichlorofluoromethane Carbon tetrachloride	J (all detects) J (all detects)	P	Laboratory control samples (%R) (L)
DE130	SL-032-SA5A-SB-3.0-4.0 SL-172-SA5A-SB-4.0-5.0 SL-174-SA5A-SB-2.0-3.0 SL-254-SA5A-SB-2.5-3.5 TB-041811 EB13-SA5A-SB-041811	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and RLs (Z)

Santa Susana Field Laboratory
Volatiles - Laboratory Blank Data Qualification Summary - SDG DE130

SDG	Sample	Compound TIC (RT in minutes)	Modified Final Concentration	A or P	Code
DE130	SL-172-SA5A-SB-4.0-5.0	Methylene chloride	4.2U ug/Kg	A	B
DE130	SL-174-SA5A-SB-2.0-3.0	Methylene chloride	4.0U ug/Kg	A	B
DE130	SL-254-SA5A-SB-2.5-3.5	Methylene chloride	3.7U ug/Kg	A	B

Santa Susana Field Laboratory
Volatiles - Field Blank Data Qualification Summary - SDG DE130

No Sample Data Qualified in this SDG

LDC #: 26078B1a **VALIDATION COMPLETENESS WORKSHEET** Date: 8/31/11
SDG #: DE130 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer:
2nd Reviewer:

METHOD: GC/MS Volatiles (EPA SW 846 Method 8260B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 4/18/11
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	A	% RSD ≤30, r2
IV.	Continuing calibration/ICV	SW	ICV/CCV ≤25
V.	Blanks	SW	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	N	client specified
VIII.	Laboratory control samples	SW	LCS ID
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A	
XI.	Target compound identification	A	
XII.	Compound quantitation/RL/LOQ/LODs	A	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	A	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	N	
XVII.	Field blanks	ND	TB=5 EB=6

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:
soil + water

1	SL-032-SA5A-SB-3.0-4.0 S	11	YBLKB32	21		31	
2	SL-172-SA5A-SB-4.0-5.0	12	YBLKY35	22		32	
3	SL-174-SA5A-SB-2.0-3.0	13		23		33	
4	SL-254-SA5A-SB-2.5-3.5	14		24		34	
5	TB-041811 W	15		25		35	
6	EB13-SA5A-SB-041811	16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

LDC #: 26078B|a

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer: C

Method: Volatiles (EPA SW 846 Method 8260B)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. GC/MS instrument performance check				
Were the BFB performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
III. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	•			
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Was a curve fit used for evaluation?	✓			
Did the initial calibration meet the curve fit acceptance criteria of > 0.990?	✓			
Were all percent relative standard deviations (%RSD) ≤ 30% and relative response factors (RRF) > 0.05?	✓			
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓			
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Were all percent differences (%D) ≤ 25% and relative response factors (RRF) ≥ 0.05?		✓		
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed at least once every 12 hours for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.	✓			
VI. Surrogate spikes				
Were all surrogate %R within QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.			✓	
Was a MS/MSD analyzed every 20 samples of each matrix?			✓	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			

LDC #: 26078 B|a

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer: C

Validation Area	Yes	No	NA	Findings/Comments
Was an LCS analyzed per analytical batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
X. Internal Standards				
Were internal standard area counts within -50% or +100% of the associated calibration standard?	✓			
Were retention times within ± 30 seconds of the associated calibration standard?	✓			
XI. Target compound identification				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?	✓			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	✓			
Were chromatogram peaks verified and accounted for?	✓			
XII. Compound quantitation/CRQLs				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	✓			
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XIII. Tentatively identified compounds (TICs)				
Were the major ions (> 10 percent relative intensity) in the reference spectrum evaluated in sample spectrum?			✓	
Were relative intensities of the major ions within ± 20% between the sample and the reference spectra?			✓	
Did the raw data indicate that the laboratory performed a library search for all required peaks in the chromatograms (samples and blanks)?			✓	
XIV. System performance				
System performance was found to be acceptable.	✓			
XV. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XVI. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XVII. Field blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

TARGET COMPOUND WORKSHEET

METHOD: VOA (EPA SW 846 Method 8260B)

A. Chloromethane*	U. 1,1,2-Trichloroethane	OO. 2,2-Dichloropropane	III. n-Butylbenzene	CCCC.1-Chlorohexane
B. Bromomethane	V. Benzene	PP. Bromochloromethane	JJJ. 1,2-Dichlorobenzene	DDDD. Isopropyl alcohol
C. Vinyl choride**	W. trans-1,3-Dichloropropene	QQ. 1,1-Dichloropropene	KKK. 1,2,4-Trichlorobenzene	EEEE. Acetonitrile
D. Chloroethane	X. Bromoform*	RR. Dibromomethane	LLL. Hexachlorobutadiene	FFFF. Acrolein
E. Methylene chloride	Y. 4-Methyl-2-pentanone	SS. 1,3-Dichloropropane	MMM. Naphthalene	GGGG. Acrylonitrile
F. Acetone	Z. 2-Hexanone	TT. 1,2-Dibromoethane	NNN. 1,2,3-Trichlorobenzene	HHHH. 1,4-Dioxane
G. Carbon disulfide	AA. Tetrachloroethene	UU. 1,1,1,2-Tetrachloroethane	OOO. 1,3,5-Trichlorobenzene	IIII. Isobutyl alcohol
H. 1,1-Dichloroethene**	BB. 1,1,2,2-Tetrachloroethane*	VV. Isopropylbenzene	PPP. trans-1,2-Dichloroethene	JJJJ. Methacrylonitrile
I. 1,1-Dichloroethane*	CC. Toluene**	WW. Bromobenzene	QQQ. cis-1,2-Dichloroethene	KKKK. Propionitrile
J. 1,2-Dichloroethene, total	DD. Chlorobenzene*	XX. 1,2,3-Trichloropropane	RRR. m,p-Xylenes	LLLL. Ethyl ether
K. Chloroform**	EE. Ethylbenzene**	YY. n-Propylbenzene	SSS. o-Xylene	MMMM. Benzyl chloride
L. 1,2-Dichloroethane	FF. Styrene	ZZ. 2-Chlorotoluene	TTT. 1,1,2-Trichloro-1,2,2-trifluoroethane	NNNN.
M. 2-Butanone	GG. Xylenes, total	AAA. 1,3,5-Trimethylbenzene	UUU. 1,2-Dichlorotetrafluoroethane	OOOO.
N. 1,1,1-Trichloroethane	HH. Vinyl acetate	BBB. 4-Chlorotoluene	VVV. 4-Ethyltoluene	PPPP.
O. Carbon tetrachloride	II. 2-Chloroethylvinyl ether	CCC. tert-Butylbenzene	WWW. Ethanol	QQQQ.
P. Bromodichloromethane	JJ. Dichlorodifluoromethane	DDD. 1,2,4-Trimethylbenzene	XXX. Di-isopropyl ether	RRRR.
Q. 1,2-Dichloropropane**	KK. Trichlorofluoromethane	EEE. sec-Butylbenzene	YYY. tert-Butanol	SSSS.
R. cis-1,3-Dichloropropene	LL. Methyl-tert-butyl ether	FFF. 1,3-Dichlorobenzene	ZZZ. tert-Butyl alcohol	TTTT.
S. Trichloroethene	MM. 1,2-Dibromo-3-chloropropane	GGG. p-Isopropyltoluene	AAAA. Ethyl tert-butyl ether	UUUU.
T. Dibromochloromethane	NN. Methyl ethyl ketone	HHH. 1,4-Dichlorobenzene	BBBB. tert-Amyl methyl ether	VVVV.

* = System performance check compounds (SPCC) for RRF ; ** = Calibration check compounds (CCC) for %RSD.

LDC #: 26078 B/a

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Page: 1 of 1
Reviewer: FT
2nd Reviewer:

METHOD: GC/MS VOA (EPA SW 846 Method 8260)
Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?
Y N N/A Were percent differences (%D) and relative response factors (RRF) within method criteria for all CCC's and SPCC's ?
Y N N/A Were all %D and RRFs within the validation criteria of ≤25 %D and ≥0.05 RRF ?

#	Date	Standard ID	Compound	Finding %D (Limit: <25.0%)	Finding RRF (Limit: >0.05)	Associated Samples	Qualifications
	3/01/11	ICV	PP	36		All soils	J/UJ/A (C)
	2/10/11	ICV	JJ	30		All water	
			F	28			
	4/21/11 11:50	CCV	M	26		All SOILS	J/UJ/A (C)
			Y	45			
			Z	57			
			III	26			
	4/22/11 9:47	CCV	JJ	37		All water	(C)
			KK	37			
			O	36			
			L	34			

CONCAL_8260B.1S

LDC #: 26078B/a

VALIDATION FINDINGS WORKSHEET
Blanks

Page: 1 of 1
Reviewer: FT
2nd Reviewer: [illegible]

METHOD: GC/MS VOA (EPA SW 846 Method 8260)
Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a method blank associated with every sample in this SDG?
Y N N/A Was a method blank analyzed at least once every 12 hours for each matrix and concentration?
Y N N/A Was there contamination in the method blanks? If yes, please see the qualifications below.

(B)

Blank analysis date: 4/21/11
Conc. units: ug/kg
Associated Samples: All SOILS

Compound	Blank ID	10X								
		Sample Identification								
[redacted]	YBLKB32			2	3	4				
E	0.46	4.6		0.65/4.2U	0.51/4.0U	0.47/3.7U				
CRQL										

Blank analysis date:
Conc. units:
Associated Samples:

Compound	Blank ID	Sample Identification								
[redacted]										
CRQL										

All results were qualified using the criteria stated below except those circled.

Note: Common contaminants such as Methylene chloride, Acetone, 2-Butanone, Carbon disulfide and TICs that were detected in samples within ten times the associated method blank concentration were qualified as not detected, "U". Other contaminants within five times the method blank concentration were also qualified as not detected, "U".

LDC #: 26078B/a

VALIDATION FINDINGS WORKSHEET
Laboratory Control Samples (LCS)

Page: 1 of 1
Reviewer: FT
2nd Reviewer: [illegible]

METHOD: GC/MS VOA (EPA SW 846 Method 8260)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a LCS required?
Y N N/A Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?

#	Date	LCS/LCSD ID	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
		LCS/D Y25	KK	130 (64-129)	( )	( )	YBLKY25, 5, 6	J/Pdet (L)
			O	126 (75-123)	( )	( )	↓	↓ ↓
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
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				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		

LDC #: 26078B/a

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: FT
2nd Reviewer: e

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

RRF = $(A_x)(C_{is})/(A_{is})(C_x)$
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

A_x = Area of compound,
C_x = Concentration of compound,
S = Standard deviation of the RRFs
X = Mean of the RRFs

A_{is} = Area of associated internal standard
C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Reported RRF (50 std)	Recalculated RRF (50 std)	Reported Average RRF (initial)	Recalculated Average RRF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL SOIL	3/01/11	C (1st internal standard)	0.4158	0.4158	0.4296	0.4296	9	9
			EE (2nd internal standard)	1.6663	1.6663	1.5916	1.5916	10	10
			JJJ (3rd internal standard)	1.4144	1.4144	1.3506	1.3506	9	9
			(4th internal standard)						
2	ICAL water	2/10/11	C (1st internal standard)	0.3993	0.3993	0.4001	0.4001	7	7
			EE (2nd internal standard)	1.9698	1.9698	1.9465	1.9465	3	3
			JJJ (3rd internal standard)	1.6823	1.6823	1.6848	1.6848	4	4
			(4th internal standard)						
3			(1st internal standard)						
			(2nd internal standard)						
			(3rd internal standard)						
			(4th internal standard)						
4			(1st internal standard)						
			(2nd internal standard)						
			(3rd internal standard)						
			(4th internal standard)						

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26078B/2

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Page: 1 of 1
Reviewer: FT
2nd Reviewer: [illegible]

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
RRF = $(A_x)(C_{is})/(A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference internal Standard)	Average RRF (initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
1	ccV	4/21/11	C (1st internal standard)	0.4296	0.4799	0.4799	12	12
	11:50		EE (2nd internal standard)	1.5916	1.7815	1.7815	12	12
			JJJ (3rd internal standard)	1.3506	1.4849	1.4849	10	10
			(4th internal standard)					
2	ccV	4/22/11	C (1st internal standard)	0.4001	0.3931	0.3931	2	2
	9:47		EE (2nd internal standard)	1.9465	2.1204	2.1204	9	9
			JJJ (3rd internal standard)	1.6848	1.8166	1.8166	8	8
			(4th internal standard)					
3			(1st internal standard)					
			(2nd internal standard)					
			(3rd internal standard)					
			(4th internal standard)					
4			(1st internal standard)					
			(2nd internal standard)					
			(3rd internal standard)					
			(4th internal standard)					

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26078 B1

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT
2nd reviewer: [illegible]

METHOD: GC/MS VOA (EPA SW 846 Method 8260)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane	50.0	49.392	99	99	0
1,2-Dichloroethane-d4	↓	48.918	98	98	↓
Toluene-d8	↓	50.253	101	101	↓
Bromofluorobenzene	↓	43.879	88	88	↓

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

LDC #: 26018P19

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample Results Verification

Reviewer: FT
2nd Reviewer: A

METHOD: GC/MS VOA (EPA SW 846 Method 8260)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratoy control sample and laboratory control sample duplicate (if applicable) were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * SSC/SA Where: SSC = Spiked sample concentration
SA = Spike added

RPD = I LCS - LCSD I * 2/(LCS + LCSD) LCS = Laboraotry control sample percent recovery LCSD = Laboratory control sample duplicate percent recovery

LCS ID: 1esIP SOIL

Compound	Spike Added (ug/kg)		Spiked Sample Concentration (ug/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
1,1-Dichloroethene	20	20	22.49	22.05	112	112	110	110	2	2
Trichloroethene	↓	↓	19.7	19.26	98	98	96	96	2	2
Benzene			20.99	20.82	105	105	104	104	1	1
Toluene			20.3	20.03	102	102	100	100	1	1
Chlorobenzene			19.72	19.53	99	99	98	98	1	1

Comments: Refer to Laboratory Control Sample findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26078 B/a

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: FT
2nd reviewer:

METHOD: GC/MS VOA (EPA SW 846 Method 8260)

Y N N/A Were all reported results recalculated and verified for all level IV samples?

Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(DF)}{(A_{is})(RRF)(V_o)(\%S)}$

A_x	=	Area of the characteristic ion (EICP) for the compound to be measured
A_{is}	=	Area of the characteristic ion (EICP) for the specific internal standard
I_s	=	Amount of internal standard added in nanograms (ng)
RRF	=	Relative response factor of the calibration standard.
V_o	=	Volume or weight of sample pruged in milliliters (ml) or grams (g).
Df	=	Dilution factor.
%S	=	Percent solids, applicable to soils and solid matrices only.

Example:

Sample I.D. #1, E:

Conc. = $\frac{(32897)(50)(5)}{(948704)(0.3108)(5.59)(0.857)}$

= 5.82 ug/kg

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	April 18, 2011
LDC Report Date:	August 31, 2011
Matrix:	Soil/Water
Parameters:	1,4-Dioxane
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE130

Sample Identification

SL-032-SA5A-SB-3.0-4.0
SL-172-SA5A-SB-4.0-5.0
SL-174-SA5A-SB-2.0-3.0
SL-254-SA5A-SB-2.5-3.5
TB-041811
EB13-SA5A-SB-041811

Introduction

This data review covers 4 soil samples and 2 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8260B using Selected Ion Monitoring (SIM) for 1,4-Dioxane.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 30.0% for 1,4-Dioxane.

Average relative response factors (RRF) for all compounds were within method and validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 25.0% for 1,4-Dioxane.

The percent differences (%D) of the second source calibration standard were less than or equal to 25.0% for 1,4-Dioxane.

All of the continuing calibration relative response factors (RRF) were within method and validation criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No 1,4-dioxane was found in the method blanks.

Sample TB-041811 was identified as a trip blank. No 1,4-dioxane was found.

Sample EB13-SA5A-SB-041811 was identified as an equipment blank. No 1,4-dioxane was found.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE130	All compounds reported below the RL.	J (all detects)	A

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was acceptable.

XV. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
1,4-Dioxane - Data Qualification Summary - SDG DE130

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE130	SL-032-SA5A-SB-3.0-4.0 SL-172-SA5A-SB-4.0-5.0 SL-174-SA5A-SB-2.0-3.0 SL-254-SA5A-SB-2.5-3.5 TB-041811 EB13-SA5A-SB-041811	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and RLs (Z)

Santa Susana Field Laboratory
1,4-Dioxane - Laboratory Blank Data Qualification Summary - SDG DE130

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
1,4-Dioxane - Field Blank Data Qualification Summary - SDG DE130

No Sample Data Qualified in this SDG

LDC #: 26078B1b

VALIDATION COMPLETENESS WORKSHEET

Level IV

Date: 8/29/11

SDG #: DE130

Page: 1 of 1

Laboratory: Lancaster Laboratories

Reviewer:

2nd Reviewer:

METHOD: GC/MS 1,4-Dioxane (EPA SW 846 Method 8260B-SIM)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 4/18/11
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	A	% RSD ≤ 30
IV.	Continuing calibration/ICV	A	ICV/CCV ≤ 25
V.	Blanks	A	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	N	client specified
VIII.	Laboratory control samples	A	LCS ID
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A	
XI.	Target compound identification	A	
XII.	Compound quantitation/RL/LOQ/LODs	A	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	A	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	N	
XVII.	Field blanks	ND	TB = 5 EB = 6

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:

Soil + Water

1	SL-032-SA5A-SB-3.0-4.0 S	11	VBLKE98	21		31	
2	SL-172-SA5A-SB-4.0-5.0	12	VBLKE97	22		32	
3	SL-174-SA5A-SB-2.0-3.0	13		23		33	
4	SL-254-SA5A-SB-2.5-3.5	14		24		34	
5	TB-041811 W	15		25		35	
6	EB13-SA5A-SB-041811 W	16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

LDC #: 26078B1b

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer: C

Method: Volatiles (EPA SW 846 Method 8260B)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. GC/MS instrument performance check				
Were the BFB performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
III. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Was a curve fit used for evaluation?		✓		
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?			✓	
Were all percent relative standard deviations (%RSD) ≤ 30% and relative response factors (RRF) > 0.05?	✓			
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓			
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Were all percent differences (%D) ≤ 25% and relative response factors (RRF) ≥ 0.05?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed at least once every 12 hours for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.			✓	
Was a MS/MSD analyzed every 20 samples of each matrix?			✓	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			

LDC #: 26078 B1U

VALIDATION FINDINGS CHECKLIST

Reviewer: FT

2nd Reviewer: A

Validation Area	Yes	No	NA	Findings/Comments
Was an LCS analyzed per analytical batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
X. Internal standards				
Were internal standard area counts within -50% or +100% of the associated calibration standard?	✓			
Were retention times within ± 30 seconds of the associated calibration standard?	✓			
XI. Target compound identification				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?			✓	
Did compound spectra meet specified EPA "Functional Guidelines" criteria?			✓	
Were chromatogram peaks verified and accounted for?	✓			
XII. Compound quantitation/CRQLs				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?			✓	
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XIII. Tentatively identified compounds (TICs)				
Were the major ions (> 10 percent relative intensity) in the reference spectrum evaluated in sample spectrum?			✓	
Were relative intensities of the major ions within ± 20% between the sample and the reference spectra?			✓	
Did the raw data indicate that the laboratory performed a library search for all required peaks in the chromatograms (samples and blanks)?			✓	
XIV. System performance				
System performance was found to be acceptable.	✓			
XV. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XVI. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XVII. Field blanks				
Field blanks were identified in this SDG.	✓			
Target compounds were detected in the field blanks.		✓		

TARGET COMPOUND WORKSHEET

METHOD: VOA (EPA SW 846 Method 8260B)

A. Chloromethane*	U. 1,1,2-Trichloroethane	OO. 2,2-Dichloropropane	III. n-Butylbenzene	CCCC.1-Chlorohexane
B. Bromomethane	V. Benzene	PP. Bromochloromethane	JJJ. 1,2-Dichlorobenzene	DDDD. Isopropyl alcohol
C. Vinyl choride**	W. trans-1,3-Dichloropropene	QQ. 1,1-Dichloropropene	KKK. 1,2,4-Trichlorobenzene	EEEE. Acetonitrile
D. Chloroethane	X. Bromoform*	RR. Dibromomethane	LLL. Hexachlorobutadiene	FFFF. Acrolein
E. Methylene chloride	Y. 4-Methyl-2-pentanone	SS. 1,3-Dichloropropane	MMM. Naphthalene	GGGG. Acrylonitrile
F. Acetone	Z. 2-Hexanone	TT. 1,2-Dibromoethane	NNN. 1,2,3-Trichlorobenzene	HHHH. 1,4-Dioxane
G. Carbon disulfide	AA. Tetrachloroethene	UU. 1,1,1,2-Tetrachloroethane	OOO. 1,3,5-Trichlorobenzene	IIII. Isobutyl alcohol
H. 1,1-Dichloroethene**	BB. 1,1,2,2-Tetrachloroethane*	VV. Isopropylbenzene	PPP. trans-1,2-Dichloroethene	JJJJ. Methacrylonitrile
I. 1,1-Dichloroethane*	CC. Toluene**	WW. Bromobenzene	QQQ. cis-1,2-Dichloroethene	KKKK. Propionitrile
J. 1,2-Dichloroethene, total	DD. Chlorobenzene*	XX. 1,2,3-Trichloropropane	RRR. m,p-Xylenes	LLLL. Ethyl ether
K. Chloroform**	EE. Ethylbenzene**	YY. n-Propylbenzene	SSS. o-Xylene	MMMM. Benzyl chloride
L. 1,2-Dichloroethane	FF. Styrene	ZZ. 2-Chlorotoluene	TTT. 1,1,2-Trichloro-1,2,2-trifluoroethane	NNNN.
M. 2-Butanone	GG. Xylenes, total	AAA. 1,3,5-Trimethylbenzene	UUU. 1,2-Dichlorotetrafluoroethane	OOOO.
N. 1,1,1-Trichloroethane	HH. Vinyl acetate	BBB. 4-Chlorotoluene	VVV. 4-Ethyltoluene	PPPP.
O. Carbon tetrachloride	II. 2-Chloroethylvinyl ether	CCC. tert-Butylbenzene	WWW. Ethanol	QQQQ.
P. Bromodichloromethane	JJ. Dichlorodifluoromethane	DDD. 1,2,4-Trimethylbenzene	XXX. Di-isopropyl ether	RRRR.
Q. 1,2-Dichloropropane**	KK. Trichlorofluoromethane	EEE. sec-Butylbenzene	YYY. tert-Butanol	SSSS.
R. cis-1,3-Dichloropropene	LL. Methyl-tert-butyl ether	FFF. 1,3-Dichlorobenzene	ZZZ. tert-Butyl alcohol	TTTT.
S. Trichloroethene	MM. 1,2-Dibromo-3-chloropropane	GGG. p-Isopropyltoluene	AAAA. Ethyl tert-butyl ether	UUUU.
T. Dibromochloromethane	NN. Methyl ethyl ketone	HHH. 1,4-Dichlorobenzene	BBBB. tert-Amyl methyl ether	VVVV.

* = System performance check compounds (SPCC) for RRF ; ** = Calibration check compounds (CCC) for %RSD.

LDC #: 26078B1b

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: FT
2nd Reviewer: [illegible]

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

RRF = $(A_x)(C_{is})/(A_{is})(C_x)$
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

A_x = Area of compound,
C_x = Concentration of compound,
S = Standard deviation of the RRFs
X = Mean of the RRFs

A_{is} = Area of associated internal standard
C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Reported RRF (5 std)	Recalculated RRF (5 std)	Reported Average RRF (initial)	Recalculated Average RRF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	11/7/10	1,4-Dioxane (1st internal standard)	1.3539	1.3539	1.3396	1.3396	2	2
			(2nd internal standard)						
			(3rd internal standard)						
			(4th internal standard)						
2	ICAL	11/01/10	↓ (1st internal standard)	1.3004	1.3004	1.3219	1.3219	1	1
			(2nd internal standard)						
			(3rd internal standard)						
			(4th internal standard)						
3			(1st internal standard)						
			(2nd internal standard)						
			(3rd internal standard)						
			(4th internal standard)						
4			(1st internal standard)						
			(2nd internal standard)						
			(3rd internal standard)						
			(4th internal standard)						

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26078B1b

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: FT
2nd Reviewer: [illegible]

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
RRF = $(A_x)(C_{is})/(A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference internal Standard)	Average RRF (initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
1	ccv	4/20/11 14:35	1,4-Dioxane (1st internal standard)	1.3396	1.3873	1.3873	4	4
			(2nd internal standard)					
			(3rd internal standard)					
			(4th internal standard)					
2	ccv	4/20/11 8:47	↓ (1st internal standard)	1.3219	1.4150	1.4150	7	7
			(2nd internal standard)					
			(3rd internal standard)					
			(4th internal standard)					
3			(1st internal standard)					
			(2nd internal standard)					
			(3rd internal standard)					
			(4th internal standard)					
4			(1st internal standard)					
			(2nd internal standard)					
			(3rd internal standard)					
			(4th internal standard)					

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26078B1U

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT
2nd reviewer: A

METHOD: GC/MS VOA (EPA SW 846 Method 8260)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8	~~92~~ 10	9.6 x 10	97	97	0
Bromofluorobenzene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

LDC #: 26078P1D

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample Results Verification

Reviewer: FT
2nd Reviewer: C

METHOD: GC/MS VOA (EPA SW 846 Method 8260)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratoy control sample and laboratory control sample duplicate (if applicable) were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * SSC/SA Where: SSC = Spiked sample concentration
SA = Spike added

RPD = I LCS - LCSD I * 2/(LCS + LCSD) LCS = Laboraotry control sample percent recovery LCSD = Laboratory control sample duplicate percent recovery

LCS ID: LCS E98

Compound	Spike Added (ug/kg)		Spiked Sample Concentration (ug/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
~~1,1-Dichloroethene~~ 1,4-Dioxane	125	125	121.77	136.46	97	97	109	109	11	11
Trichloroethene										
Benzene										
Toluene										
~~Chlorobenzene~~										

Comments: Refer to Laboratory Control Sample findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26078B1b

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: FT
2nd reviewer: [illegible]

METHOD: GC/MS VOA (EPA SW 846 Method 8260)

Y N N/A Were all reported results recalculated and verified for all level IV samples?

Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(DF)}{(A_{is})(RRF)(V_o)(\%S)}$

A_x	=	Area of the characteristic ion (EICP) for the compound to be measured
A_{is}	=	Area of the characteristic ion (EICP) for the specific internal standard
I_s	=	Amount of internal standard added in nanograms (ng)
RRF	=	Relative response factor of the calibration standard.
V_o	=	Volume or weight of sample pruged in milliliters (ml) or grams (g).
Df	=	Dilution factor.
%S	=	Percent solids, applicable to soils and solid matrices only.

Example:

Sample I.D. _____, _____:

Conc. = $\frac{(____)(____)(____)}{(____)(____)(____)(____)}$

= ND

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	April 18, 2011
LDC Report Date:	August 31, 2011
Matrix:	Soil/Water
Parameters:	Semivolatiles
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE130

Sample Identification

SL-056-SA8N-SS-0.0-0.05
SL-057-SA8N-SS-0.0-0.05
SL-071-SA8N-SS-0.0-0.05
SL-080-SA8N-SS-0.0-0.05
SL-085-SA8N-SS-0.0-0.05
SL-086-SA8N-SS-0.0-0.05
SL-132-SA8N-SS-0.0-0.05
EB05-SA8N-SS-041811
SL-032-SA5A-SB-3.0-4.0
SL-172-SA5A-SB-4.0-5.0
SL-174-SA5A-SB-2.0-3.0
SL-254-SA5A-SB-2.5-3.5
EB13-SA5A-SB-041811

Introduction

This data review covers 11 soil samples and 2 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8270C for Semivolatiles.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 30.0% for all compounds.

In the case where the laboratory used a calibration curve to evaluate the compounds, all coefficients of determination (r^2) were greater than or equal to 0.990 .

Average relative response factors (RRF) for all compounds were within method and validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs) and 25.0% for all other compounds with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
4/27/11	Benzidine	30	SL-086-SA8N-SS-0.0-0.05 SL-132-SA8N-SS-0.0-0.05 SL-032-SA5A-SB-3.0-4.0 SL-172-SA5A-SB-4.0-5.0 SL-174-SA5A-SB-2.0-3.0 SL-254-SA5A-SB-2.5-3.5	J (all detects) UJ (all non-detects)	P

The percent differences (%D) of the second source calibration standard were less than or equal to 25.0% for all compounds.

All of the continuing calibration relative response factors (RRF) were within method and validation criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No semivolatile contaminants were found in the method blanks.

Samples EB05-SA8N-SS-041811 and EB13-SA5A-SB-041811 were identified as equipment blanks. No semivolatile contaminants were found.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

LCS ID (Associated Samples)	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Flag	A or P
112WJLCS/D (All water samples in SDG DE130)	Benzoic acid	-	-	31 (≤30)	J (all detects) UJ (all non-detects)	P

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE130	All compounds reported below the RL.	J (all detects)	A

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was acceptable.

XV. Overall Assessment

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Semivolatiles - Data Qualification Summary - SDG DE130

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE130	SL-086-SA8N-SS-0.0-0.05 SL-132-SA8N-SS-0.0-0.05 SL-032-SA5A-SB-3.0-4.0 SL-172-SA5A-SB-4.0-5.0 SL-174-SA5A-SB-2.0-3.0 SL-254-SA5A-SB-2.5-3.5	Benzidine	J (all detects) UJ (all non-detects)	P	Continuing calibration (%D) (C)
DE130	EB05-SA8N-SS-041811 EB13-SA5A-SB-041811	Benzoic acid	J (all detects) UJ (all non-detects)	P	Laboratory control samples (RPD) (E)
DE130	SL-056-SA8N-SS-0.0-0.05 SL-057-SA8N-SS-0.0-0.05 SL-071-SA8N-SS-0.0-0.05 SL-080-SA8N-SS-0.0-0.05 SL-085-SA8N-SS-0.0-0.05 SL-086-SA8N-SS-0.0-0.05 SL-132-SA8N-SS-0.0-0.05 EB05-SA8N-SS-041811 SL-032-SA5A-SB-3.0-4.0 SL-172-SA5A-SB-4.0-5.0 SL-174-SA5A-SB-2.0-3.0 SL-254-SA5A-SB-2.5-3.5 EB13-SA5A-SB-041811	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and RLs (Z)

Santa Susana Field Laboratory
Semivolatiles - Laboratory Blank Data Qualification Summary - SDG DE130

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Semivolatiles - Field Blank Data Qualification Summary - SDG DE130

No Sample Data Qualified in this SDG

LDC #: 26078B2a **VALIDATION COMPLETENESS WORKSHEET** Date: 8/30/11
SDG #: DE130 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer:
2nd Reviewer:

METHOD: GC/MS Semivolatiles (EPA SW 846 Method 8270C)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 4/18/11
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	A	% RSD ≤ 30, r²
IV.	Continuing calibration/ICV	SW	ICV/CCV ≤ 25
V.	Blanks	A	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	N	client specified
VIII.	Laboratory control samples	SW	LCS/D
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A	
XI.	Target compound identification	A	
XII.	Compound quantitation/RL/LOQ/LODs	A	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	A	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	N	
XVII.	Field blanks	ND	EB-8, 13

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:
soil + water

1 1	SL-056-SA8N-SS-0.0-0.05 S	11 1	SL-174-SA5A-SB-2.0-3.0 S	21	SBLKLA112	31	
2 1	SL-057-SA8N-SS-0.0-0.05	12 1	SL-254-SA5A-SB-2.5-3.5	22 2	SBLKWJ112	32	
3 1	SL-071-SA8N-SS-0.0-0.05	13 2	EB13-SA5A-SB-041811 W	23		33	
4 1	SL-080-SA8N-SS-0.0-0.05	14		24		34	
5 1	SL-085-SA8N-SS-0.0-0.05	15		25		35	
6 1	SL-086-SA8N-SS-0.0-0.05	16		26		36	
7 1	SL-132-SA8N-SS-0.0-0.05	17		27		37	
8 2	EB05-SA8N-SS-041811 W	18		28		38	
9 1	SL-032-SA5A-SB-3.0-4.0 S	19		29		39	
10 1	SL-172-SA5A-SB-4.0-5.0	20		30		40	

LDC #: 26078132a

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer: [illegible]

Method: Semivolatiles (EPA SW 846 Method 8270C)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. GC/MS instrument performance check				
Were the DFTPP performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
III. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Was a curve fit used for evaluation?	✓			
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?	✓			
Were all percent relative standard deviations (%RSD) ≤ 30% and relative response factors (RRF) > 0.05?	✓			
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓			
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Were all percent differences (%D) ≤ 25% and relative response factors (RRF) ≥ 0.05?		✓		
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within QC limits?	✓			
If 2 or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R?			✓	
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?			✓	
VII. Matrix spike/matrix spike duplicate				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.			✓	
Was a MS/MSD analyzed every 20 samples of each matrix?			✓	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			

LDC #: 26078B2a

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer: [illegible]

Validation Area	Yes	No	NA	Findings/Comments
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
X. Internal Standards				
Were internal standard area counts within -50% or +100% of the associated calibration standard?	✓			
Were retention times within ± 30 seconds from the associated calibration standard?	✓			
XI. Target Compound Identification				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?	✓			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	✓			
Were chromatogram peaks verified and accounted for?	✓			
XII. Compound Quantitation				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	✓			
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XIII. Tentatively Identified Compounds				
Were the major ions (> 10 percent relative intensity) in the reference spectrum evaluated in sample spectrum?			✓	
Were relative intensities of the major ions within ± 20% between the sample and the reference spectra?			✓	
Did the raw data indicate that the laboratory performed a library search for all required peaks in the chromatograms (samples and blanks)?			✓	
XIV. Overall Assessment				
System performance was found to be acceptable.	✓			
XV. Overall Assessment of Data				
Overall assessment of data was found to be acceptable.	✓			
XVI. Field Duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XVII. Field Blanks				
Field blanks were identified in this SDG.	✓			
Target compounds were detected in the field blanks.		✓		

VALIDATION FINDINGS WORKSHEET

METHOD: GC/MS BNA (EPA Method 8270)

A. Phenol	P. Bis(2-chloroethoxy)methane	EE. 2,6-Dinitrotoluene	TT. Pentachlorophenol	III. Benzo(a)pyrene
B. Bis (2-chloroethyl) ether	Q. 2,4-Dichlorophenol	FF. 3-Nitroaniline	UU. Phenanthrene	JJJ. Indeno(1,2,3-cd)pyrene
C. 2-Chlorophenol	R. 1,2,4-Trichlorobenzene	GG. Acenaphthene	VV. Anthracene	KKK. Dibenz(a,h)anthracene
D. 1,3-Dichlorobenzene	S. Naphthalene	HH. 2,4-Dinitrophenol	WW. Carbazole	LLL. Benzo(g,h,i)perylene
E. 1,4-Dichlorobenzene	T. 4-Chloroaniline	II. 4-Nitrophenol	XX. Di-n-butylphthalate	MMM. Bis(2-Chloroisopropyl)ether
F. 1,2-Dichlorobenzene	U. Hexachlorobutadiene	JJ. Dibenzofuran	YY. Fluoranthene	NNN. Aniline
G. 2-Methylphenol	V. 4-Chloro-3-methylphenol	KK. 2,4-Dinitrotoluene	ZZ. Pyrene	OOO. N-Nitrosodimethylamine
H. 2,2'-Oxybis(1-chloropropane)	W. 2-Methylnaphthalene	LL. Diethylphthalate	AAA. Butylbenzylphthalate	PPP. Benzoic Acid
I. 4-Methylphenol	X. Hexachlorocyclopentadiene	MM. 4-Chlorophenyl-phenyl ether	BBB. 3,3'-Dichlorobenzidine	QQQ. Benzyl alcohol
J. N-Nitroso-di-n-propylamine	Y. 2,4,6-Trichlorophenol	NN. Fluorene	CCC. Benzo(a)anthracene	RRR. Pyridine
K. Hexachloroethane	Z. 2,4,5-Trichlorophenol	OO. 4-Nitroaniline	DDD. Chrysene	SSS. Benzidine
L. Nitrobenzene	AA. 2-Chloronaphthalene	PP. 4,6-Dinitro-2-methylphenol	EEE. Bis(2-ethylhexyl)phthalate	TTT. 1-Methylnaphthalene
M. Isophorone	BB. 2-Nitroaniline	QQ. N-Nitrosodiphenylamine (1)	FFF. Di-n-octylphthalate	UUU.
N. 2-Nitrophenol	CC. Dimethylphthalate	RR. 4-Bromophenyl-phenylether	GGG. Benzo(b)fluoranthene	VVV.
O. 2,4-Dimethylphenol	DD. Acenaphthylene	SS. Hexachlorobenzene	HHH. Benzo(k)fluoranthene	WWW.

LDC #: 26078B2S

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Page: 1 of 1
Reviewer: FT
2nd Reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270)
Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a continuing calibration standard analyzed at least once every 12 hours of sample analysis for each instrument?
Y N N/A Were percent differences (%D) and relative response factors (RRF) within method criteria for all CCC's and SPCC's ?
Y N N/A Were all %D and RRFs within the validation criteria of ≤25 %D and ≥0.05 RRF ?

#	Date	Standard ID	Compound	Finding %D (Limit: ≤25.0%)	Finding RRF (Limit: ≥0.05)	Associated Samples	Qualifications
	4/27/11 7:44	CCV	SSS	30		all 6, 7, 9 → 12	J/UJ/P (C)

CONCAL.2S

LDC #: 26078B2c

VALIDATION FINDINGS WORKSHEET
Laboratory Control Samples (LCS)

Page: 1 of 1
Reviewer: FT
2nd Reviewer: [illegible]

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a LCS required?

Y N N/A Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?

#	Date	LCS/LCSD ID	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
		112WLCS/D	PPP	( )	( )	31 (30)	All water	J/UJ/P (EL)
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
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				( )	( )	( )		
				( )	( )	( )		

LDC #: 26078132s

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: FT
2nd Reviewer: A

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

RRF = $(A_x)(C_{is})/(A_{is})(C_x)$
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

A_x = Area of compound,
C_x = Concentration of compound,
S = Standard deviation of the RRFs,

A_{is} = Area of associated internal standard
C_{is} = Concentration of internal standard
X = Mean of the RRFs

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Reported RRF (50 std)	Recalculated RRF (50 std)	Reported Average RRF (initial)	Recalculated Average RRF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	4/13/11	Phenol (1st internal standard)	2.681	2.681	2.531	2.531	7	7
			Nitrobenzene ~~Naphthalene~~ (2nd internal standard)	0.733	0.733	0.672	0.672	6	6
			2-Nitroaniline ~~Fluorene~~ (3rd internal standard)	0.341	0.341	0.311	0.311	10	10
			Pentachlorophenol ~~Pentachlorophenol~~ (4th internal standard)	0.174	0.174	0.157	0.157	10	10
			Bis(2-ethylhexyl)phthalate (5th internal standard)	0.733	0.733	0.654	0.654	10	10
			Benzo(a)pyrene (6th internal standard)	1.194	1.194	1.176	1.176	12	12
2	ICAL	4/01/11	Phenol (1st internal standard)	3.124	3.124	3.056	3.056	6	6
			Nitrobenzene ~~Naphthalene~~ (2nd internal standard)	0.556	0.556	0.545	0.545	2	2
			2-Nitroaniline ~~Fluorene~~ (3rd internal standard)	0.437	0.437	0.415	0.415	7	7
			Pentachlorophenol (4th internal standard)	0.158	0.158	0.156	0.156	6	6
			Bis(2-ethylhexyl)phthalate (5th internal standard)	0.747	0.747	0.715	0.715	7	7
			Benzo(a)pyrene (6th internal standard)	1.229	1.229	1.163	1.163	11	11
3			Phenol (1st internal standard)						
			Naphthalene (2nd internal standard)						
			Fluorene (3rd internal standard)						
			Pentachlorophenol (4th internal standard)						
			Bis(2-ethylhexyl)phthalate (5th internal standard)						
			Benzo(a)pyrene (6th internal standard)						

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26078B2s

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Page: 1 of 1
Reviewer: FT
2nd Reviewer: [illegible]

METHOD: GC/MS BNA (EPA SW 846 Method 8270C)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
RRF = $(A_x)(C_{is})/(A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Average RRF (initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
1	ccv	4/27/11	Phenol (1st internal standard)	2.531	2.706	2.706	7	7
		7:44	Nitrobenzene ~~Naphthalene~~ (2nd internal standard)	0.672	0.714	0.714	6	6
			2-Nitrotoluene ~~Fluorene~~ (3rd internal standard)	0.311	0.356	0.356	14	14
			Pentachlorophenol (4th internal standard)	0.157	0.172	0.172	9	9
			Bis(2-ethylhexyl)phthalate (5th internal standard)	0.654	0.715	0.715	9	9
			Benzo(a)pyrene (6th internal standard)	1.176	1.286	1.286	9	9
2	ccv	4/24/11	Phenol (1st internal standard)	3.056	2.819	2.819	8	8
		9:32	Nitrobenzene ~~Naphthalene~~ (2nd internal standard)	0.545	0.565	0.565	4	4
			2-Nitrotoluene ~~Fluorene~~ (3rd internal standard)	0.415	0.428	0.428	3	3
			Pentachlorophenol (4th internal standard)	0.156	0.139	0.139	11	11
			Bis(2-ethylhexyl)phthalate (5th internal standard)	0.715	0.809	0.809	13	13
			Benzo(a)pyrene (6th internal standard)	1.163	1.187	1.187	2	2
3			Phenol (1st internal standard)					
			Naphthalene (2nd internal standard)					
			Fluorene (3rd internal standard)					
			Pentachlorophenol (4th internal standard)					
			Bis(2-ethylhexyl)phthalate (5th internal standard)					
			Benzo(a)pyrene (6th internal standard)					

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26078B2c

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT
2nd reviewer: CA

METHOD: GC/MS Semivolatiles (EPA SW 846 Method 8270)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5	100	80.657	81	81	0
2-Fluorobiphenyl	↓	84.250	84	84	↓
Terphenyl-d14	↓	90.541	91	91	↓
Phenol-d5	200	192.467	96	96	↓
2-Fluorophenol	↓	187.895	94	94	↓
2,4,6-Tribromophenol	↓	216.722	108	108	↓
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5					
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5					
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

LDC #: 2607B2s

VALIDATION FINDINGS WORKSHEET

Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: FT

2nd Reviewer: A

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SC/SA

Where: SSC = Spike concentration
SA = Spike added

RPD = I LCSC - LCSDC I * 2/(LCSC + LCSDC)

LCSC = Laboraotry control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCS/LCSD samples: LCS

Compound	Spike Added (ug/kg)		Spike Concentration (ug/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
Phenol	1666.67	~~1666.67~~ NA	1659.67	NA	100	100				
N-Nitroso-di-n-propylamine			1491.21		89	89				
4-Chloro-3-methylphenol			1676.57		101	101				
Acenaphthene			1613.16		97	97				
Pentachlorophenol			1191.18		71	71				
Pyrene			1655.86		99	99	NA			

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26078B2a

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: FT
2nd reviewer: A

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(V_t)(DF)(2.0)}{(A_{is})(RRF)(V_o)(V_i)(\%S)}$

A_x	=	Area of the characteristic ion (EICP) for the compound to be measured
A_{is}	=	Area of the characteristic ion (EICP) for the specific internal standard
I_s	=	Amount of internal standard added in nanograms (ng)
V_o	=	Volume or weight of sample extract in milliliters (ml) or grams (g).
V_i	=	Volume of extract injected in microliters (ul)
V_t	=	Volume of the concentrated extract in microliters (ul)
Df	=	Dilution Factor.
%S	=	Percent solids, applicable to soil and solid matrices only.
2.0	=	Factor of 2 to account for GPC cleanup

Example:

Sample I.D. #1, EEE:

Conc. = $\frac{(5764)(40)(1000)(\quad)(\quad)}{(581182)(0.654)(30)(0.857)(\quad)}$

= 24 ug/kg

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: April 18, 2011

LDC Report Date: August 31, 2011

Matrix: Soil/Water

Parameters: Semivolatiles

Validation Level: Level IV

Laboratory: Lancaster laboratories

Sample Delivery Group (SDG): DE130

Sample Identification

SL-056-SA8N-SS-0.0-0.05
SL-057-SA8N-SS-0.0-0.05
SL-071-SA8N-SS-0.0-0.05
SL-080-SA8N-SS-0.0-0.05
SL-085-SA8N-SS-0.0-0.05
SL-086-SA8N-SS-0.0-0.05
SL-132-SA8N-SS-0.0-0.05
EB05-SA8N-SS-041811
SL-032-SA5A-SB-3.0-4.0
SL-172-SA5A-SB-4.0-5.0
SL-174-SA5A-SB-2.0-3.0
SL-254-SA5A-SB-2.5-3.5
EB13-SA5A-SB-041811

Introduction

This data review covers 11 soil samples and 2 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Semivolatiles.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 30.0% for all compounds.

In the case where the laboratory used a calibration curve to evaluate the compounds, all coefficients of determination (r^2) were greater than or equal to 0.990 .

Average relative response factors (RRF) for all compounds were within method and validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs) and 25.0% for all other compounds.

The percent differences (%D) of the second source calibration standard were less than or equal to 25.0% for all compounds with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
4/15/11	Di-n-octylphthalate	26	All samples in SDG DE130	J (all detects) UJ (all non-detects)	A
	Benzo(b)fluoranthene	30		J (all detects) UJ (all non-detects)	

All of the continuing calibration relative response factors (RRF) were within method and validation criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No semivolatile contaminants were found in the method blanks.

Samples EB05-SA8N-SS-041811 and EB13-SA5A-SB-041811 were identified as equipment blanks. No semivolatile contaminants were found with the following exceptions:

Equipment Blank ID	Sampling Date	Compound	Concentration	Associated Samples
EB05-SA8N-SS-041811	4/18/11	Butylbenzylphthalate Di-n-butylphthalate Bis(2-ethylhexyl)phthalate Di-n-octylphthalate	0.33 ug/L 0.37 ug/L 0.72 ug/L 0.52 ug/L	SL-056-SA8N-SS-0.0-0.05 SL-057-SA8N-SS-0.0-0.05 SL-071-SA8N-SS-0.0-0.05 SL-080-SA8N-SS-0.0-0.05 SL-085-SA8N-SS-0.0-0.05 SL-086-SA8N-SS-0.0-0.05 SL-132-SA8N-SS-0.0-0.05
EB13-SA5A-SB-041811	4/18/11	Di-n-butylphthalate Bis(2-ethylhexyl)phthalate Naphthalene Di-n-octylphthalate	0.32 ug/L 0.30 ug/L 0.031 ug/L 0.27 ug/L	SL-032-SA5A-SB-3.0-4.0 SL-172-SA5A-SB-4.0-5.0 SL-174-SA5A-SB-2.0-3.0 SL-254-SA5A-SB-2.5-3.5

Sample concentrations were compared to concentrations detected in the field blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated field blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE130	All compounds reported below the RL.	J (all detects)	A

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was acceptable.

XV. Overall Assessment

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Semivolatiles- Data Qualification Summary - SDG DE130

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE130	SL-056-SA8N-SS-0.0-0.05 SL-057-SA8N-SS-0.0-0.05 SL-071-SA8N-SS-0.0-0.05 SL-080-SA8N-SS-0.0-0.05 SL-085-SA8N-SS-0.0-0.05 SL-086-SA8N-SS-0.0-0.05 SL-132-SA8N-SS-0.0-0.05 EB05-SA8N-SS-041811 SL-032-SA5A-SB-3.0-4.0 SL-172-SA5A-SB-4.0-5.0 SL-174-SA5A-SB-2.0-3.0 SL-254-SA5A-SB-2.5-3.5 EB13-SA5A-SB-041811	Di-n-octylphthalate Benzo(b)fluoranthene	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A	Continuing calibration (ICV %D) (C)
DE130	SL-056-SA8N-SS-0.0-0.05 SL-057-SA8N-SS-0.0-0.05 SL-071-SA8N-SS-0.0-0.05 SL-080-SA8N-SS-0.0-0.05 SL-085-SA8N-SS-0.0-0.05 SL-086-SA8N-SS-0.0-0.05 SL-132-SA8N-SS-0.0-0.05 EB05-SA8N-SS-041811 SL-032-SA5A-SB-3.0-4.0 SL-172-SA5A-SB-4.0-5.0 SL-174-SA5A-SB-2.0-3.0 SL-254-SA5A-SB-2.5-3.5 EB13-SA5A-SB-041811	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and RLs (Z)

Santa Susana Field Laboratory
Semivolatiles- Laboratory Blank Data Qualification Summary - SDG DE130

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Semivolatiles- Field Blank Data Qualification Summary - SDG DE130

No Sample Data Qualified in this SDG

LDC #: 26078B2b **VALIDATION COMPLETENESS WORKSHEET** Date: 8/30/11
SDG #: DE130 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC/MS P~~olynuclear Aromatic Hydrocarbons~~ SVOA (EPA SW 846 Method 8270C-SIM)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 4/18/11
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	A	% RSD ≤ 30, r²
IV.	Continuing calibration/ICV	SW	ICV/CCV ≤ 25
V.	Blanks	A	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	N	client specified
VIII.	Laboratory control samples	A	LCS/D
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A	
XI.	Target compound identification	A	
XII.	Compound quantitation/RL/LOQ/LODs	A	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	A	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	N	
XVII.	Field blanks	SW	EB 8, 13

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: SOIL + Water

1	SL-056-SA8N-SS-0.0-0.05	S	11	SL-174-SA5A-SB-2.0-3.0	S	21	SBLKLA116	31	
2	SL-057-SA8N-SS-0.0-0.05		12	SL-254-SA5A-SB-2.5-3.5		22	SBLKWE110	32	
3	SL-071-SA8N-SS-0.0-0.05		13	EB13-SA5A-SB-041811	W	23		33	
4	SL-080-SA8N-SS-0.0-0.05		14			24		34	
5	SL-085-SA8N-SS-0.0-0.05		15			25		35	
6	SL-086-SA8N-SS-0.0-0.05		16			26		36	
7	SL-132-SA8N-SS-0.0-0.05		17			27		37	
8	EB05-SA8N-SS-041811	W	18			28		38	
9	SL-032-SA5A-SB-3.0-4.0	S	19			29		39	
10	SL-172-SA5A-SB-4.0-5.0		20			30		40	

LDC #: 26078B2b

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer: [illegible]

Method: Semivolatiles (EPA SW 846 Method 8270C)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. GC/MS Instrument performance check				
Were the DFTPP performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
III. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Was a curve fit used for evaluation?	✓			
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?	✓			
Were all percent relative standard deviations (%RSD) ≤ 30% and relative response factors (RRF) ≥ 0.05?	✓			
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓			
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Were all percent differences (%D) ≤ 25% and relative response factors (RRF) ≥ 0.05?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.	✓			
VI. Surrogate recoveries				
Were all surrogate %R within QC limits?	✓			
If 2 or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R?			✓	
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?			✓	
VII. Matrix spike/matrix spike duplicate				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.			✓	
Was a MS/MSD analyzed every 20 samples of each matrix?			✓	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
VIII. Laboratory control sample				
Was an LCS analyzed for this SDG?	✓			

LDC #: 26078B2b

VALIDATION FINDINGS CHECKLIST

Reviewer: FT

2nd Reviewer:

Validation Area	Yes	No	NA	Findings/Comments
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
X. Internal standards				
Were internal standard area counts within -50% or +100% of the associated calibration standard?	✓			
Were retention times within ± 30 seconds from the associated calibration standard?	✓			
XI. Target compound identification				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?	✓			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	✓			
Were chromatogram peaks verified and accounted for?	✓			
XII. Compound quantitation and CRQLs				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	✓			
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XIII. Tentatively identified compounds				
Were the major ions (> 10 percent relative intensity) in the reference spectrum evaluated in sample spectrum?			✓	
Were relative intensities of the major ions within ± 20% between the sample and the reference spectra?			✓	
Did the raw data indicate that the laboratory performed a library search for all required peaks in the chromatograms (samples and blanks)?			✓	
XIV. System performance				
System performance was found to be acceptable.	✓			
XV. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XVI. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XVII. Field blanks				
Field blanks were identified in this SDG.	✓			
Target compounds were detected in the field blanks.	✓			

VALIDATION FINDINGS WORKSHEET

METHOD: GC/MS BNA (EPA Method 8270)

A. Phenol	P. Bis(2-chloroethoxy)methane	EE. 2,6-Dinitrotoluene	TT. Pentachlorophenol	III. Benzo(a)pyrene
B. Bis (2-chloroethyl) ether	Q. 2,4-Dichlorophenol	FF. 3-Nitroaniline	UU. Phenanthrene	JJJ. Indeno(1,2,3-cd)pyrene
C. 2-Chlorophenol	R. 1,2,4-Trichlorobenzene	GG. Acenaphthene	VV. Anthracene	KKK. Dibenz(a,h)anthracene
D. 1,3-Dichlorobenzene	S. Naphthalene	HH. 2,4-Dinitrophenol	WW. Carbazole	LLL. Benzo(g,h,i)perylene
E. 1,4-Dichlorobenzene	T. 4-Chloroaniline	II. 4-Nitrophenol	XX. Di-n-butylphthalate	MMM. Bis(2-Chloroisopropyl)ether
F. 1,2-Dichlorobenzene	U. Hexachlorobutadiene	JJ. Dibenzofuran	YY. Fluoranthene	NNN. Aniline
G. 2-Methylphenol	V. 4-Chloro-3-methylphenol	KK. 2,4-Dinitrotoluene	ZZ. Pyrene	OOO. N-Nitrosodimethylamine
H. 2,2'-Oxybis(1-chloropropane)	W. 2-Methylnaphthalene	LL. Diethylphthalate	AAA. Butylbenzylphthalate	PPP. Benzoic Acid
I. 4-Methylphenol	X. Hexachlorocyclopentadiene	MM. 4-Chlorophenyl-phenyl ether	BBB. 3,3'-Dichlorobenzidine	QQQ. Benzyl alcohol
J. N-Nitroso-di-n-propylamine	Y. 2,4,6-Trichlorophenol	NN. Fluorene	CCC. Benzo(a)anthracene	RRR. Pyridine
K. Hexachloroethane	Z. 2,4,5-Trichlorophenol	OO. 4-Nitroaniline	DDD. Chrysene	SSS. Benzidine
L. Nitrobenzene	AA. 2-Chloronaphthalene	PP. 4,6-Dinitro-2-methylphenol	EEE. Bis(2-ethylhexyl)phthalate	TTT. 1-Methylnaphthalene
M. Isophorone	BB. 2-Nitroaniline	QQ. N-Nitrosodiphenylamine (1)	FFF. Di-n-octylphthalate	UUU.
N. 2-Nitrophenol	CC. Dimethylphthalate	RR. 4-Bromophenyl-phenylether	GGG. Benzo(b)fluoranthene	VVV.
O. 2,4-Dimethylphenol	DD. Acenaphthylene	SS. Hexachlorobenzene	HHH. Benzo(k)fluoranthene	WWW.

LDC #: 26078B2b

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Page: 1 of 1
Reviewer: FT
2nd Reviewer: A

METHOD: GC/MS BNA (EPA SW 846 Method 8270)
Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a continuing calibration standard analyzed at least once every 12 hours of sample analysis for each instrument?
Y N N/A Were percent differences (%D) and relative response factors (RRF) within method criteria for all CCC's and SPCC's ?
Y N N/A Were all %D and RRFs within the validation criteria of ≤25 %D and ≥0.05 RRF ?

#	Date	Standard ID	Compound	Finding %D (Limit: ≤25.0%)	Finding RRF (Limit: ≥0.05)	Associated Samples	Qualifications
	4/15/11	ICV	FFF	26		All	J/UJ/A
			GGG	30		↓	↓

CONCAL.2S

LDC #: 26078 B2b

VALIDATION FINDINGS WORKSHEET
Field Blanks

Reviewer: FT
2nd Reviewer: C

METHOD: GC/MS BNA (EPA SW 846 Method 8270)
Y N N/A Were field blanks identified in this SDG?
Y N N/A Were target compounds detected in the field blanks?

Blank units: ug/L **Associated sample units:** ug/L
Sampling date: 4/18/11
Field blank type: (circle one) Field Blank / Rinsate / Other: EB Associated Samples: 1 → 7 (ND)

Compound	Blank ID	Sample Identification								
	8									
AAA	0.33									
XX	0.37									
EEE	0.72									
FFF	0.52									

Blank units: ug/L **Associated sample units:** ug/L
Sampling date: 4/18/11
Field blank type: (circle one) Field Blank / Rinsate / Other: EB Associated Samples: 9 → 12 (ND)

Compound	Blank ID	Sample Identification								
	13									
XX	0.32									
EEE	0.30									
S	0.031									
FFF	0.27									
CRQL										

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
Common contaminants such as the phthalates and TICs noted above that were detected in samples within ten times the associated field blank concentration were qualified as not detected, "U". Other contaminants within five times the field blank concentration were also qualified as not detected, "U".

LDC #: 26078B2b

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: FT
2nd Reviewer: A

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

RRF = $(A_x)(C_{is})/(A_{is})(C_x)$
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

A_x = Area of compound,
C_x = Concentration of compound,
S = Standard deviation of the RRFs,

A_{is} = Area of associated internal standard
C_{is} = Concentration of internal standard
X = Mean of the RRFs

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Reported RRF (| std)	Recalculated RRF (| std)	Reported Average RRF (initial)	Recalculated Average RRF (initial)	Reported %RSD	Recalculated %RSD
1	CCV	4/15/11	~~Phenol (1st internal standard)~~						
			Naphthalene (2nd internal standard) ✓	1.061	1.061	1.029	1.029	4	4
			Fluorene (3rd internal standard) ✓	1.310	1.310	1.260	1.260	7	7
			~~Pentachlorophenol~~ Anthracene (4th internal standard) •	1.119	1.119	1.080	1.080	9	9
			~~Bis(2-ethylhexyl)phthalate~~ Chrysene (5th internal standard)	1.188	1.188	1.146	1.146	4	4
			Benzo(a)pyrene (6th internal standard)	1.092	1.092	1.034	1.034	12	12
2			Phenol (1st internal standard)						
			Naphthalene (2nd internal standard)						
			Fluorene (3rd internal standard)						
			Pentachlorophenol (4th internal standard)						
			Bis(2-ethylhexyl)phthalate (5th internal standard)						
			Benzo(a)pyrene (6th internal standard)						
3			Phenol (1st internal standard)						
			Naphthalene (2nd internal standard)						
			Fluorene (3rd internal standard)						
			Pentachlorophenol (4th internal standard)						
			Bis(2-ethylhexyl)phthalate (5th internal standard)						
			Benzo(a)pyrene (6th internal standard)						

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26078B2b

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: FT
2nd Reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270C)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
RRF = $(A_x)(C_{is})/(A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Average RRF (initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
1	CCV	4/21/11	~~Phenol (1st internal standard)~~					
			Naphthalene (2nd internal standard)	1.029	1.008	1.008	2	2
			Fluorene (3rd internal standard)	1.260	1.262	1.262	0	0
			~~Pentachlorophenol~~ Anthracene (4th internal standard)	1.080	1.113	1.113	3	3
			~~Bis(2-ethylhexyl)phthalate~~ Chrysene (5th internal standard)	1.146	1.121	1.121	2	2
			Benzo(a)pyrene (6th internal standard)	1.034	1.115	1.115	8	8
2	CCV	4/27/11 7:26	~~Phenol (1st internal standard)~~					
			Naphthalene (2nd internal standard)		1.033	1.033	0	0
			Fluorene (3rd internal standard)		1.249	1.249	1	1
			~~Pentachlorophenol~~ Anthracene (4th internal standard)		1.090	1.090	1	1
			~~Bis(2-ethylhexyl)phthalate~~ Chrysene (5th internal standard)		1.170	1.170	2	2
			Benzo(a)pyrene (6th internal standard)		1.081	1.081	5	5
3	CCV	4/27/11 9:21	~~Phenol (1st internal standard)~~					
			Naphthalene (2nd internal standard)		1.024	1.024	0	0
			Fluorene (3rd internal standard)		1.295	1.295	3	3
			~~Pentachlorophenol~~ Anthracene (4th internal standard)		1.169	1.169	8	8
			~~Bis(2-ethylhexyl)phthalate~~ Chrysene (5th internal standard)		1.164	1.164	2	2
			Benzo(a)pyrene (6th internal standard)		1.138	1.138	10	10

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26078 B2b

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Page: 1 of 1
Reviewer: FT
2nd reviewer: A

METHOD: GC/MS Semivolatiles (EPA SW 846 Method 8270)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: 1

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5	1.0	0.943	~~91~~ 94	94	0
2-Fluorobiphenyl	↓	0.845	~~84~~ 85	85	↓
Terphenyl-d14		0.795	~~87~~ 80	80	
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5					
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5					
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

LDC #: 26078B2b

VALIDATION FINDINGS WORKSHEET

Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: FT

2nd Reviewer: [illegible]

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SC/SA

Where: SSC = Spike concentration
SA = Spike added

RPD = I LCSC - LCSDC I * 2/(LCSC + LCSDC)

LCSC = Laboraotry control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCS/LCSD samples: 1160LALCS

Compound	Spike Added (ug/kg)		Spike Concentration (ug/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
Phenol										
N-Nitroso-di-n-propylamine										
4-Chloro-3-methylphenol										
Acenaphthene	33.33	NA	32.21	NA	97	97				
Pentachlorophenol										
Pyrene	33.33	↓	32.26	NA	97	97	NA			

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26078B2b

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: FT
2nd reviewer: A

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(V_t)(DF)(2.0)}{(A_{is})(RRF)(V_o)(V_i)(\%S)}$

A_x	=	Area of the characteristic ion (EICP) for the compound to be measured
A_{is}	=	Area of the characteristic ion (EICP) for the specific internal standard
I_s	=	Amount of internal standard added in nanograms (ng)
V_o	=	Volume or weight of sample extract in milliliters (ml) or grams (g).
V_i	=	Volume of extract injected in microliters (ul)
V_t	=	Volume of the concentrated extract in microliters (ul)
Df	=	Dilution Factor.
%S	=	Percent solids, applicable to soil and solid matrices only.
2.0	=	Factor of 2 to account for GPC cleanup

Example:

Sample I.D. #1, Benzo(b) fluoranthene

Conc. = (3868)(1)(1000)( )( )
(535270)(1.078)(30)(0.857)

= 2.6 ug/kg

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	April 18, 2011
LDC Report Date:	August 31, 2011
Matrix:	Soil/Water
Parameters:	N-Nitrosodimethylamine
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE130

Sample Identification

SL-056-SA8N-SS-0.0-0.05
SL-057-SA8N-SS-0.0-0.05
SL-071-SA8N-SS-0.0-0.05
SL-080-SA8N-SS-0.0-0.05
SL-085-SA8N-SS-0.0-0.05
SL-132-SA8N-SS-0.0-0.05
EB05-SA8N-SS-041811

Introduction

This data review covers 6 soil samples and one water sample listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA Method 1625C for N-Nitrosodimethylamine.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance check is not required for by this method.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 30.0% .

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration all compounds.

The percent differences (%D) of the second source calibration standard were less than or equal to 30.0% for all compounds.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No N-nitrosodimethylamine was found in the method blanks.

Sample EB05-SA8N-SS-041811 was identified as an equipment blank. No N-nitrosodimethylamine was found.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits with the following exceptions:

Sample	Surrogate	%R (Limits)	Compound	Flag	A or P
EB05-SA8N-SS-041811	N-nitrosodimethylamine-d6	171 (50-150)	N-nitrosodimethylamine	J (all detects)	A

VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

LCS ID (Associated Samples)	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Flag	A or P
110WLCS/D (All water samples in SDG DE130)	N-nitrosodimethylamine	60 (70-130)	-	-	J (all detects) UJ (all non-detects)	P

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE130	All compounds reported below the RL.	J (all detects)	A

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was within validation criteria.

XV. Overall Assessment

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
N-Nitrosodimethylamine - Data Qualification Summary - SDG DE130

SDG	Sample	Compound	Flag	A or P	Reason
DE130	EB05-SA8N-SS-041811	N-nitrosodimethylamine	J (all detects)	A	Surrogate spikes (%R) (S)
DE130	EB05-SA8N-SS-041811	N-nitrosodimethylamine	J (all detects) UJ (all non-detects)	P	Laboratory control samples (%R) (L)
DE130	SL-056-SA8N-SS-0.0-0.05 SL-057-SA8N-SS-0.0-0.05 SL-071-SA8N-SS-0.0-0.05 SL-080-SA8N-SS-0.0-0.05 SL-085-SA8N-SS-0.0-0.05 SL-132-SA8N-SS-0.0-0.05 EB05-SA8N-SS-041811	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and RLs (Z)

Santa Susana Field Laboratory
N-Nitrosodimethylamine - Laboratory Blank Data Qualification Summary - SDG DE130

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
N-Nitrosodimethylamine - Field Blank Data Qualification Summary - SDG DE130

No Sample Data Qualified in this SDG

LDC #: 26078B2c

VALIDATION COMPLETENESS WORKSHEET

Level IV

Date: 8/29/11

SDG #: DE130

Page: 1 of 1

Laboratory: Lancaster Laboratories

Reviewer: [illegible]

2nd Reviewer: [illegible]

METHOD: GC/MS N-Nitrosodimethylamine (EPA Method 1625C)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 4/18/11
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	A	% RSD ≤ 30
IV.	Continuing calibration/ICV	A	CCV ≤ 20 ICV ≤ 30
V.	Blanks	A	
VI.	Surrogate spikes	SW	
VII.	Matrix spike/Matrix spike duplicates	N	client specified
VIII.	Laboratory control samples	SW	Lab ID
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A	
XI.	Target compound identification	A	
XII.	Compound quantitation/RL/LOQ/LODs	A	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	A	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	N	
XVII.	Field blanks	ND	EB = 7

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:

soil + water

1	SL-056-SA8N-SS-0.0-0.05 S	11	SBLKLG110	21		31	
2	SL-057-SA8N-SS-0.0-0.05	12	SBLKWF110	22		32	
3	SL-071-SA8N-SS-0.0-0.05	13		23		33	
4	SL-080-SA8N-SS-0.0-0.05	14		24		34	
5	SL-085-SA8N-SS-0.0-0.05	15		25		35	
6	SL-132-SA8N-SS-0.0-0.05	16		26		36	
7	EB05-SA8N-SS-041811 W	17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

LDC #: 26078B2c

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer: A

Method: Semivolatiles (EPA SW 846 Method 8270C)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. GC/MS instrument performance check				
Were the DFTPP performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
III. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	NA		✓	
Was a curve fit used for evaluation?		✓		
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?			✓	
Were all percent relative standard deviations (%RSD) ≤ 30% and relative response factors (RRF) > 0.05?	✓			
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓			
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	NA		✓	
Were all percent differences (%D) ≤ ~~25%~~ 20 and relative response factors (RRF) ≥ 0.05?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate recoveries				
Were all surrogate %R within QC limits?	NA	✓		
If 2 or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R?	✓			
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?			✓	
VII. Matrix spike/matrix spike duplicate				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.			✓	
Was a MS/MSD analyzed every 20 samples of each matrix?			✓	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
VIII. LCS				
Was an LCS analyzed for this SDG?	✓			

LDC #: 26078B2C

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer:

Validation Area	Yes	No	NA	Findings/Comments
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
X. Internal Standards				
Were internal standard area counts within -50% or +100% of the associated calibration standard?	✓			
Were retention times within ± 30 seconds from the associated calibration standard?	✓			
XI. Target Compound Identification				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?			✓	
Did compound spectra meet specified EPA "Functional Guidelines" criteria?			✓	
Were chromatogram peaks verified and accounted for?	✓			
XII. Compound Quantitation				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?			✓	
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XIII. Tentatively Identified Compounds				
Were the major ions (> 10 percent relative intensity) in the reference spectrum evaluated in sample spectrum?			✓	
Were relative intensities of the major ions within ± 20% between the sample and the reference spectra?			✓	
Did the raw data indicate that the laboratory performed a library search for all required peaks in the chromatograms (samples and blanks)?			✓	
XIV. System Performance				
System performance was found to be acceptable.	✓			
XV. Overall Assessment of Data				
Overall assessment of data was found to be acceptable.	✓			
XVI. Field Duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XVII. Field Blanks				
Field blanks were identified in this SDG.	✓			
Target compounds were detected in the field blanks.		✓		

VALIDATION FINDINGS WORKSHEET

METHOD: GC/MS BNA (EPA Method 8270)

A. Phenol	P. Bis(2-chloroethoxy)methane	EE. 2,6-Dinitrotoluene	TT. Pentachlorophenol	III. Benzo(a)pyrene
B. Bis (2-chloroethyl) ether	Q. 2,4-Dichlorophenol	FF. 3-Nitroaniline	UU. Phenanthrene	JJJ. Indeno(1,2,3-cd)pyrene
C. 2-Chlorophenol	R. 1,2,4-Trichlorobenzene	GG. Acenaphthene	VV. Anthracene	KKK. Dibenz(a,h)anthracene
D. 1,3-Dichlorobenzene	S. Naphthalene	HH. 2,4-Dinitrophenol	WW. Carbazole	LLL. Benzo(g,h,i)perylene
E. 1,4-Dichlorobenzene	T. 4-Chloroaniline	II. 4-Nitrophenol	XX. Di-n-butylphthalate	MMM. Bis(2-Chloroisopropyl)ether
F. 1,2-Dichlorobenzene	U. Hexachlorobutadiene	JJ. Dibenzofuran	YY. Fluoranthene	NNN. Aniline
G. 2-Methylphenol	V. 4-Chloro-3-methylphenol	KK. 2,4-Dinitrotoluene	ZZ. Pyrene	OOO. N-Nitrosodimethylamine
H. 2,2'-Oxybis(1-chloropropane)	W. 2-Methylnaphthalene	LL. Diethylphthalate	AAA. Butylbenzylphthalate	PPP. Benzoic Acid
I. 4-Methylphenol	X. Hexachlorocyclopentadiene	MM. 4-Chlorophenyl-phenyl ether	BBB. 3,3'-Dichlorobenzidine	QQQ. Benzyl alcohol
J. N-Nitroso-di-n-propylamine	Y. 2,4,6-Trichlorophenol	NN. Fluorene	CCC. Benzo(a)anthracene	RRR. Pyridine
K. Hexachloroethane	Z. 2,4,5-Trichlorophenol	OO. 4-Nitroaniline	DDD. Chrysene	SSS. Benzidine
L. Nitrobenzene	AA. 2-Chloronaphthalene	PP. 4,6-Dinitro-2-methylphenol	EEE. Bis(2-ethylhexyl)phthalate	TTT. 1-Methylnaphthalene
M. Isophorone	BB. 2-Nitroaniline	QQ. N-Nitrosodiphenylamine (1)	FFF. Di-n-octylphthalate	UUU.
N. 2-Nitrophenol	CC. Dimethylphthalate	RR. 4-Bromophenyl-phenylether	GGG. Benzo(b)fluoranthene	VVV.
O. 2,4-Dimethylphenol	DD. Acenaphthylene	SS. Hexachlorobenzene	HHH. Benzo(k)fluoranthene	WWW.

LDC #: 26078B2C

VALIDATION FINDINGS WORKSHEET
Surrogate Recovery

Page: 1 of 1
Reviewer: FT
2nd Reviewer: A

METHOD: GC/MS BNA (EPA SW 846 Method 8270)
Please see qualification below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were percent recoveries (%R) for surrogates within QC limits?
Y N N/A If 2 or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R?
Y N N/A If any %R was less than 10 percent, was a reanalysis performed to confirm %R?

#	Date	Sample ID	Surrogate	%R (Limits)	Qualifications
		7	*	171 (50-150)	J/A det (s)
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
		* N-Nitrosodimethylamine-d6		( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	

* QC limits are advisory	QC Limits (Soil)	QC Limits (Water)		QC Limits (Soil)	QC Limits (Water)
S1 (NBZ) = Nitrobenzene-d5	23-120	35-114	S5 (2FP)= 2-Fluorophenol	25-121	21-100
S2 (FBP) = 2-Fluorobiphenyl	30-115	43-116	S6 (TBP) = 2,4,6-Tribromophenol	19-122	10-123
S3 (TPH) = Terphenyl-d14	18-137	33-141	S7 (2CP) = 2-Chlorophenol-d4	20-130*	33-110*
S4 (PHL) = Phenol-d5	24-113	10-94	S8 (DCB) = 1,2-Dichlorobenzene-d4	20-130*	16-110*

LDC #: 26078B2C

VALIDATION FINDINGS WORKSHEET
Laboratory Control Samples (LCS)

Page: 1 of 1
Reviewer: FT
2nd Reviewer: C

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".
Y N N/A Was a LCS required?
Y N N/A Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?

#	Date	LCS/LCSD ID	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
		110WLcs/D	*	60 (70-130)	( )	( )	All water	J/UJ/P (L)
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
		N-Nitrosodimethylamine		( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
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				( )	( )	( )		
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				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		

LDC #: 26078 B2C

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: FT
2nd Reviewer: [illegible]

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

RRF = $(A_x)(C_{is})/(A_{is})(C_x)$
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

A_x = Area of compound,
C_x = Concentration of compound,
S = Standard deviation of the RRFs,

A_{is} = Area of associated internal standard
C_{is} = Concentration of internal standard
X = Mean of the RRFs

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Reported RRF (25 std)	Recalculated RRF (25 std)	Reported Average RRF (initial)	Recalculated Average RRF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	4/20/11	~~Phenol (1st internal standard)~~ N-nitrosodimethylamine	1.489	1.489	1.520	1.520	9	9
			Naphthalene (2nd internal standard)						
			Fluorene (3rd internal standard)						
			Pentachlorophenol (4th internal standard)						
			Bis(2-ethylhexyl)phthalate (5th internal standard)						
			Benzo(a)pyrene (6th internal standard)						
2			Phenol (1st internal standard)						
			Naphthalene (2nd internal standard)						
			Fluorene (3rd internal standard)						
			Pentachlorophenol (4th internal standard)						
			Bis(2-ethylhexyl)phthalate (5th internal standard)						
			Benzo(a)pyrene (6th internal standard)						
3			Phenol (1st internal standard)						
			Naphthalene (2nd internal standard)						
			Fluorene (3rd internal standard)						
			Pentachlorophenol (4th internal standard)						
			Bis(2-ethylhexyl)phthalate (5th internal standard)						
			Benzo(a)pyrene (6th internal standard)						

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26078B2C

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Page: 1 of 1
Reviewer: FT
2nd Reviewer: C

METHOD: GC/MS BNA (EPA SW 846 Method 8270C)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
RRF = $(A_x)(C_{is})/(A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Average RRF (initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
1	CCV	4/28/11	N-Nitrosodimethylamine	0.51736	0.53164	0.53164	2.76032	2.76032
		10:34	Naphthalene (2nd internal standard)					
			Fluorene (3rd internal standard)					
	CCV	4/28/11	Pentachlorophenol (4th internal standard)		0.45443	0.45443	12.16301	12.16301
		17:20	Bis(2-ethylhexyl)phthalate (5th internal standard)					
			Benzo(a)pyrene (6th internal standard)					
2	CCV	4/21/11	Phenol (1st internal standard)		0.46929	0.46929	9.29	9.29
		11:28	Naphthalene (2nd internal standard)					
			Fluorene (3rd internal standard)					
	CCV	4/21/11	Pentachlorophenol (4th internal standard)		0.46818	0.46819	9.505	9.505
		13:40	Bis(2-ethylhexyl)phthalate (5th internal standard)					
			Benzo(a)pyrene (6th internal standard)					
3			Phenol (1st internal standard)		0.46648	0.46648	9.83368	9.83368
	CCV	4/28/11	Naphthalene (2nd internal standard)					
		20:23	Fluorene (3rd internal standard)					
			Pentachlorophenol (4th internal standard)					
			Bis(2-ethylhexyl)phthalate (5th internal standard)					
			Benzo(a)pyrene (6th internal standard)					

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26078B2C

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT
2nd reviewer: C

METHOD: GC/MS Semivolatiles (EPA SW 846 Method 8270)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
~~Nitrobenzene-d5~~ N-Nitrosodimethylamine-d6	25	31.104	124	124	0
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
~~1,2-Dichlorobenzene-d4~~					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5					
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5					
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

LDC #: 26078B2C

VALIDATION FINDINGS WORKSHEET

Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: FT

2nd Reviewer: A

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SC/SA

Where: SSC = Spike concentration
SA = Spike added

RPD = I LCSC - LCSDC I * 2/(LCSC + LCSDC)

LCSC = Laboraotry control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCS/LCSD samples: 21 LCS SOIL

Compound	Spike Added (ug/kg)		Spike Concentration (ug/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
Phenol										
N-Nitroso-di-n-propylamine										
4-Chloro-3-methylphenol										
Acenaphthene										
Pentachlorophenol										
Pyrene										
N-Nitrosodimethylamine	833.33	NA	616.11	NA	74	74	NA			

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26078B2C

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: FT
2nd reviewer: A

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

$$\text{Concentration} = \frac{(A_x)(I_s)(V_t)(DF)(2.0)}{(A_{is})(RRF)(V_o)(V_i)(\%S)}$$

A_x	=	Area of the characteristic ion (EICP) for the compound to be measured
A_{is}	=	Area of the characteristic ion (EICP) for the specific internal standard
I_s	=	Amount of internal standard added in nanograms (ng)
V_o	=	Volume or weight of sample extract in milliliters (ml) or grams (g).
V_i	=	Volume of extract injected in microliters (ul)
V_t	=	Volume of the concentrated extract in microliters (ul)
Df	=	Dilution Factor.
%S	=	Percent solids, applicable to soil and solid matrices only.
2.0	=	Factor of 2 to account for GPC cleanup

Example:

Sample I.D. _____ , _____:

Conc. = (_____)(_____)(_____)(_____)(_____)
( )( )( )( )( )

= ND

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	April 18, 2011
LDC Report Date:	August 31, 2011
Matrix:	Soil/Water
Parameters:	Polychlorinated Biphenyls
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE130

Sample Identification

SL-056-SA8N-SS-0.0-0.05
SL-057-SA8N-SS-0.0-0.05
SL-071-SA8N-SS-0.0-0.05
SL-080-SA8N-SS-0.0-0.05
SL-085-SA8N-SS-0.0-0.05
SL-086-SA8N-SS-0.0-0.05
SL-132-SA8N-SS-0.0-0.05
EB05-SA8N-SS-041811
SL-032-SA5A-SB-3.0-4.0
SL-172-SA5A-SB-4.0-5.0
SL-174-SA5A-SB-2.0-3.0
SL-254-SA5A-SB-2.5-3.5
EB13-SA5A-SB-041811
SL-056-SA8N-SS-0.0-0.05MS
SL-056-SA8N-SS-0.0-0.05MSD

Introduction

This data review covers 13 soil samples and 2 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8082 for Polychlorinated Biphenyls.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/ECD Instrument Performance Check

Instrument performance was acceptable unless noted otherwise under initial calibration and continuing calibration sections.

III. Initial Calibration

Initial calibration of multicomponent compounds was performed for the primary (quantitation) column as required by the method.

The percent relative standard deviations (%RSD) were less than or equal to 20.0% for all compounds.

Retention time windows were evaluated and considered technically acceptable.

IV. Continuing Calibration

Continuing calibration was performed at required frequencies.

The percent differences (%D) of calibration factors in continuing standard mixtures were within the 20.0% QC limits with the following exceptions:

Date	Standard	Column	Compound	%D	Associated Samples	Affected Compound	Flag	A or P
4/25/11	CCV	ZBmultiR2	Aroclor-5432	20.4	All water samples in SDG DE130	Aroclor-5432	J (all detects) UJ (all non-detects)	A
4/26/11 (14:17)	CCV	ZBmultiR2	Aroclor-5432	29.8	SL-056-SA8N-SS-0.0-0.05 SL-057-SA8N-SS-0.0-0.05 SL-071-SA8N-SS-0.0-0.05 SL-080-SA8N-SS-0.0-0.05 SL-085-SA8N-SS-0.0-0.05 SL-086-SA8N-SS-0.0-0.05 SL-132-SA8N-SS-0.0-0.05 SL-032-SA5A-SB-3.0-4.0 SL-172-SA5A-SB-4.0-5.0 SL-056-SA8N-SS-0.0-0.05MS SL-056-SA8N-SS-0.0-0.05MSD PBLK07112	Aroclor-5432	J (all detects) UJ (all non-detects)	A
4/26/11 (21:42)	CCV	ZBmultiR2	Aroclor-5432	25.6	SL-174-SA5A-SB-2.0-3.0 SL-254-SA5A-SB-2.5-3.5	Aroclor-5432	J (all detects) UJ (all non-detects)	A

The percent difference (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

Retention times (RT) of all compounds in the calibration standards were within QC limits.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polychlorinated biphenyl contaminants were found in the method blanks.

Samples EB05-SA8N-SS-041811 and EB13-SA5A-SB-041811 were identified as equipment blanks. No polychlorinated biphenyl contaminants were found.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits with the following exceptions:

Sample	Column	Surrogate	%R (Limits)	Compound	Flag	A or P
SL-172-SA5A-SB-4.0-5.0	Not specificed	Decachlorobiphenyl	129 (45-120)	All TCL compounds	J (all detects)	P
SL-174-SA5A-SB-2.0-3.0	Not specificed	Decachlorobiphenyl	132 (45-120)	All TCL compounds	J (all detects)	P
SL-254-SA5A-SB-2.5-3.5	Not specificed	Decachlorobiphenyl	130 (45-120)	All TCL compounds	J (all detects)	P
EB13-SA5A-SB-041811	Not specificed	Decachlorobiphenyl	125 (45-120)	All TCL compounds	J (all detects)	P

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

LCS ID (Associated Samples)	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Associated Compounds	Flag	A or P
LCS/LCSD24111 (All water samples in SDG DE130)	Aroclor-5442	92 (35-84)	96 (35-84)	-	Aroclor-5432 Aroclor-5442 Aroclor-5460	J (all detects) J (all detects) J (all detects)	P

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Florisil Cartridge Check

Florisil cleanup was not required and therefore not performed in this SDG.

XI. GPC Calibration

GPC cleanup was not required and therefore not performed in this SDG.

XII. Target Compound Identification

All target compound identifications were within validation criteria.

XIII. Compound Quantitation and Reported RLs

All compound quantitation and RLs were within validation criteria.

The sample results for detected compounds from the two columns were within 40% relative percent difference (RPD) with the following exceptions:

Sample	Compound	RPD	Flag	A or P
SL-056-SA8N-SS-0.0-0.05	Aroclor-1254	45	J (all detects)	A

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE130	All compounds reported below the RL.	J (all detects)	A

XIV. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XV. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Polychlorinated Biphenyls - Data Qualification Summary - SDG DE130

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE130	SL-056-SA8N-SS-0.0-0.05 SL-057-SA8N-SS-0.0-0.05 SL-071-SA8N-SS-0.0-0.05 SL-080-SA8N-SS-0.0-0.05 SL-085-SA8N-SS-0.0-0.05 SL-086-SA8N-SS-0.0-0.05 SL-132-SA8N-SS-0.0-0.05 EB05-SA8N-SS-041811 SL-032-SA5A-SB-3.0-4.0 SL-172-SA5A-SB-4.0-5.0 SL-174-SA5A-SB-2.0-3.0 SL-254-SA5A-SB-2.5-3.5 EB13-SA5A-SB-041811	Aroclor-5432	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D) (C)
DE130	SL-172-SA5A-SB-4.0-5.0 SL-174-SA5A-SB-2.0-3.0 SL-254-SA5A-SB-2.5-3.5 EB13-SA5A-SB-041811	All TCL compounds	J (all detects)	P	Surrogate spikes (%R) (S)
DE130	EB05-SA8N-SS-041811 EB13-SA5A-SB-041811	Aroclor-5432 Aroclor-5442 Aroclor-5460	J (all detects) J (all detects) J (all detects)	P	Laboratory control samples (%R) (L)
DE130	SL-056-SA8N-SS-0.0-0.05	Aroclor-1254	J (all detects)	A	Compound quantitation and RLs (RPD) (*XIII)
DE130	SL-199-SA5A-SB-2.5-3.5 SL-223-SA5A-SB-4.0-5.0 SL-223-SA5A-SB-8.5-9.5 DUP10-SA5A-QC-032411 SL-226-SA5A-SB-4.0-5.0 SL-225-SA5A-SB-4.0-5.0 SL-224-SA5A-SB-4.0-5.0	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and RLs (Z)

Santa Susana Field Laboratory
Polychlorinated Biphenyls - Laboratory Blank Data Qualification Summary - SDG DE130

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Polychlorinated Biphenyls - Field Blank Data Qualification Summary - SDG DE130

No Sample Data Qualified in this SDG

LDC #: 26078B3b **VALIDATION COMPLETENESS WORKSHEET** Date: 8/30/11
SDG #: DE130 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC Polychlorinated Biphenyls (EPA SW 846 Method 8082)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 4/18/11
II.	GC/ECD Instrument Performance Check	NA	
III.	Initial calibration	A	% RSD ≤ 20
IV.	Continuing calibration/ICV	SW	ICV/CCV ≤ 20
V.	Blanks	A	
VI.	Surrogate spikes	SW	
VII.	Matrix spike/Matrix spike duplicates	A	
VIII.	Laboratory control samples	SW	LCS/D
IX.	Regional quality assurance and quality control	N	
X.	Florisil cartridge check	N	
XI.	GPC Calibration	N	
XII.	Target compound identification	A	
XIII.	Compound quantitation/RL/LOQ/LODs	SW	
XIV.	Overall assessment of data	A	
XV.	Field duplicates	N	
XVI.	Field blanks	NP	EB = 8, 13

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:
SOIL + WATER

1	SL-056-SA8N-SS-0.0-0.05 S	11	SL-174-SA5A-SB-2.0-3.0 S	21	PBLK07112	31	
2	SL-057-SA8N-SS-0.0-0.05	12	SL-254-SA5A-SB-2.5-3.5	22	PBLK24111	32	
3	SL-071-SA8N-SS-0.0-0.05	13	EB13-SA5A-SB-041811 W	23		33	
4	SL-080-SA8N-SS-0.0-0.05	14	#1 MS	24		34	
5	SL-085-SA8N-SS-0.0-0.05	15	#1 MSD	25		35	
6	SL-086-SA8N-SS-0.0-0.05	16		26		36	
7	SL-132-SA8N-SS-0.0-0.05	17		27		37	
8	EB05-SA8N-SS-041811 W	18		28		38	
9	SL-032-SA5A-SB-3.0-4.0 S	19		29		39	
10	SL-172-SA5A-SB-4.0-5.0	20		30		40	

Notes:

LDC #: 26078B3b
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Page: 1 of 2
Reviewer: [illegible]
2nd Reviewer: [illegible]

Method: ✓ GC _____ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation?		✓		
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?			✓	
Were the RT windows properly established?	✓			
IV. Continuing calibration				
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20%.0 or percent recoveries 80-120%?	✓			
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?	✓			
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	

LDC #: 26078B3b
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Reviewer: FJ
2nd Reviewer: [illegible]

Validation Area	Yes	No	NA	Findings/Comments
X. Target compound identification				
Were the retention times of reported detects within the RT windows?	✓			
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XV. Field blanks				
Field blanks were identified in this SDG.	✓			
Target compounds were detected in the field blanks.		✓		

LDC #: 26078B3b

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Page: 1 of 1
Reviewer: FT

METHOD: ✓ GC __ HPLC

2nd Reviewer: A

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".
What type of continuing calibration calculation was performed? ___%D or ___RPD
Y N N/A Were continuing calibration standards analyzed at the required frequencies?
Y N N/A Did the continuing calibration standards meet the %D / RPD validation criteria of ≤20.0%?
Level IV Only
Y N N/A Were the retention times for all calibrated compounds within their respective acceptance windows?

#	Date	Standard ID	Detector/ Column	Compound	%D (Limit ≤ 20.0)	RT (limit)	Associated Samples	Qualifications
	4/25/11	CCV	ZB multi R2	Aroclor 5432	20.4	( )	All water	J/UJ/A (C)
	18:52					( )		qual 5432 only
						( )		
						( )		
	4/26/11	CCV	↓	↓	29.8	( )	PBLK07112, 1→7,	J/UJ/A (C)
	14:17					( )	9, 10, 14, 15	qual 5432 only
						( )		
						( )		
						( )		
	4/26/11	CCV	↓	↓	35.6	( )	11, 12	↓
	21:42					( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		

LDC #: 26078B3b

VALIDATION FINDINDS WORKSHEET
Surrogate Recovery

Reviewer: FT
2nd Reviewer: [illegible]

METHOD: / GC __ HPLC

Are surrogates required by the method? Yes____ or No____.

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were surrogates spiked into all samples and blanks?

Y N N/A Did all surrogate recoveries (%R) meet the QC limits?

#	Sample ID	Detector/ Column	Surrogate Compound	%R (Limits)	Qualifications
	5	NS	O	135 (45-120)	no qual 5 x DL
				( )	
				( )	
	10			129 (45-120)	J/Pdet (S)
				( )	
	11			132 (↓)	↓ ↓
				( )	
	12	↓	↓	130 (45-120)	↓ ↓
				( )	
				( )	
	13	↓	O	125 (45-120)	J/Pdet (S)
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	

	Surrogate Compound		Surrogate Compound		Surrogate Compound		Surrogate Compound		
A	Chlorobenzene (CBZ)	G	Octacosane	M	Benzo(e)Pyrene	S	1-Chloro-3-Nitrobenzene	Y	Tetrachloro-m- xylene
B	4-Bromofluorobenzene (BFB)	H	Ortho-Terphenyl	N	Terphenyl-D14	T	3,4-Dinitrotoluene		
C	a,a,a-Trifluorotoluene	I	Fluorobenzene (FBZ)	O	Decachlorobiphenyl (DCB)	U	Tripentyltin		
D	Bromochlorobenene	J	n-Triacontane	P	1-methylnaphthalene	V	Tri-n-propyltin		
E	1,4-Dichlorobutane	K	Hexacosane	Q	Dichlorophenyl Acetic Acid (DCAA)	W	Tributyl Phosphate		
F	1,4-Difluorobenzene (DFB)	L	Bromobenzene	R	4-Nitrophenol	X	Triphenyl Phosphate		

LDC #: 26078B3h

VALIDATION FINDINGS WORKSHEET
Laboratory Control Samples (LCS)

Reviewer: FT
2nd Reviewer: [illegible]

METHOD: ✓ GC ___ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were a laboratory control samples (LCS) and laboratory control sample duplicate (LCSD) analyzed for each matrix in this SDG?

Y N N/A Were the LCS percent recoveries (%R) and relative percent differences (RPD) within the QC limits?

Level IV/D Only

Y N N/A Was an LCS analyzed every 20 samples for each matrix or whenever a sample extraction was performed?

#	LCS/LCSD ID	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
	LCS/LCSD 24111	Aroclor 5442	92 (35-84)	96 (35-84)	( )	All water	J/Pdet (L)
			( )	( )	( )	qual	(Aroclor 5442 only)
			( )	( )	( )		5432 5460
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
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			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		

LDC #: 26078B36
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Compound Quantitation and Reported CRQLs

Page: 1 of 1
Reviewer: F7
2nd Reviewer: [illegible]

METHOD: ✓ GC ___ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".
Level IV/D Only
Y N N/A Were CRQLs adjusted for sample dilutions, dry weight factors, etc.?
Y N N/A Did the reported results for detected target compounds agree within 10.0% of the recalculated results?

#	Compound Name	% RPD Bet 2 col Finding ≤40	Associated Samples	Qualifications
	AA	45	1	J/A dit *

Comments: See sample calculation verification worksheet for recalculations

COMQUANew.wpd

LDC #: 26078B3h
SDG #: per varies

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC ✓ HPLC ____

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

#	Standard ID	Calibration Date	Compound	Reported CF (200 std)	Recalculated CF (200 std)	Reported Average CF (initial)	Recalculated Average CF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	4/14/11	Aroclor 1260-1 ZBmulti R1	40	40	~~40~~ 39	39	11.0	11.0
	IC20104		ZBmulti R2	179	179	175	175	11.8	11.8
2									
3									
4									

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26078B3h
SDG #: pw cover

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC ✓ HPLC ____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF - CF)/ave. CF
CF = A/C

Where: ave. CF = initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(Ical)/ CCV Conc.	Reported CF/Conc. CCV	Recalculated CF/Conc. CCV	Reported %D	Recalculated %D
1	ccv	4/25/11 18:34	Aroclor 1260 ZBR1	200	206.71	206.71	3.4	3.4
			ZBR2	200	232.57	232.57	16.3	16.3
2	ccv	4/26/11 13:58	Aroclor 1260 ↓	200	218.31	218.31	9.2	9.2
				200	235.98	235.98	18.0	18.0
3	ccv	4/26/11 21:24	↓	200	204.52	204.52	2.3	2.3
				↓	228.15	228.15	14.1	14.1
4								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26078B37
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT
2nd reviewer: [illegible]

METHOD: ✓ GC ___ HPLC

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
		104		Reported	Recalculated	
TCMX	ZB R1	~~1.03995~~	1.06803	103	103	0
PCB	ZB R2	1.04	1.133739	109	109	0

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

LDC #: 26078B3h
SDG #: per cover

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Reviewer: FT
2nd Reviewer: CT

METHOD: ✓ GC __HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

%Recovery = 100 * (SSC - SC)/SA Where SSC = Spiked sample concentration SC = Sample concentration
SA = Spike added
RPD =(((SSCMS - SSCMSD) * 2) / (SSCMS + SSCMSD))*100 MS = Matrix spike MSD = Matrix spike duplicate

MS/MSD samples: 14 + 15

Compound	Spike Added (ug/kg)		Sample Conc. (ug/kg)	Spike Sample Concentration (ug/kg)		Matrix spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	—	MS	MSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)											
Diesel (8015)											
Benzene (8021B)											
Methane (RSK-175)											
2,4-D (8151)											
Dinoseb (8151)											
Naphthalene (8310)											
Anthracene (8310)											
HMX (8330)											
2,4,6-Trinitrotoluene (8330)											
PCB - 1260	16.64	16.64		20.15	19.16	121	121	115	115	5	5

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26078B3b
SDG #: µu cones

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: ✓ GC __HPLC

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100* (SSC-SC)/SA
RPD = | LCS - LCSD | * 2/(LCS + LCSD)

Where: SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory control sample percent recovery
SC = Concentration
LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: LCS

Compound	Spike Added (ug/kg)		Spiked Sample Concentration (ug/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)										
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)										
2,4,6-Trinitrotoluene (8330)										
PCB - 1260	16.67	NA	18.81	NA	113	113	NA			

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26078B3h
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: ✓ GC ___ HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= (A)(Fv)(Df) / (RF)(Vs or Ws)(%S/100)

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound in the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID. #1 Compound Name PCB 1254

Concentration = 2.7902 / (0.857)

= 3.3 ug/kg

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications
	1254-1 = 2159.903564 / 87	(2000) / (60.1)(0.857)(1000)	= 0.8262		
				Arochor 1254-1 = 0.8262	
					= 2.315944
					= 3.165529
					= 3.741602
					= 3.901961
					2.790247

Comments:

SAMPCALew.wpd

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	April 18, 2011
LDC Report Date:	September 2, 2011
Matrix:	Soil/Water
Parameters:	Metals
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE130

Sample Identification

SL-056-SA8N-SS-0.0-0.05
SL-057-SA8N-SS-0.0-0.05
SL-071-SA8N-SS-0.0-0.05
SL-080-SA8N-SS-0.0-0.05
SL-085-SA8N-SS-0.0-0.05
SL-086-SA8N-SS-0.0-0.05
SL-132-SA8N-SS-0.0-0.05
EB05-SA8N-SS-041811
SL-032-SA5A-SB-3.0-4.0
SL-172-SA5A-SB-4.0-5.0
SL-174-SA5A-SB-2.0-3.0
SL-254-SA5A-SB-2.5-3.5
EB13-SA5A-SB-041811

Introduction

This data review covers 11 soil samples and 2 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Methods 6010B, 6020A, 7470A, and 7471A for Metals. The metals analyzed were Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Molybdenum, Mercury, Nickel, Phosphorus, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, and Zirconium.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review (January 2010).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. ICPMS Tune

The mass calibration was within 0.1 AMU and the percent relative standard deviation (%RSD) was less than or equal to 5% .

III. Calibration

An initial calibration was performed.

The frequency and analysis criteria of the initial calibration verification (ICV) and continuing calibration verification (CCV) were met.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No metal contaminants were found in the initial, continuing and preparation blanks with the following exceptions:

Method Blank ID	Analyte	Maximum Concentration	Associated Samples
PB (prep blank)	Boron	15.590 ug/L	All water samples in SDG DE130
ICB/CCB	Copper Lead	0.24 ug/L 0.071 ug/L	All water samples in SDG DE130
ICB/CCB	Copper Lithium Titanium	1.0 ug/L 3.1 ug/L 2.0 ug/L	All soil samples in SDG DE130
PB (prep blank)	Phosphorus Tin Vanadium	1.256 mg/Kg 1.478 mg/Kg 0.053 mg/Kg	All soil samples in SDG DE130
ICB/CCB	Vanadium	0.21 ug/L	SL-056-SA8N-SS-0.0-0.05 SL-057-SA8N-SS-0.0-0.05 SL-071-SA8N-SS-0.0-0.05 SL-080-SA8N-SS-0.0-0.05 SL-085-SA8N-SS-0.0-0.05 SL-086-SA8N-SS-0.0-0.05 SL-132-SA8N-SS-0.0-0.05 SL-032-SA5A-SB-3.0-4.0 SL-172-SA5A-SB-4.0-5.0
ICB/CCB	Vanadium	0.30 ug/L	SL-174-SA5A-SB-2.0-3.0 SL-254-SA5A-SB-2.5-3.5

Data qualification by the initial, continuing and preparation blanks (ICB/CCB/PBs) was based on the maximum contaminant concentration in the ICB/CCB/PBs in the analysis of each analyte. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated method blanks with the following exceptions:

Sample	Analyte	Reported Concentration	Modified Final Concentration
EB05-SA8N-SS-041811	Boron	22.1 ug/L	22.1U ug/L
EB13-SA5A-SB-041811	Boron	15.1 ug/L	15.1U ug/L
SL-056-SA8N-SS-0.0-0.05	Tin	2.7 mg/Kg	2.7U mg/Kg
SL-057-SA8N-SS-0.0-0.05	Tin	2.6 mg/Kg	2.6U mg/Kg
SL-071-SA8N-SS-0.0-0.05	Tin	2.8 mg/Kg	2.8U mg/Kg
SL-080-SA8N-SS-0.0-0.05	Tin	2.5 mg/Kg	2.5U mg/Kg
SL-085-SA8N-SS-0.0-0.05	Tin	2.6 mg/Kg	2.6U mg/Kg
SL-086-SA8N-SS-0.0-0.05	Tin	2.5 mg/Kg	2.5U mg/Kg
SL-132-SA8N-SS-0.0-0.05	Tin	2.6 mg/Kg	2.6U mg/Kg
SL-032-SA5A-SB-3.0-4.0	Tin	3.0 mg/Kg	3.0U mg/Kg
SL-172-SA5A-SB-4.0-5.0	Tin	2.8 mg/Kg	2.8U mg/Kg
SL-174-SA5A-SB-2.0-3.0	Tin	2.9 mg/Kg	2.9U mg/Kg
SL-254-SA5A-SB-2.5-3.5	Tin	3.0 mg/Kg	3.0U mg/Kg

Samples EB05-SA8N-SS-041811 and EB13-SA5A-SB-041811 were identified as equipment blanks. No metal contaminants were found with the following exceptions:

Equipment Blank ID	Sampling Date	Analyte	Concentration	Associated Samples
EB05-SA8N-SS-041811	4/18/11	Boron Calcium	22.1 ug/L 94.9 ug/L	SL-056-SA8N-SS-0.0-0.05 SL-057-SA8N-SS-0.0-0.05 SL-071-SA8N-SS-0.0-0.05 SL-080-SA8N-SS-0.0-0.05 SL-085-SA8N-SS-0.0-0.05 SL-086-SA8N-SS-0.0-0.05 SL-132-SA8N-SS-0.0-0.05

Equipment Blank ID	Sampling Date	Analyte	Concentration	Associated Samples
EB13-SA5A-SB-041811	4/18/11	Boron	15.1 ug/L	SL-032-SA5A-SB-3.0-4.0 SL-172-SA5A-SB-4.0-5.0 SL-174-SA5A-SB-2.0-3.0 SL-254-SA5A-SB-2.5-3.5

Sample concentrations were compared to concentrations detected in the field blanks. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated field blanks with the following exceptions:

Sample	Analyte	Reported Concentration	Modified Final Concentration
SL-056-SA8N-SS-0.0-0.05	Boron	6.5 mg/Kg	6.5U mg/Kg
SL-057-SA8N-SS-0.0-0.05	Boron	8.3 mg/Kg	8.3U mg/Kg
SL-071-SA8N-SS-0.0-0.05	Boron	1.6 mg/Kg	1.6U mg/Kg
SL-080-SA8N-SS-0.0-0.05	Boron	7.0 mg/Kg	7.0U mg/Kg
SL-085-SA8N-SS-0.0-0.05	Boron	2.4 mg/Kg	2.4U mg/Kg
SL-086-SA8N-SS-0.0-0.05	Boron	8.3 mg/Kg	8.3U mg/Kg
SL-132-SA8N-SS-0.0-0.05	Boron	5.0 mg/Kg	5.0U mg/Kg

V. ICP Interference Check Sample (ICS) Analysis

The frequency of analysis was met.

The criteria for analysis were met.

VI. Matrix Spike Analysis

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Analyte	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
SL-148-SA5A-SB-4.0-5.0MS/MSD (All soil samples in SDG DE130)	Antimony Arsenic	51 (75-125) -	41 (75-125) 68 (75-125)	- -	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A
SL-148-SA5A-SB-4.0-5.0MS/MSD (All soil samples in SDG DE130)	Potassium Vanadium	131 (75-125) 130 (75-125)	139 (75-125) -	- -	J (all detects) J (all detects)	A

VII. Duplicate Sample Analysis

Duplicate (DUP) sample analyses were reviewed for each matrix as applicable. Results were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Internal Standards

All internal standard percent recoveries (%R) were within QC limits.

X. Furnace Atomic Absorption QC

Graphite furnace atomic absorption was not utilized in this SDG.

XI. ICP Serial Dilution

ICP serial dilution analysis was performed by the laboratory. The analysis criteria were met with the following exceptions:

Diluted Sample	Analyte	%D (Limits)	Associated Samples	Flag	A or P
SL-148-SA5A-SB-4.0-5.0	Chromium Cobalt Copper Lead Nickel Vanadium	13 (≤10) 14 (≤10) 30 (≤10) 11 (≤10) 11 (≤10) 16 (≤10)	All soil samples in SDG DE130	J (all detects) UJ (all non-detects)	A

XII. Sample Result Verification

All sample result verifications were acceptable.

All metals reported below the RL and above the MDL were qualified as follows:

Sample	Analyte	Flag	A or P
All samples in SDG DE130	All analytes reported below the RL and above the MDL.	J (all detects)	A

XIII. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XIV. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Metals - Data Qualification Summary - SDG DE130

SDG	Sample	Analyte	Flag	A or P	Reason (Code)
DE130	SL-056-SA8N-SS-0.0-0.05 SL-057-SA8N-SS-0.0-0.05 SL-071-SA8N-SS-0.0-0.05 SL-080-SA8N-SS-0.0-0.05 SL-085-SA8N-SS-0.0-0.05 SL-086-SA8N-SS-0.0-0.05 SL-132-SA8N-SS-0.0-0.05 SL-032-SA5A-SB-3.0-4.0 SL-172-SA5A-SB-4.0-5.0 SL-174-SA5A-SB-2.0-3.0 SL-254-SA5A-SB-2.5-3.5	Antimony Arsenic	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicate (%R) (Q)
DE130	SL-056-SA8N-SS-0.0-0.05 SL-057-SA8N-SS-0.0-0.05 SL-071-SA8N-SS-0.0-0.05 SL-080-SA8N-SS-0.0-0.05 SL-085-SA8N-SS-0.0-0.05 SL-086-SA8N-SS-0.0-0.05 SL-132-SA8N-SS-0.0-0.05 SL-032-SA5A-SB-3.0-4.0 SL-172-SA5A-SB-4.0-5.0 SL-174-SA5A-SB-2.0-3.0 SL-254-SA5A-SB-2.5-3.5	Potassium Vanadium	J (all detects) J (all detects)	A	Matrix spike/Matrix spike duplicate (%R) (Q)
DE130	SL-056-SA8N-SS-0.0-0.05 SL-057-SA8N-SS-0.0-0.05 SL-071-SA8N-SS-0.0-0.05 SL-080-SA8N-SS-0.0-0.05 SL-085-SA8N-SS-0.0-0.05 SL-086-SA8N-SS-0.0-0.05 SL-132-SA8N-SS-0.0-0.05 SL-032-SA5A-SB-3.0-4.0 SL-172-SA5A-SB-4.0-5.0 SL-174-SA5A-SB-2.0-3.0 SL-254-SA5A-SB-2.5-3.5	Chromium Cobalt Copper Lead Nickel Vanadium	J (all detects) UJ (all non-detects)	A	ICP serial dilution (%D) (A)
DE130	SL-056-SA8N-SS-0.0-0.05 SL-057-SA8N-SS-0.0-0.05 SL-071-SA8N-SS-0.0-0.05 SL-080-SA8N-SS-0.0-0.05 SL-085-SA8N-SS-0.0-0.05 SL-086-SA8N-SS-0.0-0.05 SL-132-SA8N-SS-0.0-0.05 EB05-SA8N-SS-041811 SL-032-SA5A-SB-3.0-4.0 SL-172-SA5A-SB-4.0-5.0 SL-174-SA5A-SB-2.0-3.0 SL-254-SA5A-SB-2.5-3.5 EB13-SA5A-SB-041811	All analytes reported below the RL and above the MDL.	J (all detects)	A	Sample result verification (Z)

Santa Susana Field Laboratory
Metals - Laboratory Blank Data Qualification Summary - SDG DE130

SDG	Sample	Analyte	Modified Final Concentration	A or P	Code
DE130	EB05-SA8N-SS-041811	Boron	22.1U ug/L	A	B
DE130	EB13-SA5A-SB-041811	Boron	15.1U ug/L	A	B
DE130	SL-056-SA8N-SS-0.0-0.05	Tin	2.7U mg/Kg	A	B
DE130	SL-057-SA8N-SS-0.0-0.05	Tin	2.6U mg/Kg	A	B
DE130	SL-071-SA8N-SS-0.0-0.05	Tin	2.8U mg/Kg	A	B
DE130	SL-080-SA8N-SS-0.0-0.05	Tin	2.5U mg/Kg	A	B
DE130	SL-085-SA8N-SS-0.0-0.05	Tin	2.6U mg/Kg	A	B
DE130	SL-086-SA8N-SS-0.0-0.05	Tin	2.5U mg/Kg	A	B
DE130	SL-132-SA8N-SS-0.0-0.05	Tin	2.6U mg/Kg	A	B
DE130	SL-032-SA5A-SB-3.0-4.0	Tin	3.0U mg/Kg	A	B
DE130	SL-172-SA5A-SB-4.0-5.0	Tin	2.8U mg/Kg	A	B
DE130	SL-174-SA5A-SB-2.0-3.0	Tin	2.9U mg/Kg	A	B
DE130	SL-254-SA5A-SB-2.5-3.5	Tin	3.0U mg/Kg	A	B

Santa Susana Field Laboratory
Metals - Field Blank Data Qualification Summary - SDG DE130

SDG	Sample	Analyte	Modified Final Concentration	A or P	Code
DE130	SL-056-SA8N-SS-0.0-0.05	Boron	6.5U mg/Kg	A	F
DE130	SL-057-SA8N-SS-0.0-0.05	Boron	8.3U mg/Kg	A	F
DE130	SL-071-SA8N-SS-0.0-0.05	Boron	1.6U mg/Kg	A	F
DE130	SL-080-SA8N-SS-0.0-0.05	Boron	7.0U mg/Kg	A	F
DE130	SL-085-SA8N-SS-0.0-0.05	Boron	2.4U mg/Kg	A	F

SDG	Sample	Analyte	Modified Final Concentration	A or P	Code
DE130	SL-086-SA8N-SS-0.0-0.05	Boron	8.3U mg/Kg	A	F
DE130	SL-132-SA8N-SS-0.0-0.05	Boron	5.0U mg/Kg	A	F

LDC #: 26078B4

SDG #: DE130

Laboratory: Lancaster Laboratories

VALIDATION COMPLETENESS WORKSHEET

Level IV

Date: 8/29/11

Page: 1 of 1

Reviewer: CR

2nd Reviewer: ✓

METHOD: Metals (EPA SW 846 Method 6010B/6020A/~~7000~~ 7470A/7471A)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 4/18/11
II.	ICP/MS Tune	A	
III.	Calibration	A	
IV.	Blanks	SW	
V.	ICP Interference Check Sample (ICS) Analysis	SW	
VI.	Matrix Spike Analysis	SW	MS/D (SDG: DE133)
VII.	Duplicate Sample Analysis	A	Dup ✓
VIII.	Laboratory Control Samples (LCS)	A	LCS/D
IX.	Internal Standard (ICP-MS)	A	
X.	Furnace Atomic Absorption QC	N	Not utilized
XI.	ICP Serial Dilution	SW	(SDG: DE133)
XII.	Sample Result Verification	A	
XIII.	Overall Assessment of Data	A	
XIV.	Field Duplicates	N	
XV	Field Blanks	SW	EB = 8, 13

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: Soil/Water

1	SL-056-SA8N-SS-0.0-0.05	11	SL-174-SA5A-SB-2.0-3.0	21		31	
2	SL-057-SA8N-SS-0.0-0.05	12	SL-254-SA5A-SB-2.5-3.5	22		32	
3	SL-071-SA8N-SS-0.0-0.05	13	EB13-SA5A-SB-041811 W	23		33	
4	SL-080-SA8N-SS-0.0-0.05	14		24		34	
5	SL-085-SA8N-SS-0.0-0.05	15		25		35	
6	SL-086-SA8N-SS-0.0-0.05	16		26		36	
7	SL-132-SA8N-SS-0.0-0.05	17		27		37	
8	EB05-SA8N-SS-041811 W	18		28		38	
9	SL-032-SA5A-SB-3.0-4.0	19		29		39	
10	SL-172-SA5A-SB-4.0-5.0	20		30		40	

Notes:

LDC #: 26078B4

VALIDATION FINDINGS CHECKLIST

Reviewer: CR
2nd Reviewer: W

Method: Metals (EPA SW 846 Method 6010B/7000/6020)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. ICP/MS Tune				
Were all isotopes in the tuning solution mass resolution within 0.1 amu?	✓			
Were %RSD of isotopes in the tuning solution ≤5%?	✓			
III. Calibration				
Were all instruments calibrated daily, each set-up time?	✓			
Were the proper number of standards used?	✓			
Were all initial and continuing calibration verification %Rs within the 90-110% (80-120% for mercury) QC limits?	✓			
Were all initial calibration correlation coefficients ≥ 0.995?	✓			
IV. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.	✓			
V. ICP Interference Check Sample				
Were ICP interference check samples performed daily?	✓			
Were the AB solution percent recoveries (%R) with the 80-120% QC limits?	✓			
VI. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and duplicate (DUP) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD or MS/DUP. Soil / Water.	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the 75-125 QC limits? If the sample concentration exceeded the spike concentration by a factor of 4 or more, no action was taken.		✓		
Were the MS/MSD or duplicate relative percent differences (RPD) ≤ 20% for waters and ≤ 35% for soil samples? A control limit of +/- RL(+/-2X RL for soil) was used for samples that were ≤ 5X the RL, including when only one of the duplicate sample values were ≤ 5X the RL.	✓			
VII. Laboratory control samples				
Was an LCS anaylzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the 80-120% QC limits for water samples and laboratory established QC limits for soils?	✓			

DC #: 26078B4

VALIDATION FINDINGS CHECKLIST

Reviewer: AC
2nd Reviewer: [illegible]

Validation Area	Yes	No	NA	Findings/Comments
VIII. Furnace Atomic Absorption QC				
If MSA was performed, was the correlation coefficients > 0.995?			✓	
Do all applicable analysies have duplicate injections? (Level IV only)			✓	
For sample concentrations > RL, are applicable duplicate injection RSD values < 20%? (Level IV only)			✓	
Were analytical spike recoveries within the 85-115% QC limits?			✓	
IX. ICP Serial Dilution				
Was an ICP serial dilution analyzed if analyte concentrations were > 50X the MDL (ICP)/>100X the MDL(ICP/MS)?	✓			
Were all percent differences (%Ds) < 10%?		✓		
Was there evidence of negative interference? If yes, professional judgement will be used to qualify the data.		✓		
X. Internal Standards (EPA SW 846 Method 6020/EPA 200.8)				
Were all the percent recoveries (%R) within the 30-120% (6020)/60-125% (200.8) of the intensity of the internal standard in the associated initial calibration?	✓			
If the %Rs were outside the criteria, was a reanalysis performed?		✓		
XI. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?		✓		
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
XII. Sample Result Verification				
Were RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.	~~✓~~	~~✓~~	✓	
Target analytes were detected in the field duplicates.	~~✓~~	~~✓~~	✓	
XV. Field blanks				
Field blanks were identified in this SDG.	✓	~~✓~~	~~✓~~	
Target analytes were detected in the field blanks.	✓		~~✓~~	

LDC #: 26078B4

VALIDATION FINDINGS WORKSHEET
Sample Specific Element Reference

Reviewer: CR
2nd reviewer:

All circled elements are applicable to each sample.

Sample ID	Matrix	Target Analyte List (TAL)
1-13		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
Analysis Method		
ICP		Al, B, Ca, Fe, Li, Mg, Mn, P, K, Na, Sr, Sn, Ti, Zr
ICP-MS		Sb, As, Ba, Be, Cd, Cr, Co, Cu, Pb, Mo, Ni, Se, Ag, Tl, V, Zn

Comments: Mercury by CVAA if performed

LDC #: 26078B4

VALIDATION FINDINGS WORKSHEET
PB/ICB/CCB QUALIFIED SAMPLES

Page: 1 of 1
Reviewer: CK
2nd Reviewer: [illegible]

METHOD: Trace metals (EPA SW 864 Method 6010B/6020/7000) Soil preparation factor applied: 100x x MS: 2xdil Reason: B

Sample Concentration units, unless otherwise noted: ug/L Associated Samples: All Water

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit	8	13								
B		15.590		77.95	22.1	15.1								
Cu			0.24	1.2										
Pb			0.071	0.355										

Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: All Soil

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit	1	2	3	4	5	6	7	9	10	11	12
Cu			1.0	1											
Li			3.1	1.55											
P	1.256			6.28											
Sn	1.478			7.39	2.7	2.6	2.8	2.5	2.6	2.5	2.6	3.0	2.8	2.9	3.0
Ti			2.0	1											
V	0.053			0.265											

Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: 1-7, 9-10

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit	No Qualifiers									
V			0.21	0.105										

Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: 11, 12

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit	No Qualifiers									
V			0.30	0.15										

Samples with analyte concentrations within five times the associated ICB, CCB or PB concentration are listed above with the identifications from the Validation Completeness Worksheet. These sample results were qualified as not detected, "U".

Note : a - The listed analyte concentration is the highest ICB, CCB, or PB detected in the analysis of each element.

LDC #: 26078B4

VALIDATION FINDINGS WORKSHEET
Field Blanks

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: Trace Metals (EPA SW846 6010B/7000)
Y N N/A Were field blanks identified in this SDG?
Y N N/A Were target analytes detected in the field blanks?
Blank units: ug/L **Associated sample units:** mg/Kg
Sampling date: 4/18/11 Soil factor applied 100x
Field blank type: (circle one) Field Blank / Rinsate / Other: _____ Associated Samples: ~~All Soil~~ Reason Code: F

8: 1-7
13: 9-12

Analyte	Blank ID	Blank ID	Sample Identification											
	8	13	Action Level	1	2	3	4	5	6	7				
B	22.1	15.1	11.05	6.5	8.3	1.6	7.0	2.4	8.3	5.0				
Ca	94.9		47.45											

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
Samples with analyte concentrations within five times the associated field blank concentration are listed above, these sample results were qualified as not detected, "U".

LDC #: 26078B4

VALIDATION FINDINGS WORKSHEET
ICP Interference Check Sample

Reviewer: CR
2nd Reviewer: [illegible]

METHOD: Trace Metals (EPA SW 846 Method 6010/6020/7000)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".
Y N N/A Were ICP interference check samples performed as required?
Y N N/A Were the AB solution percent recoveries (%R) within the control limits of 80-120% ?
LEVEL IV ONLY:
Y N N/A Were recalculated results acceptable? See Level IV Recalculation Worksheet for recalculations.

#	Date	ICS Identification	Analyte	Concentration (ug/L)	Limit (<MDL)	Associated Samples	Qualifications
	4/29/11	ICSA (19:08/19:53)	Mn	4	0.84	All Water	No Qual (<90% ICSA)
	4/28/11	ICSA (9:31/03:42)	Mn	5	0.78	All Soil	No Qual (>10x)

Comments:

LDC #: 26078B4

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Page: 1 of 1
Reviewer: OR
2nd Reviewer: [illegible]

METHOD: Trace metals (EPA SW 846 Method 6010/6020/7000)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a matrix spike analyzed for each matrix in this SDG?

Y N N/A Were matrix spike percent recoveries (%R) within the control limits of 75-125? If the sample concentration exceeded the spike concentration by a factor of 4 or more, no action was taken.

Y N N/A Were all duplicate sample relative percent differences (RPD) ≤ 20% for water samples and ≤35% for soil samples?

LEVEL IV ONLY:

Y N N/A Were recalculated results acceptable? See Level IV Recalculation Worksheet for recalculations.

#	MS/MSD ID	Matrix	Analyte	MS %Recovery	MSD %Recovery	RPD (Limits)	Associated Samples	Qualifications
	SL-148-SA5A-SB3-4.0-5.0		Sb	51	41		All Soil	J/UJ/A (Q)
			As		68			
			K	131	139			J det A
			V	130				

LDC #: 26078B34

VALIDATION FINDINGS WORKSHEET
ICP Serial Dilution

Page: 1 of 1
Reviewer: CR
2nd Reviewer: [illegible]

METHOD: Trace Metals (EPA SW 846 Method 6010/6020/7000)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A If analyte concentrations were > 50X the MDL (ICP) ,or >100X the MDL (ICP/MS), was a serial dilution analyzed?
Y N N/A Were ICP serial dilution percent differences (%D) ≤10%?
Y N N/A Is there evidence of negative interference? If yes, professional judgement will be used to qualify the data.

LEVEL IV ONLY:

Y N N/A Were recalculated results acceptable? See Level IV Recalculation Worksheet for recalculations.

#	Date	Diluted Sample ID	Matrix	Analyte	%D (Limits)	Associated Samples	Qualifications
		SL-148-SA5A-SB40-5.0		Sr	13	All (Soil)	J/UJ/A (A)
				Co	14		
				Cu	30		
				Pb	11		
				Ni	11		
				V	16		

Comments:

SDILICPMS.wpd

LDC #: 26078B4

VALIDATION FINDINGS WORKSHEET
Initial and Continuing Calibration Calculation Verification

Page: 1 of 1
Reviewer: CB
2nd Reviewer: [illegible]

METHOD: Trace Metals (EPA SW 846 Method 6010/6020/7000)

An initial and continuing calibration verification percent recovery (%R) was recalculated for each type of analysis using the following formula:

%R = Found / True x 100 Where, Found = concentration (in ug/L) of each analyte measured in the analysis of the ICV or CCV solution
True = concentration (in ug/L) of each analyte in the ICV or CCV source

Standard ID	Type of Analysis	Element	Found (ug/L)	True (ug/L)	Recalculated %R	Reported %R	Acceptable (Y/N)
ICV	ICP (Initial calibration)	Ti	587.4	600	97.9	97.9	Y
ICV	ICP/MS (Initial calibration)	Co	506.10	500	101.2	101.2	
ICV	CVAA (Initial calibration)	Hg	2.52	2.5	100.8	100.8	
CCV3	ICP (Continuing calibration)	Sn	483.20	500	96.6	96.6	
CCV3	ICP/MS (Continuing calibration)	V	245.80	250	98.3	98.3	
CCV5	CVAA (Continuing calibration)	Hg	1.04	1	104	104	
	GFAA (Initial calibration)						
	GFAA (Continuing calibation)						

Comments: Refer to Calibration Verification findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

CALCLC.4SW

LDC #: 26028B4

VALIDATION FINDINGS WORKSHEET
Level IV Recalculation Worksheet

Page: 1 of 1
Reviewer: CR
2nd Reviewer: [illegible]

METHOD: Trace Metals (EPA SW 846 Method 6010/6020/7000)

Percent recoveries (%R) for an ICP interference check sample, a laboratory control sample and a matrix spike sample were recalculated using the following formula:

$\%R = \frac{Found}{True} \times 100$

Where, Found = Concentration of each analyte measured in the analysis of the sample. For the matrix spike calculation, Found = SSR (spiked sample result) - SR (sample result).
True = Concentration of each analyte in the source.

A sample and duplicate relative percent difference (RPD) was recalculated using the following formula:

$RPD = \frac{|S-D|}{(S+D)/2} \times 100$

Where, S = Original sample concentration
D = Duplicate sample concentration

An ICP serial dilution percent difference (%D) was recalculated using the following formula:

$\%D = \frac{|I-SDR|}{I} \times 100$

Where, I = Initial Sample Result (mg/L)
SDR = Serial Dilution Result (mg/L) (Instrument Reading x 5)

Sample ID	Type of Analysis	Element	Found / S / I (~~units~~) mg/kg	True / D / SDR (~~units~~) mg/kg	Recalculated %R / RPD / %D	Reported %R / RPD / %D	Acceptable (Y/N)
ICSAB	ICP interference check	Zn	21.7 ug/L	20	108.5	108.5	Y
LCS	Laboratory control sample	Zn	1023.5	1000	102	102	
SL-148-SASA-SB40-5.0	Matrix spike	Zn	(SSR-SR) 111.8377	108.8424	103	103	
	Duplicate	V	35.6588	36.1822	1	1	
	ICP serial dilution	Zn	233.9 ug/L	240.15 ug/L	3	3	

Comments: Refer to appropriate worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

TOTCLC.4SW

LDC #: 2596164
26078B41

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 3
Reviewer: CR
2nd reviewer: [illegible]

METHOD: Trace Metals (EPA SW 846 Method 6010/6020/7000)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Have results been reported and calculated correctly?
Y N N/A Are results within the calibrated range of the Instruments and within the linear range of the ICP?
Y N N/A Are all detection limits below the CRDL?

Detected analyte results for Al were recalculated and verified using the following equation:

Concentration = (RD)(FV)(Dil) / (In. Vol.)

RD = Raw data concentration
FV = Final volume (ml)
In. Vol. = Initial volume (ml) or weight (G)
Dil = Dilution factor

Recalculation:

$$\frac{100ml \sim (217.06286 mg/L)}{0.857 (1.02g)} = 24832 mg/kg$$

#	Sample ID	Analyte	Reported Concentration (mg/kg)	Calculated Concentration (mg/kg)	Acceptable (Y/N)
	1	Al	24800	24800	Y
		Sb	0.23	0.23	
		As	6.2	6.2	
		Ba	130	130	
		Be	0.70	0.70	
		B	6.5	6.5	
		Cd	0.28	0.28	
		Ca	35500	35500	
		Cr	30.5	30.5	
		Co	10.3	10.3	
		Cu	16.9	16.9	
		Fe	31600	31600	
		Pb	10.7	10.7	
		Li	28.3	28.3	
		Mg	8120	8120	
		Mn	429	429	
		Hg	0.011	0.011	
		Mo	0.62	0.62	
		Ni	19.1	19.1	
		P	731	731	

Note:

RECALC.4SW

LDC #: 26078B4

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: CR
2nd reviewer: [illegible]

METHOD: Trace Metals (EPA SW 846 Method 6010/6020/7000)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Have results been reported and calculated correctly?
Y N N/A Are results within the calibrated range of the instruments and within the linear range of the ICP?
Y N N/A Are all detection limits below the CRDL?

Detected analyte results for As were recalculated and verified using the following equation:

Concentration = (RD)(FV)(Dil) / (In. Vol.)

RD = Raw data concentration
FV = Final volume (ml)
In. Vol. = Initial volume (ml) or weight (G)
Dil = Dilution factor

Recalculation:

11: $\frac{100mL(25.7mg/L)(2)}{0.8929(1.02g)(1000)} = 5.6 mg/kg$

#	Sample ID	Analyte	Reported Concentration (mg/kg)	Calculated Concentration (mg/kg)	Acceptable (Y/N)
	1	K	6360	6360	Y
		Se	0.79	0.79	
		Ag	0.047	0.047	
		Na	131	131	
		Sr	73.3	73.3	
		Tl	0.31	0.31	
		Sn	2.7	2.7	
		Ti	1300	1300	
		V	57.9	57.9	
		Zn	81.1	81.1	
		Zr	2.6	2.6	
	11	Al	22100	22100	
		Sb	0.16	0.16	
		As	5.6	5.6	
		Ba	119	119	
		Be	0.90	0.90	
		Ca	3710	3710	
		Cr	25.9	25.9	
		Co	7.9	7.9	

Note:

LDC #: ~~2596164~~ 26078B4

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: B of B
Reviewer: CC
2nd reviewer: ✓

METHOD: Trace Metals (EPA SW 846 Method 6010/6020/7000)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Have results been reported and calculated correctly?
Y N N/A Are results within the calibrated range of the instruments and within the linear range of the ICP?
Y N N/A Are all detection limits below the CRDL?

Detected analyte results for _____ were recalculated and verified using the following equation:

Concentration = (RD)(FV)(Dil) / (In. Vol.)

RD = Raw data concentration
FV = Final volume (ml)
In. Vol. = Initial volume (ml) or weight (G)
Dil = Dilution factor

Recalculation: see Previous Page

#	Sample ID	Analyte	Reported Concentration mg/kg	Calculated Concentration mg/kg	Acceptable (Y/N)
	11	Cu	12.8	12.8	✓
		Fe	27900	27900	
		Pb	7.4	7.4	
		Li	28.9	28.9	
		Mg	7270	7270	
		Mn	268	268	
		Hg	0.012	0.012	
		Mo	0.46	0.46	
		Ni	14.4	14.4	
		P	485	485	
		K	3480	3480	
		Se	0.18	0.18	
		Ag	0.017	0.017	
		Na	122	122	
		Sr	22.6	22.6	
		Tl	0.36	0.36	
		Sn	2.9	2.9	
		Ti	1610	1610	
		V	45.2	45.2	
		Zn	75.7	75.7	

Note: _____

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	April 18, 2011
LDC Report Date:	September 2, 2011
Matrix:	Soil/Water
Parameters:	Wet Chemistry
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE130

Sample Identification

SL-056-SA8N-SS-0.0-0.05
SL-057-SA8N-SS-0.0-0.05
SL-071-SA8N-SS-0.0-0.05
SL-080-SA8N-SS-0.0-0.05
SL-085-SA8N-SS-0.0-0.05
SL-086-SA8N-SS-0.0-0.05
SL-132-SA8N-SS-0.0-0.05
EB05-SA8N-SS-041811
SL-032-SA5A-SB-3.0-4.0
SL-172-SA5A-SB-4.0-5.0
SL-174-SA5A-SB-2.0-3.0
SL-254-SA5A-SB-2.5-3.5
EB13-SA5A-SB-041811
SL-056-SA8N-SS-0.0-0.05MS
SL-056-SA8N-SS-0.0-0.05DUP
SL-132-SA8N-SS-0.0-0.05MS
SL-132-SA8N-SS-0.0-0.05DUP

Introduction

This data review covers 15 soil samples and 2 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 9012B for Cyanide, EPA Method 300.0 for Nitrate and Fluoride, EPA SW 846 Method 7199 for Hexavalent Chromium, and EPA Method 314.0 for Perchlorate.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review (January 2010).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

All criteria for the initial calibration of each method were met.

III. Calibration Verification

Calibration verification frequency and analysis criteria were met for each method when applicable.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No contaminant concentrations were found in the initial, continuing and preparation blanks.

Sample EB05-SA8N-SS-041811 and EB13-SA5A-SB-041811 were identified as equipment blanks. No contaminant concentrations were found.

V. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) analyses were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Analyte	%R (Limits)	Flag	A or P
SL-056-SA8N-SS-0.0-0.05MS (SL-056-SA8N-SS-0.0-0.05 SL-057-SA8N-SS-0.0-0.05 SL-071-SA8N-SS-0.0-0.05 SL-080-SA8N-SS-0.0-0.05 SL-085-SA8N-SS-0.0-0.05 SL-086-SA8N-SS-0.0-0.05 SL-132-SA8N-SS-0.0-0.05 SL-032-SA5A-SB-3.0-4.0 SL-172-SA5A-SB-4.0-5.0 SL-174-SA5A-SB-2.0-3.0)	Fluoride	75 (80-120)	J (all detects) UJ (all non-detects)	A
SL-254-SA5A-SB-2.5-3.5MS (SL-254-SA5A-SB-2.5-3.5)	Fluoride	36 (80-120)	J (all detects) UJ (all non-detects)	A

VI. Duplicates

Duplicate (DUP) sample analyses were reviewed for each matrix as applicable. Results were within QC limits.

VII. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Sample Result Verification

All sample result verifications were acceptable

All analytes reported below the RL were qualified as follows:

Sample	Analyte	Flag	A or P
All samples in SDG DE130	All analytes reported below the RL and above the MDL.	J (all detects)	A

IX. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

X. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Wet Chemistry - Data Qualification Summary - SDG DE130

SDG	Sample	Analyte	Flag	A or P	Reason (Code)
DE130	SL-056-SA8N-SS-0.0-0.05 SL-057-SA8N-SS-0.0-0.05 SL-071-SA8N-SS-0.0-0.05 SL-080-SA8N-SS-0.0-0.05 SL-085-SA8N-SS-0.0-0.05 SL-086-SA8N-SS-0.0-0.05 SL-132-SA8N-SS-0.0-0.05 SL-032-SA5A-SB-3.0-4.0 SL-172-SA5A-SB-4.0-5.0 SL-174-SA5A-SB-2.0-3.0 SL-254-SA5A-SB-2.5-3.5	Fluoride	J (all detects) UJ (all non-detects)	A	Matrix spike analysis (%R) (Q)
DE130	SL-056-SA8N-SS-0.0-0.05 SL-057-SA8N-SS-0.0-0.05 SL-071-SA8N-SS-0.0-0.05 SL-080-SA8N-SS-0.0-0.05 SL-085-SA8N-SS-0.0-0.05 SL-086-SA8N-SS-0.0-0.05 SL-132-SA8N-SS-0.0-0.05 EB05-SA8N-SS-041811 SL-032-SA5A-SB-3.0-4.0 SL-172-SA5A-SB-4.0-5.0 SL-174-SA5A-SB-2.0-3.0 SL-254-SA5A-SB-2.5-3.5 EB13-SA5A-SB-041811	All analytes reported below the RL and above the MDL.	J (all detects)	A	Sample result verification (Z)

Santa Susana Field Laboratory
Wet Chemistry – Laboratory Blank Data Qualification Summary - SDG DE130

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Wet Chemistry - Field Blank Data Qualification Summary - SDG DE130

No Sample Data Qualified in this SDG

LDC #: 26078B6 **VALIDATION COMPLETENESS WORKSHEET** Date: 8-29-11

SDG #: DE130 Level IV Page: 1 of 1

Laboratory: Lancaster Laboratories Reviewer: [illegible]

2nd Reviewer: [illegible]

METHOD: (Analyte) Cyanide (EPA SW846 Method 9012B), Nitrate-~~N~~, Fluoride (EPA Method 300.0), Hexavalent Chromium (EPA SW846 Method 7199), ~~pH (EPA Method 150.1/EPA SW846 Method 9045C)~~, Perchlorate (EPA Method 314.0)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 4/18/11
IIa.	Initial calibration	A	
IIb.	Calibration verification	A	
III.	Blanks	A	
IV	Matrix Spike/Matrix Spike Duplicates	SW	MS
V	Duplicates	A	DUP
VI.	Laboratory control samples	A	LCS/D
VII.	Sample result verification	A	
VIII.	Overall assessment of data	A	
IX.	Field duplicates	N	
X.	Field blanks	ND	EB-8, B

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: soil / water

1	SL-056-SA8N-SS-0.0-0.05	11	SL-174-SA5A-SB-2.0-3.0	21		31	
2	SL-057-SA8N-SS-0.0-0.05	12	SL-254-SA5A-SB-2.5-3.5	22		32	
3	SL-071-SA8N-SS-0.0-0.05	13	EB13-SA5A-SB-041811 W	23		33	
4	SL-080-SA8N-SS-0.0-0.05	14	(#1) MS	24		34	
5	SL-085-SA8N-SS-0.0-0.05	15	DUP	25		35	
6	SL-086-SA8N-SS-0.0-0.05	16	(#7) MS	26		36	
7	SL-132-SA8N-SS-0.0-0.05	17	DUP	27		37	
8	EB05-SA8N-SS-041811 W	18	(#12) MS	28		38	
9	SL-032-SA5A-SB-3.0-4.0	19		29		39	
10	SL-172-SA5A-SB-4.0-5.0	20		30		40	

Notes:

.DC #: 26018136

VALIDATION FINDINGS CHECKLIST

Page: 1 of 2
Reviewer: CC
2nd Reviewer: ✓

Method: Inorganics (EPA Method See cover)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Calibration				
Were all instruments calibrated daily, each set-up time?	✓			
Were the proper number of standards used?	✓			
Were all initial calibration correlation coefficients > 0.995?	✓			
Were all initial and continuing calibration verification %Rs within the 90-110% QC limits?	✓			
Were titrant checks performed as required? (Level IV only)			✓	
Were balance checks performed as required? (Level IV only)			✓	
III. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
IV. Matrix spike/Matrix spike duplicates and Duplicates				
Were a matrix spike (MS) and duplicate (DUP) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD or MS/DUP. Soil / Water.	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the 75-125 QC limits? If the sample concentration exceeded the spike concentration by a factor of 4 or more, no action was taken.		✓		
Were the MS/MSD or duplicate relative percent differences (RPD) ≤ 20% for waters and ≤ 35% for soil samples? A control limit of ≤ CRDL(≤ 2X CRDL for soil) was used for samples that were ≤ 5X the CRDL, including when only one of the duplicate sample values were ≤ 5X the CRDL.	✓			
V. Laboratory control samples				
Was an LCS anaylzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the 80-120% (85-115% for Method 300.0) QC limits?	✓			
VI. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?		✓		
Were the performance evaluation (PE) samples within the acceptance limits?			✓	

LDC #: 26078B36

VALIDATION FINDINGS CHECKLIST

Reviewer: CR
2nd Reviewer: [illegible]

Validation Area	Yes	No	NA	Findings/Comments
VII. Sample Result Verification				
Were RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
Were detection limits < RL?	✓			
VIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
IX. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target analytes were detected in the field duplicates.			✓	
X. Field blanks				
Field blanks were identified in this SDG.	✓	✓		
Target analytes were detected in the field blanks.				

DC #: 2607886

VALIDATION FINDINGS WORKSHEET
Sample Specific Analysis Reference

Reviewer: CR
2nd reviewer: L

All circled methods are applicable to each sample.

Sample ID	Matrix	Parameter
1-5,7,8		pH TDS Cl (F) (NO3) NO2 SO4 PO4 ALK (CN-) NH3 TKN TOC (CR6+) (ClO4)
6,9-13		pH TDS Cl (F) NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC (CR6+) (ClO4)
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
QC: 14,15		pH TDS Cl (F) (NO3) NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ (ClO4)
16,17		pH TDS Cl F NO3 NO2 SO4 PO4 ALK (CN-) NH3 TKN TOC CR6+ ClO4
18		pH TDS Cl (F) NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4

Comments:

LDC #: 26078B6

VALIDATION FINDINGS WORKSHEET
Matrix Spike Analysis

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: Inorganics, Method Secon

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a matrix spike analyzed for each matrix in this SDG?

Y N N/A Were matrix spike percent recoveries (%R) within the control limits of 75-125 (85-115% for Method 300.0)? If the sample concentration exceeded the spike concentration by a factor of 4 or more, no action was taken.

LEVEL IV ONLY:

Y N N/A Were recalculated results acceptable? See Level IV Recalculation Worksheet for recalculations.

#	Date	Matrix Spike ID	Matrix	Analyte	%R	Associated Samples	Qualifications
		14	S	F	75 (80-120)	1-7, 9-11	J/UJ/A (Q)
		18	S	F	36 (80-120)	12	+ (Q)

Comments:

LDC #: 26078B6

Validation Findings Worksheet
Initial and Continuing Calibration Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: ____

Method: Inorganics, Method See Cover

The correlation coefficient (r) for the calibration of ClO4 was recalculated. Calibration date: 3/28/11

An initial or continuing calibration verification percent recovery (%R) was recalculated for each type of analysis using the following formula:

%R = Found X 100 / True

Where, Found = concentration of each analyte measured in the analysis of the ICV or CCV solution
True = concentration of each analyte in the ICV or CCV source

Type of analysis	Analyte	Standard	Conc. (ug/L)	Response	Recalculated r or r^2	Reported r or r^2	Acceptable (Y/N)
Initial calibration	ClO4	s1	2	0.004	1.000	1.000	Y
		s2	4	0.01			
		s3	10	0.025			
		s4	25	0.072			
		s5	100	0.292			
Calibration verification	CN	CCV	0.15	0.16320	109	109	
Calibration verification	NO3		1.5	1.4736	98	98	
Calibration verification	F			1.4850	99	99	

Comments: Refer to Calibration Verification findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 20070D0

VALIDATION FINDINGS WORKSHEET
Level IV Recalculation Worksheet

Page: 1 of 1
Reviewer: QR
2nd Reviewer: [illegible]

METHOD: Inorganics, Method See cover

Percent recoveries (%R) for a laboratory control sample and a matrix spike sample were recalculated using the following formula:

$\%R = \frac{Found}{True} \times 100$ Where, Found = concentration of each analyte measured in the analysis of the sample. For the matrix spike calculation, Found = SSR (spiked sample result) - SR (sample result).
True = concentration of each analyte in the source.

A sample and duplicate relative percent difference (RPD) was recalculated using the following formula:

$RPD = \frac{|S-D|}{(S+D)/2} \times 100$ Where, S = Original sample concentration
D = Duplicate sample concentration

Sample ID	Type of Analysis	Element	Found / S (units)	True / O (units)	Recalculated %R / RPD	Reported %R / RPD	Acceptable (Y/N)
LCS	Laboratory control sample	Cd	22.4	25	90	~~0~~	Y
16	Matrix spike sample	CN	(SSR-SR) 5.3	4.95	107	108	↓
15	Duplicate sample	NO3	3.1	2.8	10	9	↓

Comments: Refer to appropriate worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

TOTCLC.6

LDC #: 26078B6

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: CR
2nd reviewer: ✓

METHOD: Inorganics, Method See cover

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Have results been reported and calculated correctly?
Y N N/A Are results within the calibrated range of the instruments?
Y N N/A Are all detection limits below the CRQL?

Compound (analyte) results for NO_3 / Cr^{6+} reported with a positive detect were recalculated and verified using the following equation:

Concentration =

NO_3: $y = 0.7008x - 0.0140$

Recalculation:

1: $NO_3 = \frac{\left(\frac{0.202 + 0.0140}{0.7008}\right)(50\,mL)}{5g(0.857)} = 3.6\,mg/kg$

Cr^{6+}: $y = Area(82.818) + 0.687$

3: $Cr^{6+} = \frac{(0.1112(82.818) + 0.687)}{24.60g\,(0.854)} = 0.47\,mg/kg$

#	Sample ID	Analyte	Reported Concentration (mg/kg)	Calculated Concentration (mg/kg)	Acceptable (Y/N)
.857	1	F	2.1	2.1	✓
		NO_3	3.6	3.6	
.854	3	F	1.7	1.7	
		NO_3	3.4	3.4	
		Cr^{6+}	0.48	0.47	
		CN	0.23	0.23	✓

Note:

RECALC.6

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	April 18, 2011
LDC Report Date:	August 31, 2011
Matrix:	Water
Parameters:	Total Petroleum Hydrocarbons as Gasoline
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE130

Sample Identification

TB-041811

Introduction

This data review covers one water sample listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8015B for Total Petroleum Hydrocarbons (TPH) as Gasoline.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0% .

III. Calibration Verification

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 20.0% QC limits.

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No total petroleum hydrocarbons as gasoline contaminants were found in the method blanks.

Sample TB-041811 was identified as a trip blank. No total petroleum hydrocarbons as gasoline contaminants were found.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VI. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VII. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE130	All compounds reported below the RL.	J (all detects)	A

X. System Performance

The system performance was acceptable.

XI. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XII. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Total Petroleum Hydrocarbons as Gasoline - Data Qualification Summary - SDG DE130

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE130	TB-041811	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
Total Petroleum Hydrocarbons as Gasoline - Laboratory Blank Data Qualification Summary - SDG DE130

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Total Petroleum Hydrocarbons as Gasoline - Field Blank Data Qualification Summary - SDG DE130

No Sample Data Qualified in this SDG

LDC #: 26078B7 **VALIDATION COMPLETENESS WORKSHEET** Date: 8/29/11

SDG #: DE130 Level IV Page: 1 of 1

Laboratory: Lancaster Laboratories Reviewer: EZ

2nd Reviewer: [illegible]

METHOD: GC TPH as Gasoline (EPA SW 846 Method 8015B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 4/18/11
II	Initial calibration	A	% RSD ≤ 20
III.	Calibration verification/ICV	A	IW/CW ≤ 20
IV.	Blanks	A	
V	Surrogate recovery	A	
VI.	Matrix spike/Matrix spike duplicates	N	QC sample
VII.	Laboratory control samples	A	LCS/D
VIII.	Target compound identification	A	
IX.	Compound quantitation/RL/LOQ/LODs	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	N	
XIII.	Field blanks	ND	FB = 1

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:

water

1	TB-041811	11	BLK84	21		31	
2		12		22		32	
3		13		23		33	
4		14		24		34	
5		15		25		35	
6		16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

LDC #: 24078B7
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Page: 1 of 2
Reviewer: FT
2nd Reviewer: C

Method: ✓ GC _____ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation?		✓		
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?			✓	
Were the RT windows properly established?	✓			
IV. Continuing calibration				
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20%.0 or percent recoveries 80-120%?	✓			
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.			✓	
Was a MS/MSD analyzed every 20 samples of each matrix?			✓	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	

LDC #: 26078B7
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Reviewer: FJ
2nd Reviewer: CA

Validation Area	Yes	No	NA	Findings/Comments
X. Target compound identification				
Were the retention times of reported detects within the RT windows?	✓			
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XV. Field blanks				
Field blanks were identified in this SDG.	✓			
Target compounds were detected in the field blanks.		✓		

LDC #: 26078J
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC ✓ HPLC_____

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

#	Standard ID	Calibration Date	Compound	Reported CF (1100 std)	Recalculated CF (1100 std)	Reported Average CF (Initial)	Recalculated Average CF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL	5/14/10	GRO	8549	8549	8050	8050	5.2	5.2
2									
3									
4									

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26078B7
SDG #: per cover

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: EJ
2nd Reviewer: A

METHOD: GC ✓ HPLC ____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF - CF)/ave. CF
CF = A/C

Where: ave. CF = initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(Ical)/ CCV Conc.	Reported CF/Conc. CCV	Recalculated CF/Conc. CCV	Reported %D	Recalculated %D
1	CCV	4/26/11 22:12	GRO	550.00	543.30	543.30	1.2	1.2
2								
3								
4								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26078B1
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT
2nd reviewer: CA

METHOD: ✓ GC ___ HPLC

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
Trifluorotoluene - F	NS	30	21.7101	72	72	0

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

LDC #: 26078B7
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: ✓ GC ___ HPLC

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100* (SSC-SC)/SA
RPD = | LCS - LCSD | * 2/(LCS + LCSD)

Where: SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory control sample percent recovery
SC = Concentration
LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: lcs ID

Compound	Spike Added (ug/L)		Spiked Sample Concentration (ug/L)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)	1100	1100	1200	1200	109	109	109	109	0	0
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)										
2,4,6-Trinitrotoluene (8330)										

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26078B7
SDG #: pu [illegible]

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: ✓ GC ___ HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= (A)(Fv)(Df) / (RF)(Vs or Ws)(%S/100)

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound in the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID._____ Compound Name _____

Concentration = _____

ND

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications

Comments: _____

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Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	April 18, 2011
LDC Report Date:	August 31, 2011
Matrix:	Soil/Water
Parameters:	Total Petroleum Hydrocarbons as Extractables
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE130

Sample Identification

SL-056-SA8N-SS-0.0-0.05
SL-057-SA8N-SS-0.0-0.05
SL-071-SA8N-SS-0.0-0.05
SL-080-SA8N-SS-0.0-0.05
SL-085-SA8N-SS-0.0-0.05
SL-132-SA8N-SS-0.0-0.05
EB05-SA8N-SS-041811

Introduction

This data review covers 6 soil samples and one water sample listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8015B for Total Petroleum Hydrocarbons (TPH) as Extractables.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0% .

III. Calibration Verification

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 20.0% QC limits.

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No total petroleum hydrocarbons as extractable contaminants were found in the method blanks.

Sample EB05-SA8N-SS-041811 was identified as an equipment blank. No total petroleum hydrocarbons as extractable contaminants were found.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VI. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VII. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE130	All compounds reported below the RL.	J (all detects)	A

X. System Performance

The system performance was acceptable.

XI. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XII. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Total Petroleum Hydrocarbons as Extractables - Data Qualification Summary - SDG DE130

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE130	SL-056-SA8N-SS-0.0-0.05 SL-057-SA8N-SS-0.0-0.05 SL-071-SA8N-SS-0.0-0.05 SL-080-SA8N-SS-0.0-0.05 SL-085-SA8N-SS-0.0-0.05 SL-132-SA8N-SS-0.0-0.05 EB05-SA8N-SS-041811	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and RLs (Z)

Santa Susana Field Laboratory
Total Petroleum Hydrocarbons as Extractables - Laboratory Blank Data Qualification Summary - SDG DE130

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Total Petroleum Hydrocarbons as Extractables - Field Blank Data Qualification Summary - SDG DE130

No Sample Data Qualified in this SDG

LDC #: 26078B8 **VALIDATION COMPLETENESS WORKSHEET** Date: 8/30/11

SDG #: DE130 Level IV Page: 1 of 1

Laboratory: Lancaster Laboratories Reviewer: [illegible]

2nd Reviewer: [illegible]

METHOD: GC TPH as Extractables (EPA SW 846 Method 8015B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 4/18/11
II	Initial calibration	A	% RSD ≤ 20
III.	Calibration verification/ICV	A	ICV/CCV ≤ 20
IV.	Blanks	A	
V	Surrogate recovery	A	
VI.	Matrix spike/Matrix spike duplicates	N	client specified
VII.	Laboratory control samples	A	LCS ID
VIII.	Target compound identification	A	
IX.	Compound quantitation/RL/LOQ/LODs	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	N	
XIII.	Field blanks	NP	EB = 7

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: soil + water

1 1	SL-056-SA8N-SS-0.0-0.05	11 1	PBLK16111	21		31	
2 1	SL-057-SA8N-SS-0.0-0.05	12 2	PBLK43110	22		32	
3 1	SL-071-SA8N-SS-0.0-0.05	13		23		33	
4 1	SL-080-SA8N-SS-0.0-0.05	14		24		34	
5 1	SL-085-SA8N-SS-0.0-0.05	15		25		35	
6 1	SL-132-SA8N-SS-0.0-0.05	16		26		36	
7 2	EB05-SA8N-SS-041811	17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

LDC #: 26078 BK
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Page: 1 of 2
Reviewer: [illegible]
2nd Reviewer: [illegible]

Method: ✓ GC _____ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation?		✓		
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?			✓	
Were the RT windows properly established?	✓			
IV. Continuing calibration				
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20%.0 or percent recoveries 80-120%?	✓			
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.			✓	
Was a MS/MSD analyzed every 20 samples of each matrix?			✓	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	

LDC #: 2607888
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Reviewer: FJ
2nd Reviewer: C

Validation Area	Yes	No	NA	Findings/Comments
X. Target compound identification				
Were the retention times of reported detects within the RT windows?	✓			
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XV. Field blanks				
Field blanks were identified in this SDG.	✓			
Target compounds were detected in the field blanks.		✓		

LDC #: 26078B8
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC ✓ HPLC ____

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

#	Standard ID	Calibration Date	Compound	Reported CF (2nd std)	Recalculated CF (2nd std)	Reported Average CF (initial)	Recalculated Average CF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	4/19/11	ex-c40	2091344	2091344	21026.71	21026.71	1.8	1.8
2									
3									
4									

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26028B8 8
SDG #: per cover

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: EJ
2nd Reviewer: C

METHOD: GC ✓ HPLC ____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF - CF)/ave. CF
CF = A/C

Where: ave. CF = Initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(Ical)/ CCV Conc.	Reported CF/Conc. CCV	Recalculated CF/Conc. CCV	Reported %D	Recalculated %D
1	CCV	4/26/11 5:30	C8-C40	575.96	626.90	626.90	8.8	8.8
2	CCV	4/27/11 10:04	C8-C40	287.98	302.34	302.34	5.0	5.0
3	CCV	4/29/11 6:50	C8-C40	143.99	150.33	150.33	4.4	4.4
4								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26078B8

SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT

2nd reviewer: [illegible]

METHOD: ✓ GC ___ HPLC

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
chlorobenzene	NS	0.99	0.719567	73	73	0
o-Terphenyl	L	0.99	0.9334	94	94	0

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

LDC #: 26078B8
SDG #: µ covers

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: ✓ GC ___ HPLC

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100* (SSC-SC)/SA
RPD = | LCS - LCSD | * 2/(LCS + LCSD)

Where: SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory control sample percent recovery
SC = Concentration
LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: LCS1611

Compound	Spike Added (mg/kg)		Spiked Sample Concentration (mg/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)										
~~Diesel (8015)~~ EPH (C8-C)	0.84	NA	0.66	NA	79	79	NA			
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)										
2,4,6-Trinitrotoluene (8330)										

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26078B8
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: ✓ GC ___ HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= (A)(Fv)(Df) / (RF)(Vs or Ws)(%S/100)

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound in the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID. #1 Compound Name C30 - C40

Concentration = 34582386 (1000) / 21026.71 (60.5)(0.857)(1000)

= 32 mg/kg

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications

Comments: ___

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Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	April 18, 2011
LDC Report Date:	August 31, 2011
Matrix:	Soil/Water
Parameters:	Explosives
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE130

Sample Identification

SL-056-SA8N-SS-0.0-0.05
SL-057-SA8N-SS-0.0-0.05
SL-071-SA8N-SS-0.0-0.05
SL-080-SA8N-SS-0.0-0.05
SL-085-SA8N-SS-0.0-0.05
SL-132-SA8N-SS-0.0-0.05
EB05-SA8N-SS-041811

Introduction

This data review covers 6 soil samples and one water sample listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8330A for Explosives.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration of compounds was performed for the primary (quantitation) column and confirmation column as required by the method.

The percent relative standard deviations (%RSD) were less than or equal to 20.0% for all compounds.

In the case where the laboratory used a calibration curve to evaluate the compounds, all coefficients of determination (r^2) were greater than or equal to 0.990 .

Retention time windows were evaluated and considered technically acceptable.

III. Calibration Verification

Calibration verification was performed at the required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 20.0% QC limits with the following exceptions:

Date	Column	Compound	%D	Associated Samples	Flag	A or P
4/30/11	Capcell	2,6-Dinitrotoluene	24.2	SL-132-SA8N-SS-0.0-0.05	J (all detects) UJ (all non-detects)	A

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

Retention times (RT) of all compounds in the calibration standards were within QC limits.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No explosive contaminants were found in the method blanks.

Sample EB05-SA8N-SS-041811 was identified as an equipment blank. No explosive contaminants were found.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VI. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VII. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

LCS ID (Associated Samples)	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Flag	A or P
LCS/D02109 (All water samples in SDG DE130)	Tetryl	50 (72-141)	56 (72-141)	-	J (all detects) UJ (all non-detects)	P
LCS04116 (All soil samples in SDG DE130)	Nitrobenzene PETN	124 (80-120) 124 (80-120)	- -	- -	J (all detects) J (all detects)	P

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE130	All compounds reported below the RL.	J (all detects)	A

X. System Performance

The system performance was acceptable.

XI. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XII. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Explosives - Data Qualification Summary - SDG DE130

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE130	SL-132-SA8N-SS-0.0-0.05	2,6-Dinitrotoluene	J (all detects) UJ (all non-detects)	A	Calibration verification (%D) (C)
DE130	EB05-SA8N-SS-041811	Tetryl	J (all detects) UJ (all non-detects)	P	Laboratory control samples (%R) (L)
DE130	SL-056-SA8N-SS-0.0-0.05 SL-057-SA8N-SS-0.0-0.05 SL-071-SA8N-SS-0.0-0.05 SL-080-SA8N-SS-0.0-0.05 SL-085-SA8N-SS-0.0-0.05 SL-132-SA8N-SS-0.0-0.05	Nitrobenzene PETN	J (all detects) J (all detects)	P	Laboratory control samples (%R) (L)
DE130	SL-056-SA8N-SS-0.0-0.05 SL-057-SA8N-SS-0.0-0.05 SL-071-SA8N-SS-0.0-0.05 SL-080-SA8N-SS-0.0-0.05 SL-085-SA8N-SS-0.0-0.05 SL-132-SA8N-SS-0.0-0.05 EB05-SA8N-SS-041811	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and RLs (Z)

Santa Susana Field Laboratory
Explosives - Laboratory Blank Data Qualification Summary - SDG DE130

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Explosives - Field Blank Data Qualification Summary - SDG DE130

No Sample Data Qualified in this SDG

LDC #: 26078B40

VALIDATION COMPLETENESS WORKSHEET

Level IV

Date: 8/30/11

SDG #: DE130

Page: 1 of 1

Laboratory: Lancaster Laboratories

Reviewer:

2nd Reviewer:

METHOD: HPLC Explosives (EPA SW 846 Method 8330A)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 4/18/11
II	Initial calibration	A	% RSD ≤ 20, r^2
III.	Calibration verification/ICV	SW	ICV/CCV ≤ 20
IV.	Blanks	A	
V	Surrogate recovery	A	
VI.	Matrix spike/Matrix spike duplicates	N	client specified
VII.	Laboratory control samples	SW	LCS/D
VIII.	Target compound identification	A	
IX.	Compound quantitation/RL/LOQ/LODs	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	N	
XIII.	Field blanks	ND	EB = 7

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:

SOIL & WATER

1 1	SL-056-SA8N-SS-0.0-0.05 S	11 1	PBLK04116	21		31	
2 1	SL-057-SA8N-SS-0.0-0.05	12 2	PBLK02109	22		32	
3 1	SL-071-SA8N-SS-0.0-0.05	13		23		33	
4 1	SL-080-SA8N-SS-0.0-0.05	14		24		34	
5 1	SL-085-SA8N-SS-0.0-0.05	15		25		35	
6 1	SL-132-SA8N-SS-0.0-0.05	16		26		36	
7 2	EB05-SA8N-SS-041811 W	17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

LDC #: 26078B40
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Page: 1 of 2
Reviewer: [illegible]
2nd Reviewer: [illegible]

Method: ✓ GC _____ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation?	✓			
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?	✓			
Were the RT windows properly established?	✓			
IV. Continuing calibration				
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20%.0 or percent recoveries 80-120%?	✓			
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.			✓	
Was a MS/MSD analyzed every 20 samples of each matrix?			✓	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	

LDC #: 26078B40
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Reviewer: FJ
2nd Reviewer: C

Validation Area	Yes	No	NA	Findings/Comments
X. Target compound identification				
Were the retention times of reported detects within the RT windows?	✓			
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XV. Field blanks				
Field blanks were identified in this SDG.	✓			
Target compounds were detected in the field blanks.		✓		

VALIDATION FINDINGS WORKSHEET

METHOD: ____GC ____HPLC

8310	8330	8151	8141	8141(Con't)	8021B
A. Acenaphthene	A. HMX	A. 2,4-D	A. Dichlorvos	V. Fensulfothion	V. Benzene
B. Acenaphthylene	B. RDX	B. 2,4-DB	B. Mevinphos	W. Bolstar	CC. Toluene
C. Anthracene	C. 1,3,5-Trinitrobenzene	C. 2,4,5-T	C. Demeton-O	X. EPN	EE. Ethyl Benzene
D. Benzo(a)anthracene	D. 1,3-Dinitrobenzene	D. 2,4,5-TP	D. Demeton-S	Y. Azinphos-methyl	SSS. O-Xylene
E. Benzo(a)pyrene	E. Tetryl	E. Dinoseb	E. Ethoprop	Z. Coumaphos	RRR. MP-Xylene
F. Benzo(b)fluoranthene	F. Nitrobenzene	F. Dichlorprop	F. Naled	AA. Parathion	GG. Total Xylene
G. Benzo(g,h,i)perylene	G. 2,4,6-Trinitrotoluene	G. Dicamba	G. Sulfotep	BB. Trichloronate	
H. Benzo(k)fluoranthene	H. 4-Amino-2,6-dinitrotoluene	H. Dalapon	H. Phorate	CC. Trichlorinate	
I. Chrysene	I. 2-Amino-4,6-dinitrotoluene	I. MCPP	I. Dimethoate	DD. Trifluralin	
J. Dibenz(a,h)anthracene	J. 2,4-Dinitrotolune	J. MCPA	J. Diazinon	EE. Def	
K. Fluoranthene	K. 2,6-Dinitrotoluene	K. Pentechlorophenol	K. Disulfoton	FF. Prowl	
L. Fluorene	L. 2-Nitrotoluene	L. 2,4,5-TP (silvex)	L. Parathion-methyl	GG. Ethion	
M. Indeno(1,2,3-cd)pyrene	M. 3-Nitrotoluene	M. Silvex	M. Ronnel	HH. Tetrachlorvinphos	
N. Naphthalene	N. 4-Nitrotoluene		N. Malathion	II. Sulprofos	
O. Phenanthrene	O.		O. Chlorpyrifos		
P. Pyrene	P.		P. Fenthion		
Q.	Q		Q. Parathion-ethyl		
R.			R. Trichloronate		
S.			S. Merphos		
			T. Stirofos		
			U. Tokuthion		

Notes:

emod_list.wpd

LDC #: 26078B40

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Page: 1 of 1
Reviewer: FT

METHOD: 1 **GC** __ **HPLC**

2nd Reviewer:

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".
What type of continuing calibration calculation was performed? __%D or __RPD
Y N N/A Were continuing calibration standards analyzed at the required frequencies?
Y N N/A Did the continuing calibration standards meet the %D / RPD validation criteria of ≤20.0%?
Level IV Only
Y N N/A Were the retention times for all calibrated compounds within their respective acceptance windows?

#	Date	Standard ID	Detector/ Column	Compound	%D (Limit ≤ 20.0)	RT (limit)	Associated Samples	Qualifications
	4/30/11 13:20	CCV	CAPCELL	K	24.2	( )	6	J/UJ/R (C)
						( )		
						( )		
						( )		
						( )		
						( )		
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LDC #: 26078B40

VALIDATION FINDINGS WORKSHEET
Laboratory Control Samples (LCS)

Page: 1 of 1
Reviewer: FT
2nd Reviewer:

METHOD: ✓ GC __ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were a laboratory control samples (LCS) and laboratory control sample duplicate (LCSD) analyzed for each matrix in this SDG?

Y N N/A Were the LCS percent recoveries (%R) and relative percent differences (RPD) within the QC limits?

Level IV/D Only

Y N N/A Was an LCS analyzed every 20 samples for each matrix or whenever a sample extraction was performed?

#	LCS/LCSD ID	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
	lcs1D02109	E	50 (72-141)	56 (72-141)	( )	All water	J/NJ/P (L)
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
	lcs04116	F	124 (80-120)	( )	( )	All soils	J/Pdet (L)
		PETN	124 (↓)	( )	( )	↓	↓
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
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			( )	( )	( )		
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			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		

LDC #: 26078B40
SDG #: per cover

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: P
2nd Reviewer: A

METHOD: GC ✓ HPLC ____

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

#	Standard ID	Calibration Date	Compound	Reported CF (499.5 std)	Recalculated CF (499.5 std)	Reported Average CF (Initial)	Recalculated Average CF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL chrompack	5/17/11	1,3-DNB	2.76×10^2	2.76×10^2	2.77×10^2	2.77×10^2	1.1	1.1
			Nitrobenzene	2.09×10^2	2.09×10^2	2.11×10^2	2.11×10^2	3.3	3.3
2	ICAL CAPCELL	5/17/11	↓	2.45×10^2	2.45×10^2	2.57×10^2	2.57×10^2	4.3	4.3
				1.69×10^2	1.69×10^2	1.80×10^2	1.80×10^2	6.33	6.33
3	ICAL chrompack	4/29/11	↓	2.72×10^2	2.72×10^2	2.76×10^2	2.76×10^2	1.6	1.6
				1.99×10^2	1.99×10^2	1.98×10^2	1.98×10^2	4.4	4.4
4	ICAL capcell	4/29/11	1,3-DNB	2.06×10^2	2.06×10^2	2.25×10^2	2.25×10^2	15.2	15.2
			1,4-DNB	3.10×10^2	3.10×10^2	3.40×10^2	3.40×10^2	18.5	18.5

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26078B40
SDG #: per cover

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC ✓ HPLC ____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF - CF)/ave. CF
CF = A/C

Where: ave. CF = initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(Ical)/ CCV Conc.	Reported CF/Conc. CCV	Recalculated CF/Conc. CCV	Reported %D	Recalculated %D
1	ccv	4/30/11	1,3-DNB	500.05	535.99	535.99	7.2	7.2
	chrompack	1:19	nitrobenzene	500.00	502.60	502.60	0.5	0.5
2	ccv	4/30/11	↓	507.00	498.25	498.25	1.7	1.7
	chrompack	13:20	↓	499.50	516.79	516.79	3.5	3.5
3	ccv	4/30/11	1,3-DNB	500.05	519.98	519.98	4.0	4.0
	Capcell	1:19	1,4-DNB	500.00	517.86	517.86	3.6	3.6
4	ccv	4/30/11	↓	507.00 ~~500.0~~	488.63	488.63	3.6	3.6
	Capcell	13:20	↓	493.00	457.40	457.40	7.2	7.2

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26078B40
SDG #: see cover
METHOD: / GC __ HPLC

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Page: / of /
Reviewer: FT
2nd reviewer: C

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
2. Nitro - m - xylene	~~Carbopack~~ chrompack	1852	1885.362	102	102	0

Sample ID:

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Sample ID:

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

LDC #: 26078B40
SDG #: per cover

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: ✓ GC __ HPLC

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100* (SSC-SC)/SA

RPD = I SSCLCS - SSCLCSD I * 2/(SSCLCS + SSCLCSD)

Where: SSC = Spiked sample concentration; SA = Spike added; LCS = Laboratory control sample percent recovery; SC = Concentration; LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: LCS04116

Compound	Spike Added (ug/kg)		Spiked Sample Concentration (ug/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
HMX	2000.25	NA	2103.64	NA	105	105				
RDX	2000	↓	2148.9	↓	107	107	NA			

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26078B4C

SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: ✓ GC ___ HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= $\frac{(A)(Fv)(Df)}{(RF)(Vs \text{ or } Ws)(\%S/100)}$

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound in the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID._____ Compound Name _____

Concentration = _____

ND

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications

Comments: _____

SAMPCALew.wpd

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	April 18, 2011
LDC Report Date:	August 31, 2011
Matrix:	Soil/Water
Parameters:	Terphenyls
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE130

Sample Identification

SL-056-SA8N-SS-0.0-0.05
SL-057-SA8N-SS-0.0-0.05
SL-071-SA8N-SS-0.0-0.05
SL-080-SA8N-SS-0.0-0.05
SL-085-SA8N-SS-0.0-0.05
SL-132-SA8N-SS-0.0-0.05
EB05-SA8N-SS-041811

Introduction

This data review covers 6 soil samples and one water sample listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8015B for Terphenyls.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0% .

III. Calibration Verification

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 20.0% QC limits.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No terphenyl contaminants were found in the method blanks.

Sample EB05-SA8N-SS-041811 was identified as an equipment blank. No terphenyl contaminants were found.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VI. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VII. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE130	All compounds reported below the RL.	J (all detects)	A

X. System Performance

The system performance was acceptable.

XI. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XII. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Terphenyls - Data Qualification Summary - SDG DE130

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE130	SL-056-SA8N-SS-0.0-0.05 SL-057-SA8N-SS-0.0-0.05 SL-071-SA8N-SS-0.0-0.05 SL-080-SA8N-SS-0.0-0.05 SL-085-SA8N-SS-0.0-0.05 SL-132-SA8N-SS-0.0-0.05 EB05-SA8N-SS-041811	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and RLs (Z)

Santa Susana Field Laboratory
Terphenyls - Laboratory Blank Data Qualification Summary - SDG DE130

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Terphenyls - Field Blank Data Qualification Summary - SDG DE130

No Sample Data Qualified in this SDG

LDC #: 26078B41 **VALIDATION COMPLETENESS WORKSHEET** Date: 8/30/11
SDG #: DE130 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC Terphenyls (EPA SW 846 Method 8015B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 4/18/11
II	Initial calibration	A	% RSD ≤ 20
III.	Calibration verification/~~RV~~	A	ccv ≤ 20
IV.	Blanks	A	
V	Surrogate recovery	A	
VI.	Matrix spike/Matrix spike duplicates	N	
VII.	Laboratory control samples	A	lcs ID
VIII.	Target compound identification	A	
IX.	Compound quantitation/RL/LOQ/LODs	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	N	
XIII.	Field blanks	ND	EB = 7

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:
soil + water

1 1	SL-056-SA8N-SS-0.0-0.05 S	11 1	PBLK30110	21		31	
2 1	SL-057-SA8N-SS-0.0-0.05	12 2	PBLK42110	22		32	
3 1	SL-071-SA8N-SS-0.0-0.05	13		23		33	
4 1	SL-080-SA8N-SS-0.0-0.05	14		24		34	
5 1	SL-085-SA8N-SS-0.0-0.05	15		25		35	
6 1	SL-132-SA8N-SS-0.0-0.05	16		26		36	
7 2	EB05-SA8N-SS-041811 W	17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

LDC #: 26078B41
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Page: 1 of 2
Reviewer: FT
2nd Reviewer: [illegible]

Method: ✓ GC _____ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation?		✓		
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?			✓	
Were the RT windows properly established?	✓			
IV. Continuing calibration				
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20%.0 or percent recoveries 80-120%?	✓			
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.			✓	
Was a MS/MSD analyzed every 20 samples of each matrix?			✓	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	

LDC #: 26078B41
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Reviewer: FJ
2nd Reviewer: A

Validation Area	Yes	No	NA	Findings/Comments
X. Target compound identification				
Were the retention times of reported detects within the RT windows?	✓			
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XV. Field blanks				
Field blanks were identified in this SDG.	✓	✓		
Target compounds were detected in the field blanks.		✓		

LDC #: 26078B41
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC ✓ HPLC ____

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

#	Standard ID	Calibration Date	Compound	Reported 15.520 CF (std)	Recalculated 15.520 CF (std)	Reported Average CF (initial)	Recalculated Average CF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	4/18/11	m-Terphenyl	3.42×10^4	3.42×10^4	3.30×10^4	3.30×10^4	2.4	2.4
2									
3									
4									

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26078B41
SDG #: pw Cover

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: EJ
2nd Reviewer: C

METHOD: GC ✓ HPLC ____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF - CF)/ave. CF
CF = A/C

Where: ave. CF = initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(Ical)/ CCV Conc.	Reported CF/Conc. CCV	Recalculated CF/Conc. CCV	Reported %D	Recalculated %D
1	CCV	4/23/11 11:25	m-Terphenyl	31.04	31.13	31.13	0.3	0.3
2	CCV	4/23/11 19:37	↓	31.04	31.32	31.32	0.9	0.9
3								
4								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26078B4/
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT
2nd reviewer: A

METHOD: ✓ GC ___ HPLC

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID:

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
n- Triacontane -d62	NS	0.3344	0.220739	66	66	0

Sample ID:

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Sample ID:

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

LDC #: 26078B4/
SDG #: µ covers

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: ✓ GC __HPLC

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100* (SSC-SC)/SA
RPD = I LCS - LCSD I * 2/(LCS + LCSD)

Where: SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory control sample percent recovery
SC = Concentration
LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: LCS

Compound	Spike Added (mg/kg)		Spiked Sample Concentration (mg/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)										
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)										
2,4,6-Trinitrotoluene (8330)										
m-Terphenyl	1.43	NA	1.32	NA	92	92	NA			

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26078B41
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: ✓ GC __ HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= $\frac{(A)(Fv)(Df)}{(RF)(Vs \text{ or } Ws)(\%S/100)}$

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound in the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID._____ Compound Name _____

Concentration =_____

ND

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications

Comments: _____

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Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	April 18, 2011
LDC Report Date:	August 31, 2011
Matrix:	Soil/Water
Parameters:	Alcohols
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE130

Sample Identification

SL-056-SA8N-SS-0.0-0.05
SL-057-SA8N-SS-0.0-0.05
SL-071-SA8N-SS-0.0-0.05
SL-080-SA8N-SS-0.0-0.05
SL-085-SA8N-SS-0.0-0.05
SL-132-SA8N-SS-0.0-0.05
EB05-SA8N-SS-041811
SL-080-SA8N-SS-0.0-0.05MS
SL-080-SA8N-SS-0.0-0.05MSD

Introduction

This data review covers 8 soil samples and one water sample listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8015B for Alcohols.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0% .

In the case where the laboratory used a calibration curve to evaluate the compounds, all coefficients of determination (r^2) were greater than or equal to 0.990 .

Retention time windows were evaluated and considered technically acceptable.

III. Calibration Verification

Calibration verification was performed at required frequencies.

The percent differences (%D) of calibration factors in continuing standard mixtures were within the 20.0% QC limits.

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

Retention times (RT) of all compounds in the calibration standards were within QC limits.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No alcohol contaminants were found in the method blanks with the following exceptions:

Method Blank ID	Analysis Date	Compound	Concentration	Associated Samples
PBLK25109	4/19/11	Methanol	100 ug/Kg	All soil samples in SDG DE130

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated method blanks.

Sample EB05-SA8N-SS-041811 was identified as an equipment blank. No alcohol contaminants were found.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VI. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VII. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE130	All compounds reported below the RL.	J (all detects)	A

X. System Performance

The system performance was acceptable.

XI. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XII. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Alcohols - Data Qualification Summary - SDG DE130

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE130	SL-056-SA8N-SS-0.0-0.05 SL-057-SA8N-SS-0.0-0.05 SL-071-SA8N-SS-0.0-0.05 SL-080-SA8N-SS-0.0-0.05 SL-085-SA8N-SS-0.0-0.05 SL-132-SA8N-SS-0.0-0.05 EB05-SA8N-SS-041811	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and RLs (Z)

Santa Susana Field Laboratory
Alcohols - Laboratory Blank Data Qualification Summary - SDG DE130

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Alcohols - Field Blank Data Qualification Summary - SDG DE130

No Sample Data Qualified in this SDG

LDC #: 26078B43 **VALIDATION COMPLETENESS WORKSHEET** Date: 8/30/11

SDG #: DE130 Level IV Page: 1 of 1

Laboratory: Lancaster Laboratories Reviewer: [illegible]

2nd Reviewer: [illegible]

METHOD: GC Alcohols (EPA SW 846 Method 8015B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 4/18/11
II	Initial calibration	A	% RSD ≤ 20, r²
III.	Calibration verification/ICV	A	ICV/CCV ≤ 20
IV.	Blanks	SW/	
V	Surrogate recovery	A	
VI.	Matrix spike/Matrix spike duplicates	A	
VII.	Laboratory control samples	A	LCS
VIII.	Target compound identification	A	
IX.	Compound quantitation/RL/LOQ/LODs	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	N	
XIII.	Field blanks	ND	FB = 7

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: soil + water

1	1	SL-056-SA8N-SS-0.0-0.05 S	11	1	PBLK25109	21		31	
2	1	SL-057-SA8N-SS-0.0-0.05	12		PBLK38116	22		32	
3	1	SL-071-SA8N-SS-0.0-0.05	13			23		33	
4	1	SL-080-SA8N-SS-0.0-0.05	14			24		34	
5	1	SL-085-SA8N-SS-0.0-0.05	15			25		35	
6	1	SL-132-SA8N-SS-0.0-0.05	16			26		36	
7	2	EB05-SA8N-SS-041811 W	17			27		37	
8		#4 MS	18			28		38	
9		#4 MSD	19			29		39	
10			20			30		40	

Notes:

LDC #: 26078B43
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Page: 1 of 2
Reviewer: FT
2nd Reviewer: C

Method: ✓ GC ____ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation?	✓			
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?	✓			
Were the RT windows properly established?	✓			
IV. Continuing calibration				
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20%.0 or percent recoveries 80-120%?	✓			
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.	✓	~~✓~~		
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?	✓			
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	

LDC #: 26078B43
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Reviewer: FJ
2nd Reviewer: A

Validation Area	Yes	No	NA	Findings/Comments
X. Target compound identification				
Were the retention times of reported detects within the RT windows?	✓			
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XV. Field blanks				
Field blanks were identified in this SDG.	✓			
Target compounds were detected in the field blanks.		✓		

LDC #: 26078
SDG #: DE130

VALIDATION FINDINGS WORKSHEET
Blanks

Reviewer: SM
2nd Reviewer: A

METHOD: ✓ GC ___ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were all samples associated with a given method blank?
Y N N/A Was a method blank performed for each matrix and whenever a sample extraction procedure was performed?
Y N N/A Was a method blank performed with each extraction batch?
Y N N/A Were any contaminants found in the method blanks? If yes, please see findings below.

Level IV/D Only

Y N N/A (Gasoline and aromatics only)Was a method blank analyzed with each 24 hour batch?
Y N N/A Was a method blank analyzed for each analytical / extraction batch of ≤20 samples?

Blank extraction date: 4/19/11 **Blank analysis date:** 4/20/11 **Associated samples:** PB [illegible] soil
Conc. units: µg/kg

Compound	Blank ID	Sample Identification						
	PBLK25109							
Methanol	100							

Blank extraction date:_____ **Blank analysis date:**_____ **Associated samples:**_____
Conc. units:_____

Compound	Blank ID	Sample Identification						

ALL CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
All contaminants within five times the method blank concentration were qualified as not detected, "U".

LDC #: 26078B43
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer:
2nd Reviewer:

METHOD: GC ✓ HPLC

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

#	Standard ID	Calibration Date	Compound	Reported 5000 CF (std)	Recalculated 5000 CF (std)	Reported Average CF (Initial)	Recalculated Average CF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL	4/20/11	ethanol	2.92	2.92	2.95	2.95	0.8	0.8
2	ICAL	4/18/11	ethanol	8.51	8.51	8.61	8.61	2.5	2.5
3									
4									

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26078B43
SDG #: pw cover

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: EJ
2nd Reviewer: C

METHOD: GC ✓ HPLC ____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF - CF)/ave. CF
CF = A/C

Where: ave. CF = initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(Ical)/ CCV Conc.	Reported CF/Conc. CCV	Recalculated CF/Conc. CCV	Reported %D	Recalculated %D
1	4/20/11 19:42	CCV	ethanol	10,000	9994.83	9994.83	0.1	0.1
2	4/20/11 23:41	CCV	↓	↓	9905.38	9905.38	0.9	0.9
3	4/27/11 21:02	CCV	↓	5000.00	5083.81	5083.81	1.7	1.7
4								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26078 B47
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Page: 1 of 1
Reviewer: FT
2nd reviewer: [illegible]

METHOD: ✓ GC __ HPLC

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
Acetone	NS	2500	1799.95	72	72	0

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

LDC #: 26018D47
SDG #: per cover

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Reviewer: FT
2nd Reviewer: C

METHOD: ✓ GC __HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

%Recovery = 100 * (SSC - SC)/SA Where SSC = Spiked sample concentration SC = Sample concentration
SA = Spike added
RPD =(((SSCMS - SSCMSD) * 2) / (SSCMS + SSCMSD))*100 MS = Matrix spike MSD = Matrix spike duplicate

MS/MSD samples: 8 + 9

Compound	Spike Added (ug/kg)		Sample Conc. (ug/kg)	Spike Sample Concentration (ug/kg)		Matrix spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	--	MS	MSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)											
Diesel (8015)											
Benzene (8021B)											
Methane (RSK-175)											
2,4-D (8151)											
Dinoseb (8151)											
Naphthalene (8310)											
Anthracene (8310)											
HMX (8330)											
2,4,6-Trinitrotoluene (8330)											
Methanol	2000	2000	ND	1328.97	1333.87	53	53	53	53	0	0

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26078B43
SDG #: µg cover

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: ✓ GC __HPLC

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100* (SSC-SC)/SA
RPD = I LCS - LCSD I * 2/(LCS + LCSD)

Where: SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory control sample percent recovery
SC = Concentration
LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: LCS

Compound	Spike Added (ug/kg)		Spiked Sample Concentration (ug/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)										
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)										
2,4,6-Trinitrotoluene (8330)										
Methanol	2500	NA	2336.27	NA	93	93				

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26078B43
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: ✓ GC __ HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= $\frac{(A)(Fv)(Df)}{(RF)(Vs \text{ or } Ws)(\%S/100)}$

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound in the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID._____ Compound Name _____

Concentration =_____

ND

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications

Comments: _____

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Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	April 18, 2011
LDC Report Date:	August 31, 2011
Matrix:	Soil/Water
Parameters:	Glycols
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE130

Sample Identification

SL-056-SA8N-SS-0.0-0.05
SL-057-SA8N-SS-0.0-0.05
SL-071-SA8N-SS-0.0-0.05
SL-080-SA8N-SS-0.0-0.05
SL-085-SA8N-SS-0.0-0.05
SL-132-SA8N-SS-0.0-0.05
EB05-SA8N-SS-041811

Introduction

This data review covers 6 soil samples and one water sample listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8015B for Glycols.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0%.

Retention time windows were evaluated and considered technically acceptable.

III. Calibration Verification

Calibration verification was performed at required frequencies.

The percent differences (%D) of calibration factors in continuing standard mixtures were within the 20.0% QC limits.

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

Retention times (RT) of all compounds in the calibration standards were within QC limits.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No glycol contaminants were found in the method blanks.

Sample EB05-SA8N-SS-041811 was identified as an equipment blank. No glycol contaminants were found.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VI. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VII. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE130	All compounds reported below the RL.	J (all detects)	A

X. System Performance

The system performance was acceptable.

XI. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XII. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Glycols - Data Qualification Summary - SDG DE130

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE130	SL-056-SA8N-SS-0.0-0.05 SL-057-SA8N-SS-0.0-0.05 SL-071-SA8N-SS-0.0-0.05 SL-080-SA8N-SS-0.0-0.05 SL-085-SA8N-SS-0.0-0.05 SL-132-SA8N-SS-0.0-0.05 EB05-SA8N-SS-041811	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and RLs (Z)

Santa Susana Field Laboratory
Glycols - Laboratory Blank Data Qualification Summary - SDG DE130

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Glycols - Field Blank Data Qualification Summary - SDG DE130

No Sample Data Qualified in this SDG

LDC #: 26078B45 **VALIDATION COMPLETENESS WORKSHEET** Date: 8/29/11
SDG #: DE130 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC Glycols (EPA SW 846 Method 8015B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 4/18/11
II	Initial calibration	A	% RSD ≤ 20
III.	Calibration verification/ICV	A	ICV/CCV ≤ 20
IV.	Blanks	A	
V	Surrogate recovery	A	
VI.	Matrix spike/Matrix spike duplicates	N	client specified
VII.	Laboratory control samples	A	LCS
VIII.	Target compound identification	A	
IX.	Compound quantitation/RL/LOQ/LODs	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	N	
XIII.	Field blanks	NP	EB = 7

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:
soil + water

1 1	SL-056-SA8N-SS-0.0-0.05 S	11	PBLK03110	21		31	
2 1	SL-057-SA8N-SS-0.0-0.05	12	PBLK02110	22		32	
3 1	SL-071-SA8N-SS-0.0-0.05	13		23		33	
4 1	SL-080-SA8N-SS-0.0-0.05	14		24		34	
5 1	SL-085-SA8N-SS-0.0-0.05	15		25		35	
6 1	SL-132-SA8N-SS-0.0-0.05	16		26		36	
7 2	EB05-SA8N-SS-041811 W	17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

LDC #: 26078B45
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Page: 1 of 2
Reviewer: [illegible]
2nd Reviewer: [illegible]

Method: ✓ GC ____ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation?		✓		
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?			✓	
Were the RT windows properly established?	✓			
IV. Continuing calibration				
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20%.0 or percent recoveries 80-120%?	✓			
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.			✓	
Was a MS/MSD analyzed every 20 samples of each matrix?			✓	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	

LDC #: 26078B45
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Reviewer: FJ
2nd Reviewer: C

Validation Area	Yes	No	NA	Findings/Comments
X. Target compound identification				
Were the retention times of reported detects within the RT windows?			✓	
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XV. Field blanks				
Field blanks were identified in this SDG.	✓			
Target compounds were detected in the field blanks.		✓		

LDC #: 26078B45
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC ✓ HPLC ____

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

level 4

#	Standard ID	Calibration Date	Compound	Reported 200.5164 CF (std)	Recalculated 200.5164 CF (std)	Reported Average CF (initial)	Recalculated Average CF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL GLF110A	4/20/11	Propylene Glycol	3.66×10^2	3.66×10^2	3.63×10^2	3.63×10^2	12.1	12.1
2	ICAL GLG111A	4/21/11	↓	3.25×10^2	3.25×10^2	3.18×10^2	3.18×10^2	16.5	16.5
3									
4									

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26078B45
SDG #: per cover

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC ✓ HPLC ____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF - CF)/ave. CF
CF = A/C

Where: ave. CF = initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(Ical)/ CCV Conc.	Reported CF/Conc. CCV	Recalculated CF/Conc. CCV	Reported %D	Recalculated %D
1	F110.0022	4/20/11 18:06	Propylene Glycol	100.26	89.26	89.26	11.0	11.0
	F110.0033	4/20/11 21:20	↓	100.26	86.50	86.50	13.7	13.7
2								
	F111B.0021	4/21/11 19:02	↓	100.26	94.53	94.53	5.7	5.7
3								
4								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 2607B45

SDG #: see cover

METHOD: ✓ GC ___ HPLC

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT

2nd reviewer: [illegible]

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
		192.15		Reported	Recalculated	
Tetramethylene glycol	NS	~~191.25~~	122.4037	64	64	0

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

LDC #: 26078B45
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: ✓ GC __HPLC

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100* (SSC-SC)/SA
RPD = | LCS - LCSD | * 2/(LCS + LCSD)

Where: SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory control sample percent recovery
SC = Concentration
LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: LCS03110

Compound	Spike Added (mg/kg)		Spiked Sample Concentration (mg/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)										
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)										
2,4,6-Trinitrotoluene (8330)										
Ethylene Glycol	198.16	NA	216.17	NA	109	109	NA			

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26678B45
SDG #: pu [illegible]

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: ✓ GC __ HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= (A)(Fv)(Df) / (RF)(Vs or Ws)(%S/100)

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound in the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID._____ Compound Name _____

Concentration =_____

ND

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications

Comments: _____

SAMPCALew.wpd

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	April 18, 2011
LDC Report Date:	August 31, 2011
Matrix:	Soil/Water
Parameters:	Formaldehyde
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE130

Sample Identification

SL-056-SA8N-SS-0.0-0.05
SL-057-SA8N-SS-0.0-0.05
SL-071-SA8N-SS-0.0-0.05
SL-080-SA8N-SS-0.0-0.05
SL-085-SA8N-SS-0.0-0.05
SL-132-SA8N-SS-0.0-0.05
EB05-SA8N-SS-041811

Introduction

This data review covers 6 soil samples and one water sample listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8315A for Formaldehyde.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0% .

III. Calibration Verification

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 20.0% QC limits.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No formaldehyde was found in the method blanks.

Sample EB05-SA8N-SS-041811 was identified as an equipment blank. No formaldehyde was found.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VI. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VII. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE130	All compounds reported below the RL.	J (all detects)	A

X. System Performance

The system performance was acceptable.

XI. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XII. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Formaldehyde - Data Qualification Summary - SDG DE130

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE130	SL-056-SA8N-SS-0.0-0.05 SL-057-SA8N-SS-0.0-0.05 SL-071-SA8N-SS-0.0-0.05 SL-080-SA8N-SS-0.0-0.05 SL-085-SA8N-SS-0.0-0.05 SL-132-SA8N-SS-0.0-0.05 EB05-SA8N-SS-041811	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and RLs (Z)

Santa Susana Field Laboratory
Formaldehyde - Laboratory Blank Data Qualification Summary - SDG DE130

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Formaldehyde - Field Blank Data Qualification Summary - SDG DE130

No Sample Data Qualified in this SDG

LDC #: 26078B71 **VALIDATION COMPLETENESS WORKSHEET** Date: 8/30/11
SDG #: DE130 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: F7
2nd Reviewer: [illegible]

METHOD: HPLC Formaldehyde (EPA SW 846 Method 8315A)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 4/18/11
II	Initial calibration	A	% RSD ≤ 20
III.	Calibration verification/IBL	A	CCV ≤ 20
IV.	Blanks	A	
V	Surrogate recovery	A	
VI.	Matrix spike/Matrix spike duplicates	N	client specified
VII.	Laboratory control samples	A	LCS/D
VIII.	Target compound identification	A	
IX.	Compound quantitation RL/LOQ/LODs	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	N	
XIII.	Field blanks	ND	EB = 7

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: soil + water

1 1	SL-056-SA8N-SS-0.0-0.05 S	11 1	PBLK05110	21		31	
2 1	SL-057-SA8N-SS-0.0-0.05	12 2	PBLK03111	22		32	
3 1	SL-071-SA8N-SS-0.0-0.05	13		23		33	
4 1	SL-080-SA8N-SS-0.0-0.05	14		24		34	
5 1	SL-085-SA8N-SS-0.0-0.05	15		25		35	
6 1	SL-132-SA8N-SS-0.0-0.05	16		26		36	
7 2	EB05-SA8N-SS-041811 W	17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

LDC #: 26078B71
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Page: 1 of 2
Reviewer: FT
2nd Reviewer: C

Method: ✓ GC _____ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation?		✓		
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?			✓	
Were the RT windows properly established?	✓			
IV. Continuing calibration				
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20%.0 or percent recoveries 80-120%?	✓			
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.			✓	
Was a MS/MSD analyzed every 20 samples of each matrix?			✓	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	

LDC #: 26078B71
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Reviewer: FJ
2nd Reviewer: C

Validation Area	Yes	No	NA	Findings/Comments
X. Target compound identification				
Were the retention times of reported detects within the RT windows?	✓			
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XV. Field blanks				
Field blanks were identified in this SDG.	✓			
Target compounds were detected in the field blanks.		✓		

LDC #: 26078 B-71
SDG #: per varies

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: F7
2nd Reviewer: A

METHOD: GC ✓ HPLC_____

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

level 3

#	Standard ID	Calibration Date	Compound	Reported 2002 CF (std)	Recalculated 2002 CF (std)	Reported Average CF (initial)	Recalculated Average CF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	4/22/11	Formaldehyde	6.47×10^1	6.47×10^1	6.39×10^1	6.39×10^1	1.2	1.2
2									
3									
4									

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26078B7/
SDG #: w conn

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: FT
2nd Reviewer: A

METHOD: GC ✓ HPLC ____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF - CF)/ave. CF
CF = A/C

Where: ave. CF = Initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(Ical)/ CCV Conc.	Reported CF/Conc. CCV	Recalculated CF/Conc. CCV	Reported %D	Recalculated %D
1	IF4112.20'	4/22/11	formaldehyde	2002.00	1996.36	1996.36	0.3	0.3
	IF4112.31	4/22/11	↓	↓	2005.08	2005.08	0.2	0.2
2								
	IF4112.42	4/22/11	↓	2002.00	1989.46	1989.46	0.6	0.6
3	IF4112.53	4/23/11	↓	2002.00	1984.07	1984.07	0.9	0.9
4								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26028B 1/
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT
2nd reviewer: C

METHOD: ✓ GC ___ HPLC

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
Butyraldehyde	N7	~~1969~~ 196.9	4379.047/2	112	112	0

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

LDC #: 26078B71
SDG #: µ cones

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

Reviewer: F
2nd Reviewer: C

METHOD: ✓ GC __ HPLC

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100* (SSC-SC)/SA
RPD = I LCS - LCSD I * 2/(LCS + LCSD)

Where: SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory control sample percent recovery
SC = Concentration
LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: LCS/D

Compound	Spike Added (ug/kg)		Spiked Sample Concentration (ug/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)										
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)										
2,4,6-Trinitrotoluene (8330)										
Formaldehyde	5010	NA	4705.34	NA	94	94	NA			

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26078B7 1
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: ✓ GC ___ HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= (A)(Fv)(Df) / (RF)(Vs or Ws)(%S/100)

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound in the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID._____ Compound Name _____

Concentration = _____

ND

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications

Comments: _____

SAMPCALew.wpd

SAMPLE DELIVERY GROUP

DE131

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
19-Apr-2011	TB-041911	6262840	TB	5030B	8260B	III
19-Apr-2011	TB-041911	6262840	TB	5030B	8260B SIM	III
19-Apr-2011	SL-075-SA8N-SS-0.0-0.5	6262819	N	3050B	6010B	III
19-Apr-2011	SL-075-SA8N-SS-0.0-0.5	6262819	N	3050B	6020	III
19-Apr-2011	SL-075-SA8N-SS-0.0-0.5	6262819	N	3060A	7199	III
19-Apr-2011	SL-075-SA8N-SS-0.0-0.5	6262819	N	3546	1625C	III
19-Apr-2011	SL-075-SA8N-SS-0.0-0.5	6262819	N	3550B	8015B	III
19-Apr-2011	SL-075-SA8N-SS-0.0-0.5	6262819	N	3550B	8015M	III
19-Apr-2011	SL-075-SA8N-SS-0.0-0.5	6262819	N	3550B	8082	III
19-Apr-2011	SL-075-SA8N-SS-0.0-0.5	6262819	N	3550B	8270C	III
19-Apr-2011	SL-075-SA8N-SS-0.0-0.5	6262819	N	3550B	8270C SIM	III
19-Apr-2011	SL-075-SA8N-SS-0.0-0.5	6262819	N	8330	8330A	III
19-Apr-2011	SL-075-SA8N-SS-0.0-0.5	6262819	N	METHOD	300.0	III
19-Apr-2011	SL-075-SA8N-SS-0.0-0.5	6262819	N	METHOD	314.0	III
19-Apr-2011	SL-075-SA8N-SS-0.0-0.5	6262819	N	METHOD	7471A	III
19-Apr-2011	SL-075-SA8N-SS-0.0-0.5	6262819	N	METHOD	8015B	III
19-Apr-2011	SL-075-SA8N-SS-0.0-0.5	6262819	N	METHOD	8015M	III
19-Apr-2011	SL-075-SA8N-SS-0.0-0.5	6262819	N	METHOD	8315A	III
19-Apr-2011	SL-075-SA8N-SS-0.0-0.5	6262819	N	METHOD	9012B	III
19-Apr-2011	SL-075-SA8N-SS-0.0-0.5DUP	P262819D271104A	DUP	METHOD	300.0	III
19-Apr-2011	SL-075-SA8N-SS-0.0-0.5DUP	P262819D271430A	DUP	METHOD	314.0	III
19-Apr-2011	SL-075-SA8N-SS-0.0-0.5MSD	P262819M322233A	MSD	METHOD	8015M	III
19-Apr-2011	SL-075-SA8N-SS-0.0-0.5MS	P262819R271118A	MS	METHOD	300.0	III
19-Apr-2011	SL-075-SA8N-SS-0.0-0.5MS	P262819R271452A	MS	METHOD	314.0	III
19-Apr-2011	SL-075-SA8N-SS-0.0-0.5MS	P262819R322158A	MS	METHOD	8015M	III
19-Apr-2011	SL-135-SA8N-SS-0.0-0.5	6262829	N	3050B	6010B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
19-Apr-2011	SL-135-SA8N-SS-0.0-0.5	6262829	N	3050B	6020	III
19-Apr-2011	SL-135-SA8N-SS-0.0-0.5	6262829	N	3060A	7199	III
19-Apr-2011	SL-135-SA8N-SS-0.0-0.5	6262829	N	3546	1625C	III
19-Apr-2011	SL-135-SA8N-SS-0.0-0.5	6262829	N	3550B	8015B	III
19-Apr-2011	SL-135-SA8N-SS-0.0-0.5	6262829	N	3550B	8015M	III
19-Apr-2011	SL-135-SA8N-SS-0.0-0.5	6262829	N	3550B	8082	III
19-Apr-2011	SL-135-SA8N-SS-0.0-0.5	6262829	N	3550B	8270C	III
19-Apr-2011	SL-135-SA8N-SS-0.0-0.5	6262829	N	3550B	8270C SIM	III
19-Apr-2011	SL-135-SA8N-SS-0.0-0.5	6262829	N	8330	8330A	III
19-Apr-2011	SL-135-SA8N-SS-0.0-0.5	6262829	N	Gen Prep	314.0	III
19-Apr-2011	SL-135-SA8N-SS-0.0-0.5	6262829	N	METHOD	300.0	III
19-Apr-2011	SL-135-SA8N-SS-0.0-0.5	6262829	N	METHOD	7471A	III
19-Apr-2011	SL-135-SA8N-SS-0.0-0.5	6262829	N	METHOD	8015B	III
19-Apr-2011	SL-135-SA8N-SS-0.0-0.5	6262829	N	METHOD	8015M	III
19-Apr-2011	SL-135-SA8N-SS-0.0-0.5	6262829	N	METHOD	8315A	III
19-Apr-2011	SL-135-SA8N-SS-0.0-0.5	6262829	N	METHOD	9012B	III
19-Apr-2011	SL-171-SA5A-SB-2.0-3.0	6262837	N	3050B	6010B	III
19-Apr-2011	SL-171-SA5A-SB-2.0-3.0	6262837	N	3050B	6020	III
19-Apr-2011	SL-171-SA5A-SB-2.0-3.0	6262837	N	3060A	7199	III
19-Apr-2011	SL-171-SA5A-SB-2.0-3.0	6262837	N	3550B	8082	III
19-Apr-2011	SL-171-SA5A-SB-2.0-3.0	6262837	N	3550B	8270C	III
19-Apr-2011	SL-171-SA5A-SB-2.0-3.0	6262837	N	3550B	8270C SIM	III
19-Apr-2011	SL-171-SA5A-SB-2.0-3.0	6262837	N	5035	8260B	III
19-Apr-2011	SL-171-SA5A-SB-2.0-3.0	6262837	N	5035	8260B SIM	III
19-Apr-2011	SL-171-SA5A-SB-2.0-3.0	6262837	N	METHOD	300.0	III
19-Apr-2011	SL-171-SA5A-SB-2.0-3.0	6262837	N	METHOD	314.0	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
19-Apr-2011	SL-171-SA5A-SB-2.0-3.0	6262837	N	METHOD	7471A	III
19-Apr-2011	SL-140-SA8N-SS-0.0-0.5	6262835	N	3050B	6010B	III
19-Apr-2011	SL-140-SA8N-SS-0.0-0.5	6262835	N	3050B	6020	III
19-Apr-2011	SL-140-SA8N-SS-0.0-0.5	6262835	N	3060A	7199	III
19-Apr-2011	SL-140-SA8N-SS-0.0-0.5	6262835	N	3546	1625C	III
19-Apr-2011	SL-140-SA8N-SS-0.0-0.5	6262835	N	3550B	8015B	III
19-Apr-2011	SL-140-SA8N-SS-0.0-0.5	6262835	N	3550B	8015M	III
19-Apr-2011	SL-140-SA8N-SS-0.0-0.5	6262835	N	3550B	8082	III
19-Apr-2011	SL-140-SA8N-SS-0.0-0.5	6262835	N	3550B	8270C	III
19-Apr-2011	SL-140-SA8N-SS-0.0-0.5	6262835	N	3550B	8270C SIM	III
19-Apr-2011	SL-140-SA8N-SS-0.0-0.5	6262835	N	8330	8330A	III
19-Apr-2011	SL-140-SA8N-SS-0.0-0.5	6262835	N	METHOD	300.0	III
19-Apr-2011	SL-140-SA8N-SS-0.0-0.5	6262835	N	METHOD	314.0	III
19-Apr-2011	SL-140-SA8N-SS-0.0-0.5	6262835	N	METHOD	7471A	III
19-Apr-2011	SL-140-SA8N-SS-0.0-0.5	6262835	N	METHOD	8015B	III
19-Apr-2011	SL-140-SA8N-SS-0.0-0.5	6262835	N	METHOD	8015M	III
19-Apr-2011	SL-140-SA8N-SS-0.0-0.5	6262835	N	METHOD	8315A	III
19-Apr-2011	SL-140-SA8N-SS-0.0-0.5	6262835	N	METHOD	9012B	III
19-Apr-2011	SL-077-SA8N-SS-0.0-0.5	6262821	N	3050B	6010B	III
19-Apr-2011	SL-077-SA8N-SS-0.0-0.5	6262821	N	3050B	6020	III
19-Apr-2011	SL-077-SA8N-SS-0.0-0.5	6262821	N	3060A	7199	III
19-Apr-2011	SL-077-SA8N-SS-0.0-0.5	6262821	N	3546	1625C	III
19-Apr-2011	SL-077-SA8N-SS-0.0-0.5	6262821	N	3550B	8015B	III
19-Apr-2011	SL-077-SA8N-SS-0.0-0.5	6262821	N	3550B	8015M	III
19-Apr-2011	SL-077-SA8N-SS-0.0-0.5	6262821	N	3550B	8082	III
19-Apr-2011	SL-077-SA8N-SS-0.0-0.5	6262821	N	3550B	8270C	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
19-Apr-2011	SL-077-SA8N-SS-0.0-0.5	6262821	N	3550B	8270C SIM	III
19-Apr-2011	SL-077-SA8N-SS-0.0-0.5	6262821	N	8330	8330A	III
19-Apr-2011	SL-077-SA8N-SS-0.0-0.5	6262821	N	METHOD	300.0	III
19-Apr-2011	SL-077-SA8N-SS-0.0-0.5	6262821	N	METHOD	314.0	III
19-Apr-2011	SL-077-SA8N-SS-0.0-0.5	6262821	N	METHOD	7471A	III
19-Apr-2011	SL-077-SA8N-SS-0.0-0.5	6262821	N	METHOD	8015B	III
19-Apr-2011	SL-077-SA8N-SS-0.0-0.5	6262821	N	METHOD	8015M	III
19-Apr-2011	SL-077-SA8N-SS-0.0-0.5	6262821	N	METHOD	8315A	III
19-Apr-2011	SL-077-SA8N-SS-0.0-0.5	6262821	N	METHOD	9012B	III
19-Apr-2011	SL-138-SA8N-SS-0.0-0.5	6262830	N	3050B	6010B	III
19-Apr-2011	SL-138-SA8N-SS-0.0-0.5	6262830	N	3050B	6020	III
19-Apr-2011	SL-138-SA8N-SS-0.0-0.5	6262830	N	3060A	7199	III
19-Apr-2011	SL-138-SA8N-SS-0.0-0.5	6262830	N	3546	1625C	III
19-Apr-2011	SL-138-SA8N-SS-0.0-0.5	6262830	N	3550B	8015B	III
19-Apr-2011	SL-138-SA8N-SS-0.0-0.5	6262830	N	3550B	8015M	III
19-Apr-2011	SL-138-SA8N-SS-0.0-0.5	6262830	N	3550B	8082	III
19-Apr-2011	SL-138-SA8N-SS-0.0-0.5	6262830	N	3550B	8270C	III
19-Apr-2011	SL-138-SA8N-SS-0.0-0.5	6262830	N	3550B	8270C SIM	III
19-Apr-2011	SL-138-SA8N-SS-0.0-0.5	6262830	N	8330	8330A	III
19-Apr-2011	SL-138-SA8N-SS-0.0-0.5	6262830	N	METHOD	300.0	III
19-Apr-2011	SL-138-SA8N-SS-0.0-0.5	6262830	N	METHOD	314.0	III
19-Apr-2011	SL-138-SA8N-SS-0.0-0.5	6262830	N	METHOD	7471A	III
19-Apr-2011	SL-138-SA8N-SS-0.0-0.5	6262830	N	METHOD	8015B	III
19-Apr-2011	SL-138-SA8N-SS-0.0-0.5	6262830	N	METHOD	8015M	III
19-Apr-2011	SL-138-SA8N-SS-0.0-0.5	6262830	N	METHOD	8315A	III
19-Apr-2011	SL-138-SA8N-SS-0.0-0.5	6262830	N	METHOD	9012B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
19-Apr-2011	SL-138-SA8N-SS-0.0-0.5MS	6262831	MS	3050B	6010B	III
19-Apr-2011	SL-138-SA8N-SS-0.0-0.5MS	6262831	MS	3050B	6020	III
19-Apr-2011	SL-138-SA8N-SS-0.0-0.5MS	6262831	MS	3060A	7199	III
19-Apr-2011	SL-138-SA8N-SS-0.0-0.5MS	6262831	MS	3546	1625C	III
19-Apr-2011	SL-138-SA8N-SS-0.0-0.5MS	6262831	MS	3550B	8015B	III
19-Apr-2011	SL-138-SA8N-SS-0.0-0.5MS	6262831	MS	3550B	8015M	III
19-Apr-2011	SL-138-SA8N-SS-0.0-0.5MS	6262831	MS	3550B	8082	III
19-Apr-2011	SL-138-SA8N-SS-0.0-0.5MS	6262831	MS	3550B	8270C	III
19-Apr-2011	SL-138-SA8N-SS-0.0-0.5MS	6262831	MS	3550B	8270C SIM	III
19-Apr-2011	SL-138-SA8N-SS-0.0-0.5MS	6262831	MS	8330	8330A	III
19-Apr-2011	SL-138-SA8N-SS-0.0-0.5MS	6262831	MS	METHOD	300.0	III
19-Apr-2011	SL-138-SA8N-SS-0.0-0.5MS	6262831	MS	METHOD	314.0	III
19-Apr-2011	SL-138-SA8N-SS-0.0-0.5MS	6262831	MS	METHOD	7471A	III
19-Apr-2011	SL-138-SA8N-SS-0.0-0.5MS	6262831	MS	METHOD	8015B	III
19-Apr-2011	SL-138-SA8N-SS-0.0-0.5MS	6262831	MS	METHOD	8015M	III
19-Apr-2011	SL-138-SA8N-SS-0.0-0.5MS	6262831	MS	METHOD	8315A	III
19-Apr-2011	SL-138-SA8N-SS-0.0-0.5MS	6262831	MS	METHOD	9012B	III
19-Apr-2011	SL-138-SA8N-SS-0.0-0.5MSD	6262832	MSD	3050B	6010B	III
19-Apr-2011	SL-138-SA8N-SS-0.0-0.5MSD	6262832	MSD	3050B	6020	III
19-Apr-2011	SL-138-SA8N-SS-0.0-0.5MSD	6262832	MSD	3546	1625C	III
19-Apr-2011	SL-138-SA8N-SS-0.0-0.5MSD	6262832	MSD	3550B	8015B	III
19-Apr-2011	SL-138-SA8N-SS-0.0-0.5MSD	6262832	MSD	3550B	8015M	III
19-Apr-2011	SL-138-SA8N-SS-0.0-0.5MSD	6262832	MSD	3550B	8082	III
19-Apr-2011	SL-138-SA8N-SS-0.0-0.5MSD	6262832	MSD	3550B	8270C	III
19-Apr-2011	SL-138-SA8N-SS-0.0-0.5MSD	6262832	MSD	3550B	8270C SIM	III
19-Apr-2011	SL-138-SA8N-SS-0.0-0.5MSD	6262832	MSD	8330	8330A	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
19-Apr-2011	SL-138-SA8N-SS-0.0-0.5MSD	6262832	MSD	METHOD	7471A	III
19-Apr-2011	SL-138-SA8N-SS-0.0-0.5MSD	6262832	MSD	METHOD	8015B	III
19-Apr-2011	SL-138-SA8N-SS-0.0-0.5MSD	6262832	MSD	METHOD	8015M	III
19-Apr-2011	SL-138-SA8N-SS-0.0-0.5MSD	6262832	MSD	METHOD	8315A	III
19-Apr-2011	SL-138-SA8N-SS-0.0-0.5DUP	6262833	DUP	3050B	6010B	III
19-Apr-2011	SL-138-SA8N-SS-0.0-0.5DUP	6262833	DUP	3050B	6020	III
19-Apr-2011	SL-138-SA8N-SS-0.0-0.5DUP	6262833	DUP	3060A	7199	III
19-Apr-2011	SL-138-SA8N-SS-0.0-0.5DUP	6262833	DUP	METHOD	300.0	III
19-Apr-2011	SL-138-SA8N-SS-0.0-0.5DUP	6262833	DUP	METHOD	314.0	III
19-Apr-2011	SL-138-SA8N-SS-0.0-0.5DUP	6262833	DUP	METHOD	7471A	III
19-Apr-2011	SL-138-SA8N-SS-0.0-0.5DUP	6262833	DUP	METHOD	9012B	III
19-Apr-2011	DUP04-SA8N-QC-041911	6262836	FD	3050B	6010B	III
19-Apr-2011	DUP04-SA8N-QC-041911	6262836	FD	3050B	6020	III
19-Apr-2011	DUP04-SA8N-QC-041911	6262836	FD	3060A	7199	III
19-Apr-2011	DUP04-SA8N-QC-041911	6262836	FD	3546	1625C	III
19-Apr-2011	DUP04-SA8N-QC-041911	6262836	FD	3550B	8015B	III
19-Apr-2011	DUP04-SA8N-QC-041911	6262836	FD	3550B	8015M	III
19-Apr-2011	DUP04-SA8N-QC-041911	6262836	FD	3550B	8082	III
19-Apr-2011	DUP04-SA8N-QC-041911	6262836	FD	3550B	8270C	III
19-Apr-2011	DUP04-SA8N-QC-041911	6262836	FD	3550B	8270C SIM	III
19-Apr-2011	DUP04-SA8N-QC-041911	6262836	FD	8330	8330A	III
19-Apr-2011	DUP04-SA8N-QC-041911	6262836	FD	METHOD	300.0	III
19-Apr-2011	DUP04-SA8N-QC-041911	6262836	FD	METHOD	314.0	III
19-Apr-2011	DUP04-SA8N-QC-041911	6262836	FD	METHOD	7471A	III
19-Apr-2011	DUP04-SA8N-QC-041911	6262836	FD	METHOD	8015B	III
19-Apr-2011	DUP04-SA8N-QC-041911	6262836	FD	METHOD	8015M	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
19-Apr-2011	DUP04-SA8N-QC-041911	6262836	FD	METHOD	8315A	III
19-Apr-2011	DUP04-SA8N-QC-041911	6262836	FD	METHOD	9012B	III
19-Apr-2011	SL-127-SA5A-SB-2.0-3.0	6262839	N	3050B	6010B	III
19-Apr-2011	SL-127-SA5A-SB-2.0-3.0	6262839	N	3050B	6020	III
19-Apr-2011	SL-127-SA5A-SB-2.0-3.0	6262839	N	3060A	7199	III
19-Apr-2011	SL-127-SA5A-SB-2.0-3.0	6262839	N	3550B	8082	III
19-Apr-2011	SL-127-SA5A-SB-2.0-3.0	6262839	N	3550B	8270C	III
19-Apr-2011	SL-127-SA5A-SB-2.0-3.0	6262839	N	3550B	8270C SIM	III
19-Apr-2011	SL-127-SA5A-SB-2.0-3.0	6262839	N	5035	8260B	III
19-Apr-2011	SL-127-SA5A-SB-2.0-3.0	6262839	N	5035	8260B SIM	III
19-Apr-2011	SL-127-SA5A-SB-2.0-3.0	6262839	N	METHOD	300.0	III
19-Apr-2011	SL-127-SA5A-SB-2.0-3.0	6262839	N	METHOD	314.0	III
19-Apr-2011	SL-127-SA5A-SB-2.0-3.0	6262839	N	METHOD	7471A	III
19-Apr-2011	SL-139-SA8N-SS-0.0-0.5	6262834	N	3050B	6010B	III
19-Apr-2011	SL-139-SA8N-SS-0.0-0.5	6262834	N	3050B	6020	III
19-Apr-2011	SL-139-SA8N-SS-0.0-0.5	6262834	N	3060A	7199	III
19-Apr-2011	SL-139-SA8N-SS-0.0-0.5	6262834	N	3546	1625C	III
19-Apr-2011	SL-139-SA8N-SS-0.0-0.5	6262834	N	3550B	8015B	III
19-Apr-2011	SL-139-SA8N-SS-0.0-0.5	6262834	N	3550B	8015M	III
19-Apr-2011	SL-139-SA8N-SS-0.0-0.5	6262834	N	3550B	8082	III
19-Apr-2011	SL-139-SA8N-SS-0.0-0.5	6262834	N	3550B	8270C	III
19-Apr-2011	SL-139-SA8N-SS-0.0-0.5	6262834	N	3550B	8270C SIM	III
19-Apr-2011	SL-139-SA8N-SS-0.0-0.5	6262834	N	8330	8330A	III
19-Apr-2011	SL-139-SA8N-SS-0.0-0.5	6262834	N	METHOD	300.0	III
19-Apr-2011	SL-139-SA8N-SS-0.0-0.5	6262834	N	METHOD	314.0	III
19-Apr-2011	SL-139-SA8N-SS-0.0-0.5	6262834	N	METHOD	7471A	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
19-Apr-2011	SL-139-SA8N-SS-0.0-0.5	6262834	N	METHOD	8015B	III
19-Apr-2011	SL-139-SA8N-SS-0.0-0.5	6262834	N	METHOD	8015M	III
19-Apr-2011	SL-139-SA8N-SS-0.0-0.5	6262834	N	METHOD	8315A	III
19-Apr-2011	SL-139-SA8N-SS-0.0-0.5	6262834	N	METHOD	9012B	III
19-Apr-2011	EB06-SA8N-SS-041911	6262841	EB	3005A	6010B	III
19-Apr-2011	EB06-SA8N-SS-041911	6262841	EB	3020A	6020	III
19-Apr-2011	EB06-SA8N-SS-041911	6262841	EB	3510C	8015B	III
19-Apr-2011	EB06-SA8N-SS-041911	6262841	EB	3510C	8015M	III
19-Apr-2011	EB06-SA8N-SS-041911	6262841	EB	3510C	8082	III
19-Apr-2011	EB06-SA8N-SS-041911	6262841	EB	3510C	8270C	III
19-Apr-2011	EB06-SA8N-SS-041911	6262841	EB	3510C	8270C SIM	III
19-Apr-2011	EB06-SA8N-SS-041911	6262841	EB	3520C	1625C	III
19-Apr-2011	EB06-SA8N-SS-041911	6262841	EB	8330	8330A	III
19-Apr-2011	EB06-SA8N-SS-041911	6262841	EB	Gen Prep	300.0	III
19-Apr-2011	EB06-SA8N-SS-041911	6262841	EB	Gen Prep	314.0	III
19-Apr-2011	EB06-SA8N-SS-041911	6262841	EB	Gen Prep	7199	III
19-Apr-2011	EB06-SA8N-SS-041911	6262841	EB	Gen Prep	8015B	III
19-Apr-2011	EB06-SA8N-SS-041911	6262841	EB	Gen Prep	8015M	III
19-Apr-2011	EB06-SA8N-SS-041911	6262841	EB	METHOD	7470A	III
19-Apr-2011	EB06-SA8N-SS-041911	6262841	EB	METHOD	8315A	III
19-Apr-2011	EB06-SA8N-SS-041911	6262841	EB	METHOD	9012B	III
19-Apr-2011	SL-126-SA5A-SB-4.0-5.0	6262838	N	3050B	6010B	III
19-Apr-2011	SL-126-SA5A-SB-4.0-5.0	6262838	N	3050B	6020	III
19-Apr-2011	SL-126-SA5A-SB-4.0-5.0	6262838	N	3060A	7199	III
19-Apr-2011	SL-126-SA5A-SB-4.0-5.0	6262838	N	3550B	8082	III
19-Apr-2011	SL-126-SA5A-SB-4.0-5.0	6262838	N	3550B	8270C	III

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IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
19-Apr-2011	SL-126-SA5A-SB-4.0-5.0	6262838	N	3550B	8270C SIM	III
19-Apr-2011	SL-126-SA5A-SB-4.0-5.0	6262838	N	5035	8260B	III
19-Apr-2011	SL-126-SA5A-SB-4.0-5.0	6262838	N	5035	8260B SIM	III
19-Apr-2011	SL-126-SA5A-SB-4.0-5.0	6262838	N	METHOD	300.0	III
19-Apr-2011	SL-126-SA5A-SB-4.0-5.0	6262838	N	METHOD	314.0	III
19-Apr-2011	SL-126-SA5A-SB-4.0-5.0	6262838	N	METHOD	7471A	III
19-Apr-2011	EB14-SA5A-SB-041911	6262842	EB	3510C	8015B	III
19-Apr-2011	EB14-SA5A-SB-041911	6262842	EB	3510C	8015M	III
19-Apr-2011	EB14-SA5A-SB-041911	6262842	EB	3520C	1625C	III
19-Apr-2011	EB14-SA5A-SB-041911	6262842	EB	5030B	8015M	III
19-Apr-2011	EB14-SA5A-SB-041911	6262842	EB	8330	8330A	III
19-Apr-2011	EB14-SA5A-SB-041911	6262842	EB	Gen Prep	300.0	III
19-Apr-2011	EB14-SA5A-SB-041911	6262842	EB	Gen Prep	8015B	III
19-Apr-2011	EB14-SA5A-SB-041911	6262842	EB	Gen Prep	8015M	III
19-Apr-2011	EB14-SA5A-SB-041911	6262842	EB	METHOD	8315A	III
19-Apr-2011	EB14-SA5A-SB-041911	6262842	EB	METHOD	9012B	III
19-Apr-2011	SL-122-SA8N-SS-0.0-0.5	6262828	N	3050B	6010B	III
19-Apr-2011	SL-122-SA8N-SS-0.0-0.5	6262828	N	3050B	6020	III
19-Apr-2011	SL-122-SA8N-SS-0.0-0.5	6262828	N	3060A	7199	III
19-Apr-2011	SL-122-SA8N-SS-0.0-0.5	6262828	N	3546	1625C	III
19-Apr-2011	SL-122-SA8N-SS-0.0-0.5	6262828	N	3550B	8015B	III
19-Apr-2011	SL-122-SA8N-SS-0.0-0.5	6262828	N	3550B	8015M	III
19-Apr-2011	SL-122-SA8N-SS-0.0-0.5	6262828	N	3550B	8082	III
19-Apr-2011	SL-122-SA8N-SS-0.0-0.5	6262828	N	3550B	8270C	III
19-Apr-2011	SL-122-SA8N-SS-0.0-0.5	6262828	N	3550B	8270C SIM	III
19-Apr-2011	SL-122-SA8N-SS-0.0-0.5	6262828	N	8330	8330A	III

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IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
19-Apr-2011	SL-122-SA8N-SS-0.0-0.5	6262828	N	METHOD	300.0	III
19-Apr-2011	SL-122-SA8N-SS-0.0-0.5	6262828	N	METHOD	314.0	III
19-Apr-2011	SL-122-SA8N-SS-0.0-0.5	6262828	N	METHOD	7471A	III
19-Apr-2011	SL-122-SA8N-SS-0.0-0.5	6262828	N	METHOD	8015B	III
19-Apr-2011	SL-122-SA8N-SS-0.0-0.5	6262828	N	METHOD	8015M	III
19-Apr-2011	SL-122-SA8N-SS-0.0-0.5	6262828	N	METHOD	8315A	III
19-Apr-2011	SL-122-SA8N-SS-0.0-0.5	6262828	N	METHOD	9012B	III
19-Apr-2011	SL-092-SA8N-SS-0.0-0.5	6262822	N	3050B	6010B	III
19-Apr-2011	SL-092-SA8N-SS-0.0-0.5	6262822	N	3050B	6020	III
19-Apr-2011	SL-092-SA8N-SS-0.0-0.5	6262822	N	3060A	7199	III
19-Apr-2011	SL-092-SA8N-SS-0.0-0.5	6262822	N	3546	1625C	III
19-Apr-2011	SL-092-SA8N-SS-0.0-0.5	6262822	N	3550B	8015B	III
19-Apr-2011	SL-092-SA8N-SS-0.0-0.5	6262822	N	3550B	8015M	III
19-Apr-2011	SL-092-SA8N-SS-0.0-0.5	6262822	N	3550B	8082	III
19-Apr-2011	SL-092-SA8N-SS-0.0-0.5	6262822	N	3550B	8270C	III
19-Apr-2011	SL-092-SA8N-SS-0.0-0.5	6262822	N	3550B	8270C SIM	III
19-Apr-2011	SL-092-SA8N-SS-0.0-0.5	6262822	N	8330	8330A	III
19-Apr-2011	SL-092-SA8N-SS-0.0-0.5	6262822	N	METHOD	300.0	III
19-Apr-2011	SL-092-SA8N-SS-0.0-0.5	6262822	N	METHOD	314.0	III
19-Apr-2011	SL-092-SA8N-SS-0.0-0.5	6262822	N	METHOD	7471A	III
19-Apr-2011	SL-092-SA8N-SS-0.0-0.5	6262822	N	METHOD	8015B	III
19-Apr-2011	SL-092-SA8N-SS-0.0-0.5	6262822	N	METHOD	8015M	III
19-Apr-2011	SL-092-SA8N-SS-0.0-0.5	6262822	N	METHOD	8315A	III
19-Apr-2011	SL-092-SA8N-SS-0.0-0.5	6262822	N	METHOD	9012B	III
19-Apr-2011	SL-093-SA8N-SS-0.0-0.5	6262823	N	3050B	6010B	III
19-Apr-2011	SL-093-SA8N-SS-0.0-0.5	6262823	N	3050B	6020	III

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IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
19-Apr-2011	SL-093-SA8N-SS-0.0-0.5	6262823	N	3060A	7199	III
19-Apr-2011	SL-093-SA8N-SS-0.0-0.5	6262823	N	3546	1625C	III
19-Apr-2011	SL-093-SA8N-SS-0.0-0.5	6262823	N	3550B	8015B	III
19-Apr-2011	SL-093-SA8N-SS-0.0-0.5	6262823	N	3550B	8015M	III
19-Apr-2011	SL-093-SA8N-SS-0.0-0.5	6262823	N	3550B	8082	III
19-Apr-2011	SL-093-SA8N-SS-0.0-0.5	6262823	N	3550B	8270C	III
19-Apr-2011	SL-093-SA8N-SS-0.0-0.5	6262823	N	3550B	8270C SIM	III
19-Apr-2011	SL-093-SA8N-SS-0.0-0.5	6262823	N	8330	8330A	III
19-Apr-2011	SL-093-SA8N-SS-0.0-0.5	6262823	N	METHOD	300.0	III
19-Apr-2011	SL-093-SA8N-SS-0.0-0.5	6262823	N	METHOD	314.0	III
19-Apr-2011	SL-093-SA8N-SS-0.0-0.5	6262823	N	METHOD	7471A	III
19-Apr-2011	SL-093-SA8N-SS-0.0-0.5	6262823	N	METHOD	8015B	III
19-Apr-2011	SL-093-SA8N-SS-0.0-0.5	6262823	N	METHOD	8015M	III
19-Apr-2011	SL-093-SA8N-SS-0.0-0.5	6262823	N	METHOD	8315A	III
19-Apr-2011	SL-093-SA8N-SS-0.0-0.5	6262823	N	METHOD	9012B	III
19-Apr-2011	SL-076-SA8N-SS-0.0-0.5	6262820	N	3050B	6010B	III
19-Apr-2011	SL-076-SA8N-SS-0.0-0.5	6262820	N	3050B	6020	III
19-Apr-2011	SL-076-SA8N-SS-0.0-0.5	6262820	N	3060A	7199	III
19-Apr-2011	SL-076-SA8N-SS-0.0-0.5	6262820	N	3546	1625C	III
19-Apr-2011	SL-076-SA8N-SS-0.0-0.5	6262820	N	3550B	8015B	III
19-Apr-2011	SL-076-SA8N-SS-0.0-0.5	6262820	N	3550B	8015M	III
19-Apr-2011	SL-076-SA8N-SS-0.0-0.5	6262820	N	3550B	8082	III
19-Apr-2011	SL-076-SA8N-SS-0.0-0.5	6262820	N	3550B	8270C	III
19-Apr-2011	SL-076-SA8N-SS-0.0-0.5	6262820	N	3550B	8270C SIM	III
19-Apr-2011	SL-076-SA8N-SS-0.0-0.5	6262820	N	8330	8330A	III
19-Apr-2011	SL-076-SA8N-SS-0.0-0.5	6262820	N	METHOD	300.0	III

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Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
19-Apr-2011	SL-076-SA8N-SS-0.0-0.5	6262820	N	METHOD	314.0	III
19-Apr-2011	SL-076-SA8N-SS-0.0-0.5	6262820	N	METHOD	7471A	III
19-Apr-2011	SL-076-SA8N-SS-0.0-0.5	6262820	N	METHOD	8015B	III
19-Apr-2011	SL-076-SA8N-SS-0.0-0.5	6262820	N	METHOD	8015M	III
19-Apr-2011	SL-076-SA8N-SS-0.0-0.5	6262820	N	METHOD	8315A	III
19-Apr-2011	SL-076-SA8N-SS-0.0-0.5	6262820	N	METHOD	9012B	III
19-Apr-2011	SL-095-SA8N-SS-0.0-0.5	6262825	N	3050B	6010B	III
19-Apr-2011	SL-095-SA8N-SS-0.0-0.5	6262825	N	3050B	6020	III
19-Apr-2011	SL-095-SA8N-SS-0.0-0.5	6262825	N	3060A	7199	III
19-Apr-2011	SL-095-SA8N-SS-0.0-0.5	6262825	N	3550B	8082	III
19-Apr-2011	SL-095-SA8N-SS-0.0-0.5	6262825	N	3550B	8270C	III
19-Apr-2011	SL-095-SA8N-SS-0.0-0.5	6262825	N	3550B	8270C SIM	III
19-Apr-2011	SL-095-SA8N-SS-0.0-0.5	6262825	N	METHOD	300.0	III
19-Apr-2011	SL-095-SA8N-SS-0.0-0.5	6262825	N	METHOD	314.0	III
19-Apr-2011	SL-095-SA8N-SS-0.0-0.5	6262825	N	METHOD	7471A	III
19-Apr-2011	SL-094-SA8N-SS-0.0-0.5	6262824	N	3050B	6010B	III
19-Apr-2011	SL-094-SA8N-SS-0.0-0.5	6262824	N	3050B	6020	III
19-Apr-2011	SL-094-SA8N-SS-0.0-0.5	6262824	N	3060A	7199	III
19-Apr-2011	SL-094-SA8N-SS-0.0-0.5	6262824	N	3550B	8082	III
19-Apr-2011	SL-094-SA8N-SS-0.0-0.5	6262824	N	3550B	8270C	III
19-Apr-2011	SL-094-SA8N-SS-0.0-0.5	6262824	N	3550B	8270C SIM	III
19-Apr-2011	SL-094-SA8N-SS-0.0-0.5	6262824	N	METHOD	300.0	III
19-Apr-2011	SL-094-SA8N-SS-0.0-0.5	6262824	N	METHOD	314.0	III
19-Apr-2011	SL-094-SA8N-SS-0.0-0.5	6262824	N	METHOD	7471A	III
19-Apr-2011	SL-096-SA8N-SS-0.0-0.5	6262826	N	3050B	6010B	III
19-Apr-2011	SL-096-SA8N-SS-0.0-0.5	6262826	N	3050B	6020	III

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Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
19-Apr-2011	SL-096-SA8N-SS-0.0-0.5	6262826	N	3060A	7199	III
19-Apr-2011	SL-096-SA8N-SS-0.0-0.5	6262826	N	3550B	8082	III
19-Apr-2011	SL-096-SA8N-SS-0.0-0.5	6262826	N	3550B	8270C	III
19-Apr-2011	SL-096-SA8N-SS-0.0-0.5	6262826	N	3550B	8270C SIM	III
19-Apr-2011	SL-096-SA8N-SS-0.0-0.5	6262826	N	METHOD	300.0	III
19-Apr-2011	SL-096-SA8N-SS-0.0-0.5	6262826	N	METHOD	314.0	III
19-Apr-2011	SL-096-SA8N-SS-0.0-0.5	6262826	N	METHOD	7471A	III
19-Apr-2011	SL-097-SA8N-SS-0.0-0.5	6262827	N	3050B	6010B	III
19-Apr-2011	SL-097-SA8N-SS-0.0-0.5	6262827	N	3050B	6020	III
19-Apr-2011	SL-097-SA8N-SS-0.0-0.5	6262827	N	3060A	7199	III
19-Apr-2011	SL-097-SA8N-SS-0.0-0.5	6262827	N	3550B	8082	III
19-Apr-2011	SL-097-SA8N-SS-0.0-0.5	6262827	N	3550B	8270C	III
19-Apr-2011	SL-097-SA8N-SS-0.0-0.5	6262827	N	3550B	8270C SIM	III
19-Apr-2011	SL-097-SA8N-SS-0.0-0.5	6262827	N	METHOD	300.0	III
19-Apr-2011	SL-097-SA8N-SS-0.0-0.5	6262827	N	METHOD	314.0	III
19-Apr-2011	SL-097-SA8N-SS-0.0-0.5	6262827	N	METHOD	7471A	III

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Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE131 **Laboratory: LL**

EDD Filename: PrepDE131_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **GENCHEM**

Method: **300.0** ***Matrix:*** **SO**

Sample ID: **DUP04-SA8N-QC-041911** ***Collected:*** **4/19/2011 11:05:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	0.88	U	0.88	MDL	1.1	PQL	mg/Kg	UJ	Q

Sample ID: **SL-075-SA8N-SS-0.0-0.5** ***Collected:*** **4/19/2011 8:45:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.9		0.93	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: **SL-076-SA8N-SS-0.0-0.5** ***Collected:*** **4/19/2011 2:05:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.6		0.90	MDL	1.1	PQL	mg/Kg	J	Q
Nitrate-NO3	1.2	J	0.90	MDL	1.7	PQL	mg/Kg	J	Z

Sample ID: **SL-077-SA8N-SS-0.0-0.5** ***Collected:*** **4/19/2011 10:30:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.1		1.0	MDL	1.3	PQL	mg/Kg	J	Q

Sample ID: **SL-092-SA8N-SS-0.0-0.5** ***Collected:*** **4/19/2011 1:35:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.1		0.89	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: **SL-093-SA8N-SS-0.0-0.5** ***Collected:*** **4/19/2011 1:55:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.6		0.91	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: **SL-094-SA8N-SS-0.0-0.5** ***Collected:*** **4/19/2011 3:15:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.1		0.86	MDL	1.1	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE131 **Laboratory: LL**

EDD Filename: PrepDE131_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **GENCHEM**

Method: **300.0** ***Matrix:*** **SO**

Sample ID: **SL-095-SA8N-SS-0.0-0.5** ***Collected:*** **4/19/2011 3:00:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.3		0.90	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: **SL-096-SA8N-SS-0.0-0.5** ***Collected:*** **4/19/2011 3:25:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.8		0.86	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: **SL-097-SA8N-SS-0.0-0.5** ***Collected:*** **4/19/2011 3:40:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.7		0.92	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: **SL-122-SA8N-SS-0.0-0.5** ***Collected:*** **4/19/2011 1:15:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	0.84	U	0.84	MDL	1.0	PQL	mg/Kg	UJ	Q

Sample ID: **SL-126-SA5A-SB-4.0-5.0** ***Collected:*** **4/19/2011 12:27:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	3.7		0.93	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: **SL-127-SA5A-SB-2.0-3.0** ***Collected:*** **4/19/2011 11:17:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	0.90	U	0.90	MDL	1.1	PQL	mg/Kg	UJ	Q

Sample ID: **SL-135-SA8N-SS-0.0-0.5** ***Collected:*** **4/19/2011 9:15:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.4		0.88	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: **SL-138-SA8N-SS-0.0-0.5** ***Collected:*** **4/19/2011 11:00:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	0.87	U	0.87	MDL	1.1	PQL	mg/Kg	UJ	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE131 **Laboratory: LL**

EDD Filename: PrepDE131_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: GENCHEM

Method: 300.0 **Matrix: SO**

Sample ID: SL-139-SA8N-SS-0.0-0.5 *Collected:* 4/19/2011 11:25:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	0.84	U	0.84	MDL	1.0	PQL	mg/Kg	UJ	Q

Sample ID: SL-140-SA8N-SS-0.0-0.5 *Collected:* 4/19/2011 9:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	0.92	U	0.92	MDL	1.1	PQL	mg/Kg	UJ	Q

Sample ID: SL-171-SA5A-SB-2.0-3.0 *Collected:* 4/19/2011 9:42:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.6		0.97	MDL	1.2	PQL	mg/Kg	J	Q

Method Category: METALS

Method: 6010B **Matrix: AQ**

Sample ID: EB06-SA8N-SS-041911 *Collected:* 4/19/2011 12:00:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	0.0211	J	0.0138	MDL	0.0500	PQL	mg/L	U	B
CALCIUM	0.0796	J	0.0702	MDL	0.200	PQL	mg/L	J	Z

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: DUP04-SA8N-QC-041911 *Collected:* 4/19/2011 11:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	0.965	U	0.965	MDL	5.42	PQL	mg/Kg	UJ	FD
SODIUM	67.8	J	40.4	MDL	108	PQL	mg/Kg	J	Z
TIN	2.28	J	1.08	MDL	10.8	PQL	mg/Kg	U	B
Zirconium	1.51	J	0.911	MDL	5.42	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE131 **Laboratory: LL**

EDD Filename: PrepDE131_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6010B** ***Matrix:*** **SO**

Sample ID: **SL-075-SA8N-SS-0.0-0.5** ***Collected:*** **4/19/2011 8:45:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	7.50		1.04	MDL	5.82	PQL	mg/Kg	U	F
TIN	2.35	J	1.16	MDL	11.6	PQL	mg/Kg	U	B
Zirconium	3.10	J	0.978	MDL	5.82	PQL	mg/Kg	J	Z

Sample ID: **SL-076-SA8N-SS-0.0-0.5** ***Collected:*** **4/19/2011 2:05:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.64	J	0.991	MDL	5.57	PQL	mg/Kg	U	F
TIN	2.56	J	1.11	MDL	11.1	PQL	mg/Kg	U	B
Zirconium	2.78	J	0.936	MDL	5.57	PQL	mg/Kg	J	Z

Sample ID: **SL-077-SA8N-SS-0.0-0.5** ***Collected:*** **4/19/2011 10:30:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.67	J	1.13	MDL	6.37	PQL	mg/Kg	U	F
TIN	3.00	J	1.27	MDL	12.7	PQL	mg/Kg	U	B
Zirconium	3.17	J	1.07	MDL	6.37	PQL	mg/Kg	J	Z

Sample ID: **SL-092-SA8N-SS-0.0-0.5** ***Collected:*** **4/19/2011 1:35:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	85.5	J	41.6	MDL	112	PQL	mg/Kg	J	Z
TIN	2.51	J	1.12	MDL	11.2	PQL	mg/Kg	U	B
Zirconium	1.80	J	0.938	MDL	5.58	PQL	mg/Kg	J	Z

Sample ID: **SL-093-SA8N-SS-0.0-0.5** ***Collected:*** **4/19/2011 1:55:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.75	J	0.997	MDL	5.60	PQL	mg/Kg	U	F
SODIUM	76.2	J	41.8	MDL	112	PQL	mg/Kg	J	Z
TIN	2.46	J	1.12	MDL	11.2	PQL	mg/Kg	U	B
Zirconium	1.24	J	0.941	MDL	5.60	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE131 **Laboratory: LL**

EDD Filename: PrepDE131_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B ***Matrix:*** SO

Sample ID: SL-094-SA8N-SS-0.0-0.5 ***Collected:*** 4/19/2011 3:15:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	4.41	J	0.951	MDL	5.34	PQL	mg/Kg	U	F
SODIUM	84.0	J	39.8	MDL	107	PQL	mg/Kg	J	Z
TIN	2.56	J	1.07	MDL	10.7	PQL	mg/Kg	U	B
Zirconium	3.61	J	0.897	MDL	5.34	PQL	mg/Kg	J	Z

Sample ID: SL-095-SA8N-SS-0.0-0.5 ***Collected:*** 4/19/2011 3:00:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.84	J	1.01	MDL	5.66	PQL	mg/Kg	U	F
SODIUM	77.9	J	42.2	MDL	113	PQL	mg/Kg	J	Z
TIN	2.53	J	1.13	MDL	11.3	PQL	mg/Kg	U	B
Zirconium	2.88	J	0.950	MDL	5.66	PQL	mg/Kg	J	Z

Sample ID: SL-096-SA8N-SS-0.0-0.5 ***Collected:*** 4/19/2011 3:25:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	4.14	J	0.937	MDL	5.27	PQL	mg/Kg	U	F
SODIUM	85.0	J	39.3	MDL	105	PQL	mg/Kg	J	Z
TIN	2.51	J	1.05	MDL	10.5	PQL	mg/Kg	U	B
Zirconium	3.50	J	0.885	MDL	5.27	PQL	mg/Kg	J	Z

Sample ID: SL-097-SA8N-SS-0.0-0.5 ***Collected:*** 4/19/2011 3:40:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	4.55	J	1.02	MDL	5.71	PQL	mg/Kg	U	F
SODIUM	94.9	J	42.6	MDL	114	PQL	mg/Kg	J	Z
TIN	2.55	J	1.14	MDL	11.4	PQL	mg/Kg	U	B
Zirconium	3.77	J	0.959	MDL	5.71	PQL	mg/Kg	J	Z

Sample ID: SL-122-SA8N-SS-0.0-0.5 ***Collected:*** 4/19/2011 1:15:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.82	J	0.912	MDL	5.12	PQL	mg/Kg	U	F
SODIUM	65.8	J	38.2	MDL	102	PQL	mg/Kg	J	Z
TIN	2.58	J	1.02	MDL	10.2	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE131 **Laboratory: LL**

EDD Filename: PrepDE131_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6010B** ***Matrix:*** **SO**

Sample ID: **SL-122-SA8N-SS-0.0-0.5** ***Collected:*** **4/19/2011 1:15:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	2.53	J	0.861	MDL	5.12	PQL	mg/Kg	J	Z

Sample ID: **SL-126-SA5A-SB-4.0-5.0** ***Collected:*** **4/19/2011 12:27:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	113	J	42.9	MDL	115	PQL	mg/Kg	J	Z
TIN	3.04	J	1.15	MDL	11.5	PQL	mg/Kg	U	B
Zirconium	1.94	J	0.967	MDL	5.76	PQL	mg/Kg	J	Z

Sample ID: **SL-127-SA5A-SB-2.0-3.0** ***Collected:*** **4/19/2011 11:17:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	62.0	J	41.1	MDL	110	PQL	mg/Kg	J	Z
TIN	2.41	J	1.10	MDL	11.0	PQL	mg/Kg	U	B
Zirconium	1.22	J	0.925	MDL	5.51	PQL	mg/Kg	J	Z

Sample ID: **SL-135-SA8N-SS-0.0-0.5** ***Collected:*** **4/19/2011 9:15:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.54	J	0.945	MDL	5.31	PQL	mg/Kg	U	F
SODIUM	65.0	J	39.6	MDL	106	PQL	mg/Kg	J	Z
TIN	2.31	J	1.06	MDL	10.6	PQL	mg/Kg	U	B
Zirconium	1.61	J	0.892	MDL	5.31	PQL	mg/Kg	J	Z

Sample ID: **SL-138-SA8N-SS-0.0-0.5** ***Collected:*** **4/19/2011 11:00:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.44	J	0.960	MDL	5.39	PQL	mg/Kg	UJ	FD, F
SODIUM	69.8	J	40.2	MDL	108	PQL	mg/Kg	J	Z
TIN	2.38	J	1.08	MDL	10.8	PQL	mg/Kg	U	B
Zirconium	1.84	J	0.906	MDL	5.39	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE131 **Laboratory: LL**

EDD Filename: PrepDE131_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-139-SA8N-SS-0.0-0.5 *Collected:* 4/19/2011 11:25:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	70.2	J	38.3	MDL	103	PQL	mg/Kg	J	Z
TIN	2.39	J	1.03	MDL	10.3	PQL	mg/Kg	U	B
Zirconium	1.50	J	0.863	MDL	5.14	PQL	mg/Kg	J	Z

Sample ID: SL-140-SA8N-SS-0.0-0.5 *Collected:* 4/19/2011 9:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.12	J	0.989	MDL	5.55	PQL	mg/Kg	U	F
SODIUM	77.7	J	41.4	MDL	111	PQL	mg/Kg	J	Z
TIN	2.54	J	1.11	MDL	11.1	PQL	mg/Kg	U	B
Zirconium	2.13	J	0.933	MDL	5.55	PQL	mg/Kg	J	Z

Sample ID: SL-171-SA5A-SB-2.0-3.0 *Collected:* 4/19/2011 9:42:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	81.5	J	44.1	MDL	118	PQL	mg/Kg	J	Z
TIN	2.52	J	1.18	MDL	11.8	PQL	mg/Kg	U	B
Zirconium	1.03	J	0.993	MDL	5.91	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 6020 **Matrix:** AQ

Sample ID: EB06-SA8N-SS-041911 *Collected:* 4/19/2011 12:00:00 *Analysis Type:* REA5 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	0.00045	J	0.00038	MDL	0.0020	PQL	mg/L	U	B

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: DUP04-SA8N-QC-041911 *Collected:* 4/19/2011 11:05:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.156	J	0.0430	MDL	0.430	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE131 **Laboratory: LL**

EDD Filename: PrepDE131_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6020** ***Matrix:*** **SO**

Sample ID: **DUP04-SA8N-QC-041911** ***Collected:*** **4/19/2011 11:05:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	123		0.116	MDL	0.430	PQL	mg/Kg	J	E, A

Sample ID: **DUP04-SA8N-QC-041911** ***Collected:*** **4/19/2011 11:05:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.123	J	0.0644	MDL	0.215	PQL	mg/Kg	J	Z, Q, E, FD
CADMIUM	0.224		0.0430	MDL	0.107	PQL	mg/Kg	J	Q
COBALT	7.53		0.0215	MDL	0.107	PQL	mg/Kg	J	Q
COPPER	11.7		0.0709	MDL	0.430	PQL	mg/Kg	J	Q
NICKEL	14.1		0.107	MDL	0.430	PQL	mg/Kg	J	Q, A
SILVER	0.0477	J	0.0129	MDL	0.107	PQL	mg/Kg	J	Z, FD

Sample ID: **SL-075-SA8N-SS-0.0-0.5** ***Collected:*** **4/19/2011 8:45:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.315	J	0.0461	MDL	0.461	PQL	mg/Kg	J	Z

Sample ID: **SL-075-SA8N-SS-0.0-0.5** ***Collected:*** **4/19/2011 8:45:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	127		0.124	MDL	0.461	PQL	mg/Kg	J	E, A

Sample ID: **SL-075-SA8N-SS-0.0-0.5** ***Collected:*** **4/19/2011 8:45:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0702	J	0.0692	MDL	0.231	PQL	mg/Kg	J	Z, Q, E
CADMIUM	0.350		0.0461	MDL	0.115	PQL	mg/Kg	J	Q
COBALT	12.5		0.0231	MDL	0.115	PQL	mg/Kg	J	Q
COPPER	19.1		0.0761	MDL	0.461	PQL	mg/Kg	J	Q
NICKEL	22.2		0.115	MDL	0.461	PQL	mg/Kg	J	Q, A
SILVER	0.0324	J	0.0138	MDL	0.115	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE131 **Laboratory: LL**

EDD Filename: PrepDE131_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6020** ***Matrix:*** **SO**

Sample ID: **SL-076-SA8N-SS-0.0-0.5** ***Collected:*** **4/19/2011 2:05:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.213		0.0450	MDL	0.112	PQL	mg/Kg	J	Q

Sample ID: **SL-076-SA8N-SS-0.0-0.5** ***Collected:*** **4/19/2011 2:05:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.250	J	0.0450	MDL	0.450	PQL	mg/Kg	J	Z

Sample ID: **SL-076-SA8N-SS-0.0-0.5** ***Collected:*** **4/19/2011 2:05:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	123		0.121	MDL	0.450	PQL	mg/Kg	J	E, A

Sample ID: **SL-076-SA8N-SS-0.0-0.5** ***Collected:*** **4/19/2011 2:05:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.128	J	0.0675	MDL	0.225	PQL	mg/Kg	J	Z, Q, E
COBALT	9.36		0.0225	MDL	0.112	PQL	mg/Kg	J	Q
COPPER	14.4		0.0742	MDL	0.450	PQL	mg/Kg	J	Q
NICKEL	17.0		0.112	MDL	0.450	PQL	mg/Kg	J	Q, A
SILVER	0.0497	J	0.0135	MDL	0.112	PQL	mg/Kg	J	Z

Sample ID: **SL-077-SA8N-SS-0.0-0.5** ***Collected:*** **4/19/2011 10:30:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.490	J	0.0500	MDL	0.500	PQL	mg/Kg	J	Z

Sample ID: **SL-077-SA8N-SS-0.0-0.5** ***Collected:*** **4/19/2011 10:30:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	198		0.135	MDL	0.500	PQL	mg/Kg	J	E, A

Sample ID: **SL-077-SA8N-SS-0.0-0.5** ***Collected:*** **4/19/2011 10:30:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0750	U	0.0750	MDL	0.250	PQL	mg/Kg	UJ	Q, E
CADMIUM	0.390		0.0500	MDL	0.125	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE131 **Laboratory: LL**

EDD Filename: PrepDE131_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6020** ***Matrix:*** **SO**

Sample ID: **SL-077-SA8N-SS-0.0-0.5** ***Collected:*** **4/19/2011 10:30:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COBALT	11.4		0.0250	MDL	0.125	PQL	mg/Kg	J	Q
COPPER	18.9		0.0825	MDL	0.500	PQL	mg/Kg	J	Q
NICKEL	21.5		0.125	MDL	0.500	PQL	mg/Kg	J	Q, A
SILVER	0.0695	J	0.0150	MDL	0.125	PQL	mg/Kg	J	Z

Sample ID: **SL-092-SA8N-SS-0.0-0.5** ***Collected:*** **4/19/2011 1:35:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.257		0.0425	MDL	0.106	PQL	mg/Kg	J	Q

Sample ID: **SL-092-SA8N-SS-0.0-0.5** ***Collected:*** **4/19/2011 1:35:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.174	J	0.0425	MDL	0.425	PQL	mg/Kg	J	Z

Sample ID: **SL-092-SA8N-SS-0.0-0.5** ***Collected:*** **4/19/2011 1:35:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	129		0.115	MDL	0.425	PQL	mg/Kg	J	E, A

Sample ID: **SL-092-SA8N-SS-0.0-0.5** ***Collected:*** **4/19/2011 1:35:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.127	J	0.0638	MDL	0.213	PQL	mg/Kg	J	Z, Q, E
COBALT	6.80		0.0213	MDL	0.106	PQL	mg/Kg	J	Q
COPPER	11.3		0.0702	MDL	0.425	PQL	mg/Kg	J	Q
NICKEL	12.9		0.106	MDL	0.425	PQL	mg/Kg	J	Q, A
SILVER	0.0490	J	0.0128	MDL	0.106	PQL	mg/Kg	J	Z

Sample ID: **SL-093-SA8N-SS-0.0-0.5** ***Collected:*** **4/19/2011 1:55:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.223	J	0.0448	MDL	0.448	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE131 **Laboratory: LL**

EDD Filename: PrepDE131_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 ***Matrix:*** SO

Sample ID: SL-093-SA8N-SS-0.0-0.5 ***Collected:*** 4/19/2011 1:55:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	146		0.121	MDL	0.448	PQL	mg/Kg	J	E, A

Sample ID: SL-093-SA8N-SS-0.0-0.5 ***Collected:*** 4/19/2011 1:55:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0947	J	0.0672	MDL	0.224	PQL	mg/Kg	J	Z, Q, E
CADMIUM	0.518		0.0448	MDL	0.112	PQL	mg/Kg	J	Q
COBALT	7.76		0.0224	MDL	0.112	PQL	mg/Kg	J	Q
COPPER	15.4		0.0739	MDL	0.448	PQL	mg/Kg	J	Q
NICKEL	16.3		0.112	MDL	0.448	PQL	mg/Kg	J	Q, A

Sample ID: SL-094-SA8N-SS-0.0-0.5 ***Collected:*** 4/19/2011 3:15:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.202	J	0.0419	MDL	0.419	PQL	mg/Kg	J	Z

Sample ID: SL-094-SA8N-SS-0.0-0.5 ***Collected:*** 4/19/2011 3:15:00 ***Analysis Type:*** REA4 ***Dilution:*** 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	134		0.283	MDL	1.05	PQL	mg/Kg	J	E, A

Sample ID: SL-094-SA8N-SS-0.0-0.5 ***Collected:*** 4/19/2011 3:15:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.144	J	0.0628	MDL	0.209	PQL	mg/Kg	J	Z, Q, E
CADMIUM	0.355		0.0419	MDL	0.105	PQL	mg/Kg	J	Q
COBALT	13.3		0.0209	MDL	0.105	PQL	mg/Kg	J	Q
COPPER	19.7		0.0691	MDL	0.419	PQL	mg/Kg	J	Q
NICKEL	25.8		0.105	MDL	0.419	PQL	mg/Kg	J	Q, A
SILVER	0.0569	J	0.0126	MDL	0.105	PQL	mg/Kg	J	Z

Sample ID: SL-095-SA8N-SS-0.0-0.5 ***Collected:*** 4/19/2011 3:00:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.153	J	0.0439	MDL	0.439	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE131 **Laboratory: LL**

EDD Filename: PrepDE131_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6020** ***Matrix:*** **SO**

Sample ID: **SL-095-SA8N-SS-0.0-0.5** ***Collected:*** **4/19/2011 3:00:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	163		0.119	MDL	0.439	PQL	mg/Kg	J	E, A

Sample ID: **SL-095-SA8N-SS-0.0-0.5** ***Collected:*** **4/19/2011 3:00:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0666	J	0.0659	MDL	0.220	PQL	mg/Kg	J	Z, Q, E
CADMIUM	0.236		0.0439	MDL	0.110	PQL	mg/Kg	J	Q
COBALT	12.5		0.0220	MDL	0.110	PQL	mg/Kg	J	Q
COPPER	16.9		0.0725	MDL	0.439	PQL	mg/Kg	J	Q
NICKEL	21.2		0.110	MDL	0.439	PQL	mg/Kg	J	Q, A
SILVER	0.0523	J	0.0132	MDL	0.110	PQL	mg/Kg	J	Z

Sample ID: **SL-096-SA8N-SS-0.0-0.5** ***Collected:*** **4/19/2011 3:25:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.150	J	0.0421	MDL	0.421	PQL	mg/Kg	J	Z

Sample ID: **SL-096-SA8N-SS-0.0-0.5** ***Collected:*** **4/19/2011 3:25:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	141		0.114	MDL	0.421	PQL	mg/Kg	J	E, A

Sample ID: **SL-096-SA8N-SS-0.0-0.5** ***Collected:*** **4/19/2011 3:25:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.119	J	0.0632	MDL	0.211	PQL	mg/Kg	J	Z, Q, E
CADMIUM	0.329		0.0421	MDL	0.105	PQL	mg/Kg	J	Q
COBALT	10.2		0.0211	MDL	0.105	PQL	mg/Kg	J	Q
COPPER	15.6		0.0695	MDL	0.421	PQL	mg/Kg	J	Q
NICKEL	19.9		0.105	MDL	0.421	PQL	mg/Kg	J	Q, A
SILVER	0.0370	J	0.0126	MDL	0.105	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE131 **Laboratory: LL**

EDD Filename: PrepDE131_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 ***Matrix:*** SO

Sample ID: SL-097-SA8N-SS-0.0-0.5 ***Collected:*** 4/19/2011 3:40:00 ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.308		0.0444	MDL	0.111	PQL	mg/Kg	J	Q

Sample ID: SL-097-SA8N-SS-0.0-0.5 ***Collected:*** 4/19/2011 3:40:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.177	J	0.0444	MDL	0.444	PQL	mg/Kg	J	Z

Sample ID: SL-097-SA8N-SS-0.0-0.5 ***Collected:*** 4/19/2011 3:40:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	166		0.120	MDL	0.444	PQL	mg/Kg	J	E, A

Sample ID: SL-097-SA8N-SS-0.0-0.5 ***Collected:*** 4/19/2011 3:40:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0665	U	0.0665	MDL	0.222	PQL	mg/Kg	UJ	Q, E
COBALT	11.8		0.0222	MDL	0.111	PQL	mg/Kg	J	Q
COPPER	19.5		0.0732	MDL	0.444	PQL	mg/Kg	J	Q
NICKEL	23.4		0.111	MDL	0.444	PQL	mg/Kg	J	Q, A
SILVER	0.0580	J	0.0133	MDL	0.111	PQL	mg/Kg	J	Z

Sample ID: SL-122-SA8N-SS-0.0-0.5 ***Collected:*** 4/19/2011 1:15:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.147	J	0.0410	MDL	0.410	PQL	mg/Kg	J	Z

Sample ID: SL-122-SA8N-SS-0.0-0.5 ***Collected:*** 4/19/2011 1:15:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	113		0.111	MDL	0.410	PQL	mg/Kg	J	E, A

Sample ID: SL-122-SA8N-SS-0.0-0.5 ***Collected:*** 4/19/2011 1:15:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0862	J	0.0615	MDL	0.205	PQL	mg/Kg	J	Z, Q, E
CADMIUM	0.310		0.0410	MDL	0.102	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE131 **Laboratory: LL**

EDD Filename: PrepDE131_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6020** ***Matrix:*** **SO**

Sample ID: **SL-122-SA8N-SS-0.0-0.5** ***Collected:*** **4/19/2011 1:15:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COBALT	6.73		0.0205	MDL	0.102	PQL	mg/Kg	J	Q
COPPER	11.0		0.0676	MDL	0.410	PQL	mg/Kg	J	Q
NICKEL	12.7		0.102	MDL	0.410	PQL	mg/Kg	J	Q, A
SILVER	0.0520	J	0.0123	MDL	0.102	PQL	mg/Kg	J	Z

Sample ID: **SL-126-SA5A-SB-4.0-5.0** ***Collected:*** **4/19/2011 12:27:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0674	J	0.0456	MDL	0.456	PQL	mg/Kg	J	Z

Sample ID: **SL-126-SA5A-SB-4.0-5.0** ***Collected:*** **4/19/2011 12:27:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	102		0.123	MDL	0.456	PQL	mg/Kg	J	E, A

Sample ID: **SL-126-SA5A-SB-4.0-5.0** ***Collected:*** **4/19/2011 12:27:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0699	J	0.0684	MDL	0.228	PQL	mg/Kg	J	Z, Q, E
CADMIUM	0.0612	J	0.0456	MDL	0.114	PQL	mg/Kg	J	Z, Q
COBALT	5.67		0.0228	MDL	0.114	PQL	mg/Kg	J	Q
COPPER	7.40		0.0752	MDL	0.456	PQL	mg/Kg	J	Q
NICKEL	13.5		0.114	MDL	0.456	PQL	mg/Kg	J	Q, A
SILVER	0.0569	J	0.0137	MDL	0.114	PQL	mg/Kg	J	Z

Sample ID: **SL-127-SA5A-SB-2.0-3.0** ***Collected:*** **4/19/2011 11:17:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.132		0.0441	MDL	0.110	PQL	mg/Kg	J	Q

Sample ID: **SL-127-SA5A-SB-2.0-3.0** ***Collected:*** **4/19/2011 11:17:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.133	J	0.0441	MDL	0.441	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE131 **Laboratory: LL**

EDD Filename: PrepDE131_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6020** ***Matrix:*** **SO**

Sample ID: **SL-127-SA5A-SB-2.0-3.0** ***Collected:*** **4/19/2011 11:17:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	144		0.119	MDL	0.441	PQL	mg/Kg	J	E, A

Sample ID: **SL-127-SA5A-SB-2.0-3.0** ***Collected:*** **4/19/2011 11:17:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0804	J	0.0661	MDL	0.220	PQL	mg/Kg	J	Z, Q, E
COBALT	8.81		0.0220	MDL	0.110	PQL	mg/Kg	J	Q
COPPER	13.4		0.0727	MDL	0.441	PQL	mg/Kg	J	Q
NICKEL	16.7		0.110	MDL	0.441	PQL	mg/Kg	J	Q, A
SILVER	0.0420	J	0.0132	MDL	0.110	PQL	mg/Kg	J	Z

Sample ID: **SL-135-SA8N-SS-0.0-0.5** ***Collected:*** **4/19/2011 9:15:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.184	J	0.0433	MDL	0.433	PQL	mg/Kg	J	Z

Sample ID: **SL-135-SA8N-SS-0.0-0.5** ***Collected:*** **4/19/2011 9:15:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	94.4		0.117	MDL	0.433	PQL	mg/Kg	J	E, A

Sample ID: **SL-135-SA8N-SS-0.0-0.5** ***Collected:*** **4/19/2011 9:15:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0727	J	0.0650	MDL	0.217	PQL	mg/Kg	J	Z, Q, E
CADMIUM	0.128		0.0433	MDL	0.108	PQL	mg/Kg	J	Q
COBALT	6.21		0.0217	MDL	0.108	PQL	mg/Kg	J	Q
COPPER	8.84		0.0715	MDL	0.433	PQL	mg/Kg	J	Q
NICKEL	11.4		0.108	MDL	0.433	PQL	mg/Kg	J	Q, A
SILVER	0.0146	J	0.0130	MDL	0.108	PQL	mg/Kg	J	Z

Sample ID: **SL-138-SA8N-SS-0.0-0.5** ***Collected:*** **4/19/2011 11:00:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.150		0.0436	MDL	0.109	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE131 **Laboratory: LL**

EDD Filename: PrepDE131_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6020** ***Matrix:*** **SO**

Sample ID: **SL-138-SA8N-SS-0.0-0.5** ***Collected:*** **4/19/2011 11:00:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.122	J	0.0436	MDL	0.436	PQL	mg/Kg	J	Z

Sample ID: **SL-138-SA8N-SS-0.0-0.5** ***Collected:*** **4/19/2011 11:00:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	116		0.118	MDL	0.436	PQL	mg/Kg	J	E, A

Sample ID: **SL-138-SA8N-SS-0.0-0.5** ***Collected:*** **4/19/2011 11:00:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0654	U	0.0654	MDL	0.218	PQL	mg/Kg	UJ	Q, E, FD
COBALT	6.90		0.0218	MDL	0.109	PQL	mg/Kg	J	Q
COPPER	10.1		0.0719	MDL	0.436	PQL	mg/Kg	J	Q
NICKEL	13.2		0.109	MDL	0.436	PQL	mg/Kg	J	Q, A
SILVER	0.0257	J	0.0131	MDL	0.109	PQL	mg/Kg	J	Z, FD

Sample ID: **SL-139-SA8N-SS-0.0-0.5** ***Collected:*** **4/19/2011 11:25:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.106	J	0.0411	MDL	0.411	PQL	mg/Kg	J	Z

Sample ID: **SL-139-SA8N-SS-0.0-0.5** ***Collected:*** **4/19/2011 11:25:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	109		0.111	MDL	0.411	PQL	mg/Kg	J	E, A

Sample ID: **SL-139-SA8N-SS-0.0-0.5** ***Collected:*** **4/19/2011 11:25:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0617	U	0.0617	MDL	0.206	PQL	mg/Kg	UJ	Q, E
CADMIUM	0.239		0.0411	MDL	0.103	PQL	mg/Kg	J	Q
COBALT	6.51		0.0206	MDL	0.103	PQL	mg/Kg	J	Q
COPPER	9.55		0.0678	MDL	0.411	PQL	mg/Kg	J	Q
NICKEL	12.1		0.103	MDL	0.411	PQL	mg/Kg	J	Q, A
SILVER	0.0434	J	0.0123	MDL	0.103	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE131 **Laboratory: LL**

EDD Filename: PrepDE131_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6020** ***Matrix:*** **SO**

Sample ID: **SL-140-SA8N-SS-0.0-0.5** ***Collected:*** **4/19/2011 9:45:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.204	J	0.0444	MDL	0.444	PQL	mg/Kg	J	Z

Sample ID: **SL-140-SA8N-SS-0.0-0.5** ***Collected:*** **4/19/2011 9:45:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	133		0.120	MDL	0.444	PQL	mg/Kg	J	E, A

Sample ID: **SL-140-SA8N-SS-0.0-0.5** ***Collected:*** **4/19/2011 9:45:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.279		0.0667	MDL	0.222	PQL	mg/Kg	J	Q, E
CADMIUM	0.283		0.0444	MDL	0.111	PQL	mg/Kg	J	Q
COBALT	7.32		0.0222	MDL	0.111	PQL	mg/Kg	J	Q
COPPER	14.0		0.0733	MDL	0.444	PQL	mg/Kg	J	Q
NICKEL	15.1		0.111	MDL	0.444	PQL	mg/Kg	J	Q, A
SILVER	0.0531	J	0.0133	MDL	0.111	PQL	mg/Kg	J	Z

Sample ID: **SL-171-SA5A-SB-2.0-3.0** ***Collected:*** **4/19/2011 9:42:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.182	J	0.0460	MDL	0.460	PQL	mg/Kg	J	Z

Sample ID: **SL-171-SA5A-SB-2.0-3.0** ***Collected:*** **4/19/2011 9:42:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	121		0.124	MDL	0.460	PQL	mg/Kg	J	E, A

Sample ID: **SL-171-SA5A-SB-2.0-3.0** ***Collected:*** **4/19/2011 9:42:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.101	J	0.0689	MDL	0.230	PQL	mg/Kg	J	Z, Q, E
CADMIUM	0.140		0.0460	MDL	0.115	PQL	mg/Kg	J	Q
COBALT	7.16		0.0230	MDL	0.115	PQL	mg/Kg	J	Q
COPPER	11.2		0.0758	MDL	0.460	PQL	mg/Kg	J	Q
NICKEL	15.6		0.115	MDL	0.460	PQL	mg/Kg	J	Q, A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE131 **Laboratory: LL**

EDD Filename: PrepDE131_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-171-SA5A-SB-2.0-3.0 *Collected:* 4/19/2011 9:42:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0596	J	0.0138	MDL	0.115	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 7199 **Matrix: SO**

Sample ID: SL-075-SA8N-SS-0.0-0.5 *Collected:* 4/19/2011 8:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.50	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-076-SA8N-SS-0.0-0.5 *Collected:* 4/19/2011 2:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.50	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-094-SA8N-SS-0.0-0.5 *Collected:* 4/19/2011 3:15:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.67	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-126-SA5A-SB-4.0-5.0 *Collected:* 4/19/2011 12:27:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.54	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-140-SA8N-SS-0.0-0.5 *Collected:* 4/19/2011 9:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.49	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-171-SA5A-SB-2.0-3.0 *Collected:* 4/19/2011 9:42:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.50	J	0.24	MDL	1.2	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE131 **Laboratory: LL**

EDD Filename: PrepDE131_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **7471A** ***Matrix:*** **SO**

Sample ID: **DUP04-SA8N-QC-041911** ***Collected:*** **4/19/2011 11:05:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0168	J	0.0030	MDL	0.105	PQL	mg/Kg	J	Z

Sample ID: **SL-075-SA8N-SS-0.0-0.5** ***Collected:*** **4/19/2011 8:45:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0139	J	0.0033	MDL	0.116	PQL	mg/Kg	J	Z

Sample ID: **SL-076-SA8N-SS-0.0-0.5** ***Collected:*** **4/19/2011 2:05:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0303	J	0.0030	MDL	0.106	PQL	mg/Kg	J	Z

Sample ID: **SL-077-SA8N-SS-0.0-0.5** ***Collected:*** **4/19/2011 10:30:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0977	J	0.0036	MDL	0.124	PQL	mg/Kg	J	Z

Sample ID: **SL-094-SA8N-SS-0.0-0.5** ***Collected:*** **4/19/2011 3:15:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0323	J	0.0030	MDL	0.104	PQL	mg/Kg	J	Z

Sample ID: **SL-095-SA8N-SS-0.0-0.5** ***Collected:*** **4/19/2011 3:00:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0151	J	0.0031	MDL	0.109	PQL	mg/Kg	J	Z

Sample ID: **SL-096-SA8N-SS-0.0-0.5** ***Collected:*** **4/19/2011 3:25:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0149	J	0.0029	MDL	0.101	PQL	mg/Kg	J	Z

Sample ID: **SL-097-SA8N-SS-0.0-0.5** ***Collected:*** **4/19/2011 3:40:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0149	J	0.0031	MDL	0.109	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE131 **Laboratory: LL**

EDD Filename: PrepDE131_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **7471A** ***Matrix:*** **SO**

Sample ID: **SL-122-SA8N-SS-0.0-0.5** ***Collected:*** **4/19/2011 1:15:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0209	J	0.0029	MDL	0.101	PQL	mg/Kg	J	Z

Sample ID: **SL-126-SA5A-SB-4.0-5.0** ***Collected:*** **4/19/2011 12:27:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0188	J	0.0031	MDL	0.110	PQL	mg/Kg	J	Z

Sample ID: **SL-127-SA5A-SB-2.0-3.0** ***Collected:*** **4/19/2011 11:17:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0035	J	0.0030	MDL	0.106	PQL	mg/Kg	J	Z

Sample ID: **SL-135-SA8N-SS-0.0-0.5** ***Collected:*** **4/19/2011 9:15:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0158	J	0.0029	MDL	0.102	PQL	mg/Kg	J	Z

Sample ID: **SL-138-SA8N-SS-0.0-0.5** ***Collected:*** **4/19/2011 11:00:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0181	J	0.0029	MDL	0.102	PQL	mg/Kg	J	Z

Sample ID: **SL-139-SA8N-SS-0.0-0.5** ***Collected:*** **4/19/2011 11:25:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0089	J	0.0028	MDL	0.0973	PQL	mg/Kg	J	Z

Sample ID: **SL-140-SA8N-SS-0.0-0.5** ***Collected:*** **4/19/2011 9:45:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0268	J	0.0031	MDL	0.107	PQL	mg/Kg	J	Z

Sample ID: **SL-171-SA5A-SB-2.0-3.0** ***Collected:*** **4/19/2011 9:42:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0103	J	0.0033	MDL	0.114	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE131 **Laboratory: LL**

EDD Filename: PrepDE131_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 7471A ***Matrix:*** SO

Method Category: SVOA

Method: 1625C ***Matrix:*** AQ

Sample ID: EB06-SA8N-SS-041911 ***Collected:*** 4/19/2011 12:00:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	0.501	U	0.501	MDL	1.00	PQL	ng/L	UJ	L

Sample ID: EB14-SA5A-SB-041911 ***Collected:*** 4/19/2011 1:00:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	0.808	J	0.528	MDL	1.06	PQL	ng/L	J	Z, L, S

Method Category: SVOA

Method: 1625C ***Matrix:*** SO

Sample ID: DUP04-SA8N-QC-041911 ***Collected:*** 4/19/2011 11:05:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	43.8		18.3	MDL	36.5	PQL	ng/Kg	U	B

Sample ID: SL-075-SA8N-SS-0.0-0.5 ***Collected:*** 4/19/2011 8:45:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	303	J	194	MDL	388	PQL	ng/Kg	U	B

Sample ID: SL-076-SA8N-SS-0.0-0.5 ***Collected:*** 4/19/2011 2:05:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	805		188	MDL	375	PQL	ng/Kg	U	B

Sample ID: SL-077-SA8N-SS-0.0-0.5 ***Collected:*** 4/19/2011 10:30:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	575		215	MDL	429	PQL	ng/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE131 **Laboratory: LL**

EDD Filename: PrepDE131_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1625C **Matrix: SO**

Sample ID: SL-135-SA8N-SS-0.0-0.5 *Collected:* 4/19/2011 9:15:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	27.3	J	18.2	MDL	36.5	PQL	ng/Kg	U	B

Sample ID: SL-138-SA8N-SS-0.0-0.5 *Collected:* 4/19/2011 11:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	45.2		18.2	MDL	36.3	PQL	ng/Kg	UJ	Q, B

Sample ID: SL-139-SA8N-SS-0.0-0.5 *Collected:* 4/19/2011 11:25:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	61.6		17.5	MDL	34.9	PQL	ng/Kg	U	B

Method Category: SVOA

Method: 8015M **Matrix: SO**

Sample ID: DUP04-SA8N-QC-041911 *Collected:* 4/19/2011 11:05:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	0.97	J	0.44	MDL	1.3	PQL	mg/Kg	J	Z

Sample ID: SL-075-SA8N-SS-0.0-0.5 *Collected:* 4/19/2011 8:45:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DIETHYLENE GLYCOL	5.8	U	5.8	MDL	15	PQL	mg/Kg	UJ	Q, Q

Sample ID: SL-077-SA8N-SS-0.0-0.5 *Collected:* 4/19/2011 10:30:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	0.99	J	0.51	MDL	1.5	PQL	mg/Kg	J	Z

Sample ID: SL-122-SA8N-SS-0.0-0.5 *Collected:* 4/19/2011 1:15:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	0.97	J	0.42	MDL	1.2	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE131 **Laboratory: LL**

EDD Filename: PrepDE131_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8015M **Matrix: SO**

Sample ID: SL-138-SA8N-SS-0.0-0.5 *Collected:* 4/19/2011 11:00:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	0.85	J	0.43	MDL	1.3	PQL	mg/Kg	J	Z
EFH (C21-C30)	5.8		0.43	MDL	1.3	PQL	mg/Kg	J	Q

Sample ID: SL-140-SA8N-SS-0.0-0.5 *Collected:* 4/19/2011 9:45:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	2.6	J	0.92	MDL	2.7	PQL	mg/Kg	J	Z

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: DUP04-SA8N-QC-041911 *Collected:* 4/19/2011 11:05:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	0.89	J	0.36	MDL	1.9	PQL	ug/Kg	J	Z
AROCLOR 1260	0.93	J	0.43	MDL	1.9	PQL	ug/Kg	J	Z
Aroclor 5460	1.9	J	1.1	MDL	3.6	PQL	ug/Kg	J	Z

Sample ID: SL-075-SA8N-SS-0.0-0.5 *Collected:* 4/19/2011 8:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	1.2	J	0.38	MDL	2.0	PQL	ug/Kg	J	Z

Sample ID: SL-076-SA8N-SS-0.0-0.5 *Collected:* 4/19/2011 2:05:00 *Analysis Type:* RES *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5460	7.5	J	5.6	MDL	18	PQL	ug/Kg	J	Z

Sample ID: SL-092-SA8N-SS-0.0-0.5 *Collected:* 4/19/2011 1:35:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	1.2	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z
Aroclor 5460	1.4	J	1.1	MDL	3.7	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE131 **Laboratory: LL**

EDD Filename: PrepDE131_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **8082** ***Matrix:*** **SO**

Sample ID: **SL-093-SA8N-SS-0.0-0.5** ***Collected:*** **4/19/2011 1:55:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **5**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	6.9	J	2.2	MDL	9.7	PQL	ug/Kg	J	Z
Aroclor 5460	7.6	J	5.7	MDL	19	PQL	ug/Kg	J	Z

Sample ID: **SL-094-SA8N-SS-0.0-0.5** ***Collected:*** **4/19/2011 3:15:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	1.1	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z
AROCLOR 1260	0.79	J	0.42	MDL	1.8	PQL	ug/Kg	J	Z
Aroclor 5460	2.7	J	1.1	MDL	3.6	PQL	ug/Kg	J	Z

Sample ID: **SL-096-SA8N-SS-0.0-0.5** ***Collected:*** **4/19/2011 3:25:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	0.65	J	0.42	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: **SL-122-SA8N-SS-0.0-0.5** ***Collected:*** **4/19/2011 1:15:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	0.70	J	0.34	MDL	1.8	PQL	ug/Kg	J	Z
AROCLOR 1260	1.0	J	0.41	MDL	1.8	PQL	ug/Kg	J	Z
Aroclor 5460	2.3	J	1.0	MDL	3.4	PQL	ug/Kg	J	Z

Sample ID: **SL-135-SA8N-SS-0.0-0.5** ***Collected:*** **4/19/2011 9:15:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	1.2	J	0.42	MDL	1.8	PQL	ug/Kg	J	Z
Aroclor 5460	1.6	J	1.1	MDL	3.6	PQL	ug/Kg	J	Z

Sample ID: **SL-138-SA8N-SS-0.0-0.5** ***Collected:*** **4/19/2011 11:00:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	0.86	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z, S
AROCLOR 1260	1.2	J	0.42	MDL	1.8	PQL	ug/Kg	J	Z, S
Aroclor 5460	2.2	J	1.1	MDL	3.6	PQL	ug/Kg	J	Z, S

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE131 **Laboratory: LL**

EDD Filename: PrepDE131_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: SL-139-SA8N-SS-0.0-0.5 *Collected:* 4/19/2011 11:25:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	0.75	J	0.35	MDL	1.8	PQL	ug/Kg	J	Z
AROCLOR 1260	0.68	J	0.41	MDL	1.8	PQL	ug/Kg	J	Z
Aroclor 5460	1.7	J	1.0	MDL	3.5	PQL	ug/Kg	J	Z

Sample ID: SL-140-SA8N-SS-0.0-0.5 *Collected:* 4/19/2011 9:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	1.5	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z
AROCLOR 1260	1.7	J	0.44	MDL	1.9	PQL	ug/Kg	J	Z
Aroclor 5460	2.5	J	1.1	MDL	3.8	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8270C **Matrix:** AQ

Sample ID: EB06-SA8N-SS-041911 *Collected:* 4/19/2011 12:00:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZOIC ACID	6	U	6	MDL	15	PQL	ug/L	UJ	E

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: DUP04-SA8N-QC-041911 *Collected:* 4/19/2011 11:05:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4-BROMOPHENYL-PHENYLETHER	18	U	18	MDL	180	PQL	ug/Kg	UJ	L

Sample ID: SL-075-SA8N-SS-0.0-0.5 *Collected:* 4/19/2011 8:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4-BROMOPHENYL-PHENYLETHER	19	U	19	MDL	190	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE131 **Laboratory: LL**

EDD Filename: PrepDE131_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **8270C** ***Matrix:*** **SO**

Sample ID: **SL-076-SA8N-SS-0.0-0.5** ***Collected:*** **4/19/2011 2:05:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4-BROMOPHENYL-PHENYLETHER	19	U	19	MDL	190	PQL	ug/Kg	UJ	L

Sample ID: **SL-077-SA8N-SS-0.0-0.5** ***Collected:*** **4/19/2011 10:30:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4-BROMOPHENYL-PHENYLETHER	21	U	21	MDL	210	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	43	J	21	MDL	420	PQL	ug/Kg	J	Z

Sample ID: **SL-092-SA8N-SS-0.0-0.5** ***Collected:*** **4/19/2011 1:35:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4-BROMOPHENYL-PHENYLETHER	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	27	J	18	MDL	370	PQL	ug/Kg	J	Z

Sample ID: **SL-093-SA8N-SS-0.0-0.5** ***Collected:*** **4/19/2011 1:55:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4-BROMOPHENYL-PHENYLETHER	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	32	J	19	MDL	380	PQL	ug/Kg	J	Z

Sample ID: **SL-094-SA8N-SS-0.0-0.5** ***Collected:*** **4/19/2011 3:15:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4-BROMOPHENYL-PHENYLETHER	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	27	J	18	MDL	360	PQL	ug/Kg	J	Z

Sample ID: **SL-095-SA8N-SS-0.0-0.5** ***Collected:*** **4/19/2011 3:00:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4-BROMOPHENYL-PHENYLETHER	19	U	19	MDL	190	PQL	ug/Kg	UJ	L

Sample ID: **SL-096-SA8N-SS-0.0-0.5** ***Collected:*** **4/19/2011 3:25:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4-BROMOPHENYL-PHENYLETHER	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	24	J	18	MDL	360	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE131 **Laboratory: LL**

EDD Filename: PrepDE131_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **8270C** ***Matrix:*** **SO**

Sample ID: **SL-097-SA8N-SS-0.0-0.5** ***Collected:*** **4/19/2011 3:40:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4-BROMOPHENYL-PHENYLETHER	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	25	J	19	MDL	380	PQL	ug/Kg	J	Z

Sample ID: **SL-122-SA8N-SS-0.0-0.5** ***Collected:*** **4/19/2011 1:15:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4-BROMOPHENYL-PHENYLETHER	17	U	17	MDL	170	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	27	J	17	MDL	340	PQL	ug/Kg	J	Z

Sample ID: **SL-126-SA5A-SB-4.0-5.0** ***Collected:*** **4/19/2011 12:27:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4-BROMOPHENYL-PHENYLETHER	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	34	J	19	MDL	380	PQL	ug/Kg	J	Z

Sample ID: **SL-127-SA5A-SB-2.0-3.0** ***Collected:*** **4/19/2011 11:17:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4-BROMOPHENYL-PHENYLETHER	18	U	18	MDL	180	PQL	ug/Kg	UJ	L

Sample ID: **SL-135-SA8N-SS-0.0-0.5** ***Collected:*** **4/19/2011 9:15:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4-BROMOPHENYL-PHENYLETHER	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	20	J	18	MDL	360	PQL	ug/Kg	J	Z

Sample ID: **SL-138-SA8N-SS-0.0-0.5** ***Collected:*** **4/19/2011 11:00:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4-BROMOPHENYL-PHENYLETHER	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
BENZIDINE	1300	U	1300	MDL	3600	PQL	ug/Kg	R	Q
BIS(2-ETHYLHEXYL)PHTHALATE	24	J	18	MDL	360	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE131 **Laboratory: LL**

EDD Filename: PrepDE131_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SL-139-SA8N-SS-0.0-0.5 *Collected:* 4/19/2011 11:25:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4-BROMOPHENYL-PHENYLETHER	17	U	17	MDL	170	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	27	J	17	MDL	340	PQL	ug/Kg	J	Z

Sample ID: SL-140-SA8N-SS-0.0-0.5 *Collected:* 4/19/2011 9:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4-BROMOPHENYL-PHENYLETHER	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	28	J	19	MDL	380	PQL	ug/Kg	J	Z

Sample ID: SL-171-SA5A-SB-2.0-3.0 *Collected:* 4/19/2011 9:42:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4-BROMOPHENYL-PHENYLETHER	20	U	20	MDL	200	PQL	ug/Kg	UJ	L

Method Category: SVOA

Method: 8270C SIM **Matrix:** AQ

Sample ID: EB06-SA8N-SS-041911 *Collected:* 4/19/2011 12:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	0.13	J	0.052	MDL	1.0	PQL	ug/L	J	Z
Diethylphthalate	0.057	J	0.052	MDL	1.0	PQL	ug/L	J	Z
Di-n-butylphthalate	0.30	J	0.052	MDL	1.0	PQL	ug/L	J	Z
Di-n-octylphthalate	0.25	J	0.052	MDL	1.0	PQL	ug/L	J	Z

Method Category: SVOA

Method: 8270C SIM **Matrix:** SO

Sample ID: DUP04-SA8N-QC-041911 *Collected:* 4/19/2011 11:05:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)PYRENE	0.73	U	0.73	MDL	1.8	PQL	ug/Kg	UJ	FD
BENZO(B)FLUORANTHENE	0.73	U	0.73	MDL	1.8	PQL	ug/Kg	UJ	FD
BENZO(K)FLUORANTHENE	0.73	U	0.73	MDL	1.8	PQL	ug/Kg	UJ	FD
CHRYSENE	0.42	J	0.37	MDL	1.8	PQL	ug/Kg	J	Z, FD

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE131 **Laboratory: LL**

EDD Filename: PrepDE131_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **8270C SIM** ***Matrix:*** **SO**

Sample ID: **DUP04-SA8N-QC-041911** ***Collected:*** **4/19/2011 11:05:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORANTHENE	0.73	U	0.73	MDL	1.8	PQL	ug/Kg	UJ	FD
PHENANTHRENE	0.73	U	0.73	MDL	1.8	PQL	ug/Kg	UJ	FD
PYRENE	0.73	U	0.73	MDL	1.8	PQL	ug/Kg	UJ	FD

Sample ID: **SL-077-SA8N-SS-0.0-0.5** ***Collected:*** **4/19/2011 10:30:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)PYRENE	1.2	J	0.86	MDL	2.1	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.9	J	0.86	MDL	2.1	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	0.89	J	0.86	MDL	2.1	PQL	ug/Kg	J	Z
Di-n-octylphthalate	10	J	7.7	MDL	23	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	1.2	J	0.86	MDL	2.1	PQL	ug/Kg	J	Z
NAPHTHALENE	1.3	J	0.86	MDL	2.1	PQL	ug/Kg	J	Z
PHENANTHRENE	2.0	J	0.86	MDL	2.1	PQL	ug/Kg	J	Z
PYRENE	1.9	J	0.86	MDL	2.1	PQL	ug/Kg	J	Z

Sample ID: **SL-092-SA8N-SS-0.0-0.5** ***Collected:*** **4/19/2011 1:35:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	1.6	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.1	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z
CHRYSENE	1.6	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z
FLUORANTHENE	1.6	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z
FLUORENE	1.7	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	0.81	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z
PHENANTHRENE	1.2	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z
PYRENE	1.0	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: **SL-093-SA8N-SS-0.0-0.5** ***Collected:*** **4/19/2011 1:55:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)PYRENE	0.93	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.4	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
FLUORANTHENE	1.6	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
FLUORENE	1.8	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE131 **Laboratory: LL**

EDD Filename: PrepDE131_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **8270C SIM** ***Matrix:*** **SO**

Sample ID: **SL-093-SA8N-SS-0.0-0.5** ***Collected:*** **4/19/2011 1:55:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
INDENO(1,2,3-CD)PYRENE	1.2	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
PHENANTHRENE	1.0	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
PYRENE	1.2	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: **SL-095-SA8N-SS-0.0-0.5** ***Collected:*** **4/19/2011 3:00:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	1.3	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	0.87	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
CHRYSENE	1.1	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z
FLUORANTHENE	1.5	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	1.0	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
PHENANTHRENE	0.89	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
PYRENE	0.98	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: **SL-096-SA8N-SS-0.0-0.5** ***Collected:*** **4/19/2011 3:25:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	0.49	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	1.1	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
CHRYSENE	0.86	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z
FLUORANTHENE	1.3	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	0.84	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
PHENANTHRENE	1.0	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
PYRENE	0.89	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: **SL-097-SA8N-SS-0.0-0.5** ***Collected:*** **4/19/2011 3:40:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-METHYLNAPHTHALENE	0.92	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
ANTHRACENE	0.88	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	1.1	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.2	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.2	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	0.95	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE131 **Laboratory: LL**

EDD Filename: PrepDE131_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **8270C SIM** ***Matrix:*** **SO**

Sample ID: **SL-097-SA8N-SS-0.0-0.5** ***Collected:*** **4/19/2011 3:40:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NAPHTHALENE	1.6	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: **SL-122-SA8N-SS-0.0-0.5** ***Collected:*** **4/19/2011 1:15:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)PYRENE	0.85	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.2	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z
CHRYSENE	1.4	J	0.35	MDL	1.7	PQL	ug/Kg	J	Z
FLUORANTHENE	1.6	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	1.1	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z
PHENANTHRENE	0.86	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z
PYRENE	1.2	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: **SL-127-SA5A-SB-2.0-3.0** ***Collected:*** **4/19/2011 11:17:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHRYSENE	0.71	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z
FLUORANTHENE	1.6	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z
PYRENE	1.2	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: **SL-138-SA8N-SS-0.0-0.5** ***Collected:*** **4/19/2011 11:00:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)PYRENE	0.77	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z, FD
BENZO(B)FLUORANTHENE	1.8	J	0.73	MDL	1.8	PQL	ug/Kg	J	FD
BENZO(K)FLUORANTHENE	0.86	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z, FD
CHRYSENE	1.5	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z, FD
FLUORANTHENE	1.7	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z, FD
PHENANTHRENE	0.96	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z, FD
PYRENE	1.1	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z, FD

Sample ID: **SL-139-SA8N-SS-0.0-0.5** ***Collected:*** **4/19/2011 11:25:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	0.96	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE131 **Laboratory: LL**

EDD Filename: PrepDE131_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C SIM **Matrix: SO**

Sample ID: SL-139-SA8N-SS-0.0-0.5 *Collected:* 4/19/2011 11:25:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHRYSENE	0.84	J	0.35	MDL	1.7	PQL	ug/Kg	J	Z
FLUORANTHENE	1.0	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	0.88	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: SL-140-SA8N-SS-0.0-0.5 *Collected:* 4/19/2011 9:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)PYRENE	1.0	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.3	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	1.1	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
PHENANTHRENE	1.1	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
PYRENE	1.5	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8315A **Matrix: AQ**

Sample ID: EB06-SA8N-SS-041911 *Collected:* 4/19/2011 12:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FORMALDEHYDE	15	J	10	MDL	50	PQL	ug/L	J	Z

Method Category: VOA

Method: 8260B **Matrix: SO**

Sample ID: SL-126-SA5A-SB-4.0-5.0 *Collected:* 4/19/2011 12:27:00 *Analysis Type:* RES *Dilution:* 0.85

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.67	J	0.24	MDL	4.0	PQL	ug/Kg	U	B

Sample ID: SL-127-SA5A-SB-2.0-3.0 *Collected:* 4/19/2011 11:17:00 *Analysis Type:* RES *Dilution:* 0.93

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.75	J	0.25	MDL	4.2	PQL	ug/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE131 **Laboratory: LL**

EDD Filename: PrepDE131_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **VOA**

Method: **8260B** ***Matrix:*** **SO**

Sample ID: **SL-171-SA5A-SB-2.0-3.0** ***Collected:*** **4/19/2011 9:42:00** ***Analysis Type:*** **RES** ***Dilution:*** **0.81**

Analyte	*Lab Result*	*Lab Qual*	*DL*	*DL Type*	*RL*	*RL Type*	*Units*	*Data Review Qual*	*Reason Code*
METHYLENE CHLORIDE	0.65	J	0.24	MDL	3.9	PQL	ug/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE131 **Laboratory: LL**

EDD Filename: PrepDE131_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Laboratory Triplicate Precision
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
*#	Professional Judgment
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Verification Correlation Coefficient
C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Verification Percent Recovery Upper Rejection
E	Laboratory Control Precision
E	Laboratory Duplicate Precision

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE131 **Laboratory: LL**

EDD Filename: PrepDE131_v1 **eQAPP Name: CDM_SSFL_110509**

E	Matrix Spike Precision
F	Equipment Blank Contamination
F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation
L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Q	Matrix Spike Upper Rejection

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE131 **Laboratory: LL**

EDD Filename: PrepDE131_v1 **eQAPP Name: CDM_SSFL_110509**

R	Continuing Calibration Verification Percent Recovery Lower Estimation
R	Continuing Calibration Verification Percent Recovery Lower Rejection
R	Continuing Calibration Verification Percent Recovery Upper Estimation
R	Continuing Calibration Verification Percent Recovery Upper Rejection
R	Continuing Calibration Verification Relative Response Factor
R	Initial Calibration Relative Response Factor
R	Initial Calibration Verification Percent Recovery Lower Estimation
R	Initial Calibration Verification Percent Recovery Lower Rejection
R	Initial Calibration Verification Percent Recovery Upper Estimation
R	Initial Calibration Verification Percent Recovery Upper Rejection
R	Initial Calibration Verification Relative Response Factor
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

Level III ADR Outliers
(including Manual Review Outliers)

Quality Control Outlier Reports

DE131

Method Blank Outlier Report

Lab Reporting Batch ID: DE131 **Laboratory: LL**

EDD Filename: DE131_v1. **eQAPP Name: CDM_SSFL_110509**

Method: **1625C**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKLE11B261359	5/2/2011 1:59:00 PM	N-NITROSODIMETHYLAMINE	34.7 ng/Kg	DUP04-SA8N-QC-041911 SL-075-SA8N-SS-0.0-0.5 SL-076-SA8N-SS-0.0-0.5 SL-077-SA8N-SS-0.0-0.5 SL-092-SA8N-SS-0.0-0.5 SL-093-SA8N-SS-0.0-0.5 SL-122-SA8N-SS-0.0-0.5 SL-135-SA8N-SS-0.0-0.5 SL-138-SA8N-SS-0.0-0.5 SL-139-SA8N-SS-0.0-0.5 SL-140-SA8N-SS-0.0-0.5

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
DUP04-SA8N-QC-041911(RES)	N-NITROSODIMETHYLAMINE	43.8 ng/Kg	43.8U ng/Kg
SL-075-SA8N-SS-0.0-0.5(RES)	N-NITROSODIMETHYLAMINE	303 ng/Kg	388U ng/Kg
SL-076-SA8N-SS-0.0-0.5(RES)	N-NITROSODIMETHYLAMINE	805 ng/Kg	805U ng/Kg
SL-077-SA8N-SS-0.0-0.5(RES)	N-NITROSODIMETHYLAMINE	575 ng/Kg	575U ng/Kg
SL-135-SA8N-SS-0.0-0.5(RES)	N-NITROSODIMETHYLAMINE	27.3 ng/Kg	36.5U ng/Kg
SL-138-SA8N-SS-0.0-0.5(RES)	N-NITROSODIMETHYLAMINE	45.2 ng/Kg	45.2U ng/Kg
SL-139-SA8N-SS-0.0-0.5(RES)	N-NITROSODIMETHYLAMINE	61.6 ng/Kg	61.8U ng/Kg

Method: **6010B**
Matrix: **AQ**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P11748AB221924	4/29/2011 7:24:00 PM	BORON	0.0156 mg/L	EB06-SA8N-SS-041911

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
EB06-SA8N-SS-041911(REA2)	BORON	0.0211 mg/L	0.0211U mg/L

Method Blank Outlier Report

Lab Reporting Batch ID: DE131 **Laboratory: LL**

EDD Filename: DE131_v1. **eQAPP Name: CDM_SSFL_110509**

Method: **6010B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P11608BB221536	4/30/2011 3:36:00 PM	CALCIUM	6.24 mg/Kg	DUP04-SA8N-QC-041911
		PHOSPHORUS	1.04 mg/Kg	SL-075-SA8N-SS-0.0-0.5
		TIN	1.61 mg/Kg	SL-076-SA8N-SS-0.0-0.5
				SL-077-SA8N-SS-0.0-0.5
				SL-092-SA8N-SS-0.0-0.5
				SL-093-SA8N-SS-0.0-0.5
				SL-094-SA8N-SS-0.0-0.5
				SL-095-SA8N-SS-0.0-0.5
				SL-096-SA8N-SS-0.0-0.5
				SL-097-SA8N-SS-0.0-0.5
				SL-122-SA8N-SS-0.0-0.5
				SL-126-SA5A-SB-4.0-5.0
				SL-127-SA5A-SB-2.0-3.0
				SL-135-SA8N-SS-0.0-0.5
				SL-138-SA8N-SS-0.0-0.5
				SL-139-SA8N-SS-0.0-0.5
				SL-140-SA8N-SS-0.0-0.5
				SL-171-SA5A-SB-2.0-3.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
DUP04-SA8N-QC-041911(RES)	TIN	2.28 mg/Kg	2.28U mg/Kg
SL-075-SA8N-SS-0.0-0.5(RES)	TIN	2.35 mg/Kg	2.35U mg/Kg
SL-076-SA8N-SS-0.0-0.5(RES)	TIN	2.56 mg/Kg	2.56U mg/Kg
SL-077-SA8N-SS-0.0-0.5(RES)	TIN	3.00 mg/Kg	3.00U mg/Kg
SL-092-SA8N-SS-0.0-0.5(RES)	TIN	2.51 mg/Kg	2.51U mg/Kg
SL-093-SA8N-SS-0.0-0.5(RES)	TIN	2.46 mg/Kg	2.46U mg/Kg
SL-094-SA8N-SS-0.0-0.5(RES)	TIN	2.56 mg/Kg	2.56U mg/Kg
SL-095-SA8N-SS-0.0-0.5(RES)	TIN	2.53 mg/Kg	2.53U mg/Kg
SL-096-SA8N-SS-0.0-0.5(RES)	TIN	2.51 mg/Kg	2.51U mg/Kg
SL-097-SA8N-SS-0.0-0.5(RES)	TIN	2.55 mg/Kg	2.55U mg/Kg
SL-122-SA8N-SS-0.0-0.5(RES)	TIN	2.58 mg/Kg	2.58U mg/Kg
SL-126-SA5A-SB-4.0-5.0(RES)	TIN	3.04 mg/Kg	3.04U mg/Kg
SL-127-SA5A-SB-2.0-3.0(RES)	TIN	2.41 mg/Kg	2.41U mg/Kg
SL-135-SA8N-SS-0.0-0.5(RES)	TIN	2.31 mg/Kg	2.31U mg/Kg
SL-138-SA8N-SS-0.0-0.5(RES)	TIN	2.38 mg/Kg	2.38U mg/Kg
SL-139-SA8N-SS-0.0-0.5(RES)	TIN	2.39 mg/Kg	2.39U mg/Kg
SL-140-SA8N-SS-0.0-0.5(RES)	TIN	2.54 mg/Kg	2.54U mg/Kg
SL-171-SA5A-SB-2.0-3.0(RES)	TIN	2.52 mg/Kg	2.52U mg/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE131 **Laboratory: LL**

EDD Filename: DE131_v1. **eQAPP Name: CDM_SSFL_110509**

Method: **6020**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P11626BB221103A	4/27/2011 11:03:00 AM	COPPER VANADIUM ZINC	0.107 mg/Kg 0.0888 mg/Kg 0.608 mg/Kg	DUP04-SA8N-QC-041911 SL-075-SA8N-SS-0.0-0.5 SL-076-SA8N-SS-0.0-0.5 SL-077-SA8N-SS-0.0-0.5 SL-092-SA8N-SS-0.0-0.5 SL-093-SA8N-SS-0.0-0.5 SL-094-SA8N-SS-0.0-0.5 SL-095-SA8N-SS-0.0-0.5 SL-096-SA8N-SS-0.0-0.5 SL-097-SA8N-SS-0.0-0.5 SL-122-SA8N-SS-0.0-0.5 SL-126-SA5A-SB-4.0-5.0 SL-127-SA5A-SB-2.0-3.0 SL-135-SA8N-SS-0.0-0.5 SL-138-SA8N-SS-0.0-0.5 SL-139-SA8N-SS-0.0-0.5 SL-140-SA8N-SS-0.0-0.5 SL-171-SA5A-SB-2.0-3.0

Method: **8260B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB32B211301A	4/21/2011 1:01:00 PM	METHYLENE CHLORIDE	0.46 ug/Kg	SL-126-SA5A-SB-4.0-5.0 SL-127-SA5A-SB-2.0-3.0 SL-171-SA5A-SB-2.0-3.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-126-SA5A-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.87 ug/Kg	4.0U ug/Kg
SL-127-SA5A-SB-2.0-3.0(RES)	METHYLENE CHLORIDE	0.75 ug/Kg	4.2U ug/Kg
SL-171-SA5A-SB-2.0-3.0(RES)	METHYLENE CHLORIDE	0.65 ug/Kg	3.9U ug/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE131 **Laboratory: LL**

EDD Filename: DE131_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 8015M
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-075-SA8N-SS-0.0-0.5MS SL-075-SA8N-SS-0.0-0.5MSD (SL-075-SA8N-SS-0.0-0.5)	DIETHYLENE GLYCOL	54	-	59.00-109.00	42 (20.00)	DIETHYLENE GLYCOL	J (all detects) UJ (all non-detects)
SL-138-SA8N-SS-0.0-0.5MS SL-138-SA8N-SS-0.0-0.5MSD (SL-138-SA8N-SS-0.0-0.5)	EFH (C21-C30) EFH (C30-C40)	147 159	157 228	49.00-123.00 49.00-123.00	- -	EFH (C21-C30) EFH (C30-C40)	J(all detects) EFH (C30-C40) No Qual, >4x

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-138-SA8N-SS-0.0-0.5MS SL-138-SA8N-SS-0.0-0.5MSD (SL-138-SA8N-SS-0.0-0.5)	4-CHLORO-3-METHYLPHENOL	114	111	76.00-110.00	-	4-CHLORO-3-METHYLPHENOL	J(all detects)
SL-138-SA8N-SS-0.0-0.5MS SL-138-SA8N-SS-0.0-0.5MSD (SL-138-SA8N-SS-0.0-0.5)	BENZIDINE	0	0	35.00-141.00	-	BENZIDINE	J(all detects) R(all non-detects)
SL-138-SA8N-SS-0.0-0.5MSD (SL-138-SA8N-SS-0.0-0.5)	PENTACHLOROPHENOL	-	-	28.00-127.00	38 (30.00)	PENTACHLOROPHENOL	J(all detects)

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-138-SA8N-SS-0.0-0.5MSD (DUP04-SA8N-QC-041911 SL-075-SA8N-SS-0.0-0.5 SL-076-SA8N-SS-0.0-0.5 SL-077-SA8N-SS-0.0-0.5 SL-092-SA8N-SS-0.0-0.5 SL-093-SA8N-SS-0.0-0.5 SL-094-SA8N-SS-0.0-0.5 SL-095-SA8N-SS-0.0-0.5 SL-096-SA8N-SS-0.0-0.5 SL-097-SA8N-SS-0.0-0.5 SL-122-SA8N-SS-0.0-0.5 SL-126-SA5A-SB-4.0-5.0 SL-127-SA5A-SB-2.0-3.0 SL-135-SA8N-SS-0.0-0.5 SL-138-SA8N-SS-0.0-0.5 SL-139-SA8N-SS-0.0-0.5 SL-140-SA8N-SS-0.0-0.5 SL-171-SA5A-SB-2.0-3.0)	CADMIUM COBALT COPPER NICKEL	- - - -	128 127 126 127	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	- - - -	CADMIUM COBALT COPPER NICKEL	J(all detects)

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE131 **Laboratory: LL**

EDD Filename: DE131_v1. **eQAPP Name: CDM_SSFL_110509**

Method: **6020**

Matrix: **SO**

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-138-SA8N-SS-0.0-0.5MS	ANTIMONY	36	44	75.00-125.00	23 (20.00)	ANTIMONY	
SL-138-SA8N-SS-0.0-0.5MSD	ZINC	71	-	75.00-125.00	-	ZINC	
(DUP04-SA8N-QC-041911							
SL-075-SA8N-SS-0.0-0.5							
SL-076-SA8N-SS-0.0-0.5							
SL-077-SA8N-SS-0.0-0.5							
SL-092-SA8N-SS-0.0-0.5							
SL-093-SA8N-SS-0.0-0.5							
SL-094-SA8N-SS-0.0-0.5							
SL-095-SA8N-SS-0.0-0.5							J(all detects)
SL-096-SA8N-SS-0.0-0.5							UJ(all non-detects)
SL-097-SA8N-SS-0.0-0.5							
SL-122-SA8N-SS-0.0-0.5							
SL-126-SA5A-SB-4.0-5.0							
SL-127-SA5A-SB-2.0-3.0							
SL-135-SA8N-SS-0.0-0.5							
SL-138-SA8N-SS-0.0-0.5							Zn,
SL-139-SA8N-SS-0.0-0.5							No Qual, >4x
SL-140-SA8N-SS-0.0-0.5							
SL-171-SA5A-SB-2.0-3.0)							
SL-138-SA8N-SS-0.0-0.5MSD	BARIUM	-	510	75.00-125.00	32 (20.00)	BARIUM	
(DUP04-SA8N-QC-041911							
SL-075-SA8N-SS-0.0-0.5							
SL-076-SA8N-SS-0.0-0.5							
SL-077-SA8N-SS-0.0-0.5							
SL-092-SA8N-SS-0.0-0.5							
SL-093-SA8N-SS-0.0-0.5							
SL-094-SA8N-SS-0.0-0.5							J(all detects)
SL-095-SA8N-SS-0.0-0.5							UJ(all non-detects)
SL-096-SA8N-SS-0.0-0.5							
SL-097-SA8N-SS-0.0-0.5							
SL-122-SA8N-SS-0.0-0.5							
SL-126-SA5A-SB-4.0-5.0							
SL-127-SA5A-SB-2.0-3.0							
SL-135-SA8N-SS-0.0-0.5							
SL-138-SA8N-SS-0.0-0.5							No Qual %R,
SL-139-SA8N-SS-0.0-0.5							>4x
SL-140-SA8N-SS-0.0-0.5							
SL-171-SA5A-SB-2.0-3.0)							

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE131 **Laboratory: LL**

EDD Filename: DE131_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-138-SA8N-SS-0.0-0.5MS	ALUMINUM	1033	1129	75.00-125.00	-	ALUMINUM	
SL-138-SA8N-SS-0.0-0.5MSD	CALCIUM	148	162	75.00-125.00	-	CALCIUM	
(DUP04-SA8N-QC-041911	IRON	712	974	75.00-125.00	-	IRON	
SL-075-SA8N-SS-0.0-0.5	MAGNESIUM	142	173	75.00-125.00	-	MAGNESIUM	
SL-076-SA8N-SS-0.0-0.5	TITANIUM	200	238	75.00-125.00	-	TITANIUM	
SL-077-SA8N-SS-0.0-0.5							
SL-092-SA8N-SS-0.0-0.5							
SL-093-SA8N-SS-0.0-0.5							
SL-094-SA8N-SS-0.0-0.5							
SL-095-SA8N-SS-0.0-0.5							
SL-096-SA8N-SS-0.0-0.5							No Qual, >4x
SL-097-SA8N-SS-0.0-0.5							
SL-122-SA8N-SS-0.0-0.5							
SL-126-SA5A-SB-4.0-5.0							
SL-127-SA5A-SB-2.0-3.0							
SL-135-SA8N-SS-0.0-0.5							
SL-138-SA8N-SS-0.0-0.5							
SL-139-SA8N-SS-0.0-0.5							
SL-140-SA8N-SS-0.0-0.5							
SL-171-SA5A-SB-2.0-3.0)							

Method: 1625C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-138-SA8N-SS-0.0-0.5MS SL-138-SA8N-SS-0.0-0.5MSD (SL-138-SA8N-SS-0.0-0.5)	N-NITROSODIMETHYLAMINE	55	56	70.00-130.00	-	N-NITROSODIMETHYLAMINE	J(all detects) UJ(all non-detects)

Method: 300.0
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-075-SA8N-SS-0.0-0.5MS (SL-075-SA8N-SS-0.0-0.5 SL-076-SA8N-SS-0.0-0.5 SL-077-SA8N-SS-0.0-0.5 SL-092-SA8N-SS-0.0-0.5 SL-093-SA8N-SS-0.0-0.5 SL-094-SA8N-SS-0.0-0.5 SL-095-SA8N-SS-0.0-0.5 SL-096-SA8N-SS-0.0-0.5 SL-097-SA8N-SS-0.0-0.5 SL-122-SA8N-SS-0.0-0.5)	FLUORIDE	58	-	80.00-120.00	-	FLUORIDE	J(all detects) UJ(all non-detects)
SL-138-SA8N-SS-0.0-0.5MS (DUP04-SA8N-QC-041911 SL-126-SA5A-SB-4.0-5.0 SL-127-SA5A-SB-2.0-3.0 SL-135-SA8N-SS-0.0-0.5 SL-138-SA8N-SS-0.0-0.5 SL-139-SA8N-SS-0.0-0.5 SL-140-SA8N-SS-0.0-0.5 SL-171-SA5A-SB-2.0-3.0)	FLUORIDE	49	-	80.00-120.00	-	FLUORIDE	J(all detects) UJ(all non-detects)

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE131 **Laboratory: LL**

EDD Filename: DE131_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 300.0
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-138-SA8N-SS-0.0-0.5DUP (DUP04-SA8N-QC-041911 SL-126-SA5A-SB-4.0-5.0 SL-127-SA5A-SB-2.0-3.0 SL-135-SA8N-SS-0.0-0.5 SL-138-SA8N-SS-0.0-0.5 SL-139-SA8N-SS-0.0-0.5 SL-140-SA8N-SS-0.0-0.5 SL-171-SA5A-SB-2.0-3.0)	FLUORIDE	200	20.00	No Qual, OK by Difference

Method: 6010B
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-138-SA8N-SS-0.0-0.5DUP (DUP04-SA8N-QC-041911 SL-075-SA8N-SS-0.0-0.5 SL-076-SA8N-SS-0.0-0.5 SL-077-SA8N-SS-0.0-0.5 SL-092-SA8N-SS-0.0-0.5 SL-093-SA8N-SS-0.0-0.5 SL-094-SA8N-SS-0.0-0.5 SL-095-SA8N-SS-0.0-0.5 SL-096-SA8N-SS-0.0-0.5 SL-097-SA8N-SS-0.0-0.5 SL-122-SA8N-SS-0.0-0.5 SL-126-SA5A-SB-4.0-5.0 SL-127-SA5A-SB-2.0-3.0 SL-135-SA8N-SS-0.0-0.5 SL-138-SA8N-SS-0.0-0.5 SL-139-SA8N-SS-0.0-0.5 SL-140-SA8N-SS-0.0-0.5 SL-171-SA5A-SB-2.0-3.0)	BORON Zirconium	200 27	20.00 20.00	No Qual, OK by Difference

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE131 **Laboratory: LL**

EDD Filename: DE131_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 6020
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-138-SA8N-SS-0.0-0.5DUP	ANTIMONY	200	20.00	
(DUP04-SA8N-QC-041911	CADMIUM	24	20.00	
SL-075-SA8N-SS-0.0-0.5	SILVER	30	20.00	
SL-076-SA8N-SS-0.0-0.5				
SL-077-SA8N-SS-0.0-0.5				
SL-092-SA8N-SS-0.0-0.5				
SL-093-SA8N-SS-0.0-0.5				
SL-094-SA8N-SS-0.0-0.5				
SL-095-SA8N-SS-0.0-0.5				No Qual, OK by Difference
SL-096-SA8N-SS-0.0-0.5				
SL-097-SA8N-SS-0.0-0.5				
SL-122-SA8N-SS-0.0-0.5				
SL-126-SA5A-SB-4.0-5.0				
SL-127-SA5A-SB-2.0-3.0				
SL-135-SA8N-SS-0.0-0.5				
SL-138-SA8N-SS-0.0-0.5				
SL-139-SA8N-SS-0.0-0.5				
SL-140-SA8N-SS-0.0-0.5				
SL-171-SA5A-SB-2.0-3.0)				

Method: 300.0
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-075-SA8N-SS-0.0-0.5DUP	FLUORIDE	74	20.00	
(SL-075-SA8N-SS-0.0-0.5				
SL-076-SA8N-SS-0.0-0.5				
SL-077-SA8N-SS-0.0-0.5				
SL-092-SA8N-SS-0.0-0.5				
SL-093-SA8N-SS-0.0-0.5				No Qual, OK by Difference
SL-094-SA8N-SS-0.0-0.5				
SL-095-SA8N-SS-0.0-0.5				
SL-096-SA8N-SS-0.0-0.5				
SL-097-SA8N-SS-0.0-0.5				
SL-122-SA8N-SS-0.0-0.5)				

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE131 **Laboratory: LL**

EDD Filename: DE131_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 1625C
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P0WFLCSQ261308 (EB06-SA8N-SS-041911 EB14-SA5A-SB-041911)	N-NITROSODIMETHYLAMINE	60	-	70.00-130.00	-	N-NITROSODIMETHYLAMINE	J (all detects) UJ (all non-detects)

Method: 8082
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11114AQ242158A P11114AY242139A (EB06-SA8N-SS-041911)	Aroclor 5442	92	96	35.00-84.00	-	Aroclor 5432 Aroclor 5442 Aroclor 5460	J(all detects)

Method: 8330A
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11161AY242029A (EB06-SA8N-SS-041911 EB14-SA5A-SB-041911)	2,4,6-TRINITROTOLUENE	-	110	76.00-109.00	-	2,4,6-TRINITROTOLUENE	J(all detects)

Method: 8270C
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P2WJLCSY261109 (EB06-SA8N-SS-041911)	BENZOIC ACID	-	-	10.00-69.00	31 (30.00)	BENZOIC ACID	J(all detects) UJ(all non-detects)

Method: 8260B
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
LCSY25Q211111A (TB-041911)	CARBON TETRACHLORIDE TRICHLOROFLUOROMETHANE	126 130	- -	75.00-123.00 64.00-129.00	- -	CARBON TETRACHLORIDE TRICHLOROFLUOROMETHAN	J(all detects)

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE131 **Laboratory: LL**

EDD Filename: DE131_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 8330A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11164AQ240658A	NITROBENZENE	124	-	80.00-120.00	-	NITROBENZENE	
(DUP04-SA8N-QC-041911	PETN	124	-	80.00-120.00	-	PETN	
SL-075-SA8N-SS-0.0-0.5							
SL-076-SA8N-SS-0.0-0.5							
SL-077-SA8N-SS-0.0-0.5							
SL-092-SA8N-SS-0.0-0.5							J(all detects)
SL-093-SA8N-SS-0.0-0.5							
SL-122-SA8N-SS-0.0-0.5							
SL-135-SA8N-SS-0.0-0.5							
SL-138-SA8N-SS-0.0-0.5							
SL-139-SA8N-SS-0.0-0.5							
SL-140-SA8N-SS-0.0-0.5)							

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P5LBLCSQ260936	4-BROMOPHENYL-PHENYLETH	73	-	79.00-117.00	-	4-BROMOPHENYL-PHENYLET	
(DUP04-SA8N-QC-041911							
SL-075-SA8N-SS-0.0-0.5							
SL-076-SA8N-SS-0.0-0.5							
SL-077-SA8N-SS-0.0-0.5							
SL-092-SA8N-SS-0.0-0.5							
SL-093-SA8N-SS-0.0-0.5							
SL-094-SA8N-SS-0.0-0.5							
SL-095-SA8N-SS-0.0-0.5							
SL-096-SA8N-SS-0.0-0.5							J(all detects)
SL-097-SA8N-SS-0.0-0.5							UJ(all non-detects)
SL-122-SA8N-SS-0.0-0.5							
SL-126-SA5A-SB-4.0-5.0							
SL-127-SA5A-SB-2.0-3.0							
SL-135-SA8N-SS-0.0-0.5							
SL-138-SA8N-SS-0.0-0.5							
SL-139-SA8N-SS-0.0-0.5							
SL-140-SA8N-SS-0.0-0.5							
SL-171-SA5A-SB-2.0-3.0)							

Surrogate Outlier Report

Lab Reporting Batch ID: DE131 **Laboratory: LL**

EDD Filename: DE131_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 1625C
Matrix: AQ

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
EB06-SA8N-SS-041911	N-Nitrosodimethylamine-d6	155	50.00-150.00	All Target Analytes	J (all detects)
EB14-SA5A-SB-041911	N-Nitrosodimethylamine-d6	153	50.00-150.00	All Target Analytes	J(all detects)

Method: 1625C
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-077-SA8N-SS-0.0-0.5	N-Nitrosodimethylamine-d6	255	50.00-150.00	All Target Analytes	No Qual, Diluted Out

Method: 8082
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-076-SA8N-SS-0.0-0.5	DECACHLOROBIPHENYL	128	45.00-120.00	All Target Analytes	No Qual, Diluted Out
SL-138-SA8N-SS-0.0-0.5	DECACHLOROBIPHENYL	121	45.00-120.00	All Target Analytes	J(all detects)

Field Duplicate RPD Report

Lab Reporting Batch ID: DE131 **Laboratory: LL**

EDD Filename: DE131_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 160.3M
Matrix: SO

Analyte	Concentration (%)		Sample RPD	eQAPP RPD	Flag
	SL-138-SA8N-SS-0.0-0.5	DUP04-SA8N-QC-041911			
MOISTURE	8.2	8.7	6		No Qualifiers Applied

Method: 1625C
Matrix: SO

Analyte	Concentration (ng/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-138-SA8N-SS-0.0-0.5	DUP04-SA8N-QC-041911			
N-NITROSODIMETHYLAMINE	45.2	43.8	3	50.00	No Qualifiers Applied

Method: 300.0
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-138-SA8N-SS-0.0-0.5	DUP04-SA8N-QC-041911			
Nitrate-NO3	3.5	3.7	6	50.00	No Qualifiers Applied

Method: 6010B
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-138-SA8N-SS-0.0-0.5	DUP04-SA8N-QC-041911			
ALUMINUM	12500	12400	1	50.00	No Qualifiers Applied
CALCIUM	2180	2280	4	50.00	
IRON	18600	19400	4	50.00	
LITHIUM	25.5	25.2	1	50.00	
MAGNESIUM	4060	4100	1	50.00	
MANGANESE	309	306	1	50.00	
PHOSPHORUS	431	439	2	50.00	
POTASSIUM	3530	3580	1	50.00	
SODIUM	69.8	67.8	3	50.00	
STRONTIUM	14.7	15.5	5	50.00	
TIN	2.38	2.28	4	50.00	
TITANIUM	1080	1050	3	50.00	
Zirconium	1.84	1.51	20	50.00	
BORON	1.44	5.42 U	200	50.00	J(all detects) UJ(all non-detects)

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Field Duplicate RPD Report

Lab Reporting Batch ID: DE131 **Laboratory: LL**

EDD Filename: DE131_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 6020
Matrix: SO

Analyte	Concentration (mg/Kg) SL-138-SA8N-SS-0.0-0.5	Concentration (mg/Kg) DUP04-SA8N-QC-041911	Sample RPD	eQAPP RPD	Flag
ARSENIC	5.92	6.46	9	50.00	No Qualifiers Applied
BARIUM	116	123	6	50.00	
BERYLLIUM	0.629	0.630	0	50.00	
CADMIUM	0.150	0.224	40	50.00	
CHROMIUM	18.2	19.1	5	50.00	
COBALT	6.90	7.53	9	50.00	
COPPER	10.1	11.7	15	50.00	
LEAD	12.9	13.8	7	50.00	
MOLYBDENUM	0.502	0.591	16	50.00	
NICKEL	13.2	14.1	7	50.00	
SELENIUM	0.122	0.156	24	50.00	
THALLIUM	0.300	0.298	1	50.00	
VANADIUM	37.0	38.9	5	50.00	
ZINC	79.3	85.5	8	50.00	
ANTIMONY	0.218 U	0.123	200	50.00	J(all detects)
SILVER	0.0257	0.0477	60	50.00	UJ(all non-detects)

Method: 7471A
Matrix: SO

Analyte	Concentration (mg/Kg) SL-138-SA8N-SS-0.0-0.5	Concentration (mg/Kg) DUP04-SA8N-QC-041911	Sample RPD	eQAPP RPD	Flag
MERCURY	0.0181	0.0168	7	50.00	No Qualifiers Applied

Method: 8015M
Matrix: SO

Analyte	Concentration (mg/Kg) SL-138-SA8N-SS-0.0-0.5	Concentration (mg/Kg) DUP04-SA8N-QC-041911	Sample RPD	eQAPP RPD	Flag
EFH (C15-C20)	0.85	0.97	13	50.00	No Qualifiers Applied
EFH (C21-C30)	5.8	8.6	39	50.00	
EFH (C30-C40)	22	35	46	50.00	

Method: 8082
Matrix: SO

Analyte	Concentration (ug/Kg) SL-138-SA8N-SS-0.0-0.5	Concentration (ug/Kg) DUP04-SA8N-QC-041911	Sample RPD	eQAPP RPD	Flag
AROCLOR 1254	0.86	0.89	3	50.00	No Qualifiers Applied
AROCLOR 1260	1.2	0.93	25	50.00	
Aroclor 5460	2.2	1.9	15	50.00	

Field Duplicate RPD Report

Lab Reporting Batch ID: DE131 **Laboratory: LL**

EDD Filename: DE131_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 8270C SIM
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-138-SA8N-SS-0.0-0.5	DUP04-SA8N-QC-041911			
BENZO(A)PYRENE	0.77	1.8 U	200	50.00	J(all detects) UJ(all non-detects)
BENZO(B)FLUORANTHENE	1.8	1.8 U	200	50.00	
BENZO(K)FLUORANTHENE	0.86	1.8 U	200	50.00	
CHRYSENE	1.5	0.42	113	50.00	
FLUORANTHENE	1.7	1.8 U	200	50.00	
PHENANTHRENE	0.96	1.8 U	200	50.00	
PYRENE	1.1	1.8 U	200	50.00	

Method: 9045M
Matrix: SO

Analyte	Concentration (pH unit)		Sample RPD	eQAPP RPD	Flag
	SL-138-SA8N-SS-0.0-0.5	DUP04-SA8N-QC-041911			
PH	5.92	6.03	2	50.00	No Qualifiers Applied

Method: ASTM D1498
Matrix: SO

Analyte	Concentration (mV)		Sample RPD	eQAPP RPD	Flag
	SL-138-SA8N-SS-0.0-0.5	DUP04-SA8N-QC-041911			
Oxidation Reduction Potential	449	464	3		No Qualifiers Applied

Reporting Limit Outliers

Lab Reporting Batch ID: DE131 **Laboratory: LL**

EDD Filename: DE131_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 1625C

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB14-SA5A-SB-041911	N-NITROSODIMETHYLAMINE	J	0.808	1.06	PQL	ng/L	J (all detects)

Method: 6010B

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB06-SA8N-SS-041911	BORON	J	0.0211	0.0500	PQL	mg/L	J (all detects)
	CALCIUM	J	0.0796	0.200	PQL	mg/L	

Method: 6020

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB06-SA8N-SS-041911	COPPER	J	0.00045	0.0020	PQL	mg/L	J (all detects)

Method: 8270C SIM

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB06-SA8N-SS-041911	BIS(2-ETHYLHEXYL)PHTHALATE	J	0.13	1.0	PQL	ug/L	J (all detects)
	Diethylphthalate	J	0.057	1.0	PQL	ug/L	
	Di-n-butylphthalate	J	0.30	1.0	PQL	ug/L	
	Di-n-octylphthalate	J	0.25	1.0	PQL	ug/L	

Method: 8315A

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB06-SA8N-SS-041911	FORMALDEHYDE	J	15	50	PQL	ug/L	J (all detects)

Method: 1625C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-075-SA8N-SS-0.0-0.5	N-NITROSODIMETHYLAMINE	J	303	388	PQL	ng/Kg	J (all detects)
SL-135-SA8N-SS-0.0-0.5	N-NITROSODIMETHYLAMINE	J	27.3	36.5	PQL	ng/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE131 **Laboratory: LL**

EDD Filename: DE131_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 300.0

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-076-SA8N-SS-0.0-0.5	Nitrate-NO3	J	1.2	1.7	PQL	mg/Kg	J (all detects)

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP04-SA8N-QC-041911	SODIUM	J	67.8	108	PQL	mg/Kg	J (all detects)
	TIN	J	2.28	10.8	PQL	mg/Kg	
	Zirconium	J	1.51	5.42	PQL	mg/Kg	
SL-075-SA8N-SS-0.0-0.5	TIN	J	2.35	11.6	PQL	mg/Kg	J (all detects)
	Zirconium	J	3.10	5.82	PQL	mg/Kg	
SL-076-SA8N-SS-0.0-0.5	BORON	J	1.64	5.57	PQL	mg/Kg	J (all detects)
	TIN	J	2.56	11.1	PQL	mg/Kg	
	Zirconium	J	2.78	5.57	PQL	mg/Kg	
SL-077-SA8N-SS-0.0-0.5	BORON	J	2.67	6.37	PQL	mg/Kg	J (all detects)
	TIN	J	3.00	12.7	PQL	mg/Kg	
	Zirconium	J	3.17	6.37	PQL	mg/Kg	
SL-092-SA8N-SS-0.0-0.5	SODIUM	J	85.5	112	PQL	mg/Kg	J (all detects)
	TIN	J	2.51	11.2	PQL	mg/Kg	
	Zirconium	J	1.80	5.58	PQL	mg/Kg	
SL-093-SA8N-SS-0.0-0.5	BORON	J	1.75	5.60	PQL	mg/Kg	J (all detects)
	SODIUM	J	76.2	112	PQL	mg/Kg	
	TIN	J	2.46	11.2	PQL	mg/Kg	
	Zirconium	J	1.24	5.60	PQL	mg/Kg	
SL-094-SA8N-SS-0.0-0.5	BORON	J	4.41	5.34	PQL	mg/Kg	J (all detects)
	SODIUM	J	84.0	107	PQL	mg/Kg	
	TIN	J	2.56	10.7	PQL	mg/Kg	
	Zirconium	J	3.61	5.34	PQL	mg/Kg	
SL-095-SA8N-SS-0.0-0.5	BORON	J	2.84	5.66	PQL	mg/Kg	J (all detects)
	SODIUM	J	77.9	113	PQL	mg/Kg	
	TIN	J	2.53	11.3	PQL	mg/Kg	
	Zirconium	J	2.88	5.66	PQL	mg/Kg	
SL-096-SA8N-SS-0.0-0.5	BORON	J	4.14	5.27	PQL	mg/Kg	J (all detects)
	SODIUM	J	85.0	105	PQL	mg/Kg	
	TIN	J	2.51	10.5	PQL	mg/Kg	
	Zirconium	J	3.50	5.27	PQL	mg/Kg	
SL-097-SA8N-SS-0.0-0.5	BORON	J	4.55	5.71	PQL	mg/Kg	J (all detects)
	SODIUM	J	94.9	114	PQL	mg/Kg	
	TIN	J	2.55	11.4	PQL	mg/Kg	
	Zirconium	J	3.77	5.71	PQL	mg/Kg	
SL-122-SA8N-SS-0.0-0.5	BORON	J	1.82	5.12	PQL	mg/Kg	J (all detects)
	SODIUM	J	65.8	102	PQL	mg/Kg	
	TIN	J	2.58	10.2	PQL	mg/Kg	
	Zirconium	J	2.53	5.12	PQL	mg/Kg	
SL-126-SA5A-SB-4.0-5.0	SODIUM	J	113	115	PQL	mg/Kg	J (all detects)
	TIN	J	3.04	11.5	PQL	mg/Kg	
	Zirconium	J	1.94	5.76	PQL	mg/Kg	
SL-127-SA5A-SB-2.0-3.0	SODIUM	J	62.0	110	PQL	mg/Kg	J (all detects)
	TIN	J	2.41	11.0	PQL	mg/Kg	
	Zirconium	J	1.22	5.51	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE131 **Laboratory: LL**

EDD Filename: DE131_v1. **eQAPP Name: CDM_SSFL_110509**

Method: **6010B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-135-SA8N-SS-0.0-0.5	BORON	J	1.54	5.31	PQL	mg/Kg	J (all detects)
	SODIUM	J	65.0	106	PQL	mg/Kg	
	TIN	J	2.31	10.6	PQL	mg/Kg	
	Zirconium	J	1.61	5.31	PQL	mg/Kg	
SL-138-SA8N-SS-0.0-0.5	BORON	J	1.44	5.39	PQL	mg/Kg	J (all detects)
	SODIUM	J	69.8	108	PQL	mg/Kg	
	TIN	J	2.38	10.8	PQL	mg/Kg	
	Zirconium	J	1.84	5.39	PQL	mg/Kg	
SL-139-SA8N-SS-0.0-0.5	SODIUM	J	70.2	103	PQL	mg/Kg	J (all detects)
	TIN	J	2.39	10.3	PQL	mg/Kg	
	Zirconium	J	1.50	5.14	PQL	mg/Kg	
SL-140-SA8N-SS-0.0-0.5	BORON	J	1.12	5.55	PQL	mg/Kg	J (all detects)
	SODIUM	J	77.7	111	PQL	mg/Kg	
	TIN	J	2.54	11.1	PQL	mg/Kg	
	Zirconium	J	2.13	5.55	PQL	mg/Kg	
SL-171-SA5A-SB-2.0-3.0	SODIUM	J	81.5	118	PQL	mg/Kg	J (all detects)
	TIN	J	2.52	11.8	PQL	mg/Kg	
	Zirconium	J	1.03	5.91	PQL	mg/Kg	

Method: **6020**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP04-SA8N-QC-041911	ANTIMONY	J	0.123	0.215	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.156	0.430	PQL	mg/Kg	
	SILVER	J	0.0477	0.107	PQL	mg/Kg	
SL-075-SA8N-SS-0.0-0.5	ANTIMONY	J	0.0702	0.231	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.315	0.461	PQL	mg/Kg	
	SILVER	J	0.0324	0.115	PQL	mg/Kg	
SL-076-SA8N-SS-0.0-0.5	ANTIMONY	J	0.128	0.225	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.250	0.450	PQL	mg/Kg	
	SILVER	J	0.0497	0.112	PQL	mg/Kg	
SL-077-SA8N-SS-0.0-0.5	SELENIUM	J	0.490	0.500	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0695	0.125	PQL	mg/Kg	
SL-092-SA8N-SS-0.0-0.5	ANTIMONY	J	0.127	0.213	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.174	0.425	PQL	mg/Kg	
	SILVER	J	0.0490	0.106	PQL	mg/Kg	
SL-093-SA8N-SS-0.0-0.5	ANTIMONY	J	0.0947	0.224	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.223	0.448	PQL	mg/Kg	
SL-094-SA8N-SS-0.0-0.5	ANTIMONY	J	0.144	0.209	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.202	0.419	PQL	mg/Kg	
	SILVER	J	0.0569	0.105	PQL	mg/Kg	
SL-095-SA8N-SS-0.0-0.5	ANTIMONY	J	0.0666	0.220	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.153	0.439	PQL	mg/Kg	
	SILVER	J	0.0523	0.110	PQL	mg/Kg	
SL-096-SA8N-SS-0.0-0.5	ANTIMONY	J	0.119	0.211	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.150	0.421	PQL	mg/Kg	
	SILVER	J	0.0370	0.105	PQL	mg/Kg	
SL-097-SA8N-SS-0.0-0.5	SELENIUM	J	0.177	0.444	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0580	0.111	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE131 **Laboratory: LL**

EDD Filename: DE131_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-122-SA8N-SS-0.0-0.5	ANTIMONY	J	0.0862	0.205	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.147	0.410	PQL	mg/Kg	
	SILVER	J	0.0520	0.102	PQL	mg/Kg	
SL-126-SA5A-SB-4.0-5.0	ANTIMONY	J	0.0699	0.228	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0612	0.114	PQL	mg/Kg	
	SELENIUM	J	0.0674	0.456	PQL	mg/Kg	
	SILVER	J	0.0569	0.114	PQL	mg/Kg	
SL-127-SA5A-SB-2.0-3.0	ANTIMONY	J	0.0804	0.220	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.133	0.441	PQL	mg/Kg	
	SILVER	J	0.0420	0.110	PQL	mg/Kg	
SL-135-SA8N-SS-0.0-0.5	ANTIMONY	J	0.0727	0.217	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.184	0.433	PQL	mg/Kg	
	SILVER	J	0.0146	0.108	PQL	mg/Kg	
SL-138-SA8N-SS-0.0-0.5	SELENIUM	J	0.122	0.436	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0257	0.109	PQL	mg/Kg	
SL-139-SA8N-SS-0.0-0.5	SELENIUM	J	0.106	0.411	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0434	0.103	PQL	mg/Kg	
SL-140-SA8N-SS-0.0-0.5	SELENIUM	J	0.204	0.444	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0531	0.111	PQL	mg/Kg	
SL-171-SA5A-SB-2.0-3.0	ANTIMONY	J	0.101	0.230	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.182	0.460	PQL	mg/Kg	
	SILVER	J	0.0596	0.115	PQL	mg/Kg	

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-075-SA8N-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.50	1.2	PQL	mg/Kg	J (all detects)
SL-076-SA8N-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.50	1.1	PQL	mg/Kg	J (all detects)
SL-094-SA8N-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.67	1.1	PQL	mg/Kg	J (all detects)
SL-126-SA5A-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.54	1.2	PQL	mg/Kg	J (all detects)
SL-140-SA8N-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.49	1.1	PQL	mg/Kg	J (all detects)
SL-171-SA5A-SB-2.0-3.0	HEXAVALENT CHROMIUM	J	0.50	1.2	PQL	mg/Kg	J (all detects)

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP04-SA8N-QC-041911	MERCURY	J	0.0168	0.105	PQL	mg/Kg	J (all detects)
SL-075-SA8N-SS-0.0-0.5	MERCURY	J	0.0139	0.116	PQL	mg/Kg	J (all detects)
SL-076-SA8N-SS-0.0-0.5	MERCURY	J	0.0303	0.106	PQL	mg/Kg	J (all detects)
SL-077-SA8N-SS-0.0-0.5	MERCURY	J	0.0977	0.124	PQL	mg/Kg	J (all detects)
SL-094-SA8N-SS-0.0-0.5	MERCURY	J	0.0323	0.104	PQL	mg/Kg	J (all detects)
SL-095-SA8N-SS-0.0-0.5	MERCURY	J	0.0151	0.109	PQL	mg/Kg	J (all detects)

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Reporting Limit Outliers

Lab Reporting Batch ID: DE131 **Laboratory: LL**

EDD Filename: DE131_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-096-SA8N-SS-0.0-0.5	MERCURY	J	0.0149	0.101	PQL	mg/Kg	J (all detects)
SL-097-SA8N-SS-0.0-0.5	MERCURY	J	0.0149	0.109	PQL	mg/Kg	J (all detects)
SL-122-SA8N-SS-0.0-0.5	MERCURY	J	0.0209	0.101	PQL	mg/Kg	J (all detects)
SL-126-SA5A-SB-4.0-5.0	MERCURY	J	0.0188	0.110	PQL	mg/Kg	J (all detects)
SL-127-SA5A-SB-2.0-3.0	MERCURY	J	0.0035	0.106	PQL	mg/Kg	J (all detects)
SL-135-SA8N-SS-0.0-0.5	MERCURY	J	0.0158	0.102	PQL	mg/Kg	J (all detects)
SL-138-SA8N-SS-0.0-0.5	MERCURY	J	0.0181	0.102	PQL	mg/Kg	J (all detects)
SL-139-SA8N-SS-0.0-0.5	MERCURY	J	0.0089	0.0973	PQL	mg/Kg	J (all detects)
SL-140-SA8N-SS-0.0-0.5	MERCURY	J	0.0268	0.107	PQL	mg/Kg	J (all detects)
SL-171-SA5A-SB-2.0-3.0	MERCURY	J	0.0103	0.114	PQL	mg/Kg	J (all detects)

Method: 8015M

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP04-SA8N-QC-041911	EFH (C15-C20)	J	0.97	1.3	PQL	mg/Kg	J (all detects)
SL-077-SA8N-SS-0.0-0.5	EFH (C15-C20)	J	0.99	1.5	PQL	mg/Kg	J (all detects)
SL-122-SA8N-SS-0.0-0.5	EFH (C15-C20)	J	0.97	1.2	PQL	mg/Kg	J (all detects)
SL-138-SA8N-SS-0.0-0.5	EFH (C15-C20)	J	0.85	1.3	PQL	mg/Kg	J (all detects)
SL-140-SA8N-SS-0.0-0.5	EFH (C15-C20)	J	2.6	2.7	PQL	mg/Kg	J (all detects)

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP04-SA8N-QC-041911	AROCLOR 1254 AROCLOR 1260 Aroclor 5460	J J J	0.89 0.93 1.9	1.9 1.9 3.6	PQL PQL PQL	ug/Kg ug/Kg ug/Kg	J (all detects)
SL-075-SA8N-SS-0.0-0.5	AROCLOR 1254	J	1.2	2.0	PQL	ug/Kg	J (all detects)
SL-076-SA8N-SS-0.0-0.5	Aroclor 5460	J	7.5	18	PQL	ug/Kg	J (all detects)
SL-092-SA8N-SS-0.0-0.5	AROCLOR 1254 Aroclor 5460	J J	1.2 1.4	1.9 3.7	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-093-SA8N-SS-0.0-0.5	AROCLOR 1260 Aroclor 5460	J J	6.9 7.6	9.7 19	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-094-SA8N-SS-0.0-0.5	AROCLOR 1254 AROCLOR 1260 Aroclor 5460	J J J	1.1 0.79 2.7	1.8 1.8 3.6	PQL PQL PQL	ug/Kg ug/Kg ug/Kg	J (all detects)
SL-096-SA8N-SS-0.0-0.5	AROCLOR 1260	J	0.65	1.8	PQL	ug/Kg	J (all detects)
SL-122-SA8N-SS-0.0-0.5	AROCLOR 1254 AROCLOR 1260 Aroclor 5460	J J J	0.70 1.0 2.3	1.8 1.8 3.4	PQL PQL PQL	ug/Kg ug/Kg ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE131 **Laboratory: LL**

EDD Filename: DE131_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-135-SA8N-SS-0.0-0.5	AROCLOR 1260 Aroclor 5460	J J	1.2 1.6	1.8 3.6	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-138-SA8N-SS-0.0-0.5	AROCLOR 1254 AROCLOR 1260 Aroclor 5460	J J J	0.86 1.2 2.2	1.8 1.8 3.6	PQL PQL PQL	ug/Kg ug/Kg ug/Kg	J (all detects)
SL-139-SA8N-SS-0.0-0.5	AROCLOR 1254 AROCLOR 1260 Aroclor 5460	J J J	0.75 0.68 1.7	1.8 1.8 3.5	PQL PQL PQL	ug/Kg ug/Kg ug/Kg	J (all detects)
SL-140-SA8N-SS-0.0-0.5	AROCLOR 1254 AROCLOR 1260 Aroclor 5460	J J J	1.5 1.7 2.5	1.9 1.9 3.8	PQL PQL PQL	ug/Kg ug/Kg ug/Kg	J (all detects)

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-126-SA5A-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.67	4.0	PQL	ug/Kg	J (all detects)
SL-127-SA5A-SB-2.0-3.0	METHYLENE CHLORIDE	J	0.75	4.2	PQL	ug/Kg	J (all detects)
SL-171-SA5A-SB-2.0-3.0	METHYLENE CHLORIDE	J	0.65	3.9	PQL	ug/Kg	J (all detects)

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-077-SA8N-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	43	420	PQL	ug/Kg	J (all detects)
SL-092-SA8N-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	27	370	PQL	ug/Kg	J (all detects)
SL-093-SA8N-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	32	380	PQL	ug/Kg	J (all detects)
SL-094-SA8N-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	27	360	PQL	ug/Kg	J (all detects)
SL-096-SA8N-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	24	360	PQL	ug/Kg	J (all detects)
SL-097-SA8N-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	25	380	PQL	ug/Kg	J (all detects)
SL-122-SA8N-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	27	340	PQL	ug/Kg	J (all detects)
SL-126-SA5A-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	34	380	PQL	ug/Kg	J (all detects)
SL-135-SA8N-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	20	360	PQL	ug/Kg	J (all detects)
SL-138-SA8N-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	24	360	PQL	ug/Kg	J (all detects)
SL-139-SA8N-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	27	340	PQL	ug/Kg	J (all detects)
SL-140-SA8N-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	28	380	PQL	ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE131 **Laboratory: LL**

EDD Filename: DE131_v1. **eQAPP Name: CDM_SSFL_110509**

Method: **8270C SIM**

Matrix: **SO**

SampleID	*Analyte*	*Lab Qual*	*Result*	*Reporting Limit*	*RL Type*	*Units*	*Flag*
DUP04-SA8N-QC-041911	CHRYSENE	J	0.42	1.8	PQL	ug/Kg	J (all detects)
SL-077-SA8N-SS-0.0-0.5	BENZO(A)PYRENE	J	1.2	2.1	PQL	ug/Kg	J (all detects)
	BENZO(G,H,I)PERYLENE	J	1.9	2.1	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	0.89	2.1	PQL	ug/Kg	
	Di-n-octylphthalate	J	10	23	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.2	2.1	PQL	ug/Kg	
	NAPHTHALENE	J	1.3	2.1	PQL	ug/Kg	
	PHENANTHRENE	J	2.0	2.1	PQL	ug/Kg	
	PYRENE	J	1.9	2.1	PQL	ug/Kg	
SL-092-SA8N-SS-0.0-0.5	BENZO(B)FLUORANTHENE	J	1.6	1.9	PQL	ug/Kg	J (all detects)
	BENZO(G,H,I)PERYLENE	J	1.1	1.9	PQL	ug/Kg	
	CHRYSENE	J	1.6	1.9	PQL	ug/Kg	
	FLUORANTHENE	J	1.6	1.9	PQL	ug/Kg	
	FLUORENE	J	1.7	1.9	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	0.81	1.9	PQL	ug/Kg	
	PHENANTHRENE	J	1.2	1.9	PQL	ug/Kg	
	PYRENE	J	1.0	1.9	PQL	ug/Kg	
SL-093-SA8N-SS-0.0-0.5	BENZO(A)PYRENE	J	0.93	1.9	PQL	ug/Kg	J (all detects)
	BENZO(G,H,I)PERYLENE	J	1.4	1.9	PQL	ug/Kg	
	FLUORANTHENE	J	1.6	1.9	PQL	ug/Kg	
	FLUORENE	J	1.8	1.9	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.2	1.9	PQL	ug/Kg	
	PHENANTHRENE	J	1.0	1.9	PQL	ug/Kg	
	PYRENE	J	1.2	1.9	PQL	ug/Kg	
SL-095-SA8N-SS-0.0-0.5	BENZO(B)FLUORANTHENE	J	1.3	1.9	PQL	ug/Kg	J (all detects)
	BENZO(G,H,I)PERYLENE	J	0.87	1.9	PQL	ug/Kg	
	CHRYSENE	J	1.1	1.9	PQL	ug/Kg	
	FLUORANTHENE	J	1.5	1.9	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.0	1.9	PQL	ug/Kg	
	PHENANTHRENE	J	0.89	1.9	PQL	ug/Kg	
	PYRENE	J	0.98	1.9	PQL	ug/Kg	
SL-096-SA8N-SS-0.0-0.5	ANTHRACENE	J	0.49	1.8	PQL	ug/Kg	J (all detects)
	BENZO(B)FLUORANTHENE	J	1.1	1.8	PQL	ug/Kg	
	CHRYSENE	J	0.86	1.8	PQL	ug/Kg	
	FLUORANTHENE	J	1.3	1.8	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	0.84	1.8	PQL	ug/Kg	
	PHENANTHRENE	J	1.0	1.8	PQL	ug/Kg	
	PYRENE	J	0.89	1.8	PQL	ug/Kg	
SL-097-SA8N-SS-0.0-0.5	2-METHYLNAPHTHALENE	J	0.92	1.9	PQL	ug/Kg	J (all detects)
	ANTHRACENE	J	0.88	1.9	PQL	ug/Kg	
	BENZO(A)ANTHRACENE	J	1.1	1.9	PQL	ug/Kg	
	BENZO(A)PYRENE	J	1.2	1.9	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.2	1.9	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	0.95	1.9	PQL	ug/Kg	
	NAPHTHALENE	J	1.6	1.9	PQL	ug/Kg	
SL-122-SA8N-SS-0.0-0.5	BENZO(A)PYRENE	J	0.85	1.7	PQL	ug/Kg	J (all detects)
	BENZO(G,H,I)PERYLENE	J	1.2	1.7	PQL	ug/Kg	
	CHRYSENE	J	1.4	1.7	PQL	ug/Kg	
	FLUORANTHENE	J	1.6	1.7	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.1	1.7	PQL	ug/Kg	
	PHENANTHRENE	J	0.86	1.7	PQL	ug/Kg	
	PYRENE	J	1.2	1.7	PQL	ug/Kg	
SL-127-SA5A-SB-2.0-3.0	CHRYSENE	J	0.71	1.9	PQL	ug/Kg	J (all detects)
	FLUORANTHENE	J	1.6	1.9	PQL	ug/Kg	
	PYRENE	J	1.2	1.9	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE131 **Laboratory: LL**

EDD Filename: DE131_v1. **eQAPP Name: CDM_SSFL_110509**

Method: **8270C SIM**

Matrix: **SO**

SampleID	*Analyte*	*Lab Qual*	*Result*	*Reporting Limit*	*RL Type*	*Units*	*Flag*
SL-138-SA8N-SS-0.0-0.5	BENZO(A)PYRENE	J	0.77	1.8	PQL	ug/Kg	J (all detects)
	BENZO(K)FLUORANTHENE	J	0.86	1.8	PQL	ug/Kg	
	CHRYSENE	J	1.5	1.8	PQL	ug/Kg	
	FLUORANTHENE	J	1.7	1.8	PQL	ug/Kg	
	PHENANTHRENE	J	0.96	1.8	PQL	ug/Kg	
	PYRENE	J	1.1	1.8	PQL	ug/Kg	
SL-139-SA8N-SS-0.0-0.5	BENZO(B)FLUORANTHENE	J	0.96	1.7	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	0.84	1.7	PQL	ug/Kg	
	FLUORANTHENE	J	1.0	1.7	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	0.88	1.7	PQL	ug/Kg	
SL-140-SA8N-SS-0.0-0.5	BENZO(A)PYRENE	J	1.0	1.9	PQL	ug/Kg	J (all detects)
	BENZO(G,H,I)PERYLENE	J	1.3	1.9	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.1	1.9	PQL	ug/Kg	
	PHENANTHRENE	J	1.1	1.9	PQL	ug/Kg	
	PYRENE	J	1.5	1.9	PQL	ug/Kg	

QC Outlier Report: HoldingTimes

Lab Reporting Batch ID: DE131 **Laboratory: LL**
EDD Filename: DE131_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 8015M **Preparation Method: 3510C**
Matrix: AQ

Sample ID	Type	Actual	Criteria	Units	Flag
EB06-SA8N-SS-041911 (REA2)	Sampling To Analysis	10.00	7.00	DAYS	J (all detects)
EB14-SA5A-SB-041911 (REA2)		10.00	7.00	DAYS	UJ (all non-detects)
EB14-SA5A-SB-041911 (RES)		8.00	7.00	DAYS	

LDC #: 26078C4 **VALIDATION COMPLETENESS WORKSHEET** Date: 8/29-11
SDG #: DE131 ADR Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: Metals (EPA SW 846 Method 6010B/6020A/7000)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	N	Sampling dates:
II.	ICP/MS Tune	—	
III.	Calibration	—	
IV.	Blanks	SW	
V.	ICP Interference Check Sample (ICS) Analysis	N	
VI.	Matrix Spike Analysis	SW	MS/D
VII.	Duplicate Sample Analysis	SW	D
VIII.	Laboratory Control Samples (LCS)	N	LCS/P
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	SW	(Ba, Ni)
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	—	
XV	Field Blanks	SW	EB=19

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:

1	SL-075-SA8N-SS-0.0-0.5	11	SL-135-SA8N-SS-0.0-0.5	21	SL-138-SA8N-SS-0.0-0.5MSD	31	
2	SL-076-SA8N-SS-0.0-0.5	12	SL-138-SA8N-SS-0.0-0.5	22	SL-138-SA8N-SS-0.0-0.5DUP	32	
3	SL-077-SA8N-SS-0.0-0.5	13	SL-139-SA8N-SS-0.0-0.5	23		33	
4	SL-092-SA8N-SS-0.0-0.5	14	SL-140-SA8N-SS-0.0-0.5	24		34	
5	SL-093-SA8N-SS-0.0-0.5	15	SL-DUP04-SA8N-QC-041911	25		35	
6	SL-094-SA8N-SS-0.0-0.5	16	SL-171-SA5A-SB-2.0-3.0	26		36	
7	SL-095-SA8N-SS-0.0-0.5	17	SL-126-SA5A-SB-4.0-5.0	27		37	
8	SL-096-SA8N-SS-0.0-0.5	18	SL-127-SA5A-SB-2.0-3.0	28		38	
9	SL-097-SA8N-SS-0.0-0.5	19	EB06-SA8N-SS-041911	29		39	
10	SL-122-SA8N-SS-0.0-0.5	20	SL-138-SA8N-SS-0.0-0.5MS	30		40	

Notes:

LDC #: 26078C4

VALIDATION FINDINGS WORKSHEET
PB/ICB/CCB QUALIFIED SAMPLES

Page: 1 of 1
Reviewer: CR
2nd Reviewer: [illegible]

METHOD: Trace metals (EPA SW 864 Method 6010B/6020/7000) Soil preparation factor applied: 100x x MS: 2xdil Reason: B
Sample Concentration units, unless otherwise noted: ug/L Associated Samples: All Water

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit	19									
Cu			0.24	1.2	0.45									

Samples with analyte concentrations within five times the associated ICB, CCB or PB concentration are listed above with the identifications from the Validation Completeness Worksheet. These sample results were qualified as not detected, "U".
Note : a - The listed analyte concentration is the highest ICB, CCB, or PB detected in the analysis of each element.

LDC #: 26078C4

VALIDATION FINDINGS WORKSHEET
Field Blanks

Page: 1 of 1
Reviewer: OL
2nd Reviewer: [illegible]

METHOD: Trace Metals (EPA SW846 6010B/7000)
Y N N/A Were field blanks identified in this SDG?
Y N N/A Were target analytes detected in the field blanks?
Blank units: ug/L **Associated sample units:** mg/Kg
Sampling date: 4/19/11 Soil factor applied 100x
Field blank type: (circle one) Field Blank / Rinsate / Other: Associated Samples: 1-15 ~~All Soil~~ Reason Code: F

Analyte	Blank ID	Sample Identification																			
	~~8~~ 19	Action Level	1.	2.	3.	5.	6.	7.	8.	9.	10.	11.	12.	14.							
B	21.1	10.55	7.5	1.6	2.7	1.7	4.4	2.8	4.1	4.6	1.8	1.5	1.4	1.1							
Ca	79.6	39.8																			
Cu	0.45	0.225																			

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
Samples with analyte concentrations within five times the associated field blank concentration are listed above, these sample results were qualified as not detected, "U".

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 5A(MS/MSD)
MATRIX SPIKE/MATRIX SPIKE DUPLICATE
SDG No.: DE131
Matrix: SOIL Level (low/med): LOW

74X

Background Lab Sample ID: 6262830BKG Matrix Spike Lab Sample ID: 6262831MS Matrix Spike Duplicate Lab Sample ID: 6262832MSD
% Solids for Sample: 91.8
Batch Id(s): P11608B, P11626B, P11611B

Analyte	Mass	BKG Sample Result	C	MS Sample Result	C	MSD Sample Result	C	MS Spike Added	MSD Spike Added	Units	MS %R	Q	MSD %R	Q	RPD	Q	Control Limit %R	RPD	M
Aluminum		12489.1844		14695.8264		14877.5314		213.5931	211.5193	MG/KG	1033		1129		1			20	P
Antimony	121	0.0654	U	0.4505		0.5695		1.2691	1.2942	MG/KG	35	N	44	N	23	*	75 - 125	20	MS
Arsenic	75	5.9194		8.1329		8.3738		2.1152	2.1571	MG/KG	105		114		3		75 - 125	20	MS
Barium	137	116.2745		124.3945		171.2720		10.5760	10.7854	MG/KG	77		510		32	*		20	MS
Beryllium	9	0.6285		1.5824		1.6538		0.8461	0.8628	MG/KG	113		119		4		75 - 125	20	MS
Boron		1.4420	B	212.3350		210.2671		213.5931	211.5193	MG/KG	99		99		1		84 - 115	20	P
Cadmium	111	0.1499		1.3654		1.5304		1.0576	1.0785	MG/KG	115		128	N	11		75 - 125	20	MS
Calcium		2180.5334		2810.9328		2864.6022		427.1861	423.0387	MG/KG	148		162		2			20	P
Chromium	52	18.1939		29.6339		29.5304		10.5760	10.7854	MG/KG	108		105		0		75 - 125	20	MS
Cobalt	59	6.9020		71.9166		75.4330		52.8798	53.9270	MG/KG	123		127	N	5		75 - 125	20	MS
Copper	63	10.1460		22.4634		23.7710		10.5760	10.7854	MG/KG	116		126	N	6		75 - 125	20	MS
Iron		18649.2224		19409.5124		19679.0300		106.7965	105.7597	MG/KG	712		974		1			20	P
Lead	208	12.8715		15.7899		16.1781		3.1728	3.2356	MG/KG	92		102		2			20	MS
Lithium		25.5333		130.8033		130.8596		106.7965	105.7597	MG/KG	99		100		0		82 - 114	20	P
Magnesium		4061.7841		4365.5015		4427.8497		213.5931	211.5193	MG/KG	142		173		1			20	P
Manganese		309.0080		363.8750		367.0982		53.3983	52.8798	MG/KG	103		110		1			20	P
Mercury		0.0181	B	0.1810		0.1749		0.1741	0.1714	MG/KG	94		91		3		65 - 135	20	CV
Molybdenum	98	0.5024		12.5494		13.2358		10.5760	10.7854	MG/KG	114		118		5		75 - 125	20	MS
Nickel	60	13.1939		25.3612		26.9419		10.5760	10.7854	MG/KG	115		127	N	6		75 - 125	20	MS
Phosphorus		431.4437		523.4568		521.3783		106.7965	105.7597	MG/KG	86		85		0			20	P
Potassium		3533.9352		4764.0640		4806.7718		1067.9653	1057.5967	MG/KG	115		120		1		75 - 125	20	P
Selenium	78	0.1224	B	2.5150		2.5756		2.1152	2.1571	MG/KG	113		114		2		75 - 125	20	MS
Silver	107	0.0257	B	13.0804		13.5421		10.5760	10.7854	MG/KG	123		125		3		75 - 125	20	MS
Sodium		69.8138	B	1142.4570		1140.2585		1067.9653	1057.5967	MG/KG	100		101		0		75 - 125	20	P
Strontium		14.7070		124.1616		122.4528		106.7965	105.7597	MG/KG	102		102		1		75 - 115	20	P
Thallium	203	0.2998		0.7712		0.7828		0.4230	0.4314	MG/KG	111		112		1		75 - 125	20	MS
Tin		2.3825	B	371.5473		370.1853		427.1861	423.0387	MG/KG	86		87		0		80 - 110	20	P
Titanium		1081.6282		1294.7221		1333.5787		106.7965	105.7597	MG/KG	200		238		3			20	P
Vanadium	51	36.9717		46.7669		47.9734		10.5760	10.7854	MG/KG	93		102		3		75 - 125	20	MS
Zinc	66	79.3246		86.8287		89.2815		10.5760	10.7854	MG/KG	71		92		3			20	MS
Zirconium		1.8368	B	98.4803		98.4453		106.7965	105.7597	MG/KG	90		91		0		75 - 125	20	P

METHODS:
P = ICP Atomic Emission Spectrometer CV = Cold Vapor
MS = ICP Mass Spectrometry AF = Cold Vapor Atomic Fluorescence

CONCENTRATION QUALIFIERS:
U= Below MDL, B= Below LOQ
FLAGS:
N = Matrix Spike OOS, * = Duplicate OOS

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 6
DUPLICATES
SDG No.: DE131
Matrix: SOIL Level (low/med): LOW

<5xRL

Background Lab Sample ID: 6262830BKG
% Solids for Duplicate: 91.7
Batch ID(s): P11608B, P11626B, P11611B
Concentration Units: MG/KG

Duplicate Lab Sample ID: 6262833DUP
% Solids for Sample: 91.8

Analyte	Mass	Control Limit	Samples (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum			12489.1844		12618.1737		1		P
Antimony	121		0.0654	U	0.0727	B	200		MS
Arsenic	75		5.9194		6.0789		3		MS
Barium	137		116.2745		100.0683		15		MS
Beryllium	9	0.1	0.6285		0.5410		15		MS
Boron			1.4420	B	0.9413	U	200		P
Cadmium	111	0.1	0.1499		0.1905		24		MS
Calcium			2180.5334		2129.1241		2		P
Chromium	52		18.1939		16.2224		11		MS
Cobalt	59		6.9020		5.8418		17		MS
Copper	63		10.1460		8.9218		13		MS
Iron			18649.2224		18991.6207		2		P
Lead	208		12.8715		11.5511		11		MS
Lithium			25.5333		25.6235		0		P
Magnesium			4061.7841		4049.4627		0		P
Manganese			309.0080		312.1391		1		P
Mercury			0.0181	B	0.0192	B	6		CV
Molybdenum	98	0.1	0.5024		0.5133		2		MS
Nickel	60		13.1939		11.3610		15		MS
Phosphorus			431.4437		423.2925		2		P
Potassium			3533.9352		3496.8462		1		P
Selenium	78		0.1224	B	0.1265	B	3		MS
Silver	107		0.0257	B	0.0348	B	30		MS
Sodium			69.8138	B	67.3795	B	4		P
Strontium			14.7070		14.3146		3		P
Thallium	203	0.1	0.2998		0.3101		3		MS
Tin			2.3825	B	2.5319	B	6		P
Titanium			1081.6282		1050.8355		3		P
Vanadium	51		36.9717		33.0215		11		MS
Zinc	66		79.3246		68.7342		14		MS
Zirconium			1.8368	B	2.4060	B	27		P

NOTE: An asterisk (*) in column "Q" indicates poor duplicate precision (RPD > 20% OR |(S) - (D)| > LOQ for values < 5x LOQ).
The data are considered to be valid because the laboratory control sample is within the control limits. See the Laboratory Control Sample.

DE131 5824

METHODS:	CONCENTRATION QUALIFIERS:
P = ICP Atomic Emission Spectrometer	U= Below MDL
MS = ICP Mass Spectrometry	B= Below LOQ
CV = Cold Vapor	FLAGS:
AF = Cold Vapor Atomic Fluorescence	* = Duplicate Out of Spec

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 9
SERIAL DILUTIONS
SDG No.: DE131
Matrix: SOIL Level (low/med): LOW

J100/A

Background Lab Sample ID: 6262830BKG Serial Dilution Lab Sample ID: 6262830L
Batch ID(s): P11608B, P11626B
Concentration Units: UG/L

Analyte	Mass	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Diff.	Q	M
Aluminum		115797.2200		118967.9500		3		P
Antimony	121	0.3000	U	1.5000	U			MS
Arsenic	75	27.1700		23.0850		15		MS
Barium	137	533.7000		442.7000		17	E	MS
Beryllium	9	2.8850		2.7295		5		MS
Boron		13.3700	B	44.5000	U	100		P
Cadmium	111	0.6881		1.1800	B	71		MS
Calcium		20217.4700		21961.7000		9		P
Chromium	52	83.5100		78.1500		6		MS
Cobalt	59	31.6800		30.7350		3		MS
Copper	63	46.5700		44.2200		5		MS
Iron		172911.8600		189954.8000		10		P
Lead	208	59.0800		55.5500		6		MS
Lithium		236.7400		239.4000		1		P
Magnesium		37660.0500		40600.5500		8		P
Manganese		2865.0600		3128.2000		9		P
Molybdenum	98	2.3060		2.2785	B	1		MS
Nickel	60	60.5600		53.2000		12	E	MS
Phosphorus		4000.2600		4162.1000		4		P
Potassium		32765.9400		34613.0000		6		P
Selenium	78	0.5619	B	1.0000	U	100		MS
Silver	107	0.1181	B	0.3000	U	100		MS
Sodium		647.3000	B	1865.0000	U	100		P
Strontium		136.3600		146.5000		7		P
Thallium	203	1.3760		1.3165	B	4		MS
Tin		22.0900	B	50.0000	U	100		P
Titanium		10028.6400		10649.7500		6		P
Vanadium	51	169.7000		160.8500		5		MS
Zinc	66	364.1000		362.3500		0		MS
Zirconium		17.0300	B	42.0000	U	100		P

NOTE: An E in column Q indicates the presence of a chemical or physical interference in the matrix when the % difference is greater than 10%. This applies only when (I) is greater than or equal to 50x MDL for ICP, 100x MDL for ICP-MS (6020), 50x MDL for ICP-MS (200.8), or 25x MDL for GFAA.

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry

CONCENTRATION QUALIFIERS: PE131 5638
U= Below MDL
B= Below LOQ

FLAGS:
E = Matrix Effects exist as proven by Serial Dilution or Spiked Dilution

SAMPLE DELIVERY GROUP

DE133

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
20-Apr-2011	TB-042011	6264851	TB	5030B	8015M	III
20-Apr-2011	TB-042011	6264851	TB	5030B	8260B	III
20-Apr-2011	TB-042011	6264851	TB	5030B	8260B SIM	III
20-Apr-2011	SL-148-SA5A-SB-4.0-5.0	6264845	N	3050B	6010B	III
20-Apr-2011	SL-148-SA5A-SB-4.0-5.0	6264845	N	3050B	6020	III
20-Apr-2011	SL-148-SA5A-SB-4.0-5.0	6264845	N	3060A	7199	III
20-Apr-2011	SL-148-SA5A-SB-4.0-5.0	6264845	N	3546	1625C	III
20-Apr-2011	SL-148-SA5A-SB-4.0-5.0	6264845	N	3550B	8015B	III
20-Apr-2011	SL-148-SA5A-SB-4.0-5.0	6264845	N	3550B	8015M	III
20-Apr-2011	SL-148-SA5A-SB-4.0-5.0	6264845	N	3550B	8082	III
20-Apr-2011	SL-148-SA5A-SB-4.0-5.0	6264845	N	3550B	8270C	III
20-Apr-2011	SL-148-SA5A-SB-4.0-5.0	6264845	N	3550B	8270C SIM	III
20-Apr-2011	SL-148-SA5A-SB-4.0-5.0	6264845	N	5035	8015M	III
20-Apr-2011	SL-148-SA5A-SB-4.0-5.0	6264845	N	5035	8260B	III
20-Apr-2011	SL-148-SA5A-SB-4.0-5.0	6264845	N	5035	8260B SIM	III
20-Apr-2011	SL-148-SA5A-SB-4.0-5.0	6264845	N	8330	8330A	III
20-Apr-2011	SL-148-SA5A-SB-4.0-5.0	6264845	N	METHOD	300.0	III
20-Apr-2011	SL-148-SA5A-SB-4.0-5.0	6264845	N	METHOD	314.0	III
20-Apr-2011	SL-148-SA5A-SB-4.0-5.0	6264845	N	METHOD	7471A	III
20-Apr-2011	SL-148-SA5A-SB-4.0-5.0	6264845	N	METHOD	8015B	III
20-Apr-2011	SL-148-SA5A-SB-4.0-5.0	6264845	N	METHOD	8015M	III
20-Apr-2011	SL-148-SA5A-SB-4.0-5.0	6264845	N	METHOD	8315A	III
20-Apr-2011	SL-148-SA5A-SB-4.0-5.0	6264845	N	METHOD	9012B	III
20-Apr-2011	SL-148-SA5A-SB-4.0-5.0MS	6264846	MS	3050B	6010B	III
20-Apr-2011	SL-148-SA5A-SB-4.0-5.0MS	6264846	MS	3050B	6020	III
20-Apr-2011	SL-148-SA5A-SB-4.0-5.0MS	6264846	MS	3060A	7199	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
20-Apr-2011	SL-148-SA5A-SB-4.0-5.0MS	6264846	MS	3546	1625C	III
20-Apr-2011	SL-148-SA5A-SB-4.0-5.0MS	6264846	MS	3550B	8015B	III
20-Apr-2011	SL-148-SA5A-SB-4.0-5.0MS	6264846	MS	3550B	8015M	III
20-Apr-2011	SL-148-SA5A-SB-4.0-5.0MS	6264846	MS	3550B	8082	III
20-Apr-2011	SL-148-SA5A-SB-4.0-5.0MS	6264846	MS	3550B	8270C	III
20-Apr-2011	SL-148-SA5A-SB-4.0-5.0MS	6264846	MS	3550B	8270C SIM	III
20-Apr-2011	SL-148-SA5A-SB-4.0-5.0MS	6264846	MS	5035	8015M	III
20-Apr-2011	SL-148-SA5A-SB-4.0-5.0MS	6264846	MS	5035	8260B	III
20-Apr-2011	SL-148-SA5A-SB-4.0-5.0MS	6264846	MS	5035	8260B SIM	III
20-Apr-2011	SL-148-SA5A-SB-4.0-5.0MS	6264846	MS	8330	8330A	III
20-Apr-2011	SL-148-SA5A-SB-4.0-5.0MS	6264846	MS	METHOD	300.0	III
20-Apr-2011	SL-148-SA5A-SB-4.0-5.0MS	6264846	MS	METHOD	314.0	III
20-Apr-2011	SL-148-SA5A-SB-4.0-5.0MS	6264846	MS	METHOD	7471A	III
20-Apr-2011	SL-148-SA5A-SB-4.0-5.0MS	6264846	MS	METHOD	8015B	III
20-Apr-2011	SL-148-SA5A-SB-4.0-5.0MS	6264846	MS	METHOD	8015M	III
20-Apr-2011	SL-148-SA5A-SB-4.0-5.0MS	6264846	MS	METHOD	8315A	III
20-Apr-2011	SL-148-SA5A-SB-4.0-5.0MS	6264846	MS	METHOD	9012B	III
20-Apr-2011	SL-148-SA5A-SB-4.0-5.0MSD	6264847	MSD	3050B	6010B	III
20-Apr-2011	SL-148-SA5A-SB-4.0-5.0MSD	6264847	MSD	3050B	6020	III
20-Apr-2011	SL-148-SA5A-SB-4.0-5.0MSD	6264847	MSD	3546	1625C	III
20-Apr-2011	SL-148-SA5A-SB-4.0-5.0MSD	6264847	MSD	3550B	8015B	III
20-Apr-2011	SL-148-SA5A-SB-4.0-5.0MSD	6264847	MSD	3550B	8015M	III
20-Apr-2011	SL-148-SA5A-SB-4.0-5.0MSD	6264847	MSD	3550B	8082	III
20-Apr-2011	SL-148-SA5A-SB-4.0-5.0MSD	6264847	MSD	3550B	8270C	III
20-Apr-2011	SL-148-SA5A-SB-4.0-5.0MSD	6264847	MSD	3550B	8270C SIM	III
20-Apr-2011	SL-148-SA5A-SB-4.0-5.0MSD	6264847	MSD	5035	8015M	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
20-Apr-2011	SL-148-SA5A-SB-4.0-5.0MSD	6264847	MSD	5035	8260B	III
20-Apr-2011	SL-148-SA5A-SB-4.0-5.0MSD	6264847	MSD	5035	8260B SIM	III
20-Apr-2011	SL-148-SA5A-SB-4.0-5.0MSD	6264847	MSD	8330	8330A	III
20-Apr-2011	SL-148-SA5A-SB-4.0-5.0MSD	6264847	MSD	METHOD	7471A	III
20-Apr-2011	SL-148-SA5A-SB-4.0-5.0MSD	6264847	MSD	METHOD	8015B	III
20-Apr-2011	SL-148-SA5A-SB-4.0-5.0MSD	6264847	MSD	METHOD	8015M	III
20-Apr-2011	SL-148-SA5A-SB-4.0-5.0MSD	6264847	MSD	METHOD	8315A	III
20-Apr-2011	SL-148-SA5A-SB-4.0-5.0DUP	6264848	DUP	3050B	6010B	III
20-Apr-2011	SL-148-SA5A-SB-4.0-5.0DUP	6264848	DUP	3050B	6020	III
20-Apr-2011	SL-148-SA5A-SB-4.0-5.0DUP	6264848	DUP	3060A	7199	III
20-Apr-2011	SL-148-SA5A-SB-4.0-5.0DUP	6264848	DUP	METHOD	300.0	III
20-Apr-2011	SL-148-SA5A-SB-4.0-5.0DUP	6264848	DUP	METHOD	314.0	III
20-Apr-2011	SL-148-SA5A-SB-4.0-5.0DUP	6264848	DUP	METHOD	7471A	III
20-Apr-2011	SL-148-SA5A-SB-4.0-5.0DUP	6264848	DUP	METHOD	9012B	III
20-Apr-2011	DUP15-SA5A-QC-042011	6264850	FD	3050B	6010B	III
20-Apr-2011	DUP15-SA5A-QC-042011	6264850	FD	3050B	6020	III
20-Apr-2011	DUP15-SA5A-QC-042011	6264850	FD	3060A	7199	III
20-Apr-2011	DUP15-SA5A-QC-042011	6264850	FD	3546	1625C	III
20-Apr-2011	DUP15-SA5A-QC-042011	6264850	FD	3550B	8015B	III
20-Apr-2011	DUP15-SA5A-QC-042011	6264850	FD	3550B	8015M	III
20-Apr-2011	DUP15-SA5A-QC-042011	6264850	FD	3550B	8082	III
20-Apr-2011	DUP15-SA5A-QC-042011	6264850	FD	3550B	8270C	III
20-Apr-2011	DUP15-SA5A-QC-042011	6264850	FD	3550B	8270C SIM	III
20-Apr-2011	DUP15-SA5A-QC-042011	6264850	FD	5035	8015M	III
20-Apr-2011	DUP15-SA5A-QC-042011	6264850	FD	5035	8260B	III
20-Apr-2011	DUP15-SA5A-QC-042011	6264850	FD	5035	8260B SIM	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
20-Apr-2011	DUP15-SA5A-QC-042011	6264850	FD	8330	8330A	III
20-Apr-2011	DUP15-SA5A-QC-042011	6264850	FD	METHOD	300.0	III
20-Apr-2011	DUP15-SA5A-QC-042011	6264850	FD	METHOD	314.0	III
20-Apr-2011	DUP15-SA5A-QC-042011	6264850	FD	METHOD	7471A	III
20-Apr-2011	DUP15-SA5A-QC-042011	6264850	FD	METHOD	8015B	III
20-Apr-2011	DUP15-SA5A-QC-042011	6264850	FD	METHOD	8015M	III
20-Apr-2011	DUP15-SA5A-QC-042011	6264850	FD	METHOD	8315A	III
20-Apr-2011	DUP15-SA5A-QC-042011	6264850	FD	METHOD	9012B	III
20-Apr-2011	SL-148-SA5A-SB-9.0-10.0	6264849	N	3050B	6010B	III
20-Apr-2011	SL-148-SA5A-SB-9.0-10.0	6264849	N	3050B	6020	III
20-Apr-2011	SL-148-SA5A-SB-9.0-10.0	6264849	N	3060A	7199	III
20-Apr-2011	SL-148-SA5A-SB-9.0-10.0	6264849	N	3546	1625C	III
20-Apr-2011	SL-148-SA5A-SB-9.0-10.0	6264849	N	3550B	8015B	III
20-Apr-2011	SL-148-SA5A-SB-9.0-10.0	6264849	N	3550B	8015M	III
20-Apr-2011	SL-148-SA5A-SB-9.0-10.0	6264849	N	3550B	8082	III
20-Apr-2011	SL-148-SA5A-SB-9.0-10.0	6264849	N	3550B	8270C	III
20-Apr-2011	SL-148-SA5A-SB-9.0-10.0	6264849	N	3550B	8270C SIM	III
20-Apr-2011	SL-148-SA5A-SB-9.0-10.0	6264849	N	5035	8015M	III
20-Apr-2011	SL-148-SA5A-SB-9.0-10.0	6264849	N	5035	8260B	III
20-Apr-2011	SL-148-SA5A-SB-9.0-10.0	6264849	N	5035	8260B SIM	III
20-Apr-2011	SL-148-SA5A-SB-9.0-10.0	6264849	N	8330	8330A	III
20-Apr-2011	SL-148-SA5A-SB-9.0-10.0	6264849	N	METHOD	300.0	III
20-Apr-2011	SL-148-SA5A-SB-9.0-10.0	6264849	N	METHOD	314.0	III
20-Apr-2011	SL-148-SA5A-SB-9.0-10.0	6264849	N	METHOD	7471A	III
20-Apr-2011	SL-148-SA5A-SB-9.0-10.0	6264849	N	METHOD	8015B	III
20-Apr-2011	SL-148-SA5A-SB-9.0-10.0	6264849	N	METHOD	8015M	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
20-Apr-2011	SL-148-SA5A-SB-9.0-10.0	6264849	N	METHOD	8315A	III
20-Apr-2011	SL-148-SA5A-SB-9.0-10.0	6264849	N	METHOD	9012B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE133 **Laboratory: LL**

EDD Filename: DE133_v1. **eQAPP Name: CDM_SSFL_110509**

Method Category: GENCHEM

Method: 300.0 **Matrix: SO**

Sample ID: DUP15-SA5A-QC-042011 *Collected:* 4/20/2011 11:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.6		0.89	MDL	1.1	PQL	mg/Kg	J	Q
Nitrate-NO3	1.2	J	0.89	MDL	1.7	PQL	mg/Kg	J	Z

Sample ID: SL-148-SA5A-SB-4.0-5.0 *Collected:* 4/20/2011 11:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.4		0.90	MDL	1.1	PQL	mg/Kg	J	Q
Nitrate-NO3	1.2	J	0.90	MDL	1.7	PQL	mg/Kg	J	Z

Sample ID: SL-148-SA5A-SB-9.0-10.0 *Collected:* 4/20/2011 11:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.6		0.94	MDL	1.2	PQL	mg/Kg	J	Q
Nitrate-NO3	1.4	J	0.94	MDL	1.8	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: DUP15-SA5A-QC-042011 *Collected:* 4/20/2011 11:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.01	J	0.983	MDL	5.53	PQL	mg/Kg	J	Z, FD
POTASSIUM	2510		19.9	MDL	55.3	PQL	mg/Kg	J	Q
SODIUM	109	J	41.2	MDL	111	PQL	mg/Kg	J	Z
TIN	2.66	J	1.11	MDL	11.1	PQL	mg/Kg	U	B
Zirconium	1.61	J	0.928	MDL	5.53	PQL	mg/Kg	J	Z

Sample ID: SL-148-SA5A-SB-4.0-5.0 *Collected:* 4/20/2011 11:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.92	J	0.969	MDL	5.44	PQL	mg/Kg	J	Z, FD
POTASSIUM	2360		19.6	MDL	54.4	PQL	mg/Kg	J	Q
TIN	2.58	J	1.09	MDL	10.9	PQL	mg/Kg	U	B
Zirconium	1.70	J	0.914	MDL	5.44	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE133 **Laboratory: LL**

EDD Filename: DE133_v1. **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6010B** ***Matrix:*** **SO**

Sample ID: SL-148-SA5A-SB-9.0-10.0 ***Collected:*** 4/20/2011 11:50:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	1560		20.5	MDL	56.8	PQL	mg/Kg	J	Q
TIN	2.66	J	1.14	MDL	11.4	PQL	mg/Kg	U	B
Zirconium	1.09	J	0.955	MDL	5.68	PQL	mg/Kg	J	Z

Method Category: **METALS**

Method: **6020** ***Matrix:*** **SO**

Sample ID: DUP15-SA5A-QC-042011 ***Collected:*** 4/20/2011 11:05:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.124	J	0.0433	MDL	0.433	PQL	mg/Kg	J	Z

Sample ID: DUP15-SA5A-QC-042011 ***Collected:*** 4/20/2011 11:05:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.151	J	0.0650	MDL	0.217	PQL	mg/Kg	J	Z, Q
ARSENIC	4.35		0.0867	MDL	0.433	PQL	mg/Kg	J	Q
CADMIUM	0.0645	J	0.0433	MDL	0.108	PQL	mg/Kg	J	Z, FD
CHROMIUM	17.0		0.130	MDL	0.433	PQL	mg/Kg	J	A
COBALT	6.11		0.0217	MDL	0.108	PQL	mg/Kg	J	A
COPPER	7.87		0.0715	MDL	0.433	PQL	mg/Kg	J	A
LEAD	5.26		0.0113	MDL	0.217	PQL	mg/Kg	J	A
NICKEL	12.2		0.108	MDL	0.433	PQL	mg/Kg	J	A
SILVER	0.0421	J	0.0130	MDL	0.108	PQL	mg/Kg	J	Z
VANADIUM	33.7		0.0238	MDL	0.108	PQL	mg/Kg	J	Q, A

Sample ID: SL-148-SA5A-SB-4.0-5.0 ***Collected:*** 4/20/2011 11:00:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.124	J	0.0431	MDL	0.431	PQL	mg/Kg	J	Z

Sample ID: SL-148-SA5A-SB-4.0-5.0 ***Collected:*** 4/20/2011 11:00:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.191	J	0.0647	MDL	0.216	PQL	mg/Kg	J	Z, Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE133 **Laboratory: LL**

EDD Filename: DE133_v1. **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 ***Matrix:*** SO

Sample ID: SL-148-SA5A-SB-4.0-5.0 ***Collected:*** 4/20/2011 11:00:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	4.37		0.0862	MDL	0.431	PQL	mg/Kg	J	Q
CADMIUM	0.0431	U	0.0431	MDL	0.108	PQL	mg/Kg	UJ	FD
CHROMIUM	17.9		0.129	MDL	0.431	PQL	mg/Kg	J	A
COBALT	6.36		0.0216	MDL	0.108	PQL	mg/Kg	J	A
COPPER	7.21		0.0711	MDL	0.431	PQL	mg/Kg	J	A
LEAD	5.29		0.0112	MDL	0.216	PQL	mg/Kg	J	A
NICKEL	12.3		0.108	MDL	0.431	PQL	mg/Kg	J	A
SILVER	0.0367	J	0.0129	MDL	0.108	PQL	mg/Kg	J	Z
VANADIUM	35.7		0.0237	MDL	0.108	PQL	mg/Kg	J	Q, A

Sample ID: SL-148-SA5A-SB-9.0-10.0 ***Collected:*** 4/20/2011 11:50:00 ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	3.93		0.0758	MDL	0.459	PQL	mg/Kg	J	A

Sample ID: SL-148-SA5A-SB-9.0-10.0 ***Collected:*** 4/20/2011 11:50:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0651	J	0.0459	MDL	0.459	PQL	mg/Kg	J	Z

Sample ID: SL-148-SA5A-SB-9.0-10.0 ***Collected:*** 4/20/2011 11:50:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0689	U	0.0689	MDL	0.230	PQL	mg/Kg	UJ	Q
ARSENIC	3.31		0.0918	MDL	0.459	PQL	mg/Kg	J	Q
CHROMIUM	12.7		0.138	MDL	0.459	PQL	mg/Kg	J	A
COBALT	2.58		0.0230	MDL	0.115	PQL	mg/Kg	J	A
LEAD	3.40		0.0119	MDL	0.230	PQL	mg/Kg	J	A
NICKEL	6.60		0.115	MDL	0.459	PQL	mg/Kg	J	A
SILVER	0.0152	J	0.0138	MDL	0.115	PQL	mg/Kg	J	Z
VANADIUM	27.4		0.0253	MDL	0.115	PQL	mg/Kg	J	Q, A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE133 **Laboratory: LL**

EDD Filename: DE133_v1. **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **7199** ***Matrix:*** **SO**

Sample ID: **DUP15-SA5A-QC-042011** ***Collected:*** **4/20/2011 11:05:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.54	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: **SL-148-SA5A-SB-4.0-5.0** ***Collected:*** **4/20/2011 11:00:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.39	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: **SL-148-SA5A-SB-9.0-10.0** ***Collected:*** **4/20/2011 11:50:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	1.1	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Method Category: **METALS**

Method: **7471A** ***Matrix:*** **SO**

Sample ID: **DUP15-SA5A-QC-042011** ***Collected:*** **4/20/2011 11:05:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0099	J	0.0031	MDL	0.108	PQL	mg/Kg	J	Z, FD

Sample ID: **SL-148-SA5A-SB-4.0-5.0** ***Collected:*** **4/20/2011 11:00:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0196	J	0.0032	MDL	0.111	PQL	mg/Kg	J	Z, FD

Sample ID: **SL-148-SA5A-SB-9.0-10.0** ***Collected:*** **4/20/2011 11:50:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0108	J	0.0032	MDL	0.112	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE133 | Laboratory: LL

EDD Filename: DE133_v1. | eQAPP Name: CDM_SSFL_110509

Method Category: SVOA
Method: 1625C **Matrix:** SO

Sample ID: SL-148-SA5A-SB-4.0-5.0 *Collected:* 4/20/2011 11:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	50.5		18.6	MDL	37.1	PQL	ng/Kg	J	Q

Method Category: SVOA
Method: 8015M **Matrix:** SO

Sample ID: DUP15-SA5A-QC-042011 *Collected:* 4/20/2011 11:05:00 *Analysis Type:* REA2S *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	2.1		0.45	MDL	1.3	PQL	mg/Kg	J	FD

Sample ID: SL-148-SA5A-SB-4.0-5.0 *Collected:* 4/20/2011 11:00:00 *Analysis Type:* REA2S *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	1.2	J	0.45	MDL	1.3	PQL	mg/Kg	J	Z, FD

Sample ID: SL-148-SA5A-SB-4.0-5.0 *Collected:* 4/20/2011 11:00:00 *Analysis Type:* REAS *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DIETHYLENE GLYCOL	5.6	U	5.6	MDL	14	PQL	mg/Kg	UJ	Q

Sample ID: SL-148-SA5A-SB-9.0-10.0 *Collected:* 4/20/2011 11:50:00 *Analysis Type:* REA2S *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	0.97	J	0.47	MDL	1.4	PQL	mg/Kg	J	Z

Method Category: SVOA
Method: 8270C **Matrix:** SO

Sample ID: SL-148-SA5A-SB-4.0-5.0 *Collected:* 4/20/2011 11:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZIDINE	1300	U	1300	MDL	3700	PQL	ug/Kg	R	Q

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE133 **Laboratory: LL**

EDD Filename: DE133_v1. **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **8270C SIM** ***Matrix:*** **SO**

Sample ID: **SL-148-SA5A-SB-9.0-10.0** ***Collected:*** **4/20/2011 11:50:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Di-n-octylphthalate	9.4	J	7.0	MDL	21	PQL	ug/Kg	J	Z

Method Category: **VOA**

Method: **8260B** ***Matrix:*** **SO**

Sample ID: **DUP15-SA5A-QC-042011** ***Collected:*** **4/20/2011 11:05:00** ***Analysis Type:*** **RES** ***Dilution:*** **0.81**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.65	J	0.22	MDL	3.6	PQL	ug/Kg	U	B

Sample ID: **SL-148-SA5A-SB-4.0-5.0** ***Collected:*** **4/20/2011 11:00:00** ***Analysis Type:*** **RES** ***Dilution:*** **0.81**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.76	J	0.22	MDL	3.6	PQL	ug/Kg	U	B

Sample ID: **SL-148-SA5A-SB-9.0-10.0** ***Collected:*** **4/20/2011 11:50:00** ***Analysis Type:*** **RES** ***Dilution:*** **0.85**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.79	J	0.24	MDL	4.0	PQL	ug/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE133 **Laboratory: LL**

EDD Filename: DE133_v1. **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Laboratory Triplicate Precision
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
*#	Professional Judgment
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Verification Correlation Coefficient
C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Verification Percent Recovery Upper Rejection
E	Laboratory Control Precision
E	Laboratory Duplicate Precision

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE133 **Laboratory: LL**

EDD Filename: DE133_v1. **eQAPP Name: CDM_SSFL_110509**

E	Matrix Spike Precision
F	Equipment Blank Contamination
F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation
L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Q	Matrix Spike Upper Rejection

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE133 **Laboratory: LL**

EDD Filename: DE133_v1. **eQAPP Name: CDM_SSFL_110509**

R	Continuing Calibration Verification Percent Recovery Lower Estimation
R	Continuing Calibration Verification Percent Recovery Lower Rejection
R	Continuing Calibration Verification Percent Recovery Upper Estimation
R	Continuing Calibration Verification Percent Recovery Upper Rejection
R	Continuing Calibration Verification Relative Response Factor
R	Initial Calibration Relative Response Factor
R	Initial Calibration Verification Percent Recovery Lower Estimation
R	Initial Calibration Verification Percent Recovery Lower Rejection
R	Initial Calibration Verification Percent Recovery Upper Estimation
R	Initial Calibration Verification Percent Recovery Upper Rejection
R	Initial Calibration Verification Relative Response Factor
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

Level III ADR Outliers
(including Manual Review Outliers)

Quality Control Outlier Reports

DE133

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE133 **Laboratory: LL**

EDD Filename: PrepDE133_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8015M
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-148-SA5A-SB-4.0-5.0MSD (DUP15-SA5A-QC-042011)	ETHYLENE GLYCOL Propylene glycol	- -	- -	63.00-107.00 63.00-107.00	27 (20.00) 26 (20.00)	ETHYLENE GLYCOL Propylene glycol	J (all detects)
SL-148-SA5A-SB-4.0-5.0MSD (DUP15-SA5A-QC-042011)	DIETHYLENE GLYCOL	-	26	59.00-109.00	104 (20.00)	DIETHYLENE GLYCOL	J(all detects) UJ(all non-detects)

Method: 8330A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-148-SA5A-SB-4.0-5.0MSD (DUP15-SA5A-QC-042011)	PETN	-	126	80.00-121.00	-	PETN	J(all detects)

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-148-SA5A-SB-4.0-5.0MS (DUP15-SA5A-QC-042011 -148-SA5A-SB-4.0-5.0 SL -148-SA5A-SB-9.0-10.0) SL	VANADIUM	130	-	75.00-125.00	-	VANADIUM	J(all detects)
SL-148-SA5A-SB-4.0-5.0MS SL-148-SA5A-SB-4.0-5.0MSD (DUP15-SA5A-QC-042011 -148-SA5A-SB-4.0-5.0 SL -148-SA5A-SB-9.0-10.0) SL	ANTIMONY ARSENIC	51 -	41 68	75.00-125.00 75.00-125.00	- -	ANTIMONY ARSENIC	J(all detects) UJ(all non-detects)
SL-148-SA5A-SB-4.0-5.0MS (DUP15-SA5A-QC-042011 -148-SA5A-SB-4.0-5.0 SL -148-SA5A-SB-9.0-10.0) SL	BARIUM	166	-	75.00-125.00	-	BARIUM	No Qual, >4x

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-148-SA5A-SB-4.0-5.0MS SL-148-SA5A-SB-4.0-5.0MSD (DUP15-SA5A-QC-042011 -148-SA5A-SB-4.0-5.0 SL -148-SA5A-SB-9.0-10.0) SL	ALUMINUM CALCIUM IRON MAGNESIUM MANGANESE POTASSIUM TITANIUM	1832 132 1186 218 171 131 261	2092 143 1510 241 189 139 292	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	- - - - - - -	ALUMINUM CALCIUM IRON MAGNESIUM MANGANESE POTASSIUM TITANIUM	J(all detects) Al, Ca, Fe, Mg, Mn, Ti, No Qual, >4x

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE133 **Laboratory: LL**

EDD Filename: PrepDE133_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1625C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-148-SA5A-SB-4.0-5.0MS (DUP15-SA5A-QC-042011)	N-NITROSODIMETHYLAMINE	54	-	70.00-130.00	-	N-NITROSODIMETHYLAMINE	J(all detects) UJ(all non-detects)

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-148-SA5A-SB-4.0-5.0MS SL-148-SA5A-SB-4.0-5.0MSD (DUP15-SA5A-QC-042011)	BENZIDINE	0	21	35.00-141.00	200 (30.00)	BENZIDINE	J(all detects) R(all non-detects)

Method: 300.0
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-148-SA5A-SB-4.0-5.0MS (DUP15-SA5A-QC-042011 -148-SA5A-SB-4.0-5.0 SL -148-SA5A-SB-9.0-10.0) SL	FLUORIDE	49	-	80.00-120.00	-	FLUORIDE	J(all detects) UJ(all non-detects)

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE133 **Laboratory: LL**

EDD Filename: DE133_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 300.0
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-148-SA5A-SB-4.0-5.0DUP (DUP15-SA5A-QC-042011 SL -148-SA5A-SB-4.0-5.0 SL -148-SA5A-SB-9.0-10.0)	FLUORIDE Nitrate-NO3	23 47	20.00 20.00	No Qual, OK by difference

Method: 6010B
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-148-SA5A-SB-4.0-5.0DUP (DUP15-SA5A-QC-042011 SL -148-SA5A-SB-4.0-5.0 SL -148-SA5A-SB-9.0-10.0)	BORON Zirconium	34 64	20.00 20.00	No Qual, OK by difference

Method: 6020
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-148-SA5A-SB-4.0-5.0DUP (DUP15-SA5A-QC-042011 SL -148-SA5A-SB-4.0-5.0 SL -148-SA5A-SB-9.0-10.0)	ANTIMONY CADMIUM SELENIUM	38 200 41	20.00 20.00 20.00	No Qual, OK by difference

Method: 7199
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-148-SA5A-SB-4.0-5.0DUP (DUP15-SA5A-QC-042011 SL -148-SA5A-SB-4.0-5.0 SL -148-SA5A-SB-9.0-10.0)	HEXAVALENT CHROMIUM	44	20.00	No Qual, OK by difference

Method: 7471A
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-148-SA5A-SB-4.0-5.0DUP (DUP15-SA5A-QC-042011 SL -148-SA5A-SB-4.0-5.0 SL -148-SA5A-SB-9.0-10.0)	MERCURY	99	20.00	No Qual, OK by difference

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE133 **Laboratory: LL**

EDD Filename: DE133_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 8260B
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
LCSY25Q211111A (TB-042011)	CARBON TETRACHLORIDE TRICHLOROFLUOROMETHANE	126 130	- -	75.00-123.00 64.00-129.00	- -	CARBON TETRACHLORIDE TRICHLOROFLUOROMETHAN	J(all detects)

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11626AQ220811A (DUP15-SA5A-QC-042011 SL-148-SA5A-SB-4.0-5.0 SL-148-SA5A-SB-9.0-10.0)	ANTIMONY	121	-	80.00-120.00	-	ANTIMONY	No Qual, SRM Within limits

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P8LKLCSQ261351 (DUP15-SA5A-QC-042011 SL-148-SA5A-SB-4.0-5.0 SL-148-SA5A-SB-9.0-10.0)	Butylbenzylphthalate	116	-	75.00-115.00	-	Butylbenzylphthalate	J(all detects)

Method Blank Outlier Report

Lab Reporting Batch ID: DE133 **Laboratory: LL**

EDD Filename: PrepDE133_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **6010B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P11608AB220149	4/28/2011 1:49:00 AM	PHOSPHORUS TIN	1.26 mg/Kg 1.48 mg/Kg	DUP15-SA5A-QC-042011 SL-148-SA5A-SB-4.0-5.0 SL-148-SA5A-SB-9.0-10.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
DUP15-SA5A-QC-042011(RES)	TIN	2.66 mg/Kg	2.66U mg/Kg
SL-148-SA5A-SB-4.0-5.0(RES)	TIN	2.58 mg/Kg	2.58U mg/Kg
SL-148-SA5A-SB-9.0-10.0(RES)	TIN	2.66 mg/Kg	2.66U mg/Kg

Method: **6020**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P11626AB220808A	4/27/2011 8:08:00 AM	VANADIUM	0.0532 mg/Kg	DUP15-SA5A-QC-042011 SL-148-SA5A-SB-4.0-5.0 SL-148-SA5A-SB-9.0-10.0

Method: **8260B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB32B211301A	4/21/2011 1:01:00 PM	METHYLENE CHLORIDE	0.46 ug/Kg	DUP15-SA5A-QC-042011 SL-148-SA5A-SB-4.0-5.0 SL-148-SA5A-SB-9.0-10.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
DUP15-SA5A-QC-042011(RES)	METHYLENE CHLORIDE	0.65 ug/Kg	3.6U ug/Kg
SL-148-SA5A-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.76 ug/Kg	3.6U ug/Kg
SL-148-SA5A-SB-9.0-10.0(RES)	METHYLENE CHLORIDE	0.79 ug/Kg	4.0U ug/Kg

Field Duplicate RPD Report

Lab Reporting Batch ID: DE133 **Laboratory: LL**

EDD Filename: DE133_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 160.3M
Matrix: SO

Analyte	Concentration (%)		Sample RPD	eQAPP RPD	Flag
	SL-148-SA5A-SB-4.0-5.0	DUP15-SA5A-QC-042011			
MOISTURE	10.8	10.4	4		No Qualifiers Applied

Method: 1625C
Matrix: SO

Analyte	Concentration (ng/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-148-SA5A-SB-4.0-5.0	DUP15-SA5A-QC-042011			
N-NITROSODIMETHYLAMINE	50.5	76.2	41	50.00	No Qualifiers Applied

Method: 300.0
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-148-SA5A-SB-4.0-5.0	DUP15-SA5A-QC-042011			
FLUORIDE	1.4	1.6	13	50.00	No Qualifiers Applied
Nitrate-NO3	1.2	1.2	0	50.00	

Method: 6010B
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-148-SA5A-SB-4.0-5.0	DUP15-SA5A-QC-042011			
ALUMINUM	19000	19100	1	50.00	No Qualifiers Applied
CALCIUM	2020	2070	2	50.00	
IRON	19900	20600	3	50.00	
LITHIUM	23.8	24.3	2	50.00	
MAGNESIUM	4080	4200	3	50.00	
MANGANESE	303	355	16	50.00	
PHOSPHORUS	234	239	2	50.00	
POTASSIUM	2360	2510	6	50.00	
SODIUM	116	109	6	50.00	
STRONTIUM	21.2	20.7	2	50.00	
TIN	2.58	2.66	3	50.00	
TITANIUM	1110	1160	4	50.00	
Zirconium	1.70	1.61	5	50.00	
BORON	1.92	1.01	62	50.00	J(all detects)

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Field Duplicate RPD Report

Lab Reporting Batch ID: DE133 **Laboratory: LL**

EDD Filename: DE133_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 6020
Matrix: SO

Analyte	Concentration (mg/Kg) SL-148-SA5A-SB-4.0-5.0	Concentration (mg/Kg) DUP15-SA5A-QC-042011	Sample RPD	eQAPP RPD	Flag
ANTIMONY	0.191	0.151	23	50.00	No Qualifiers Applied
ARSENIC	4.37	4.35	0	50.00	
BARIUM	108	108	0	50.00	
BERYLLIUM	0.703	0.670	5	50.00	
CHROMIUM	17.9	17.0	5	50.00	
COBALT	6.36	6.11	4	50.00	
COPPER	7.21	7.87	9	50.00	
LEAD	5.29	5.26	1	50.00	
MOLYBDENUM	0.625	0.600	4	50.00	
NICKEL	12.3	12.2	1	50.00	
SELENIUM	0.124	0.124	0	50.00	
SILVER	0.0367	0.0421	14	50.00	
THALLIUM	0.260	0.289	11	50.00	
VANADIUM	35.7	33.7	6	50.00	
ZINC	50.4	48.4	4	50.00	
CADMIUM	0.108 U	0.0645	200	50.00	J(all detects) UJ(all non-detects)

Method: 7199
Matrix: SO

Analyte	Concentration (mg/Kg) SL-148-SA5A-SB-4.0-5.0	Concentration (mg/Kg) DUP15-SA5A-QC-042011	Sample RPD	eQAPP RPD	Flag
HEXAVALENT CHROMIUM	0.39	0.54	32	50.00	No Qualifiers Applied

Method: 7471A
Matrix: SO

Analyte	Concentration (mg/Kg) SL-148-SA5A-SB-4.0-5.0	Concentration (mg/Kg) DUP15-SA5A-QC-042011	Sample RPD	eQAPP RPD	Flag
MERCURY	0.0196	0.0099	66	50.00	J(all detects)

Method: 8015M
Matrix: SO

Analyte	Concentration (mg/Kg) SL-148-SA5A-SB-4.0-5.0	Concentration (mg/Kg) DUP15-SA5A-QC-042011	Sample RPD	eQAPP RPD	Flag
EFH (C30-C40)	1.2	2.1	55	50.00	J(all detects)

Method: 8260B
Matrix: SO

Analyte	Concentration (ug/Kg) SL-148-SA5A-SB-4.0-5.0	Concentration (ug/Kg) DUP15-SA5A-QC-042011	Sample RPD	eQAPP RPD	Flag
METHYLENE CHLORIDE	0.76	0.65	16	50.00	No Qualifiers Applied

Field Duplicate RPD Report

Lab Reporting Batch ID: DE133 **Laboratory: LL**

EDD Filename: DE133_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 9045M
Matrix: SO

Analyte	Concentration (pH unit)		Sample RPD	eQAPP RPD	Flag
	SL-148-SA5A-SB-4.0-5.0	DUP15-SA5A-QC-042011			
PH	6.49	7.10	9	50.00	No Qualifiers Applied

Method: ASTM D1498
Matrix: SO

Analyte	Concentration (mV)		Sample RPD	eQAPP RPD	Flag
	SL-148-SA5A-SB-4.0-5.0	DUP15-SA5A-QC-042011			
Oxidation Reduction Potential	415	463	11		No Qualifiers Applied

Reporting Limit Outliers

Lab Reporting Batch ID: DE133 **Laboratory: LL**

EDD Filename: DE133_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 300.0

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP15-SA5A-QC-042011	Nitrate-NO3	J	1.2	1.7	PQL	mg/Kg	J (all detects)
SL-148-SA5A-SB-4.0-5.0	Nitrate-NO3	J	1.2	1.7	PQL	mg/Kg	J (all detects)
SL-148-SA5A-SB-9.0-10.0	Nitrate-NO3	J	1.4	1.8	PQL	mg/Kg	J (all detects)

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP15-SA5A-QC-042011	BORON	J	1.01	5.53	PQL	mg/Kg	J (all detects)
	SODIUM	J	109	111	PQL	mg/Kg	
	TIN	J	2.66	11.1	PQL	mg/Kg	
	Zirconium	J	1.61	5.53	PQL	mg/Kg	
SL-148-SA5A-SB-4.0-5.0	BORON	J	1.92	5.44	PQL	mg/Kg	J (all detects)
	TIN	J	2.58	10.9	PQL	mg/Kg	
	Zirconium	J	1.70	5.44	PQL	mg/Kg	
SL-148-SA5A-SB-9.0-10.0	TIN	J	2.66	11.4	PQL	mg/Kg	J (all detects)
	Zirconium	J	1.09	5.68	PQL	mg/Kg	

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP15-SA5A-QC-042011	ANTIMONY	J	0.151	0.217	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0645	0.108	PQL	mg/Kg	
	SELENIUM	J	0.124	0.433	PQL	mg/Kg	
	SILVER	J	0.0421	0.108	PQL	mg/Kg	
SL-148-SA5A-SB-4.0-5.0	ANTIMONY	J	0.191	0.216	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.124	0.431	PQL	mg/Kg	
	SILVER	J	0.0367	0.108	PQL	mg/Kg	
SL-148-SA5A-SB-9.0-10.0	SELENIUM	J	0.0651	0.459	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0152	0.115	PQL	mg/Kg	

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP15-SA5A-QC-042011	HEXAVALENT CHROMIUM	J	0.54	1.1	PQL	mg/Kg	J (all detects)
SL-148-SA5A-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.39	1.1	PQL	mg/Kg	J (all detects)
SL-148-SA5A-SB-9.0-10.0	HEXAVALENT CHROMIUM	J	1.1	1.2	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE133 **Laboratory: LL**

EDD Filename: DE133_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP15-SA5A-QC-042011	MERCURY	J	0.0099	0.108	PQL	mg/Kg	J (all detects)
SL-148-SA5A-SB-4.0-5.0	MERCURY	J	0.0196	0.111	PQL	mg/Kg	J (all detects)
SL-148-SA5A-SB-9.0-10.0	MERCURY	J	0.0108	0.112	PQL	mg/Kg	J (all detects)

Method: 8015M

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-148-SA5A-SB-4.0-5.0	EFH (C30-C40)	J	1.2	1.3	PQL	mg/Kg	J (all detects)
SL-148-SA5A-SB-9.0-10.0	EFH (C30-C40)	J	0.97	1.4	PQL	mg/Kg	J (all detects)

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP15-SA5A-QC-042011	METHYLENE CHLORIDE	J	0.65	3.6	PQL	ug/Kg	J (all detects)
SL-148-SA5A-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.76	3.6	PQL	ug/Kg	J (all detects)
SL-148-SA5A-SB-9.0-10.0	METHYLENE CHLORIDE	J	0.79	4.0	PQL	ug/Kg	J (all detects)

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-148-SA5A-SB-9.0-10.0	Di-n-octylphthalate	J	9.4	21	PQL	ug/Kg	J (all detects)

LDC #: 26078D4 **VALIDATION COMPLETENESS WORKSHEET** Date: 8-29-11
SDG #: DE133 ADR Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: Metals (EPA SW 846 Method 6010B/6020A/7000)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	N	Sampling dates:
II.	ICP/MS Tune	—	
III.	Calibration	—	
IV.	Blanks	A	No Quals for ICB/CCB
V.	ICP Interference Check Sample (ICS) Analysis	N	
VI.	Matrix Spike Analysis	SW	MS/P
VII.	Duplicate Sample Analysis	SW	DUP
VIII.	Laboratory Control Samples (LCS)	A	LCS
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	SW	
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	—	
XV	Field Blanks	—	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: Soil

1	SL-148-SA5A-SB-4.0-5.0	11		21		31	
2	SL-148-SA5A-SB-9.0-10.0	12		22		32	
3	DUP15-SA5A-QC-042011	13		23		33	
4	SL-148-SA5A-SB-4.0-5.0MS	14		24		34	
5	SL-148-SA5A-SB-4.0-5.0MSD	15		25		35	
6	SL-148-SA5A-SB-4.0-5.0DUP	16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 5A(MS/MSD)
MATRIX SPIKE/MATRIX SPIKE DUPLICATE
SDG No.: DE133
Matrix: SOIL Level (low/med): LOW

74x

Background Lab Sample ID: 6264845BKG Matrix Spike Lab Sample ID: 6264846MS Matrix Spike Duplicate Lab Sample ID: 6264847MSD
% Solids for Sample: 89.2
Batch Id(s): P11608A, P11626A, P11611A

Analyte	Mass	BKG Sample Result	C	MS Sample Result	C	MSD Sample Result	C	MS Spike Added	MSD Spike Added	Units	MS %R	Q	MSD %R	Q	RPD	Q	Control Limit %R	Control Limit RPD	M
Aluminum		18967.8752		22956.1104		23567.5712		217.6847	219.8189	MG/KG	1832		2092		3			20	P
Antimony	121	0.1915	B	0.8671		0.7395		1.3320	1.3320	MG/KG	51	N	41	N	16		75 - 125	20	MS
Arsenic	75	4.3657		6.7464		5.8829		2.2200	2.2200	MG/KG	107		68	N	14		75 - 125	20	MS
Barium	137	108.3132		126.6927		118.8119		11.0998	11.0998	MG/KG	166		95		6			20	MS
Beryllium	9	0.7035		1.5933		1.5462		0.8880	0.8880	MG/KG	100		95		3		75 - 125	20	MS
Boron		1.9178	B	219.3250		221.0301		217.6847	219.8189	MG/KG	100		100		1		84 - 115	20	P
Cadmium	111	0.0431	U	1.2192		1.2125		1.1100	1.1100	MG/KG	110		109		1		75 - 125	20	MS
Calcium		2016.0314		2589.6992		2646.3279		435.3694	439.6377	MG/KG	132		143		2			20	P
Chromium	52	17.8790		29.0592		29.2146		11.0998	11.0998	MG/KG	101		102		1		75 - 125	20	MS
Cobalt	59	6.3600		65.7772		62.5361		55.4988	55.4988	MG/KG	107		101		5		75 - 125	20	MS
Copper	63	7.2072		18.8585		18.8141		11.0998	11.0998	MG/KG	105		105		0		75 - 125	20	MS
Iron		19881.1224		21172.4313		21540.3500		108.8424	109.9094	MG/KG	1186		1510		2			20	P
Lead	208	5.2949		9.2084		8.7932		3.3299	3.3299	MG/KG	118		105		5		75 - 125	20	MS
Lithium		23.8495		135.6872		137.7935		108.8424	109.9094	MG/KG	103		104		2		82 - 114	20	P
Magnesium		4077.2835		4551.3975		4606.7935		217.6847	219.8189	MG/KG	218		241		1			20	P
Manganese		303.0922		395.9054		406.7199		54.4212	54.9547	MG/KG	171		189		3			20	P
Mercury		0.0196	B	0.1814		0.1768		0.1845	0.1797	MG/KG	88		87		3		65 - 135	20	CV
Molybdenum	98	0.6246		11.9833		11.4883		11.0998	11.0998	MG/KG	102		98		4		75 - 125	20	MS
Nickel	60	12.3189		25.3963		23.6869		11.0998	11.0998	MG/KG	118		102		7		75 - 125	20	MS
Phosphorus		233.6225		339.0265		341.4117		108.8424	109.9094	MG/KG	97		98		1		75 - 125	20	P
Potassium		2364.0668		3791.5821		3890.5830		1088.4235	1099.0943	MG/KG	131	N	139	N	3		75 - 125	20	P
Selenium	78	0.1244	B	2.3287		2.2888		2.2200	2.2200	MG/KG	99		97		2		75 - 125	20	MS
Silver	107	0.0367	B	11.7080		11.2751		11.0998	11.0998	MG/KG	105		101		4		75 - 125	20	MS
Sodium		115.9650		1205.2375		1202.7609		1088.4235	1099.0943	MG/KG	100		99		0		75 - 125	20	P
Strontium		21.1883		128.3643		129.5338		108.8424	109.9094	MG/KG	98		99		1		75 - 115	20	P
Thallium	203	0.2604		0.7632		0.7841		0.4440	0.4440	MG/KG	113		118		3		75 - 125	20	MS
Tin		2.5774	B	386.7735		390.7742		435.3694	439.6377	MG/KG	88		88		1		80 - 110	20	P
Titanium		1110.8723		1394.9073		1432.1452		108.8424	109.9094	MG/KG	261		292		3			20	P
Vanadium	51	35.6588		50.1043		46.3304		11.0998	11.0998	MG/KG	130	N	96		8		75 - 125	20	MS
Zinc	66	50.4269		63.4019		58.9841		11.0998	11.0998	MG/KG	117		77		7			20	MS
Zirconium		1.6958	B	108.4941		111.0041		108.8424	109.9094	MG/KG	98		99		2		75 - 125	20	P

METHODS:
P = ICP Atomic Emission Spectrometer CV = Cold Vapor
MS = ICP/Mass Spectrometry AF = Cold Vapor Atomic Fluorescence

CONCENTRATION QUALIFIERS:
U= Below MDL, B= Below LOQ
FLAGS:
N = Matrix Spike OOS, * = Duplicate OOS

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 6
DUPLICATES
SDG No.: DE133
Matrix: SOIL Level (low/med): LOW

<5xRL

Background Lab Sample ID: 6264845BKG
% Solids for Duplicate: 88.9
Batch ID(s): P11608A, P11626A, P11611A
Concentration Units: MG/KG

Duplicate Lab Sample ID: 6264848DUP
% Solids for Sample: 89.2

Analyte	Mass	Control Limit	Samples (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum			18967.8752		19576.7765		3		P
Antimony	121		0.1915	B	0.1301	B	38		MS
Arsenic	75		4.3657		3.7413		15		MS
Barium	137		108.3132		105.7768		2		MS
Beryllium	9		0.7035		0.6942		1		MS
Boron			1.9178	B	1.3582	B	34		P
Cadmium	111		0.0431	U	0.0502	B	200		MS
Calcium			2016.0314		2058.4016		2		P
Chromium	52		17.8790		18.2142		2		MS
Cobalt	59		6.3600		6.7396		6		MS
Copper	63		7.2072		7.5486		5		MS
Iron			19881.1224		20498.1664		3		P
Lead	208		5.2949		5.2053		2		MS
Lithium			23.8495		24.5958		3		P
Magnesium			4077.2835		4187.4774		3		P
Manganese			303.0922		325.9400		7		P
Mercury			0.0196	B	0.0066	B	99		CV
Molybdenum	98		0.6246		0.6249		0		MS
Nickel	60		12.3189		12.8132		4		MS
Phosphorus			233.6225		230.3618		1		P
Potassium			2364.0668		2327.6022		2		P
Selenium	78		0.1244	B	0.0820	B	41		MS
Silver	107		0.0367	B	0.0356	B	3		MS
Sodium		108.8	115.9650		119.6178		3		P
Strontium			21.1883		21.7769		3		P
Thallium	203	0.1	0.2604		0.2578		1		MS
Tin			2.5774	B	2.5763	B	0		P
Titanium			1110.8723		1157.7484		4		P
Vanadium	51		35.6588		36.1822		1		MS
Zinc	66		50.4269		50.8881		1		MS
Zirconium			1.6958	B	3.2964	B	64		P

NOTE: An asterisk (*) in column "Q" indicates poor duplicate precision (RPD > 20% OR |(S) - (D)| > LOQ for values < 5x LOQ).
The data are considered to be valid because the laboratory control sample is within the control limits. See the Laboratory Control Sample.

DE133 2878

METHODS:	CONCENTRATION QUALIFIERS:
P = ICP Atomic Emission Spectrometer	U= Below MDL
MS = ICP Mass Spectrometry	B= Below LOQ
CV = Cold Vapor	FLAGS:
AF = Cold Vapor Atomic Fluorescence	* = Duplicate Out of Spec

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 9
SERIAL DILUTIONS
SDG No.: DE133
Matrix: SOIL Level (low/med): LOW

5/05/A

Background Lab Sample ID: 6264845BKG Serial Dilution Lab Sample ID: 6264845L
Batch ID(s): P11608A, P11626A
Concentration Units: UG/L

Analyte	Mass	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Diff.	Q	M
Aluminum		174269.2500		176552.1500		1		P
Antimony	121	0.8881	B	1.5000	U	100		MS
Arsenic	75	20.2500		18.9400		6		MS
Barium	137	502.4000		525.0000		4		MS
Beryllium	9	3.2630		3.6635		12		MS
Boron		17.6200	B	44.5000	U	100		P
Cadmium	111	0.2000	U	1.0000	U			MS
Calcium		18522.4900		19573.4000		6		P
Chromium	52	82.9300		93.6000		13	E	MS
Cobalt	59	29.5000		33.6000		14	E	MS
Copper	63	33.4300		43.3350		30	E	MS
Iron		182659.8000		188982.1500		3		P
Lead	208	24.5600		27.2350		11	E	MS
Lithium		219.1200		239.4000		9		P
Magnesium		37460.4500		38778.6000		4		P
Manganese		2784.6900		2949.3500		6		P
Molybdenum	98	2.8970		4.0745		41		MS
Nickel	60	57.1400		63.7000		11	E	MS
Phosphorus		2146.4300		2147.9500		0		P
Potassium		21720.1000		21857.6500		1		P
Selenium	78	0.5770	B	1.0000	U	100		MS
Silver	107	0.1700	B	0.3000	U	100		MS
Sodium		1065.4400		1865.0000	U	100		P
Strontium		194.6700		198.7000		2		P
Thallium	203	1.2080		1.1255	B	7		MS
Tin		23.6800	B	50.0000	U	100		P
Titanium		10206.2500		10811.5000		6		P
Vanadium	51	165.4000		192.0500		16	E	MS
Zinc	66	233.9000		240.1500		3		MS
Zirconium		15.5800	B	42.0000	U	100		P

NOTE: An E in column Q indicates the presence of a chemical or physical interference in the matrix when the % difference is greater than 10%. This applies only when (I) is greater than or equal to 50x MDL for ICP, 100x MDL for ICP-MS (6020), 50x MDL for ICP-MS (200.8), or 25x MDL for GFAA.

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry

CONCENTRATION QUALIFIERS: DE133 2888
U= Below MDL
B= Below LOQ

FLAGS:
E = Matrix Effects exist as proven by Serial Dilution or Spiked Dilution

SAMPLE DELIVERY GROUP

DE135

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
22-Apr-2011	TB-042211	6267481	TB	5030B	8015M	III
22-Apr-2011	TB-042211	6267481	TB	5030B	8260B	III
22-Apr-2011	TB-042211	6267481	TB	5030B	8260B SIM	III
22-Apr-2011	SL-007-SA8N-SB-4.0-5.0	6267467	N	3050B	6010B	III
22-Apr-2011	SL-007-SA8N-SB-4.0-5.0	6267467	N	3050B	6020	III
22-Apr-2011	SL-007-SA8N-SB-4.0-5.0	6267467	N	3060A	7199	III
22-Apr-2011	SL-007-SA8N-SB-4.0-5.0	6267467	N	3550B	8082	III
22-Apr-2011	SL-007-SA8N-SB-4.0-5.0	6267467	N	3550B	8270C	III
22-Apr-2011	SL-007-SA8N-SB-4.0-5.0	6267467	N	3550B	8270C SIM	III
22-Apr-2011	SL-007-SA8N-SB-4.0-5.0	6267467	N	5035	8260B	III
22-Apr-2011	SL-007-SA8N-SB-4.0-5.0	6267467	N	5035	8260B SIM	III
22-Apr-2011	SL-007-SA8N-SB-4.0-5.0	6267467	N	METHOD	300.0	III
22-Apr-2011	SL-007-SA8N-SB-4.0-5.0	6267467	N	METHOD	314.0	III
22-Apr-2011	SL-007-SA8N-SB-4.0-5.0	6267467	N	METHOD	7471A	III
22-Apr-2011	SL-007-SA8N-SB-4.0-5.0	6267467	N	METHOD	8015M	III
22-Apr-2011	SL-007-SA8N-SB-4.0-5.0MSD	P267467M321858A	MSD	METHOD	8015M	III
22-Apr-2011	SL-007-SA8N-SB-4.0-5.0MS	P267467R321823A	MS	METHOD	8015M	III
22-Apr-2011	SL-007-SA8N-SB-9.0-10	6267468	N	3050B	6010B	III
22-Apr-2011	SL-007-SA8N-SB-9.0-10	6267468	N	3050B	6020	III
22-Apr-2011	SL-007-SA8N-SB-9.0-10	6267468	N	3060A	7199	III
22-Apr-2011	SL-007-SA8N-SB-9.0-10	6267468	N	3550B	8082	III
22-Apr-2011	SL-007-SA8N-SB-9.0-10	6267468	N	3550B	8270C	III
22-Apr-2011	SL-007-SA8N-SB-9.0-10	6267468	N	3550B	8270C SIM	III
22-Apr-2011	SL-007-SA8N-SB-9.0-10	6267468	N	METHOD	300.0	III
22-Apr-2011	SL-007-SA8N-SB-9.0-10	6267468	N	METHOD	314.0	III
22-Apr-2011	SL-007-SA8N-SB-9.0-10	6267468	N	METHOD	7471A	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
22-Apr-2011	SL-007-SA8N-SB-9.0-10	6267468	N	METHOD	8015M	III
22-Apr-2011	SL-007-SA8N-SB-9.0-10MSD	P267468M321956A	MSD	METHOD	8015M	III
22-Apr-2011	SL-007-SA8N-SB-9.0-10MS	P267468R321938A	MS	METHOD	8015M	III
22-Apr-2011	SL-010-SA8N-SB-4.0-5.0	6267469	N	3050B	6010B	III
22-Apr-2011	SL-010-SA8N-SB-4.0-5.0	6267469	N	3050B	6020	III
22-Apr-2011	SL-010-SA8N-SB-4.0-5.0	6267469	N	3060A	7199	III
22-Apr-2011	SL-010-SA8N-SB-4.0-5.0	6267469	N	3546	1625C	III
22-Apr-2011	SL-010-SA8N-SB-4.0-5.0	6267469	N	3550B	8015B	III
22-Apr-2011	SL-010-SA8N-SB-4.0-5.0	6267469	N	3550B	8015M	III
22-Apr-2011	SL-010-SA8N-SB-4.0-5.0	6267469	N	3550B	8082	III
22-Apr-2011	SL-010-SA8N-SB-4.0-5.0	6267469	N	3550B	8270C	III
22-Apr-2011	SL-010-SA8N-SB-4.0-5.0	6267469	N	3550B	8270C SIM	III
22-Apr-2011	SL-010-SA8N-SB-4.0-5.0	6267469	N	5035	8015M	III
22-Apr-2011	SL-010-SA8N-SB-4.0-5.0	6267469	N	5035	8260B	III
22-Apr-2011	SL-010-SA8N-SB-4.0-5.0	6267469	N	5035	8260B SIM	III
22-Apr-2011	SL-010-SA8N-SB-4.0-5.0	6267469	N	8330	8330A	III
22-Apr-2011	SL-010-SA8N-SB-4.0-5.0	6267469	N	METHOD	300.0	III
22-Apr-2011	SL-010-SA8N-SB-4.0-5.0	6267469	N	METHOD	314.0	III
22-Apr-2011	SL-010-SA8N-SB-4.0-5.0	6267469	N	METHOD	7471A	III
22-Apr-2011	SL-010-SA8N-SB-4.0-5.0	6267469	N	METHOD	8015B	III
22-Apr-2011	SL-010-SA8N-SB-4.0-5.0	6267469	N	METHOD	8015M	III
22-Apr-2011	SL-010-SA8N-SB-4.0-5.0	6267469	N	METHOD	8315A	III
22-Apr-2011	SL-010-SA8N-SB-4.0-5.0	6267469	N	METHOD	9012B	III
22-Apr-2011	SL-064-SA5A-SB-3.0-4.0	6267473	N	3050B	6010B	III
22-Apr-2011	SL-064-SA5A-SB-3.0-4.0	6267473	N	3050B	6020	III
22-Apr-2011	SL-064-SA5A-SB-3.0-4.0	6267473	N	3060A	7199	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
22-Apr-2011	SL-064-SA5A-SB-3.0-4.0	6267473	N	3550B	8082	III
22-Apr-2011	SL-064-SA5A-SB-3.0-4.0	6267473	N	3550B	8270C	III
22-Apr-2011	SL-064-SA5A-SB-3.0-4.0	6267473	N	3550B	8270C SIM	III
22-Apr-2011	SL-064-SA5A-SB-3.0-4.0	6267473	N	5035	8260B	III
22-Apr-2011	SL-064-SA5A-SB-3.0-4.0	6267473	N	5035	8260B SIM	III
22-Apr-2011	SL-064-SA5A-SB-3.0-4.0	6267473	N	METHOD	300.0	III
22-Apr-2011	SL-064-SA5A-SB-3.0-4.0	6267473	N	METHOD	314.0	III
22-Apr-2011	SL-064-SA5A-SB-3.0-4.0	6267473	N	METHOD	7471A	III
22-Apr-2011	SL-064-SA5A-SB-3.0-4.0MS	6267474	MS	3050B	6010B	III
22-Apr-2011	SL-064-SA5A-SB-3.0-4.0MS	6267474	MS	3050B	6020	III
22-Apr-2011	SL-064-SA5A-SB-3.0-4.0MS	6267474	MS	3060A	7199	III
22-Apr-2011	SL-064-SA5A-SB-3.0-4.0MS	6267474	MS	3550B	8082	III
22-Apr-2011	SL-064-SA5A-SB-3.0-4.0MS	6267474	MS	3550B	8270C	III
22-Apr-2011	SL-064-SA5A-SB-3.0-4.0MS	6267474	MS	3550B	8270C SIM	III
22-Apr-2011	SL-064-SA5A-SB-3.0-4.0MS	6267474	MS	5035	8260B	III
22-Apr-2011	SL-064-SA5A-SB-3.0-4.0MS	6267474	MS	5035	8260B SIM	III
22-Apr-2011	SL-064-SA5A-SB-3.0-4.0MS	6267474	MS	METHOD	300.0	III
22-Apr-2011	SL-064-SA5A-SB-3.0-4.0MS	6267474	MS	METHOD	314.0	III
22-Apr-2011	SL-064-SA5A-SB-3.0-4.0MS	6267474	MS	METHOD	7471A	III
22-Apr-2011	SL-064-SA5A-SB-3.0-4.0MSD	6267475	MSD	3050B	6010B	III
22-Apr-2011	SL-064-SA5A-SB-3.0-4.0MSD	6267475	MSD	3050B	6020	III
22-Apr-2011	SL-064-SA5A-SB-3.0-4.0MSD	6267475	MSD	3550B	8082	III
22-Apr-2011	SL-064-SA5A-SB-3.0-4.0MSD	6267475	MSD	3550B	8270C	III
22-Apr-2011	SL-064-SA5A-SB-3.0-4.0MSD	6267475	MSD	3550B	8270C SIM	III
22-Apr-2011	SL-064-SA5A-SB-3.0-4.0MSD	6267475	MSD	5035	8260B	III
22-Apr-2011	SL-064-SA5A-SB-3.0-4.0MSD	6267475	MSD	5035	8260B SIM	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
22-Apr-2011	SL-064-SA5A-SB-3.0-4.0MSD	6267475	MSD	METHOD	7471A	III
22-Apr-2011	SL-064-SA5A-SB-3.0-4.0DUP	6267476	DUP	3050B	6010B	III
22-Apr-2011	SL-064-SA5A-SB-3.0-4.0DUP	6267476	DUP	3050B	6020	III
22-Apr-2011	SL-064-SA5A-SB-3.0-4.0DUP	6267476	DUP	3060A	7199	III
22-Apr-2011	SL-064-SA5A-SB-3.0-4.0DUP	6267476	DUP	METHOD	300.0	III
22-Apr-2011	SL-064-SA5A-SB-3.0-4.0DUP	6267476	DUP	METHOD	314.0	III
22-Apr-2011	SL-064-SA5A-SB-3.0-4.0DUP	6267476	DUP	METHOD	7471A	III
22-Apr-2011	DUP16-SA5A-QC-042211	6267480	FD	3050B	6010B	III
22-Apr-2011	DUP16-SA5A-QC-042211	6267480	FD	3050B	6020	III
22-Apr-2011	DUP16-SA5A-QC-042211	6267480	FD	3060A	7199	III
22-Apr-2011	DUP16-SA5A-QC-042211	6267480	FD	3550B	8082	III
22-Apr-2011	DUP16-SA5A-QC-042211	6267480	FD	3550B	8270C	III
22-Apr-2011	DUP16-SA5A-QC-042211	6267480	FD	3550B	8270C SIM	III
22-Apr-2011	DUP16-SA5A-QC-042211	6267480	FD	5035	8260B	III
22-Apr-2011	DUP16-SA5A-QC-042211	6267480	FD	5035	8260B SIM	III
22-Apr-2011	DUP16-SA5A-QC-042211	6267480	FD	METHOD	300.0	III
22-Apr-2011	DUP16-SA5A-QC-042211	6267480	FD	METHOD	314.0	III
22-Apr-2011	DUP16-SA5A-QC-042211	6267480	FD	METHOD	7471A	III
22-Apr-2011	DUP16-SA5A-QC-042211DUP	P267480D270416B	DUP	METHOD	300.0	III
22-Apr-2011	DUP16-SA5A-QC-042211DUP	P267480D270431B	DUP	METHOD	314.0	III
22-Apr-2011	DUP16-SA5A-QC-042211MS	P267480R270430B	MS	METHOD	300.0	III
22-Apr-2011	DUP16-SA5A-QC-042211MS	P267480R270453B	MS	METHOD	314.0	III
22-Apr-2011	SL-010-SA8N-SB-9.0-10	6267470	N	3050B	6010B	III
22-Apr-2011	SL-010-SA8N-SB-9.0-10	6267470	N	3050B	6020	III
22-Apr-2011	SL-010-SA8N-SB-9.0-10	6267470	N	3060A	7199	III
22-Apr-2011	SL-010-SA8N-SB-9.0-10	6267470	N	3546	1625C	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
22-Apr-2011	SL-010-SA8N-SB-9.0-10	6267470	N	3550B	8015B	III
22-Apr-2011	SL-010-SA8N-SB-9.0-10	6267470	N	3550B	8015M	III
22-Apr-2011	SL-010-SA8N-SB-9.0-10	6267470	N	3550B	8082	III
22-Apr-2011	SL-010-SA8N-SB-9.0-10	6267470	N	3550B	8270C	III
22-Apr-2011	SL-010-SA8N-SB-9.0-10	6267470	N	3550B	8270C SIM	III
22-Apr-2011	SL-010-SA8N-SB-9.0-10	6267470	N	5035	8015M	III
22-Apr-2011	SL-010-SA8N-SB-9.0-10	6267470	N	5035	8260B	III
22-Apr-2011	SL-010-SA8N-SB-9.0-10	6267470	N	5035	8260B SIM	III
22-Apr-2011	SL-010-SA8N-SB-9.0-10	6267470	N	8330	8330A	III
22-Apr-2011	SL-010-SA8N-SB-9.0-10	6267470	N	METHOD	300.0	III
22-Apr-2011	SL-010-SA8N-SB-9.0-10	6267470	N	METHOD	314.0	III
22-Apr-2011	SL-010-SA8N-SB-9.0-10	6267470	N	METHOD	7471A	III
22-Apr-2011	SL-010-SA8N-SB-9.0-10	6267470	N	METHOD	8015B	III
22-Apr-2011	SL-010-SA8N-SB-9.0-10	6267470	N	METHOD	8015M	III
22-Apr-2011	SL-010-SA8N-SB-9.0-10	6267470	N	METHOD	8315A	III
22-Apr-2011	SL-010-SA8N-SB-9.0-10	6267470	N	METHOD	9012B	III
22-Apr-2011	SL-010-SA8N-SB-9.0-10MSD	P267470M321853A	MSD	METHOD	8015B	III
22-Apr-2011	SL-010-SA8N-SB-9.0-10MS	P267470R321838A	MS	METHOD	8015B	III
22-Apr-2011	SL-011-SA8N-SB-9.0-10.0	6267472	N	3050B	6010B	III
22-Apr-2011	SL-011-SA8N-SB-9.0-10.0	6267472	N	3050B	6020	III
22-Apr-2011	SL-011-SA8N-SB-9.0-10.0	6267472	N	3060A	7199	III
22-Apr-2011	SL-011-SA8N-SB-9.0-10.0	6267472	N	3546	1625C	III
22-Apr-2011	SL-011-SA8N-SB-9.0-10.0	6267472	N	3550B	8015B	III
22-Apr-2011	SL-011-SA8N-SB-9.0-10.0	6267472	N	3550B	8015M	III
22-Apr-2011	SL-011-SA8N-SB-9.0-10.0	6267472	N	3550B	8082	III
22-Apr-2011	SL-011-SA8N-SB-9.0-10.0	6267472	N	3550B	8270C	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
22-Apr-2011	SL-011-SA8N-SB-9.0-10.0	6267472	N	3550B	8270C SIM	III
22-Apr-2011	SL-011-SA8N-SB-9.0-10.0	6267472	N	5035	8015M	III
22-Apr-2011	SL-011-SA8N-SB-9.0-10.0	6267472	N	5035	8260B	III
22-Apr-2011	SL-011-SA8N-SB-9.0-10.0	6267472	N	5035	8260B SIM	III
22-Apr-2011	SL-011-SA8N-SB-9.0-10.0	6267472	N	8330	8330A	III
22-Apr-2011	SL-011-SA8N-SB-9.0-10.0	6267472	N	METHOD	300.0	III
22-Apr-2011	SL-011-SA8N-SB-9.0-10.0	6267472	N	METHOD	314.0	III
22-Apr-2011	SL-011-SA8N-SB-9.0-10.0	6267472	N	METHOD	7471A	III
22-Apr-2011	SL-011-SA8N-SB-9.0-10.0	6267472	N	METHOD	8015B	III
22-Apr-2011	SL-011-SA8N-SB-9.0-10.0	6267472	N	METHOD	8015M	III
22-Apr-2011	SL-011-SA8N-SB-9.0-10.0	6267472	N	METHOD	8315A	III
22-Apr-2011	SL-011-SA8N-SB-9.0-10.0	6267472	N	METHOD	9012B	III
22-Apr-2011	SL-011-SA8N-SB-4.0-5.0	6267471	N	3050B	6010B	III
22-Apr-2011	SL-011-SA8N-SB-4.0-5.0	6267471	N	3050B	6020	III
22-Apr-2011	SL-011-SA8N-SB-4.0-5.0	6267471	N	3060A	7199	III
22-Apr-2011	SL-011-SA8N-SB-4.0-5.0	6267471	N	3546	1625C	III
22-Apr-2011	SL-011-SA8N-SB-4.0-5.0	6267471	N	3550B	8015B	III
22-Apr-2011	SL-011-SA8N-SB-4.0-5.0	6267471	N	3550B	8015M	III
22-Apr-2011	SL-011-SA8N-SB-4.0-5.0	6267471	N	3550B	8082	III
22-Apr-2011	SL-011-SA8N-SB-4.0-5.0	6267471	N	3550B	8270C	III
22-Apr-2011	SL-011-SA8N-SB-4.0-5.0	6267471	N	3550B	8270C SIM	III
22-Apr-2011	SL-011-SA8N-SB-4.0-5.0	6267471	N	5035	8015M	III
22-Apr-2011	SL-011-SA8N-SB-4.0-5.0	6267471	N	5035	8260B	III
22-Apr-2011	SL-011-SA8N-SB-4.0-5.0	6267471	N	5035	8260B SIM	III
22-Apr-2011	SL-011-SA8N-SB-4.0-5.0	6267471	N	8330	8330A	III
22-Apr-2011	SL-011-SA8N-SB-4.0-5.0	6267471	N	METHOD	300.0	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
22-Apr-2011	SL-011-SA8N-SB-4.0-5.0	6267471	N	METHOD	314.0	III
22-Apr-2011	SL-011-SA8N-SB-4.0-5.0	6267471	N	METHOD	7471A	III
22-Apr-2011	SL-011-SA8N-SB-4.0-5.0	6267471	N	METHOD	8015B	III
22-Apr-2011	SL-011-SA8N-SB-4.0-5.0	6267471	N	METHOD	8015M	III
22-Apr-2011	SL-011-SA8N-SB-4.0-5.0	6267471	N	METHOD	8315A	III
22-Apr-2011	SL-011-SA8N-SB-4.0-5.0	6267471	N	METHOD	9012B	III
22-Apr-2011	SL-166-SA5A-SS-0.0-0.5	6267477	N	3050B	6010B	III
22-Apr-2011	SL-166-SA5A-SS-0.0-0.5	6267477	N	3050B	6020	III
22-Apr-2011	SL-166-SA5A-SS-0.0-0.5	6267477	N	3060A	7199	III
22-Apr-2011	SL-166-SA5A-SS-0.0-0.5	6267477	N	3550B	8082	III
22-Apr-2011	SL-166-SA5A-SS-0.0-0.5	6267477	N	3550B	8270C	III
22-Apr-2011	SL-166-SA5A-SS-0.0-0.5	6267477	N	3550B	8270C SIM	III
22-Apr-2011	SL-166-SA5A-SS-0.0-0.5	6267477	N	METHOD	300.0	III
22-Apr-2011	SL-166-SA5A-SS-0.0-0.5	6267477	N	METHOD	314.0	III
22-Apr-2011	SL-166-SA5A-SS-0.0-0.5	6267477	N	METHOD	7471A	III
22-Apr-2011	SL-253-SA5A-SB-4.0-5.0	6267478	N	3050B	6010B	III
22-Apr-2011	SL-253-SA5A-SB-4.0-5.0	6267478	N	3050B	6020	III
22-Apr-2011	SL-253-SA5A-SB-4.0-5.0	6267478	N	3060A	7199	III
22-Apr-2011	SL-253-SA5A-SB-4.0-5.0	6267478	N	3550B	8082	III
22-Apr-2011	SL-253-SA5A-SB-4.0-5.0	6267478	N	3550B	8270C	III
22-Apr-2011	SL-253-SA5A-SB-4.0-5.0	6267478	N	3550B	8270C SIM	III
22-Apr-2011	SL-253-SA5A-SB-4.0-5.0	6267478	N	5035	8260B	III
22-Apr-2011	SL-253-SA5A-SB-4.0-5.0	6267478	N	5035	8260B SIM	III
22-Apr-2011	SL-253-SA5A-SB-4.0-5.0	6267478	N	METHOD	300.0	III
22-Apr-2011	SL-253-SA5A-SB-4.0-5.0	6267478	N	METHOD	314.0	III
22-Apr-2011	SL-253-SA5A-SB-4.0-5.0	6267478	N	METHOD	7471A	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
22-Apr-2011	SL-253-SA5A-SB-8.0-9.0	6267479	N	3050B	6010B	III
22-Apr-2011	SL-253-SA5A-SB-8.0-9.0	6267479	N	3050B	6020	III
22-Apr-2011	SL-253-SA5A-SB-8.0-9.0	6267479	N	3060A	7199	III
22-Apr-2011	SL-253-SA5A-SB-8.0-9.0	6267479	N	3550B	8082	III
22-Apr-2011	SL-253-SA5A-SB-8.0-9.0	6267479	N	3550B	8270C	III
22-Apr-2011	SL-253-SA5A-SB-8.0-9.0	6267479	N	3550B	8270C SIM	III
22-Apr-2011	SL-253-SA5A-SB-8.0-9.0	6267479	N	METHOD	300.0	III
22-Apr-2011	SL-253-SA5A-SB-8.0-9.0	6267479	N	METHOD	314.0	III
22-Apr-2011	SL-253-SA5A-SB-8.0-9.0	6267479	N	METHOD	7471A	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE135 **Laboratory: LL**

EDD Filename: PrepDE135_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **GENCHEM**

Method: **300.0** ***Matrix:*** **SO**

Sample ID: **DUP16-SA5A-QC-042211** ***Collected:*** **4/22/2011 11:15:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	3.0		0.89	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: **SL-007-SA8N-SB-4.0-5.0** ***Collected:*** **4/22/2011 9:33:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	4.9		0.93	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: **SL-007-SA8N-SB-9.0-10** ***Collected:*** **4/22/2011 9:45:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	4.1		0.92	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: **SL-010-SA8N-SB-4.0-5.0** ***Collected:*** **4/22/2011 11:10:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	8.1		0.94	MDL	1.2	PQL	mg/Kg	J	Q
Nitrate-NO3	1.2	J	0.94	MDL	1.8	PQL	mg/Kg	J	Z

Sample ID: **SL-010-SA8N-SB-9.0-10** ***Collected:*** **4/22/2011 11:20:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	8.5		0.95	MDL	1.2	PQL	mg/Kg	J	Q
Nitrate-NO3	1.4	J	0.95	MDL	1.8	PQL	mg/Kg	J	Z

Sample ID: **SL-011-SA8N-SB-4.0-5.0** ***Collected:*** **4/22/2011 12:52:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	11.1		0.95	MDL	1.2	PQL	mg/Kg	J	Q
Nitrate-NO3	1.5	J	0.95	MDL	1.8	PQL	mg/Kg	J	Z

Sample ID: **SL-011-SA8N-SB-9.0-10.0** ***Collected:*** **4/22/2011 12:12:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	6.4		0.94	MDL	1.2	PQL	mg/Kg	J	Q
Nitrate-NO3	1.1	J	0.94	MDL	1.8	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE135 **Laboratory: LL**

EDD Filename: PrepDE135_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **GENCHEM**

Method: **300.0** ***Matrix:*** **SO**

Sample ID: **SL-064-SA5A-SB-3.0-4.0** ***Collected:*** **4/22/2011 11:10:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.3		0.90	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: **SL-166-SA5A-SS-0.0-0.5** ***Collected:*** **4/22/2011 1:45:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.1		0.82	MDL	1.0	PQL	mg/Kg	J	Q

Sample ID: **SL-253-SA5A-SB-4.0-5.0** ***Collected:*** **4/22/2011 3:30:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.9		0.92	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: **SL-253-SA5A-SB-8.0-9.0** ***Collected:*** **4/22/2011 4:05:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.0		0.89	MDL	1.1	PQL	mg/Kg	J	Q

Method Category: **METALS**

Method: **6010B** ***Matrix:*** **SO**

Sample ID: **DUP16-SA5A-QC-042211** ***Collected:*** **4/22/2011 11:15:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	2490		19.9	MDL	55.4	PQL	mg/Kg	J	Q
SODIUM	102	J	41.3	MDL	111	PQL	mg/Kg	J	Z
TIN	3.45	J	1.11	MDL	11.1	PQL	mg/Kg	U	B

Sample ID: **SL-007-SA8N-SB-4.0-5.0** ***Collected:*** **4/22/2011 9:33:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	2920		20.3	MDL	56.4	PQL	mg/Kg	J	Q
SODIUM	91.2	J	42.1	MDL	113	PQL	mg/Kg	J	Z
TIN	3.02	J	1.13	MDL	11.3	PQL	mg/Kg	U	B
Zirconium	3.10	J	0.948	MDL	5.64	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE135 **Laboratory: LL**

EDD Filename: PrepDE135_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6010B** ***Matrix:*** **SO**

Sample ID: **SL-007-SA8N-SB-9.0-10** ***Collected:*** **4/22/2011 9:45:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	2760		20.6	MDL	57.2	PQL	mg/Kg	J	Q
TIN	3.15	J	1.14	MDL	11.4	PQL	mg/Kg	U	B
Zirconium	3.35	J	0.960	MDL	5.72	PQL	mg/Kg	J	Z

Sample ID: **SL-010-SA8N-SB-4.0-5.0** ***Collected:*** **4/22/2011 11:10:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	2860		20.5	MDL	56.8	PQL	mg/Kg	J	Q
TIN	3.13	J	1.14	MDL	11.4	PQL	mg/Kg	U	B
Zirconium	2.72	J	0.955	MDL	5.68	PQL	mg/Kg	J	Z

Sample ID: **SL-010-SA8N-SB-9.0-10** ***Collected:*** **4/22/2011 11:20:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	3080		21.1	MDL	58.6	PQL	mg/Kg	J	Q
TIN	3.31	J	1.17	MDL	11.7	PQL	mg/Kg	U	B
Zirconium	3.23	J	0.984	MDL	5.86	PQL	mg/Kg	J	Z

Sample ID: **SL-011-SA8N-SB-4.0-5.0** ***Collected:*** **4/22/2011 12:52:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	3190		20.9	MDL	58.0	PQL	mg/Kg	J	Q
TIN	3.26	J	1.16	MDL	11.6	PQL	mg/Kg	U	B
Zirconium	2.78	J	0.975	MDL	5.80	PQL	mg/Kg	J	Z

Sample ID: **SL-011-SA8N-SB-9.0-10.0** ***Collected:*** **4/22/2011 12:12:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	2300		21.1	MDL	58.6	PQL	mg/Kg	J	Q
TIN	3.30	J	1.17	MDL	11.7	PQL	mg/Kg	U	B
Zirconium	2.90	J	0.985	MDL	5.86	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE135 **Laboratory: LL**

EDD Filename: PrepDE135_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-064-SA5A-SB-3.0-4.0 *Collected:* 4/22/2011 11:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	2660		20.0	MDL	55.5	PQL	mg/Kg	J	Q
SODIUM	93.2	J	41.4	MDL	111	PQL	mg/Kg	J	Z
TIN	3.50	J	1.11	MDL	11.1	PQL	mg/Kg	U	B

Sample ID: SL-166-SA5A-SS-0.0-0.5 *Collected:* 4/22/2011 1:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	2010		18.1	MDL	50.4	PQL	mg/Kg	J	Q
SODIUM	62.2	J	37.6	MDL	101	PQL	mg/Kg	J	Z
TIN	2.89	J	1.01	MDL	10.1	PQL	mg/Kg	U	B

Sample ID: SL-253-SA5A-SB-4.0-5.0 *Collected:* 4/22/2011 3:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	2090		20.7	MDL	57.6	PQL	mg/Kg	J	Q
TIN	3.19	J	1.15	MDL	11.5	PQL	mg/Kg	U	B

Sample ID: SL-253-SA5A-SB-8.0-9.0 *Collected:* 4/22/2011 4:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	2080		19.7	MDL	54.8	PQL	mg/Kg	J	Q
TIN	3.29	J	1.10	MDL	11.0	PQL	mg/Kg	U	B

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: DUP16-SA5A-QC-042211 *Collected:* 4/22/2011 11:15:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.170	J	0.0443	MDL	0.443	PQL	mg/Kg	J	Z

Sample ID: DUP16-SA5A-QC-042211 *Collected:* 4/22/2011 11:15:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.575		0.0554	MDL	0.111	PQL	mg/Kg	J	E

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE135 **Laboratory: LL**

EDD Filename: PrepDE135_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6020** ***Matrix:*** **SO**

Sample ID: **DUP16-SA5A-QC-042211** ***Collected:*** **4/22/2011 11:15:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	113		0.120	MDL	0.443	PQL	mg/Kg	J	E, A

Sample ID: **DUP16-SA5A-QC-042211** ***Collected:*** **4/22/2011 11:15:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0664	U	0.0664	MDL	0.221	PQL	mg/Kg	UJ	Q, E
ARSENIC	8.02		0.0886	MDL	0.443	PQL	mg/Kg	J	Q, Q, E
BERYLLIUM	0.952		0.0177	MDL	0.111	PQL	mg/Kg	J	E
CADMIUM	0.112		0.0443	MDL	0.111	PQL	mg/Kg	J	Q, E
CHROMIUM	25.9		0.133	MDL	0.443	PQL	mg/Kg	J	Q, A
COBALT	8.70		0.0221	MDL	0.111	PQL	mg/Kg	J	Q, E, A
COPPER	14.5		0.0731	MDL	0.443	PQL	mg/Kg	J	Q, E, A
LEAD	8.33		0.0115	MDL	0.221	PQL	mg/Kg	J	Q, Q, E
NICKEL	20.2		0.111	MDL	0.443	PQL	mg/Kg	J	Q, E, A
SILVER	0.0405	J	0.0133	MDL	0.111	PQL	mg/Kg	J	Z, Q, E
VANADIUM	46.5		0.0244	MDL	0.111	PQL	mg/Kg	J	Q, Q, A
ZINC	69.4		0.620	MDL	3.32	PQL	mg/Kg	J	E, A

Sample ID: **SL-007-SA8N-SB-4.0-5.0** ***Collected:*** **4/22/2011 9:33:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0767	J	0.0452	MDL	0.452	PQL	mg/Kg	J	Z

Sample ID: **SL-007-SA8N-SB-4.0-5.0** ***Collected:*** **4/22/2011 9:33:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.385		0.0564	MDL	0.113	PQL	mg/Kg	J	E

Sample ID: **SL-007-SA8N-SB-4.0-5.0** ***Collected:*** **4/22/2011 9:33:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	107		0.122	MDL	0.452	PQL	mg/Kg	J	E, A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE135 **Laboratory: LL**

EDD Filename: PrepDE135_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6020** ***Matrix:*** **SO**

Sample ID: **SL-007-SA8N-SB-4.0-5.0** ***Collected:*** **4/22/2011 9:33:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0677	U	0.0677	MDL	0.226	PQL	mg/Kg	UJ	Q, E
ARSENIC	6.81		0.0903	MDL	0.452	PQL	mg/Kg	J	Q, Q, E
BERYLLIUM	0.800		0.0181	MDL	0.113	PQL	mg/Kg	J	E
CADMIUM	0.210		0.0452	MDL	0.113	PQL	mg/Kg	J	Q, E
CHROMIUM	28.1		0.135	MDL	0.452	PQL	mg/Kg	J	Q, A
COBALT	10.4		0.0226	MDL	0.113	PQL	mg/Kg	J	Q, E, A
COPPER	14.4		0.0745	MDL	0.452	PQL	mg/Kg	J	Q, E, A
LEAD	7.94		0.0117	MDL	0.226	PQL	mg/Kg	J	Q, Q, E
NICKEL	18.4		0.113	MDL	0.452	PQL	mg/Kg	J	Q, E, A
SILVER	0.0333	J	0.0135	MDL	0.113	PQL	mg/Kg	J	Z, Q, E
VANADIUM	51.3		0.0248	MDL	0.113	PQL	mg/Kg	J	Q, Q, A
ZINC	64.4		0.632	MDL	3.39	PQL	mg/Kg	J	E, A

Sample ID: **SL-007-SA8N-SB-9.0-10** ***Collected:*** **4/22/2011 9:45:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0562	J	0.0457	MDL	0.457	PQL	mg/Kg	J	Z

Sample ID: **SL-007-SA8N-SB-9.0-10** ***Collected:*** **4/22/2011 9:45:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.412		0.0572	MDL	0.114	PQL	mg/Kg	J	E

Sample ID: **SL-007-SA8N-SB-9.0-10** ***Collected:*** **4/22/2011 9:45:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	93.2		0.123	MDL	0.457	PQL	mg/Kg	J	E, A

Sample ID: **SL-007-SA8N-SB-9.0-10** ***Collected:*** **4/22/2011 9:45:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0686	U	0.0686	MDL	0.229	PQL	mg/Kg	UJ	Q, E
ARSENIC	6.72		0.0915	MDL	0.457	PQL	mg/Kg	J	Q, Q, E
BERYLLIUM	0.821		0.0183	MDL	0.114	PQL	mg/Kg	J	E
CADMIUM	0.259		0.0457	MDL	0.114	PQL	mg/Kg	J	Q, E

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE135 **Laboratory: LL**

EDD Filename: PrepDE135_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6020** ***Matrix:*** **SO**

Sample ID: **SL-007-SA8N-SB-9.0-10** ***Collected:*** **4/22/2011 9:45:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHROMIUM	27.4		0.137	MDL	0.457	PQL	mg/Kg	J	Q, A
COBALT	10.4		0.0229	MDL	0.114	PQL	mg/Kg	J	Q, E, A
COPPER	14.4		0.0755	MDL	0.457	PQL	mg/Kg	J	Q, E, A
LEAD	7.84		0.0119	MDL	0.229	PQL	mg/Kg	J	Q, Q, E
NICKEL	21.1		0.114	MDL	0.457	PQL	mg/Kg	J	Q, E, A
SILVER	0.0318	J	0.0137	MDL	0.114	PQL	mg/Kg	J	Z, Q, E
VANADIUM	49.4		0.0252	MDL	0.114	PQL	mg/Kg	J	Q, Q, A
ZINC	61.7		0.640	MDL	3.43	PQL	mg/Kg	J	E, A

Sample ID: **SL-010-SA8N-SB-4.0-5.0** ***Collected:*** **4/22/2011 11:10:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0661	J	0.0468	MDL	0.468	PQL	mg/Kg	J	Z

Sample ID: **SL-010-SA8N-SB-4.0-5.0** ***Collected:*** **4/22/2011 11:10:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.344		0.0585	MDL	0.117	PQL	mg/Kg	J	E

Sample ID: **SL-010-SA8N-SB-4.0-5.0** ***Collected:*** **4/22/2011 11:10:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	113		0.126	MDL	0.468	PQL	mg/Kg	J	E, A

Sample ID: **SL-010-SA8N-SB-4.0-5.0** ***Collected:*** **4/22/2011 11:10:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0918	J	0.0703	MDL	0.234	PQL	mg/Kg	J	Z, Q, E
ARSENIC	7.35		0.0937	MDL	0.468	PQL	mg/Kg	J	Q, Q, E
BERYLLIUM	0.879		0.0187	MDL	0.117	PQL	mg/Kg	J	E
CADMIUM	0.196		0.0468	MDL	0.117	PQL	mg/Kg	J	Q, E
CHROMIUM	31.9		0.141	MDL	0.468	PQL	mg/Kg	J	Q, A
COBALT	11.9		0.0234	MDL	0.117	PQL	mg/Kg	J	Q, E, A
COPPER	15.7		0.0773	MDL	0.468	PQL	mg/Kg	J	Q, E, A
LEAD	9.40		0.0122	MDL	0.234	PQL	mg/Kg	J	Q, Q, E

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE135 **Laboratory: LL**

EDD Filename: PrepDE135_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6020** ***Matrix:*** **SO**

Sample ID: **SL-010-SA8N-SB-4.0-5.0** ***Collected:*** **4/22/2011 11:10:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NICKEL	20.7		0.117	MDL	0.468	PQL	mg/Kg	J	Q, E, A
SILVER	0.0304	J	0.0141	MDL	0.117	PQL	mg/Kg	J	Z, Q, E
VANADIUM	57.0		0.0258	MDL	0.117	PQL	mg/Kg	J	Q, Q, A
ZINC	65.6		0.656	MDL	3.51	PQL	mg/Kg	J	E, A

Sample ID: **SL-010-SA8N-SB-9.0-10** ***Collected:*** **4/22/2011 11:20:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0669	J	0.0464	MDL	0.464	PQL	mg/Kg	J	Z

Sample ID: **SL-010-SA8N-SB-9.0-10** ***Collected:*** **4/22/2011 11:20:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.346		0.0580	MDL	0.116	PQL	mg/Kg	J	E

Sample ID: **SL-010-SA8N-SB-9.0-10** ***Collected:*** **4/22/2011 11:20:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	146		0.125	MDL	0.464	PQL	mg/Kg	J	E, A

Sample ID: **SL-010-SA8N-SB-9.0-10** ***Collected:*** **4/22/2011 11:20:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0809	J	0.0696	MDL	0.232	PQL	mg/Kg	J	Z, Q, E
ARSENIC	7.63		0.0928	MDL	0.464	PQL	mg/Kg	J	Q, Q, E
BERYLLIUM	0.940		0.0186	MDL	0.116	PQL	mg/Kg	J	E
CADMIUM	0.212		0.0464	MDL	0.116	PQL	mg/Kg	J	Q, E
CHROMIUM	29.8		0.139	MDL	0.464	PQL	mg/Kg	J	Q, A
COBALT	10.9		0.0232	MDL	0.116	PQL	mg/Kg	J	Q, E, A
COPPER	17.4		0.0766	MDL	0.464	PQL	mg/Kg	J	Q, E, A
LEAD	8.42		0.0121	MDL	0.232	PQL	mg/Kg	J	Q, Q, E
NICKEL	23.5		0.116	MDL	0.464	PQL	mg/Kg	J	Q, E, A
SILVER	0.0943	J	0.0139	MDL	0.116	PQL	mg/Kg	J	Z, Q, E
VANADIUM	54.3		0.0255	MDL	0.116	PQL	mg/Kg	J	Q, Q, A
ZINC	76.2		0.650	MDL	3.48	PQL	mg/Kg	J	E, A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE135 **Laboratory: LL**

EDD Filename: PrepDE135_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6020** ***Matrix:*** **SO**

Sample ID: **SL-011-SA8N-SB-4.0-5.0** ***Collected:*** **4/22/2011 12:52:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0853	J	0.0460	MDL	0.460	PQL	mg/Kg	J	Z

Sample ID: **SL-011-SA8N-SB-4.0-5.0** ***Collected:*** **4/22/2011 12:52:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.550		0.0574	MDL	0.115	PQL	mg/Kg	J	E

Sample ID: **SL-011-SA8N-SB-4.0-5.0** ***Collected:*** **4/22/2011 12:52:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	169		0.124	MDL	0.460	PQL	mg/Kg	J	E, A

Sample ID: **SL-011-SA8N-SB-4.0-5.0** ***Collected:*** **4/22/2011 12:52:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0689	U	0.0689	MDL	0.230	PQL	mg/Kg	UJ	Q, E
ARSENIC	8.90		0.0919	MDL	0.460	PQL	mg/Kg	J	Q, Q, E
BERYLLIUM	1.07		0.0184	MDL	0.115	PQL	mg/Kg	J	E
CADMIUM	0.224		0.0460	MDL	0.115	PQL	mg/Kg	J	Q, E
CHROMIUM	32.8		0.138	MDL	0.460	PQL	mg/Kg	J	Q, A
COBALT	14.7		0.0230	MDL	0.115	PQL	mg/Kg	J	Q, E, A
COPPER	14.5		0.0758	MDL	0.460	PQL	mg/Kg	J	Q, E, A
LEAD	11.1		0.0119	MDL	0.230	PQL	mg/Kg	J	Q, Q, E
NICKEL	25.7		0.115	MDL	0.460	PQL	mg/Kg	J	Q, E, A
SILVER	0.0636	J	0.0138	MDL	0.115	PQL	mg/Kg	J	Z, Q, E
VANADIUM	62.0		0.0253	MDL	0.115	PQL	mg/Kg	J	Q, Q, A
ZINC	74.6		0.643	MDL	3.45	PQL	mg/Kg	J	E, A

Sample ID: **SL-011-SA8N-SB-9.0-10.0** ***Collected:*** **4/22/2011 12:12:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0713	J	0.0469	MDL	0.469	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE135 **Laboratory: LL**

EDD Filename: PrepDE135_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6020** ***Matrix:*** **SO**

Sample ID: **SL-011-SA8N-SB-9.0-10.0** ***Collected:*** **4/22/2011 12:12:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.352		0.0586	MDL	0.117	PQL	mg/Kg	J	E

Sample ID: **SL-011-SA8N-SB-9.0-10.0** ***Collected:*** **4/22/2011 12:12:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	125		0.127	MDL	0.469	PQL	mg/Kg	J	E, A

Sample ID: **SL-011-SA8N-SB-9.0-10.0** ***Collected:*** **4/22/2011 12:12:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0703	U	0.0703	MDL	0.234	PQL	mg/Kg	UJ	Q, E
ARSENIC	8.06		0.0938	MDL	0.469	PQL	mg/Kg	J	Q, Q, E
BERYLLIUM	0.964		0.0188	MDL	0.117	PQL	mg/Kg	J	E
CADMIUM	0.152		0.0469	MDL	0.117	PQL	mg/Kg	J	Q, E
CHROMIUM	32.3		0.141	MDL	0.469	PQL	mg/Kg	J	Q, A
COBALT	13.0		0.0234	MDL	0.117	PQL	mg/Kg	J	Q, E, A
COPPER	15.9		0.0774	MDL	0.469	PQL	mg/Kg	J	Q, E, A
LEAD	9.97		0.0122	MDL	0.234	PQL	mg/Kg	J	Q, Q, E
NICKEL	24.9		0.117	MDL	0.469	PQL	mg/Kg	J	Q, E, A
SILVER	0.0551	J	0.0141	MDL	0.117	PQL	mg/Kg	J	Z, Q, E
VANADIUM	56.8		0.0258	MDL	0.117	PQL	mg/Kg	J	Q, Q, A
ZINC	69.2		0.657	MDL	3.52	PQL	mg/Kg	J	E, A

Sample ID: **SL-064-SA5A-SB-3.0-4.0** ***Collected:*** **4/22/2011 11:10:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.134	J	0.0440	MDL	0.440	PQL	mg/Kg	J	Z

Sample ID: **SL-064-SA5A-SB-3.0-4.0** ***Collected:*** **4/22/2011 11:10:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.532		0.0550	MDL	0.110	PQL	mg/Kg	J	E

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE135 **Laboratory: LL**

EDD Filename: PrepDE135_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 ***Matrix:*** SO

Sample ID: SL-064-SA5A-SB-3.0-4.0 ***Collected:*** 4/22/2011 11:10:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	102		0.119	MDL	0.440	PQL	mg/Kg	J	E, A

Sample ID: SL-064-SA5A-SB-3.0-4.0 ***Collected:*** 4/22/2011 11:10:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0659	U	0.0659	MDL	0.220	PQL	mg/Kg	UJ	Q, E
ARSENIC	7.42		0.0879	MDL	0.440	PQL	mg/Kg	J	Q, Q, E
BERYLLIUM	0.865		0.0176	MDL	0.110	PQL	mg/Kg	J	E
CADMIUM	0.0937	J	0.0440	MDL	0.110	PQL	mg/Kg	J	Z, Q, E
CHROMIUM	23.6		0.132	MDL	0.440	PQL	mg/Kg	J	Q, A
COBALT	8.10		0.0220	MDL	0.110	PQL	mg/Kg	J	Q, E, A
COPPER	11.4		0.0725	MDL	0.440	PQL	mg/Kg	J	Q, E, A
LEAD	7.52		0.0114	MDL	0.220	PQL	mg/Kg	J	Q, Q, E
NICKEL	18.5		0.110	MDL	0.440	PQL	mg/Kg	J	Q, E, A
SILVER	0.0404	J	0.0132	MDL	0.110	PQL	mg/Kg	J	Z, Q, E
VANADIUM	41.7		0.0242	MDL	0.110	PQL	mg/Kg	J	Q, Q, A
ZINC	63.8		0.615	MDL	3.30	PQL	mg/Kg	J	E, A

Sample ID: SL-166-SA5A-SS-0.0-0.5 ***Collected:*** 4/22/2011 1:45:00 ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0912	J	0.0403	MDL	0.403	PQL	mg/Kg	J	Z

Sample ID: SL-166-SA5A-SS-0.0-0.5 ***Collected:*** 4/22/2011 1:45:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.568		0.0504	MDL	0.101	PQL	mg/Kg	J	E

Sample ID: SL-166-SA5A-SS-0.0-0.5 ***Collected:*** 4/22/2011 1:45:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	71.3		0.109	MDL	0.403	PQL	mg/Kg	J	E, A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE135 **Laboratory: LL**

EDD Filename: PrepDE135_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6020** ***Matrix:*** **SO**

Sample ID: **SL-166-SA5A-SS-0.0-0.5** ***Collected:*** **4/22/2011 1:45:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0667	J	0.0605	MDL	0.202	PQL	mg/Kg	J	Z, Q, E
ARSENIC	5.01		0.0806	MDL	0.403	PQL	mg/Kg	J	Q, Q, E
BERYLLIUM	0.696		0.0161	MDL	0.101	PQL	mg/Kg	J	E
CADMIUM	0.167		0.0403	MDL	0.101	PQL	mg/Kg	J	Q, E
CHROMIUM	14.0		0.121	MDL	0.403	PQL	mg/Kg	J	Q, A
COBALT	7.80		0.0202	MDL	0.101	PQL	mg/Kg	J	Q, E, A
COPPER	6.54		0.0665	MDL	0.403	PQL	mg/Kg	J	Q, E, A
LEAD	5.86		0.0105	MDL	0.202	PQL	mg/Kg	J	Q, Q, E
NICKEL	10.4		0.101	MDL	0.403	PQL	mg/Kg	J	Q, E, A
SILVER	0.191		0.0121	MDL	0.101	PQL	mg/Kg	J	Q, E
VANADIUM	29.5		0.0222	MDL	0.101	PQL	mg/Kg	J	Q, Q, A
ZINC	67.6		0.564	MDL	3.02	PQL	mg/Kg	J	E, A

Sample ID: **SL-253-SA5A-SB-4.0-5.0** ***Collected:*** **4/22/2011 3:30:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0748	J	0.0456	MDL	0.456	PQL	mg/Kg	J	Z

Sample ID: **SL-253-SA5A-SB-4.0-5.0** ***Collected:*** **4/22/2011 3:30:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.783		0.0570	MDL	0.114	PQL	mg/Kg	J	E

Sample ID: **SL-253-SA5A-SB-4.0-5.0** ***Collected:*** **4/22/2011 3:30:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	139		0.123	MDL	0.456	PQL	mg/Kg	J	E, A

Sample ID: **SL-253-SA5A-SB-4.0-5.0** ***Collected:*** **4/22/2011 3:30:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0684	U	0.0684	MDL	0.228	PQL	mg/Kg	UJ	Q, E
ARSENIC	6.07		0.0913	MDL	0.456	PQL	mg/Kg	J	Q, Q, E
BERYLLIUM	1.04		0.0183	MDL	0.114	PQL	mg/Kg	J	E
CADMIUM	0.0854	J	0.0456	MDL	0.114	PQL	mg/Kg	J	Z, Q, E

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE135 **Laboratory: LL**

EDD Filename: PrepDE135_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6020** ***Matrix:*** **SO**

Sample ID: **SL-253-SA5A-SB-4.0-5.0** ***Collected:*** **4/22/2011 3:30:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHROMIUM	24.8		0.137	MDL	0.456	PQL	mg/Kg	J	Q, A
COBALT	8.59		0.0228	MDL	0.114	PQL	mg/Kg	J	Q, E, A
COPPER	10.3		0.0753	MDL	0.456	PQL	mg/Kg	J	Q, E, A
LEAD	7.08		0.0119	MDL	0.228	PQL	mg/Kg	J	Q, Q, E
NICKEL	20.5		0.114	MDL	0.456	PQL	mg/Kg	J	Q, E, A
SILVER	0.0646	J	0.0137	MDL	0.114	PQL	mg/Kg	J	Z, Q, E
VANADIUM	49.5		0.0251	MDL	0.114	PQL	mg/Kg	J	Q, Q, A
ZINC	60.8		0.639	MDL	3.42	PQL	mg/Kg	J	E, A

Sample ID: **SL-253-SA5A-SB-8.0-9.0** ***Collected:*** **4/22/2011 4:05:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0882	J	0.0443	MDL	0.443	PQL	mg/Kg	J	Z

Sample ID: **SL-253-SA5A-SB-8.0-9.0** ***Collected:*** **4/22/2011 4:05:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.480		0.0554	MDL	0.111	PQL	mg/Kg	J	E

Sample ID: **SL-253-SA5A-SB-8.0-9.0** ***Collected:*** **4/22/2011 4:05:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	105		0.120	MDL	0.443	PQL	mg/Kg	J	E, A

Sample ID: **SL-253-SA5A-SB-8.0-9.0** ***Collected:*** **4/22/2011 4:05:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0664	U	0.0664	MDL	0.221	PQL	mg/Kg	UJ	Q, E
ARSENIC	5.95		0.0886	MDL	0.443	PQL	mg/Kg	J	Q, Q, E
BERYLLIUM	0.775		0.0177	MDL	0.111	PQL	mg/Kg	J	E
CADMIUM	0.101	J	0.0443	MDL	0.111	PQL	mg/Kg	J	Z, Q, E
CHROMIUM	26.4		0.133	MDL	0.443	PQL	mg/Kg	J	Q, A
COBALT	8.45		0.0221	MDL	0.111	PQL	mg/Kg	J	Q, E, A
COPPER	11.0		0.0731	MDL	0.443	PQL	mg/Kg	J	Q, E, A
LEAD	6.76		0.0115	MDL	0.221	PQL	mg/Kg	J	Q, Q, E

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE135 **Laboratory: LL**

EDD Filename: PrepDE135_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6020** ***Matrix:*** **SO**

Sample ID: **SL-253-SA5A-SB-8.0-9.0** ***Collected:*** **4/22/2011 4:05:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NICKEL	15.1		0.111	MDL	0.443	PQL	mg/Kg	J	Q, E, A
SILVER	0.0423	J	0.0133	MDL	0.111	PQL	mg/Kg	J	Z, Q, E
VANADIUM	47.6		0.0244	MDL	0.111	PQL	mg/Kg	J	Q, Q, A
ZINC	60.6		0.620	MDL	3.32	PQL	mg/Kg	J	E, A

Method Category: **METALS**

Method: **7199** ***Matrix:*** **SO**

Sample ID: **DUP16-SA5A-QC-042211** ***Collected:*** **4/22/2011 11:15:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.29	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z, FD

Sample ID: **SL-007-SA8N-SB-4.0-5.0** ***Collected:*** **4/22/2011 9:33:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.47	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: **SL-064-SA5A-SB-3.0-4.0** ***Collected:*** **4/22/2011 11:10:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.22	U	0.22	MDL	1.1	PQL	mg/Kg	UJ	FD

Sample ID: **SL-253-SA5A-SB-4.0-5.0** ***Collected:*** **4/22/2011 3:30:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.40	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: **SL-253-SA5A-SB-8.0-9.0** ***Collected:*** **4/22/2011 4:05:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.26	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE135 **Laboratory: LL**

EDD Filename: PrepDE135_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 7471A ***Matrix:*** SO

Sample ID: DUP16-SA5A-QC-042211 ***Collected:*** 4/22/2011 11:15:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0093	J	0.0032	MDL	0.110	PQL	mg/Kg	UJ	B, FD

Sample ID: SL-007-SA8N-SB-4.0-5.0 ***Collected:*** 4/22/2011 9:33:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0224	J	0.0031	MDL	0.108	PQL	mg/Kg	U	B

Sample ID: SL-007-SA8N-SB-9.0-10 ***Collected:*** 4/22/2011 9:45:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0327	J	0.0032	MDL	0.113	PQL	mg/Kg	U	B

Sample ID: SL-010-SA8N-SB-4.0-5.0 ***Collected:*** 4/22/2011 11:10:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0174	J	0.0032	MDL	0.111	PQL	mg/Kg	U	B

Sample ID: SL-010-SA8N-SB-9.0-10 ***Collected:*** 4/22/2011 11:20:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0225	J	0.0032	MDL	0.112	PQL	mg/Kg	U	B

Sample ID: SL-011-SA8N-SB-4.0-5.0 ***Collected:*** 4/22/2011 12:52:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0140	J	0.0032	MDL	0.112	PQL	mg/Kg	U	B

Sample ID: SL-011-SA8N-SB-9.0-10.0 ***Collected:*** 4/22/2011 12:12:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0216	J	0.0032	MDL	0.113	PQL	mg/Kg	U	B

Sample ID: SL-064-SA5A-SB-3.0-4.0 ***Collected:*** 4/22/2011 11:10:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0261	J	0.0031	MDL	0.107	PQL	mg/Kg	UJ	B, FD

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE135 **Laboratory: LL**

EDD Filename: PrepDE135_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 7471A **Matrix: SO**

Sample ID: SL-166-SA5A-SS-0.0-0.5 *Collected:* 4/22/2011 1:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0823	J	0.0029	MDL	0.101	PQL	mg/Kg	J	Z

Sample ID: SL-253-SA5A-SB-4.0-5.0 *Collected:* 4/22/2011 3:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0124	J	0.0032	MDL	0.113	PQL	mg/Kg	U	B

Sample ID: SL-253-SA5A-SB-8.0-9.0 *Collected:* 4/22/2011 4:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0087	J	0.0031	MDL	0.109	PQL	mg/Kg	U	B

Method Category: SVOA

Method: 8015M **Matrix: SO**

Sample ID: SL-010-SA8N-SB-4.0-5.0 *Collected:* 4/22/2011 11:10:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	0.86	J	0.47	MDL	1.4	PQL	mg/Kg	J	Z

Sample ID: SL-011-SA8N-SB-4.0-5.0 *Collected:* 4/22/2011 12:52:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	0.86	J	0.47	MDL	1.4	PQL	mg/Kg	J	Z

Sample ID: SL-011-SA8N-SB-9.0-10.0 *Collected:* 4/22/2011 12:12:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	0.53	J	0.47	MDL	1.4	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE135 **Laboratory: LL**

EDD Filename: PrepDE135_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SL-064-SA5A-SB-3.0-4.0 *Collected:* 4/22/2011 11:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZIDINE	1300	U	1300	MDL	3700	PQL	ug/Kg	UJ	Q

Method Category: SVOA

Method: 8270C SIM **Matrix:** SO

Sample ID: DUP16-SA5A-QC-042211 *Collected:* 4/22/2011 11:15:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Diethylphthalate	7.0	J	6.7	MDL	20	PQL	ug/Kg	J	Z, FD
Di-n-butylphthalate	14	J	6.7	MDL	20	PQL	ug/Kg	J	Z, FD
FLUORANTHENE	0.97	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z, FD

Sample ID: SL-011-SA8N-SB-4.0-5.0 *Collected:* 4/22/2011 12:52:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	9.1	J	7.1	MDL	21	PQL	ug/Kg	J	Z

Sample ID: SL-064-SA5A-SB-3.0-4.0 *Collected:* 4/22/2011 11:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Diethylphthalate	6.6	U	6.6	MDL	20	PQL	ug/Kg	UJ	FD
Di-n-butylphthalate	6.6	U	6.6	MDL	20	PQL	ug/Kg	UJ	FD
FLUORANTHENE	0.74	U	0.74	MDL	1.8	PQL	ug/Kg	UJ	FD

Sample ID: SL-253-SA5A-SB-4.0-5.0 *Collected:* 4/22/2011 3:30:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHRYSENE	0.48	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z
FLUORANTHENE	1.3	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
PHENANTHRENE	1.0	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
PYRENE	0.80	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE135 **Laboratory: LL**

EDD Filename: PrepDE135_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **VOA**

Method: **8260B** ***Matrix:*** **SO**

Sample ID: **DUP16-SA5A-QC-042211** ***Collected:*** **4/22/2011 11:15:00** ***Analysis Type:*** **RES** ***Dilution:*** **0.89**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.67	J	0.24	MDL	4.0	PQL	ug/Kg	U	B

Sample ID: **SL-007-SA8N-SB-4.0-5.0** ***Collected:*** **4/22/2011 9:33:00** ***Analysis Type:*** **RES** ***Dilution:*** **0.78**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.58	J	0.22	MDL	3.6	PQL	ug/Kg	U	B

Sample ID: **SL-010-SA8N-SB-4.0-5.0** ***Collected:*** **4/22/2011 11:10:00** ***Analysis Type:*** **RES** ***Dilution:*** **0.87**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.52	J	0.25	MDL	4.1	PQL	ug/Kg	U	B

Sample ID: **SL-010-SA8N-SB-9.0-10** ***Collected:*** **4/22/2011 11:20:00** ***Analysis Type:*** **RES** ***Dilution:*** **0.83**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.43	J	0.24	MDL	3.9	PQL	ug/Kg	U	B

Sample ID: **SL-011-SA8N-SB-4.0-5.0** ***Collected:*** **4/22/2011 12:52:00** ***Analysis Type:*** **RES** ***Dilution:*** **0.86**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.51	J	0.24	MDL	4.1	PQL	ug/Kg	U	B

Sample ID: **SL-011-SA8N-SB-9.0-10.0** ***Collected:*** **4/22/2011 12:12:00** ***Analysis Type:*** **RES** ***Dilution:*** **0.89**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.46	J	0.25	MDL	4.2	PQL	ug/Kg	U	B

Sample ID: **SL-064-SA5A-SB-3.0-4.0** ***Collected:*** **4/22/2011 11:10:00** ***Analysis Type:*** **RES** ***Dilution:*** **0.83**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.45	J	0.22	MDL	3.7	PQL	ug/Kg	U	B

Sample ID: **SL-253-SA5A-SB-4.0-5.0** ***Collected:*** **4/22/2011 3:30:00** ***Analysis Type:*** **RES** ***Dilution:*** **0.92**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.41	J	0.26	MDL	4.3	PQL	ug/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE135 **Laboratory: LL**

EDD Filename: PrepDE135_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category:	VOA		
Method:	8260B	*Matrix:*	SO

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE135 **Laboratory: LL**

EDD Filename: PrepDE135_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Laboratory Triplicate Precision
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
*#	Professional Judgment
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Verification Correlation Coefficient
C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Verification Percent Recovery Upper Rejection
E	Laboratory Control Precision
E	Laboratory Duplicate Precision

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE135 **Laboratory: LL**

EDD Filename: PrepDE135_v1 **eQAPP Name: CDM_SSFL_110509**

E	Matrix Spike Precision
F	Equipment Blank Contamination
F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation
L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Q	Matrix Spike Upper Rejection

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE135 **Laboratory: LL**

EDD Filename: PrepDE135_v1 **eQAPP Name: CDM_SSFL_110509**

R	Continuing Calibration Verification Percent Recovery Lower Estimation
R	Continuing Calibration Verification Percent Recovery Lower Rejection
R	Continuing Calibration Verification Percent Recovery Upper Estimation
R	Continuing Calibration Verification Percent Recovery Upper Rejection
R	Continuing Calibration Verification Relative Response Factor
R	Initial Calibration Relative Response Factor
R	Initial Calibration Verification Percent Recovery Lower Estimation
R	Initial Calibration Verification Percent Recovery Lower Rejection
R	Initial Calibration Verification Percent Recovery Upper Estimation
R	Initial Calibration Verification Percent Recovery Upper Rejection
R	Initial Calibration Verification Relative Response Factor
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

Level III ADR Outliers
(including Manual Review Outliers)

Quality Control Outlier Reports

DE135

Method Blank Outlier Report

Lab Reporting Batch ID: DE135 **Laboratory: LL**

EDD Filename: DE135_v1. **eQAPP Name: CDM_SSFL_110509**

Method: **6010B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P11908AB220116	5/5/2011 1:16:00 AM	ALUMINUM IRON PHOSPHORUS STRONTIUM TIN	5.87 mg/Kg 5.63 mg/Kg 1.51 mg/Kg 0.195 mg/Kg 1.76 mg/Kg	DUP16-SA5A-QC-042211 SL-007-SA8N-SB-4.0-5.0 SL-007-SA8N-SB-9.0-10 SL-010-SA8N-SB-4.0-5.0 SL-010-SA8N-SB-9.0-10 SL-011-SA8N-SB-4.0-5.0 SL-011-SA8N-SB-9.0-10.0 SL-064-SA5A-SB-3.0-4.0 SL-166-SA5A-SS-0.0-0.5 SL-253-SA5A-SB-4.0-5.0 SL-253-SA5A-SB-8.0-9.0
P11908AB220919	5/5/2011 9:19:00 AM	CALCIUM	132 mg/Kg	DUP16-SA5A-QC-042211 SL-007-SA8N-SB-4.0-5.0 SL-007-SA8N-SB-9.0-10 SL-010-SA8N-SB-4.0-5.0 SL-010-SA8N-SB-9.0-10 SL-011-SA8N-SB-4.0-5.0 SL-011-SA8N-SB-9.0-10.0 SL-064-SA5A-SB-3.0-4.0 SL-166-SA5A-SS-0.0-0.5 SL-253-SA5A-SB-4.0-5.0 SL-253-SA5A-SB-8.0-9.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
DUP16-SA5A-QC-042211(RES)	TIN	3.45 mg/Kg	3.45U mg/Kg
SL-007-SA8N-SB-4.0-5.0(RES)	TIN	3.02 mg/Kg	3.02U mg/Kg
SL-007-SA8N-SB-9.0-10(RES)	TIN	3.15 mg/Kg	3.15U mg/Kg
SL-010-SA8N-SB-4.0-5.0(RES)	TIN	3.13 mg/Kg	3.13U mg/Kg
SL-010-SA8N-SB-9.0-10(RES)	TIN	3.31 mg/Kg	3.31U mg/Kg
SL-011-SA8N-SB-4.0-5.0(RES)	TIN	3.26 mg/Kg	3.26U mg/Kg
SL-011-SA8N-SB-9.0-10.0(RES)	TIN	3.30 mg/Kg	3.30U mg/Kg
SL-064-SA5A-SB-3.0-4.0(RES)	TIN	3.50 mg/Kg	3.50U mg/Kg
SL-166-SA5A-SS-0.0-0.5(RES)	TIN	2.89 mg/Kg	2.89U mg/Kg
SL-253-SA5A-SB-4.0-5.0(RES)	TIN	3.19 mg/Kg	3.19U mg/Kg
SL-253-SA5A-SB-8.0-9.0(RES)	TIN	3.29 mg/Kg	3.29U mg/Kg

Method: **6020**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P11926AB221028A	5/3/2011 10:28:00 AM	COPPER	0.0910 mg/Kg	DUP16-SA5A-QC-042211 SL-007-SA8N-SB-4.0-5.0 SL-007-SA8N-SB-9.0-10 SL-010-SA8N-SB-4.0-5.0 SL-010-SA8N-SB-9.0-10 SL-011-SA8N-SB-4.0-5.0 SL-011-SA8N-SB-9.0-10.0 SL-064-SA5A-SB-3.0-4.0 SL-166-SA5A-SS-0.0-0.5 SL-253-SA5A-SB-4.0-5.0 SL-253-SA5A-SB-8.0-9.0

Method Blank Outlier Report

Lab Reporting Batch ID: DE135 **Laboratory: LL**

EDD Filename: DE135_v1. **eQAPP Name: CDM_SSFL_110509**

Method: **7471A**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P11911AB220440	5/3/2011 4:40:00 AM	MERCURY	0.0140 mg/Kg	DUP16-SA5A-QC-042211 SL-007-SA8N-SB-4.0-5.0 SL-007-SA8N-SB-9.0-10 SL-010-SA8N-SB-4.0-5.0 SL-010-SA8N-SB-9.0-10 SL-011-SA8N-SB-4.0-5.0 SL-011-SA8N-SB-9.0-10.0 SL-064-SA5A-SB-3.0-4.0 SL-166-SA5A-SS-0.0-0.5 SL-253-SA5A-SB-4.0-5.0 SL-253-SA5A-SB-8.0-9.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
DUP16-SA5A-QC-042211(RES)	MERCURY	0.0093 mg/Kg	0.0093U mg/Kg
SL-007-SA8N-SB-4.0-5.0(RES)	MERCURY	0.0224 mg/Kg	0.0224U mg/Kg
SL-007-SA8N-SB-9.0-10(RES)	MERCURY	0.0327 mg/Kg	0.0327U mg/Kg
SL-010-SA8N-SB-4.0-5.0(RES)	MERCURY	0.0174 mg/Kg	0.0174U mg/Kg
SL-010-SA8N-SB-9.0-10(RES)	MERCURY	0.0225 mg/Kg	0.0225U mg/Kg
SL-011-SA8N-SB-4.0-5.0(RES)	MERCURY	0.0140 mg/Kg	0.0140U mg/Kg
SL-011-SA8N-SB-9.0-10.0(RES)	MERCURY	0.0216 mg/Kg	0.0216U mg/Kg
SL-064-SA5A-SB-3.0-4.0(RES)	MERCURY	0.0261 mg/Kg	0.0261U mg/Kg
SL-253-SA5A-SB-4.0-5.0(RES)	MERCURY	0.0124 mg/Kg	0.0124U mg/Kg
SL-253-SA5A-SB-8.0-9.0(RES)	MERCURY	0.0087 mg/Kg	0.0087U mg/Kg

Method: **8260B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB38B210138A	4/27/2011 1:38:00 AM	METHYLENE CHLORIDE TOLUENE	0.46 ug/Kg 0.08 ug/Kg	DUP16-SA5A-QC-042211 SL-007-SA8N-SB-4.0-5.0 SL-010-SA8N-SB-4.0-5.0 SL-010-SA8N-SB-9.0-10 SL-011-SA8N-SB-4.0-5.0 SL-011-SA8N-SB-9.0-10.0 SL-064-SA5A-SB-3.0-4.0 SL-253-SA5A-SB-4.0-5.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
DUP16-SA5A-QC-042211(RES)	METHYLENE CHLORIDE	0.67 ug/Kg	4.0U ug/Kg
SL-007-SA8N-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.58 ug/Kg	3.6U ug/Kg
SL-010-SA8N-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.52 ug/Kg	4.1U ug/Kg
SL-010-SA8N-SB-9.0-10(RES)	METHYLENE CHLORIDE	0.43 ug/Kg	3.9U ug/Kg
SL-011-SA8N-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.51 ug/Kg	4.1U ug/Kg
SL-011-SA8N-SB-9.0-10.0(RES)	METHYLENE CHLORIDE	0.46 ug/Kg	4.2U ug/Kg
SL-064-SA5A-SB-3.0-4.0(RES)	METHYLENE CHLORIDE	0.45 ug/Kg	3.7U ug/Kg
SL-253-SA5A-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.41 ug/Kg	4.3U ug/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE135 **Laboratory: LL**

EDD Filename: DE135_v1. **eQAPP Name: CDM_SSFL_110509**

Method: **8270C**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKLD12B260920	5/3/2011 9:20:00 AM	BIS(2-ETHYLHEXYL)PHTHALATE	20 ug/Kg	DUP16-SA5A-QC-042211 SL-007-SA8N-SB-4.0-5.0 SL-007-SA8N-SB-9.0-10 SL-010-SA8N-SB-4.0-5.0 SL-010-SA8N-SB-9.0-10 SL-011-SA8N-SB-4.0-5.0 SL-011-SA8N-SB-9.0-10.0 SL-064-SA5A-SB-3.0-4.0 SL-166-SA5A-SS-0.0-0.5 SL-253-SA5A-SB-4.0-5.0 SL-253-SA5A-SB-8.0-9.0

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE135 **Laboratory: LL**

EDD Filename: DE135_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 8015M
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-007-SA8N-SB-9.0-10MSD	DIETHYLENE GLYCOL	-	115	59.00-109.00	-	DIETHYLENE GLYCOL	
(SL-007-SA8N-SB-9.0-10)	ETHYLENE GLYCOL	-	116	63.00-107.00	-	ETHYLENE GLYCOL	J (all detects)
	Propylene glycol	-	113	63.00-107.00	-	Propylene glycol	

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-064-SA5A-SB-3.0-4.0MS	ANTIMONY	27	36	75.00-125.00	28 (20.00)	ANTIMONY	
SL-064-SA5A-SB-3.0-4.0MSD							
(DUP16-SA5A-QC-042211							
SL-007-SA8N-SB-4.0-5.0							
SL-007-SA8N-SB-9.0-10							
SL-010-SA8N-SB-4.0-5.0							
SL-010-SA8N-SB-9.0-10							J(all detects)
SL-011-SA8N-SB-4.0-5.0							UJ(all non-detects)
SL-011-SA8N-SB-9.0-10.0							
SL-064-SA5A-SB-3.0-4.0							
SL-166-SA5A-SS-0.0-0.5							Post Spike = 104%
SL-253-SA5A-SB-4.0-5.0							
SL-253-SA5A-SB-8.0-9.0)							
SL-064-SA5A-SB-3.0-4.0MS	ARSENIC	70	184	75.00-125.00	25 (20.00)	ARSENIC	
SL-064-SA5A-SB-3.0-4.0MSD	BERYLLIUM	-	-	75.00-125.00	22 (20.00)	BERYLLIUM	
(DUP16-SA5A-QC-042211	CADMIUM	-	135	75.00-125.00	24 (20.00)	CADMIUM	
SL-007-SA8N-SB-4.0-5.0	CHROMIUM	66	-	75.00-125.00	-	CHROMIUM	
SL-007-SA8N-SB-9.0-10	COBALT	-	133	75.00-125.00	23 (20.00)	COBALT	
SL-010-SA8N-SB-4.0-5.0	COPPER	-	137	75.00-125.00	24 (20.00)	COPPER	
SL-010-SA8N-SB-9.0-10	LEAD	68	148	75.00-125.00	24 (20.00)	LEAD	J(all detects)
SL-011-SA8N-SB-4.0-5.0	NICKEL	-	153	75.00-125.00	25 (20.00)	NICKEL	UJ(all non-detects)
SL-011-SA8N-SB-9.0-10.0	SILVER	-	127	75.00-125.00	21 (20.00)	SILVER	
SL-064-SA5A-SB-3.0-4.0	VANADIUM	59	153	75.00-125.00	-	VANADIUM	
SL-166-SA5A-SS-0.0-0.5	ZINC	39	209	75.00-125.00	24 (20.00)	ZINC	Zn,
SL-253-SA5A-SB-4.0-5.0							No Qual %R, >4x
SL-253-SA5A-SB-8.0-9.0)							
SL-064-SA5A-SB-3.0-4.0MSD	MOLYBDENUM	-	-	75.00-125.00	28 (20.00)	MOLYBDENUM	
(DUP16-SA5A-QC-042211							
SL-007-SA8N-SB-4.0-5.0							
SL-007-SA8N-SB-9.0-10							
SL-010-SA8N-SB-4.0-5.0							
SL-010-SA8N-SB-9.0-10							J(all detects)
SL-011-SA8N-SB-4.0-5.0							UJ(all non-detects)
SL-011-SA8N-SB-9.0-10.0							
SL-064-SA5A-SB-3.0-4.0							
SL-166-SA5A-SS-0.0-0.5							
SL-253-SA5A-SB-4.0-5.0							
SL-253-SA5A-SB-8.0-9.0)							
SL-064-SA5A-SB-3.0-4.0MS	BARIUM	-1	316	75.00-125.00	29 (20.00)	BARIUM	
SL-064-SA5A-SB-3.0-4.0MSD							
(DUP16-SA5A-QC-042211							
SL-007-SA8N-SB-4.0-5.0							
SL-007-SA8N-SB-9.0-10							
SL-010-SA8N-SB-4.0-5.0							
SL-010-SA8N-SB-9.0-10							J(all detects)
SL-011-SA8N-SB-4.0-5.0							UJ(all non-detects)
SL-011-SA8N-SB-9.0-10.0							
SL-064-SA5A-SB-3.0-4.0							
SL-166-SA5A-SS-0.0-0.5							No Qual, %R, >4x
SL-253-SA5A-SB-4.0-5.0							
SL-253-SA5A-SB-8.0-9.0)							

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE135 **Laboratory: LL**

EDD Filename: DE135_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-064-SA5A-SB-3.0-4.0MS SL-064-SA5A-SB-3.0-4.0MSD (DUP16-SA5A-QC-042211 SL-007-SA8N-SB-4.0-5.0 SL-007-SA8N-SB-9.0-10 SL-010-SA8N-SB-4.0-5.0 SL-010-SA8N-SB-9.0-10 SL-011-SA8N-SB-4.0-5.0 SL-011-SA8N-SB-9.0-10.0 SL-064-SA5A-SB-3.0-4.0 SL-166-SA5A-SS-0.0-0.5 SL-253-SA5A-SB-4.0-5.0 SL-253-SA5A-SB-8.0-9.0)	ALUMINUM CALCIUM IRON MAGNESIUM POTASSIUM TITANIUM	2399 184 2247 360 - 237	2118 139 1156 221 137 231	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	- - - - - -	ALUMINUM CALCIUM IRON MAGNESIUM POTASSIUM TITANIUM	J(all detects) Al, Ca, Fe, Mg, Ti, No Qual, >4x
SL-064-SA5A-SB-3.0-4.0MS (DUP16-SA5A-QC-042211 SL-007-SA8N-SB-4.0-5.0 SL-007-SA8N-SB-9.0-10 SL-010-SA8N-SB-4.0-5.0 SL-010-SA8N-SB-9.0-10 SL-011-SA8N-SB-4.0-5.0 SL-011-SA8N-SB-9.0-10.0 SL-064-SA5A-SB-3.0-4.0 SL-166-SA5A-SS-0.0-0.5 SL-253-SA5A-SB-4.0-5.0 SL-253-SA5A-SB-8.0-9.0)	MANGANESE	67	-	75.00-125.00	-	MANGANESE	No Qual, >4x

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-064-SA5A-SB-3.0-4.0MS SL-064-SA5A-SB-3.0-4.0MSD (SL-064-SA5A-SB-3.0-4.0)	BENZIDINE	14	15	35.00-141.00	-	BENZIDINE	J(all detects) UJ(all non-detects)

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-064-SA5A-SB-3.0-4.0MS (DUP16-SA5A-QC-042211 SL-064-SA5A-SB-3.0-4.0 SL-253-SA5A-SB-4.0-5.0 SL-253-SA5A-SB-8.0-9.0)	CALCIUM	56	-	75.00-125.00	-	CALCIUM	No Qual, >4x

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE135 **Laboratory: LL**

EDD Filename: DE135_v1. **eQAPP Name: CDM_SSFL_110509**

Method: **300.0**
Matrix: **SO**

QC Sample ID (Associated Samples)	*Compound*	*MS %R*	*MSD %R*	*%R Limits*	*RPD (Limits)*	*Affected Compounds*	*Flag*
SL-064-SA5A-SB-3.0-4.0MS (SL-007-SA8N-SB-4.0-5.0 SL -007-SA8N-SB-9.0-10 SL -010-SA8N-SB-4.0-5.0 SL -010-SA8N-SB-9.0-10 SL -011-SA8N-SB-4.0-5.0 SL -011-SA8N-SB-9.0-10.0 SL -064-SA5A-SB-3.0-4.0 SL -166-SA5A-SS-0.0-0.5 SL -253-SA5A-SB-4.0-5.0 SL -253-SA5A-SB-8.0-9.0)	FLUORIDE	47	-	80.00-120.00	-	FLUORIDE	J(all detects) UJ(all non-detects)
DUP16-SA5A-QC-042211MS (DUP16-SA5A-QC-042211)	FLUORIDE	49	-	80.00-120.00	-	FLUORIDE	J(all detects) UJ(all non-detects)

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE135 **Laboratory: LL**

EDD Filename: DE135_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 6010B
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-064-SA5A-SB-3.0-4.0DUP (DUP16-SA5A-QC-042211 SL-007-SA8N-SB-4.0-5.0 SL-007-SA8N-SB-9.0-10 SL-010-SA8N-SB-4.0-5.0 SL-010-SA8N-SB-9.0-10 SL-011-SA8N-SB-4.0-5.0 SL-011-SA8N-SB-9.0-10.0 SL-064-SA5A-SB-3.0-4.0 SL-166-SA5A-SS-0.0-0.5 SL-253-SA5A-SB-4.0-5.0 SL-253-SA5A-SB-8.0-9.0)	Zirconium	200	20.00	No Qual, OK by difference

Method: 6020
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-064-SA5A-SB-3.0-4.0DUP (DUP16-SA5A-QC-042211 SL-007-SA8N-SB-4.0-5.0 SL-007-SA8N-SB-9.0-10 SL-010-SA8N-SB-4.0-5.0 SL-010-SA8N-SB-9.0-10 SL-011-SA8N-SB-4.0-5.0 SL-011-SA8N-SB-9.0-10.0 SL-064-SA5A-SB-3.0-4.0 SL-166-SA5A-SS-0.0-0.5 SL-253-SA5A-SB-4.0-5.0 SL-253-SA5A-SB-8.0-9.0)	SELENIUM	22	20.00	No Qual, OK by difference

Method: 7199
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-064-SA5A-SB-3.0-4.0DUP (DUP16-SA5A-QC-042211 SL-007-SA8N-SB-4.0-5.0 SL-007-SA8N-SB-9.0-10 SL-010-SA8N-SB-4.0-5.0 SL-010-SA8N-SB-9.0-10 SL-011-SA8N-SB-4.0-5.0 SL-011-SA8N-SB-9.0-10.0 SL-064-SA5A-SB-3.0-4.0 SL-166-SA5A-SS-0.0-0.5 SL-253-SA5A-SB-4.0-5.0 SL-253-SA5A-SB-8.0-9.0)	HEXAVALENT CHROMIUM	200	20.00	No Qual, OK by difference

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE135 **Laboratory: LL**

EDD Filename: DE135_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 7471A
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-064-SA5A-SB-3.0-4.0DUP (DUP16-SA5A-QC-042211 SL -007-SA8N-SB-4.0-5.0 SL -007-SA8N-SB-9.0-10 SL -010-SA8N-SB-4.0-5.0 SL -010-SA8N-SB-9.0-10 SL -011-SA8N-SB-4.0-5.0 SL -011-SA8N-SB-9.0-10.0 SL -064-SA5A-SB-3.0-4.0 SL -166-SA5A-SS-0.0-0.5 SL -253-SA5A-SB-4.0-5.0 SL -253-SA5A-SB-8.0-9.0)	MERCURY	123	20.00	No Qual, OK by difference

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE135 **Laboratory: LL**

EDD Filename: DE135_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 8260B
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
LCS1Y32Q211104A LCS1Y32Y211125A LCSY32Q211001A LCSY32Y211043A (TB-042211)	1,2-DICHLOROETHANE 2-Chloro-1,1,1-trifluoroethane BROMOMETHANE CHLOROMETHANE DICHLORODIFLUOROMETHAN VINYL CHLORIDE	131 132 121 - 123 -	- 132 125 139 122 127	70.00-130.00 77.00-120.00 44.00-120.00 60.00-129.00 47.00-120.00 65.00-125.00	- - - - - -	1,2-DICHLOROETHANE 2-Chloro-1,1,1-trifluoroethane BROMOMETHANE CHLOROMETHANE DICHLORODIFLUOROMETHA VINYL CHLORIDE	J(all detects)

Method: 8330A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11184AQ240252A (SL-010-SA8N-SB-4.0-5.0 SL -010-SA8N-SB-9.0-10 SL -011-SA8N-SB-4.0-5.0 SL -011-SA8N-SB-9.0-10.0)	PETN	124	-	80.00-120.00	-	PETN	J (all detects)

Method: 8082
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11233AY240336A (DUP16-SA5A-QC-042211)	Aroclor 5442	-	115	36.00-106.00	-	Aroclor 5432, 5442, and 5460	J(all detects)

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11926AQ221031A (DUP16-SA5A-QC-042211 SL -007-SA8N-SB-4.0-5.0 SL -007-SA8N-SB-9.0-10 SL -010-SA8N-SB-4.0-5.0 SL -010-SA8N-SB-9.0-10 SL -011-SA8N-SB-4.0-5.0 SL -011-SA8N-SB-9.0-10.0 SL -064-SA5A-SB-3.0-4.0 SL -166-SA5A-SS-0.0-0.5 SL -253-SA5A-SB-4.0-5.0 SL -253-SA5A-SB-8.0-9.0)	ANTIMONY	68	-	80.00-120.00	-	ANTIMONY	No Qual, SRM within limits

Field Duplicate RPD Report

Lab Reporting Batch ID: DE135 **Laboratory: LL**

EDD Filename: DE135_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 160.3M
Matrix: SO

Analyte	Concentration (%)		Sample RPD	eQAPP RPD	Flag
	SL-064-SA5A-SB-3.0-4.0	DUP16-SA5A-QC-042211			
MOISTURE	10.8	10.6	2		No Qualifiers Applied

Method: 300.0
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-064-SA5A-SB-3.0-4.0	DUP16-SA5A-QC-042211			
FLUORIDE	2.3	3.0	26	50.00	No Qualifiers Applied

Method: 6010B
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-064-SA5A-SB-3.0-4.0	DUP16-SA5A-QC-042211			
ALUMINUM	21900	23700	8	50.00	No Qualifiers Applied
BORON	8.23	7.87	4	50.00	
CALCIUM	2920	2990	2	50.00	
IRON	24900	26600	7	50.00	
LITHIUM	32.8	36.7	11	50.00	
MAGNESIUM	5460	5980	9	50.00	
MANGANESE	292	296	1	50.00	
PHOSPHORUS	309	297	4	50.00	
POTASSIUM	2660	2490	7	50.00	
SODIUM	93.2	102	9	50.00	
STRONTIUM	18.3	19.6	7	50.00	
TIN	3.50	3.45	1	50.00	
TITANIUM	1170	1190	2	50.00	

Method: 6020
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-064-SA5A-SB-3.0-4.0	DUP16-SA5A-QC-042211			
ARSENIC	7.42	8.02	8	50.00	No Qualifiers Applied
BARIUM	102	113	10	50.00	
BERYLLIUM	0.865	0.952	10	50.00	
CADMIUM	0.0937	0.112	18	50.00	
CHROMIUM	23.6	25.9	9	50.00	
COBALT	8.10	8.70	7	50.00	
COPPER	11.4	14.5	24	50.00	
LEAD	7.52	8.33	10	50.00	
MOLYBDENUM	0.532	0.575	8	50.00	
NICKEL	18.5	20.2	9	50.00	
SELENIUM	0.134	0.170	24	50.00	
SILVER	0.0404	0.0405	0	50.00	
THALLIUM	0.316	0.353	11	50.00	
VANADIUM	41.7	46.5	11	50.00	
ZINC	63.8	69.4	8	50.00	

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Field Duplicate RPD Report

Lab Reporting Batch ID: DE135 **Laboratory: LL**

EDD Filename: PrepDE135_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7199
Matrix: SO

Analyte	Concentration (mg/Kg) SL-064-SA5A-SB-3.0-4.0	Concentration (mg/Kg) DUP16-SA5A-QC-042211	Sample RPD	eQAPP RPD	Flag
HEXAVALENT CHROMIUM	1.1 U	0.29	200	50.00	J(all detects) UJ(all non-detects)

Method: 7471A
Matrix: SO

Analyte	Concentration (mg/Kg) SL-064-SA5A-SB-3.0-4.0	Concentration (mg/Kg) DUP16-SA5A-QC-042211	Sample RPD	eQAPP RPD	Flag
MERCURY	0.0261	0.0093	95	50.00	J(all detects)

Method: 8260B
Matrix: SO

Analyte	Concentration (ug/Kg) SL-064-SA5A-SB-3.0-4.0	Concentration (ug/Kg) DUP16-SA5A-QC-042211	Sample RPD	eQAPP RPD	Flag
METHYLENE CHLORIDE	0.45	0.67	39	50.00	No Qualifiers Applied

Method: 8270C SIM
Matrix: SO

Analyte	Concentration (ug/Kg) SL-064-SA5A-SB-3.0-4.0	Concentration (ug/Kg) DUP16-SA5A-QC-042211	Sample RPD	eQAPP RPD	Flag
Diethylphthalate	20 U	7.0	200	50.00	J(all detects) UJ(all non-detects)
Di-n-butylphthalate	20 U	14	200	50.00	
FLUORANTHENE	1.8 U	0.97	200	50.00	

Method: 9045M
Matrix: SO

Analyte	Concentration (pH unit) SL-064-SA5A-SB-3.0-4.0	Concentration (pH unit) DUP16-SA5A-QC-042211	Sample RPD	eQAPP RPD	Flag
PH	6.86	7.08	3	50.00	No Qualifiers Applied

Method: ASTM D1498
Matrix: SO

Analyte	Concentration (mV) SL-064-SA5A-SB-3.0-4.0	Concentration (mV) DUP16-SA5A-QC-042211	Sample RPD	eQAPP RPD	Flag
Oxidation Reduction Potential	392	454	15		No Qualifiers Applied

Reporting Limit Outliers

Lab Reporting Batch ID: DE135 **Laboratory: LL**

EDD Filename: DE135_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 300.0

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-010-SA8N-SB-4.0-5.0	Nitrate-NO3	J	1.2	1.8	PQL	mg/Kg	J (all detects)
SL-010-SA8N-SB-9.0-10	Nitrate-NO3	J	1.4	1.8	PQL	mg/Kg	J (all detects)
SL-011-SA8N-SB-4.0-5.0	Nitrate-NO3	J	1.5	1.8	PQL	mg/Kg	J (all detects)
SL-011-SA8N-SB-9.0-10.0	Nitrate-NO3	J	1.1	1.8	PQL	mg/Kg	J (all detects)

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP16-SA5A-QC-042211	SODIUM TIN	J J	102 3.45	111 11.1	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-007-SA8N-SB-4.0-5.0	SODIUM TIN Zirconium	J J J	91.2 3.02 3.10	113 11.3 5.64	PQL PQL PQL	mg/Kg mg/Kg mg/Kg	J (all detects)
SL-007-SA8N-SB-9.0-10	TIN Zirconium	J J	3.15 3.35	11.4 5.72	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-010-SA8N-SB-4.0-5.0	TIN Zirconium	J J	3.13 2.72	11.4 5.68	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-010-SA8N-SB-9.0-10	TIN Zirconium	J J	3.31 3.23	11.7 5.86	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-011-SA8N-SB-4.0-5.0	TIN Zirconium	J J	3.26 2.78	11.6 5.80	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-011-SA8N-SB-9.0-10.0	TIN Zirconium	J J	3.30 2.90	11.7 5.86	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-064-SA5A-SB-3.0-4.0	SODIUM TIN	J J	93.2 3.50	111 11.1	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-166-SA5A-SS-0.0-0.5	SODIUM TIN	J J	62.2 2.89	101 10.1	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-253-SA5A-SB-4.0-5.0	TIN	J	3.19	11.5	PQL	mg/Kg	J (all detects)
SL-253-SA5A-SB-8.0-9.0	TIN	J	3.29	11.0	PQL	mg/Kg	J (all detects)

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP16-SA5A-QC-042211	SELENIUM SILVER	J J	0.170 0.0405	0.443 0.111	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-007-SA8N-SB-4.0-5.0	SELENIUM SILVER	J J	0.0767 0.0333	0.452 0.113	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-007-SA8N-SB-9.0-10	SELENIUM SILVER	J J	0.0562 0.0318	0.457 0.114	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-010-SA8N-SB-4.0-5.0	ANTIMONY SELENIUM SILVER	J J J	0.0918 0.0661 0.0304	0.234 0.468 0.117	PQL PQL PQL	mg/Kg mg/Kg mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE135 **Laboratory: LL**

EDD Filename: DE135_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-010-SA8N-SB-9.0-10	ANTIMONY	J	0.0809	0.232	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0669	0.464	PQL	mg/Kg	
	SILVER	J	0.0943	0.116	PQL	mg/Kg	
SL-011-SA8N-SB-4.0-5.0	SELENIUM	J	0.0853	0.460	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0636	0.115	PQL	mg/Kg	
SL-011-SA8N-SB-9.0-10.0	SELENIUM	J	0.0713	0.469	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0551	0.117	PQL	mg/Kg	
SL-064-SA5A-SB-3.0-4.0	CADMIUM	J	0.0937	0.110	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.134	0.440	PQL	mg/Kg	
	SILVER	J	0.0404	0.110	PQL	mg/Kg	
SL-166-SA5A-SS-0.0-0.5	ANTIMONY	J	0.0667	0.202	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0912	0.403	PQL	mg/Kg	
SL-253-SA5A-SB-4.0-5.0	CADMIUM	J	0.0854	0.114	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0748	0.456	PQL	mg/Kg	
	SILVER	J	0.0646	0.114	PQL	mg/Kg	
SL-253-SA5A-SB-8.0-9.0	CADMIUM	J	0.101	0.111	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0882	0.443	PQL	mg/Kg	
	SILVER	J	0.0423	0.111	PQL	mg/Kg	

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP16-SA5A-QC-042211	HEXAVALENT CHROMIUM	J	0.29	1.1	PQL	mg/Kg	J (all detects)
SL-007-SA8N-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.47	1.2	PQL	mg/Kg	J (all detects)
SL-253-SA5A-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.40	1.2	PQL	mg/Kg	J (all detects)
SL-253-SA5A-SB-8.0-9.0	HEXAVALENT CHROMIUM	J	0.26	1.1	PQL	mg/Kg	J (all detects)

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP16-SA5A-QC-042211	MERCURY	J	0.0093	0.110	PQL	mg/Kg	J (all detects)
SL-007-SA8N-SB-4.0-5.0	MERCURY	J	0.0224	0.108	PQL	mg/Kg	J (all detects)
SL-007-SA8N-SB-9.0-10	MERCURY	J	0.0327	0.113	PQL	mg/Kg	J (all detects)
SL-010-SA8N-SB-4.0-5.0	MERCURY	J	0.0174	0.111	PQL	mg/Kg	J (all detects)
SL-010-SA8N-SB-9.0-10	MERCURY	J	0.0225	0.112	PQL	mg/Kg	J (all detects)
SL-011-SA8N-SB-4.0-5.0	MERCURY	J	0.0140	0.112	PQL	mg/Kg	J (all detects)
SL-011-SA8N-SB-9.0-10.0	MERCURY	J	0.0216	0.113	PQL	mg/Kg	J (all detects)
SL-064-SA5A-SB-3.0-4.0	MERCURY	J	0.0261	0.107	PQL	mg/Kg	J (all detects)
SL-166-SA5A-SS-0.0-0.5	MERCURY	J	0.0823	0.101	PQL	mg/Kg	J (all detects)
SL-253-SA5A-SB-4.0-5.0	MERCURY	J	0.0124	0.113	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE135 **Laboratory: LL**

EDD Filename: DE135_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-253-SA5A-SB-8.0-9.0	MERCURY	J	0.0087	0.109	PQL	mg/Kg	J (all detects)

Method: 8015M

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-010-SA8N-SB-4.0-5.0	EFH (C30-C40)	J	0.86	1.4	PQL	mg/Kg	J (all detects)
SL-011-SA8N-SB-4.0-5.0	EFH (C30-C40)	J	0.86	1.4	PQL	mg/Kg	J (all detects)
SL-011-SA8N-SB-9.0-10.0	EFH (C30-C40)	J	0.53	1.4	PQL	mg/Kg	J (all detects)

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP16-SA5A-QC-042211	METHYLENE CHLORIDE	J	0.67	4.0	PQL	ug/Kg	J (all detects)
SL-007-SA8N-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.58	3.6	PQL	ug/Kg	J (all detects)
SL-010-SA8N-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.52	4.1	PQL	ug/Kg	J (all detects)
SL-010-SA8N-SB-9.0-10	METHYLENE CHLORIDE	J	0.43	3.9	PQL	ug/Kg	J (all detects)
SL-011-SA8N-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.51	4.1	PQL	ug/Kg	J (all detects)
SL-011-SA8N-SB-9.0-10.0	METHYLENE CHLORIDE	J	0.46	4.2	PQL	ug/Kg	J (all detects)
SL-064-SA5A-SB-3.0-4.0	METHYLENE CHLORIDE	J	0.45	3.7	PQL	ug/Kg	J (all detects)
SL-253-SA5A-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.41	4.3	PQL	ug/Kg	J (all detects)

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP16-SA5A-QC-042211	Diethylphthalate	J	7.0	20	PQL	ug/Kg	J (all detects)
	Di-n-butylphthalate	J	14	20	PQL	ug/Kg	
	FLUORANTHENE	J	0.97	1.9	PQL	ug/Kg	
SL-011-SA8N-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	9.1	21	PQL	ug/Kg	J (all detects)
SL-253-SA5A-SB-4.0-5.0	CHRYSENE	J	0.48	1.9	PQL	ug/Kg	J (all detects)
	FLUORANTHENE	J	1.3	1.9	PQL	ug/Kg	
	PHENANTHRENE	J	1.0	1.9	PQL	ug/Kg	
	PYRENE	J	0.80	1.9	PQL	ug/Kg	

LDC #: 26078E4 **VALIDATION COMPLETENESS WORKSHEET** Date: 8-29-11

SDG #: DE135 ADR Page: 1 of 1

Laboratory: Lancaster Laboratories Reviewer: [illegible]

2nd Reviewer: [illegible]

METHOD: Metals (EPA SW 846 Method 6010B/6020A/7000)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	N	Sampling dates:
II.	ICP/MS Tune	—	
III.	Calibration	—	
IV.	Blanks	A	No ICB/CCB quals
V.	ICP Interference Check Sample (ICS) Analysis	N	
VI.	Matrix Spike Analysis	SW	MS/D
VII.	Duplicate Sample Analysis	N	DUP
VIII.	Laboratory Control Samples (LCS)	A	LCS
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	SW	
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	—	
XV	Field Blanks	—	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: 5

1	SL-007-SA8N-SB-4.0-5.0	11	DUP16-SA5A-QC-042211	21		31	
2	SL-007-SA8N-SB-9.0-10.0	12	SL-064-SA5A-SB-3.0-4.0MS	22		32	
3	SL-010-SA8N-SB-4.0-5.0	13	SL-064-SA5A-SB-3.0-4.0MSD	23		33	
4	SL-010-SA8N-SB-9.0-10.0	14	SL-064-SA5A-SB-3.0-4.0DUP	24		34	
5	SL-011-SA8N-SB-4.0-5.0	15		25		35	
6	SL-011-SA8N-SB-9.0-10.0	16		26		36	
7	SL-064-SA5A-SB-3.0-4.0	17		27		37	
8	SL-166-SA5A-SB-0.0-0.5	18		28		38	
9	SL-25~~6~~3-SA5A-SB-4.0-5.0	19		29		39	
10	SL-25~~6~~3-SA5A-SB-8.0-9.0	20		30		40	

Notes:

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 5A(MS/MSD)
MATRIX SPIKE/MATRIX SPIKE DUPLICATE
SDG No.: DE135
Matrix: SOIL Level (low/med): LOW

74X

Background Lab Sample ID: 6267473BKG Matrix Spike Lab Sample ID: 6267474MS Matrix Spike Duplicate Lab Sample ID: 6267475MSD
% Solids for Sample: 89.2
Batch Id(s): P11908A, P11926A, P12508G, P11911A

%R PS

Analyte	Mass	BKG Sample Result	C	MS Sample Result	C	MSD Sample Result	C	MS Spike Added	MSD Spike Added	Units	MS %R	Q	MSD %R	Q	RPD	Q	Control Limit %R	Control Limit RPD	M
Aluminum		21926.6283		27200.6067		26629.0337		219.8189	221.9953	MG/KG	2399		2118		2			20	P
Antimony	121	0.0659	U	0.3614		0.4795		1.3320	1.3320	MG/KG	27	N	36	N	28	*	75 - 125	20	MS
Arsenic	75	7.4189		8.9620		11.4971		2.2200	2.2200	MG/KG	70	N	184	N	25	*	75 - 125	20	MS
Barium	137	102.0399		101.9402		137.1265		11.0998	11.0998	MG/KG	-1		316		29	*		20	MS
Beryllium	9	0.8648		1.5824		1.9680		0.8880	0.8880	MG/KG	81		124		22	*	75 - 125	20	MS
Boron		8.2305		217.0096		217.7696		219.8189	221.9953	MG/KG	95		94		0		84 - 115	20	P
Cadmium	111	0.0937	B	1.2496		1.5941		1.1100	1.1100	MG/KG	104		135	N	24	*	75 - 125	20	MS
Calcium		2760.4771		3567.4833		3375.5927		439.6377	443.9906	MG/KG	184		139		6			20	P
Chromium	52	23.5646		30.8351		37.0510		11.0998	11.0998	MG/KG	66	N	122		18		75 - 125	20	MS
Cobalt	59	8.0981		64.6006		81.6499		55.4988	55.4988	MG/KG	102		133	N	23	*	75 - 125	20	MS
Copper	63	11.4086		20.9741		26.5950		11.0998	11.0998	MG/KG	86		137	N	24	*	75 - 125	20	MS
Iron		24884.5891		27354.7492		26167.4977		109.9094	110.9976	MG/KG	2247		1156		4			20	P
Lead	208	7.5178		9.7900		12.4340		3.3299	3.3299	MG/KG	68	N	148	N	24	*	75 - 125	20	MS
Lithium		32.7543		145.5454		142.1336		109.9094	110.9976	MG/KG	103		99		2		82 - 114	20	P
Magnesium		5455.8984		6246.1784		5946.7111		219.8189	221.9953	MG/KG	360		221		5			20	P
Manganese		291.5575		328.4127		344.2492		54.9547	55.4988	MG/KG	67		95		5			20	P
Mercury		0.0261	B	0.1637		0.1689		0.1764	0.1840	MG/KG	78		78		3		65 - 135	20	CV
Molybdenum	98	0.5315		10.7024		14.1766		11.0998	11.0998	MG/KG	92		123		28	*	75 - 125	20	MS
Nickel	60	18.4692		27.6384		35.4082		11.0998	11.0998	MG/KG	83		153	N	25	*	75 - 125	20	MS
Phosphorus		308.9431		418.4406		429.9205		109.9094	110.9976	MG/KG	100		109		3		75 - 125	20	P
Potassium		2664.3265		4007.2804		4180.8240		1099.0943	1109.9765	MG/KG	122		137	N	4		75 - 125	20	P
Selenium	78	0.1344	B	2.3576		2.7328		2.2200	2.2200	MG/KG	100		117		15		75 - 125	20	MS
Silver	107	0.0404	B	11.5260		14.1744		11.0998	11.0998	MG/KG	103		127	N	21	*	75 - 125	20	MS
Sodium		93.1725	B	1157.4771		1153.1523		1099.0943	1109.9765	MG/KG	97		95		0		75 - 125	20	P
Strontium		18.3024		129.1535		128.3177		109.9094	110.9976	MG/KG	101		99		1		75 - 115	20	P
Thallium	203	0.3163		0.6893		0.8460		0.4440	0.4440	MG/KG	84		119		20		75 - 125	20	MS
Tin		3.4953	B	374.4944		374.3440		439.6377	443.9906	MG/KG	84		84		0		80 - 110	20	P
Titanium		1169.3402		1429.5898		1425.9679		109.9094	110.9976	MG/KG	237		231		0			20	P
Vanadium	51	41.6996		48.1952		58.6290		11.0998	11.0998	MG/KG	59	N	153	N	20		75 - 125	20	MS
Zinc	66	63.8354		68.1970		87.0444		11.0998	11.0998	MG/KG	39		209		24	*		20	MS
Zirconium		0.9324	U	107.6332		106.9274		109.9094	110.9976	MG/KG	98		96		1		75 - 125	20	P

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METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry
CV = Cold Vapor
AF = Cold Vapor Atomic Fluorescence

CONCENTRATION QUALIFIERS:
U= Below MDL, B= Below LOQ
FLAGS:
N = Matrix Spike OOS, * = Duplicate OOS

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 6
DUPLICATES
SDG No.: DE135
Matrix: SOIL Level (low/med): LOW

<5xRL

Background Lab Sample ID: 6267473BKG
% Solids for Duplicate: 89.0
Batch ID(s): P11908A, P11926A, P12508G, P11911A
Concentration Units: MG/KG

Duplicate Lab Sample ID: 6267476DUP
% Solids for Sample: 89.2

Analyte	Mass	Control Limit	Samples (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum			21926.6283		21156.0989		4		P
Antimony	121		0.0659	U	0.0673	U			MS
Arsenic	75		7.4189		6.7758		9		MS
Barium	137		102.0399		97.7354		4		MS
Beryllium	9		0.8648		0.8143		6		MS
Boron		5.5	8.2305		8.1861		1		P
Cadmium	111		0.0937	B	0.0816	B	14		MS
Calcium			2760.4771		2793.6802		1		P
Chromium	52		23.5646		22.8924		3		MS
Cobalt	59		8.0981		7.8363		3		MS
Copper	63		11.4086		11.0112		4		MS
Iron			24884.5891		25373.5558		2		P
Lead	208		7.5178		7.0381		7		MS
Lithium			32.7543		32.5376		1		P
Magnesium			5455.8984		5497.0127		1		P
Manganese			291.5575		301.1727		3		P
Mercury			0.0261	B	0.0062	B	123		CV
Molybdenum	98	0.1	0.5315		0.5500		3		MS
Nickel	60		18.4692		18.1704		2		MS
Phosphorus			308.9431		326.9366		6		P
Potassium			2664.3265		2727.7686		2		P
Selenium	78		0.1344	B	0.1073	B	22		MS
Silver	107		0.0404	B	0.0399	B	1		MS
Sodium			93.1725	B	94.2078	B	1		P
Strontium			18.3024		18.2867		0		P
Thallium	203	0.1	0.3163		0.2765		13		MS
Tin			3.4953	B	3.3171	B	5		P
Titanium			1169.3402		1161.7856		1		P
Vanadium	51		41.6996		40.7399		2		MS
Zinc	66		63.8354		62.3767		2		MS
Zirconium			0.9324	U	1.3035	B	200		P

NOTE: An asterisk (*) in column "Q" indicates poor duplicate precision (RPD > 20% OR |(S) - (D)| > LOQ for values < 5x LOQ).
The data are considered to be valid because the laboratory control sample is within the control limits. See the Laboratory Control Sample.

DE135 3383

METHODS:	CONCENTRATION QUALIFIERS:
P = ICP Atomic Emission Spectrometer	U= Below MDL
MS = ICP Mass Spectrometry	B= Below LOQ
CV = Cold Vapor	FLAGS:
AF = Cold Vapor Atomic Fluorescence	* = Duplicate Out of Spec

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 9
SERIAL DILUTIONS
SDG No.: DE135
Matrix: SOIL Level (low/med): LOW

5/05/

Background Lab Sample ID: 6267473BKG Serial Dilution Lab Sample ID: 6267473L
Batch ID(s): P11908A, P11926A, P12508G
Concentration Units: UG/L

Analyte	Mass	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Diff.	Q	M
Aluminum		197541.3800		201598.7000		2		P
Antimony	121	0.3000	U	1.5000	U			MS
Arsenic	75	33.7500		34.2100		1		MS
Barium	137	464.2000		524.0000		13	E	MS
Beryllium	9	3.9340		4.6900		19		MS
Boron		74.1500		93.6500	B	26		P
Cadmium	111	0.4262	B	1.0085	B	137		MS
Calcium		27082.3500		26133.9000		4		P
Chromium	52	107.2000		130.9500		22	E	MS
Cobalt	59	36.8400		41.7100		13	E	MS
Copper	63	51.9000		65.9500		27	E	MS
Iron		224190.2400		233563.6000		4		P
Lead	208	34.2000		37.6000		10		MS
Lithium		295.0900		316.6000		7		P
Magnesium		49153.2800		49870.0000		1		P
Manganese		2626.7000		2763.7500		5		P
Molybdenum	98	2.4180		3.7990		57		MS
Nickel	60	84.0200		100.3000		19	E	MS
Phosphorus		2783.3300		2904.3000		4		P
Potassium		24003.4500		24326.3500		1		P
Selenium	78	0.6112	B	1.0000	U	100		MS
Silver	107	0.1836	B	0.3057	B	67		MS
Sodium		839.4100	B	1865.0000	U	100		P
Strontium		164.8900		175.7500		7		P
Thallium	203	1.4390		1.7005	B	18		MS
Tin		31.4900	B	50.0000	U	100		P
Titanium		10534.8200		11195.9500		6		P
Vanadium	51	189.7000		236.3000		25	E	MS
Zinc	66	290.4000		346.3500		19	E	MS
Zirconium		8.4000	U	42.0000	U			P

NOTE: An E in column Q indicates the presence of a chemical or physical interference in the matrix when the % difference is greater than 10%. This applies only when (I) is greater than or equal to 50x MDL for ICP, 100x MDL for ICP-MS (6020), 50x MDL for ICP-MS (200.8), or 25x MDL for GFAA.

METHODS:	CONCENTRATION QUALIFIERS: DE135 3386
P = ICP Atomic Emission Spectrometer MS = ICP Mass Spectrometry	U= Below MDL B= Below LOQ FLAGS: E = Matrix Effects exist as proven by Serial Dilution or Spiked Dilution

SAMPLE DELIVERY GROUP

DE151

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
16-May-2011	SL-003-SA5DN-SB-0.5-1.5	6288938	N	3050B	6010B	III
16-May-2011	SL-003-SA5DN-SB-0.5-1.5	6288938	N	3050B	6020	III
16-May-2011	SL-003-SA5DN-SB-0.5-1.5	6288938	N	3060A	7199	III
16-May-2011	SL-003-SA5DN-SB-0.5-1.5	6288938	N	3546	1625C	III
16-May-2011	SL-003-SA5DN-SB-0.5-1.5	6288938	N	3550B	8015B	III
16-May-2011	SL-003-SA5DN-SB-0.5-1.5	6288938	N	3550B	8015M	III
16-May-2011	SL-003-SA5DN-SB-0.5-1.5	6288938	N	3550B	8082	III
16-May-2011	SL-003-SA5DN-SB-0.5-1.5	6288938	N	3550B	8270C	III
16-May-2011	SL-003-SA5DN-SB-0.5-1.5	6288938	N	3550B	8270C SIM	III
16-May-2011	SL-003-SA5DN-SB-0.5-1.5	6288938	N	5035	8015M	III
16-May-2011	SL-003-SA5DN-SB-0.5-1.5	6288938	N	5035	8260B	III
16-May-2011	SL-003-SA5DN-SB-0.5-1.5	6288938	N	5035	8260B SIM	III
16-May-2011	SL-003-SA5DN-SB-0.5-1.5	6288938	N	8330	8330A	III
16-May-2011	SL-003-SA5DN-SB-0.5-1.5	6288938	N	METHOD	300.0	III
16-May-2011	SL-003-SA5DN-SB-0.5-1.5	6288938	N	METHOD	314.0	III
16-May-2011	SL-003-SA5DN-SB-0.5-1.5	6288938	N	METHOD	6850	III
16-May-2011	SL-003-SA5DN-SB-0.5-1.5	6288938	N	METHOD	7471A	III
16-May-2011	SL-003-SA5DN-SB-0.5-1.5	6288938	N	METHOD	8015B	III
16-May-2011	SL-003-SA5DN-SB-0.5-1.5	6288938	N	METHOD	8015M	III
16-May-2011	SL-003-SA5DN-SB-0.5-1.5	6288938	N	METHOD	8315A	III
16-May-2011	SL-003-SA5DN-SB-0.5-1.5	6288938	N	METHOD	9012B	III
16-May-2011	SL-003-SA5DN-SB-8.0-9.0	6288939	N	3050B	6010B	III
16-May-2011	SL-003-SA5DN-SB-8.0-9.0	6288939	N	3050B	6020	III
16-May-2011	SL-003-SA5DN-SB-8.0-9.0	6288939	N	3060A	7199	III
16-May-2011	SL-003-SA5DN-SB-8.0-9.0	6288939	N	3546	1625C	III
16-May-2011	SL-003-SA5DN-SB-8.0-9.0	6288939	N	3550B	8015B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
16-May-2011	SL-003-SA5DN-SB-8.0-9.0	6288939	N	3550B	8015M	III
16-May-2011	SL-003-SA5DN-SB-8.0-9.0	6288939	N	3550B	8082	III
16-May-2011	SL-003-SA5DN-SB-8.0-9.0	6288939	N	3550B	8270C	III
16-May-2011	SL-003-SA5DN-SB-8.0-9.0	6288939	N	3550B	8270C SIM	III
16-May-2011	SL-003-SA5DN-SB-8.0-9.0	6288939	N	5035	8015M	III
16-May-2011	SL-003-SA5DN-SB-8.0-9.0	6288939	N	5035	8260B	III
16-May-2011	SL-003-SA5DN-SB-8.0-9.0	6288939	N	5035	8260B SIM	III
16-May-2011	SL-003-SA5DN-SB-8.0-9.0	6288939	N	8330	8330A	III
16-May-2011	SL-003-SA5DN-SB-8.0-9.0	6288939	N	METHOD	300.0	III
16-May-2011	SL-003-SA5DN-SB-8.0-9.0	6288939	N	METHOD	314.0	III
16-May-2011	SL-003-SA5DN-SB-8.0-9.0	6288939	N	METHOD	7471A	III
16-May-2011	SL-003-SA5DN-SB-8.0-9.0	6288939	N	METHOD	8015B	III
16-May-2011	SL-003-SA5DN-SB-8.0-9.0	6288939	N	METHOD	8015M	III
16-May-2011	SL-003-SA5DN-SB-8.0-9.0	6288939	N	METHOD	8315A	III
16-May-2011	SL-003-SA5DN-SB-8.0-9.0	6288939	N	METHOD	9012B	III
16-May-2011	SL-042-SA5A-SB-3.5-4.5	6288929	N	3050B	6010B	III
16-May-2011	SL-042-SA5A-SB-3.5-4.5	6288929	N	3050B	6020	III
16-May-2011	SL-042-SA5A-SB-3.5-4.5	6288929	N	3060A	7199	III
16-May-2011	SL-042-SA5A-SB-3.5-4.5	6288929	N	3550B	8082	III
16-May-2011	SL-042-SA5A-SB-3.5-4.5	6288929	N	3550B	8270C	III
16-May-2011	SL-042-SA5A-SB-3.5-4.5	6288929	N	3550B	8270C SIM	III
16-May-2011	SL-042-SA5A-SB-3.5-4.5	6288929	N	5035	8260B	III
16-May-2011	SL-042-SA5A-SB-3.5-4.5	6288929	N	5035	8260B SIM	III
16-May-2011	SL-042-SA5A-SB-3.5-4.5	6288929	N	METHOD	300.0	III
16-May-2011	SL-042-SA5A-SB-3.5-4.5	6288929	N	METHOD	314.0	III
16-May-2011	SL-042-SA5A-SB-3.5-4.5	6288929	N	METHOD	7471A	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
16-May-2011	SL-042-SA5A-SB-3.5-4.5MS	6288930	MS	3050B	6010B	III
16-May-2011	SL-042-SA5A-SB-3.5-4.5MS	6288930	MS	3050B	6020	III
16-May-2011	SL-042-SA5A-SB-3.5-4.5MS	6288930	MS	3060A	7199	III
16-May-2011	SL-042-SA5A-SB-3.5-4.5MS	6288930	MS	3550B	8082	III
16-May-2011	SL-042-SA5A-SB-3.5-4.5MS	6288930	MS	3550B	8270C	III
16-May-2011	SL-042-SA5A-SB-3.5-4.5MS	6288930	MS	3550B	8270C SIM	III
16-May-2011	SL-042-SA5A-SB-3.5-4.5MS	6288930	MS	5035	8260B	III
16-May-2011	SL-042-SA5A-SB-3.5-4.5MS	6288930	MS	5035	8260B SIM	III
16-May-2011	SL-042-SA5A-SB-3.5-4.5MS	6288930	MS	METHOD	300.0	III
16-May-2011	SL-042-SA5A-SB-3.5-4.5MS	6288930	MS	METHOD	314.0	III
16-May-2011	SL-042-SA5A-SB-3.5-4.5MS	6288930	MS	METHOD	7471A	III
16-May-2011	SL-042-SA5A-SB-3.5-4.5MSD	6288931	MSD	3050B	6010B	III
16-May-2011	SL-042-SA5A-SB-3.5-4.5MSD	6288931	MSD	3050B	6020	III
16-May-2011	SL-042-SA5A-SB-3.5-4.5MSD	6288931	MSD	3550B	8082	III
16-May-2011	SL-042-SA5A-SB-3.5-4.5MSD	6288931	MSD	3550B	8270C	III
16-May-2011	SL-042-SA5A-SB-3.5-4.5MSD	6288931	MSD	3550B	8270C SIM	III
16-May-2011	SL-042-SA5A-SB-3.5-4.5MSD	6288931	MSD	5035	8260B	III
16-May-2011	SL-042-SA5A-SB-3.5-4.5MSD	6288931	MSD	5035	8260B SIM	III
16-May-2011	SL-042-SA5A-SB-3.5-4.5MSD	6288931	MSD	METHOD	7471A	III
16-May-2011	SL-042-SA5A-SB-3.5-4.5DUP	6288932	DUP	3050B	6010B	III
16-May-2011	SL-042-SA5A-SB-3.5-4.5DUP	6288932	DUP	3050B	6020	III
16-May-2011	SL-042-SA5A-SB-3.5-4.5DUP	6288932	DUP	3060A	7199	III
16-May-2011	SL-042-SA5A-SB-3.5-4.5DUP	6288932	DUP	METHOD	300.0	III
16-May-2011	SL-042-SA5A-SB-3.5-4.5DUP	6288932	DUP	METHOD	314.0	III
16-May-2011	SL-042-SA5A-SB-3.5-4.5DUP	6288932	DUP	METHOD	7471A	III
16-May-2011	DUP-17-SA5A-QC-051611	6288933	FD	3050B	6010B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
16-May-2011	DUP-17-SA5A-QC-051611	6288933	FD	3050B	6020	III
16-May-2011	DUP-17-SA5A-QC-051611	6288933	FD	3060A	7199	III
16-May-2011	DUP-17-SA5A-QC-051611	6288933	FD	3550B	8082	III
16-May-2011	DUP-17-SA5A-QC-051611	6288933	FD	3550B	8270C	III
16-May-2011	DUP-17-SA5A-QC-051611	6288933	FD	3550B	8270C SIM	III
16-May-2011	DUP-17-SA5A-QC-051611	6288933	FD	5035	8260B	III
16-May-2011	DUP-17-SA5A-QC-051611	6288933	FD	5035	8260B SIM	III
16-May-2011	DUP-17-SA5A-QC-051611	6288933	FD	METHOD	300.0	III
16-May-2011	DUP-17-SA5A-QC-051611	6288933	FD	METHOD	314.0	III
16-May-2011	DUP-17-SA5A-QC-051611	6288933	FD	METHOD	7471A	III
16-May-2011	SL-004-SA5DN-SB-3.5-4.5	6288940	N	3050B	6010B	III
16-May-2011	SL-004-SA5DN-SB-3.5-4.5	6288940	N	3050B	6020	III
16-May-2011	SL-004-SA5DN-SB-3.5-4.5	6288940	N	3060A	7199	III
16-May-2011	SL-004-SA5DN-SB-3.5-4.5	6288940	N	3546	1625C	III
16-May-2011	SL-004-SA5DN-SB-3.5-4.5	6288940	N	3550B	8015B	III
16-May-2011	SL-004-SA5DN-SB-3.5-4.5	6288940	N	3550B	8015M	III
16-May-2011	SL-004-SA5DN-SB-3.5-4.5	6288940	N	3550B	8082	III
16-May-2011	SL-004-SA5DN-SB-3.5-4.5	6288940	N	3550B	8270C	III
16-May-2011	SL-004-SA5DN-SB-3.5-4.5	6288940	N	3550B	8270C SIM	III
16-May-2011	SL-004-SA5DN-SB-3.5-4.5	6288940	N	5035	8015M	III
16-May-2011	SL-004-SA5DN-SB-3.5-4.5	6288940	N	5035	8260B	III
16-May-2011	SL-004-SA5DN-SB-3.5-4.5	6288940	N	5035	8260B SIM	III
16-May-2011	SL-004-SA5DN-SB-3.5-4.5	6288940	N	8330	8330A	III
16-May-2011	SL-004-SA5DN-SB-3.5-4.5	6288940	N	METHOD	300.0	III
16-May-2011	SL-004-SA5DN-SB-3.5-4.5	6288940	N	METHOD	314.0	III
16-May-2011	SL-004-SA5DN-SB-3.5-4.5	6288940	N	METHOD	7471A	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
16-May-2011	SL-004-SA5DN-SB-3.5-4.5	6288940	N	METHOD	8015B	III
16-May-2011	SL-004-SA5DN-SB-3.5-4.5	6288940	N	METHOD	8015M	III
16-May-2011	SL-004-SA5DN-SB-3.5-4.5	6288940	N	METHOD	8315A	III
16-May-2011	SL-004-SA5DN-SB-3.5-4.5	6288940	N	METHOD	9012B	III
16-May-2011	SL-004-SA5DN-SB-9.0-10.0	6288941	N	3050B	6010B	III
16-May-2011	SL-004-SA5DN-SB-9.0-10.0	6288941	N	3050B	6020	III
16-May-2011	SL-004-SA5DN-SB-9.0-10.0	6288941	N	3060A	7199	III
16-May-2011	SL-004-SA5DN-SB-9.0-10.0	6288941	N	3546	1625C	III
16-May-2011	SL-004-SA5DN-SB-9.0-10.0	6288941	N	3550B	8015B	III
16-May-2011	SL-004-SA5DN-SB-9.0-10.0	6288941	N	3550B	8015M	III
16-May-2011	SL-004-SA5DN-SB-9.0-10.0	6288941	N	3550B	8082	III
16-May-2011	SL-004-SA5DN-SB-9.0-10.0	6288941	N	3550B	8270C	III
16-May-2011	SL-004-SA5DN-SB-9.0-10.0	6288941	N	3550B	8270C SIM	III
16-May-2011	SL-004-SA5DN-SB-9.0-10.0	6288941	N	5035	8015M	III
16-May-2011	SL-004-SA5DN-SB-9.0-10.0	6288941	N	5035	8260B	III
16-May-2011	SL-004-SA5DN-SB-9.0-10.0	6288941	N	5035	8260B SIM	III
16-May-2011	SL-004-SA5DN-SB-9.0-10.0	6288941	N	8330	8330A	III
16-May-2011	SL-004-SA5DN-SB-9.0-10.0	6288941	N	METHOD	300.0	III
16-May-2011	SL-004-SA5DN-SB-9.0-10.0	6288941	N	METHOD	314.0	III
16-May-2011	SL-004-SA5DN-SB-9.0-10.0	6288941	N	METHOD	7471A	III
16-May-2011	SL-004-SA5DN-SB-9.0-10.0	6288941	N	METHOD	8015B	III
16-May-2011	SL-004-SA5DN-SB-9.0-10.0	6288941	N	METHOD	8015M	III
16-May-2011	SL-004-SA5DN-SB-9.0-10.0	6288941	N	METHOD	8315A	III
16-May-2011	SL-004-SA5DN-SB-9.0-10.0	6288941	N	METHOD	9012B	III
16-May-2011	EB15-SA5A-SB-051611	6288935	EB	3005A	6010B	III
16-May-2011	EB15-SA5A-SB-051611	6288935	EB	3020A	6020	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
16-May-2011	EB15-SA5A-SB-051611	6288935	EB	3510C	8082	III
16-May-2011	EB15-SA5A-SB-051611	6288935	EB	3510C	8270C	III
16-May-2011	EB15-SA5A-SB-051611	6288935	EB	3510C	8270C SIM	III
16-May-2011	EB15-SA5A-SB-051611	6288935	EB	5030B	8260B	III
16-May-2011	EB15-SA5A-SB-051611	6288935	EB	5030B	8260B SIM	III
16-May-2011	EB15-SA5A-SB-051611	6288935	EB	Gen Prep	300.0	III
16-May-2011	EB15-SA5A-SB-051611	6288935	EB	Gen Prep	314.0	III
16-May-2011	EB15-SA5A-SB-051611	6288935	EB	Gen Prep	7199	III
16-May-2011	EB15-SA5A-SB-051611	6288935	EB	METHOD	7470A	III
16-May-2011	SL-002-SA5DN-SB-4.0-5.0	6288936	N	3050B	6010B	III
16-May-2011	SL-002-SA5DN-SB-4.0-5.0	6288936	N	3050B	6020	III
16-May-2011	SL-002-SA5DN-SB-4.0-5.0	6288936	N	3060A	7199	III
16-May-2011	SL-002-SA5DN-SB-4.0-5.0	6288936	N	3550B	8082	III
16-May-2011	SL-002-SA5DN-SB-4.0-5.0	6288936	N	3550B	8270C	III
16-May-2011	SL-002-SA5DN-SB-4.0-5.0	6288936	N	3550B	8270C SIM	III
16-May-2011	SL-002-SA5DN-SB-4.0-5.0	6288936	N	5035	8260B	III
16-May-2011	SL-002-SA5DN-SB-4.0-5.0	6288936	N	5035	8260B SIM	III
16-May-2011	SL-002-SA5DN-SB-4.0-5.0	6288936	N	METHOD	300.0	III
16-May-2011	SL-002-SA5DN-SB-4.0-5.0	6288936	N	METHOD	314.0	III
16-May-2011	SL-002-SA5DN-SB-4.0-5.0	6288936	N	METHOD	7471A	III
16-May-2011	SL-002-SA5DN-SB-9.0-10.0	6288937	N	3050B	6010B	III
16-May-2011	SL-002-SA5DN-SB-9.0-10.0	6288937	N	3050B	6020	III
16-May-2011	SL-002-SA5DN-SB-9.0-10.0	6288937	N	3060A	7199	III
16-May-2011	SL-002-SA5DN-SB-9.0-10.0	6288937	N	3550B	8082	III
16-May-2011	SL-002-SA5DN-SB-9.0-10.0	6288937	N	3550B	8270C	III
16-May-2011	SL-002-SA5DN-SB-9.0-10.0	6288937	N	3550B	8270C SIM	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
16-May-2011	SL-002-SA5DN-SB-9.0-10.0	6288937	N	METHOD	300.0	III
16-May-2011	SL-002-SA5DN-SB-9.0-10.0	6288937	N	METHOD	314.0	III
16-May-2011	SL-002-SA5DN-SB-9.0-10.0	6288937	N	METHOD	7471A	III
16-May-2011	SL-167-SA5A-SB-1.0-2.0	6288934	N	3050B	6010B	III
16-May-2011	SL-167-SA5A-SB-1.0-2.0	6288934	N	3050B	6020	III
16-May-2011	SL-167-SA5A-SB-1.0-2.0	6288934	N	3060A	7199	III
16-May-2011	SL-167-SA5A-SB-1.0-2.0	6288934	N	3546	1625C	III
16-May-2011	SL-167-SA5A-SB-1.0-2.0	6288934	N	3550B	8015B	III
16-May-2011	SL-167-SA5A-SB-1.0-2.0	6288934	N	3550B	8015M	III
16-May-2011	SL-167-SA5A-SB-1.0-2.0	6288934	N	3550B	8082	III
16-May-2011	SL-167-SA5A-SB-1.0-2.0	6288934	N	3550B	8270C	III
16-May-2011	SL-167-SA5A-SB-1.0-2.0	6288934	N	3550B	8270C SIM	III
16-May-2011	SL-167-SA5A-SB-1.0-2.0	6288934	N	5035	8015M	III
16-May-2011	SL-167-SA5A-SB-1.0-2.0	6288934	N	5035	8260B	III
16-May-2011	SL-167-SA5A-SB-1.0-2.0	6288934	N	5035	8260B SIM	III
16-May-2011	SL-167-SA5A-SB-1.0-2.0	6288934	N	8330	8330A	III
16-May-2011	SL-167-SA5A-SB-1.0-2.0	6288934	N	METHOD	300.0	III
16-May-2011	SL-167-SA5A-SB-1.0-2.0	6288934	N	METHOD	314.0	III
16-May-2011	SL-167-SA5A-SB-1.0-2.0	6288934	N	METHOD	7471A	III
16-May-2011	SL-167-SA5A-SB-1.0-2.0	6288934	N	METHOD	8015B	III
16-May-2011	SL-167-SA5A-SB-1.0-2.0	6288934	N	METHOD	8015M	III
16-May-2011	SL-167-SA5A-SB-1.0-2.0	6288934	N	METHOD	8315A	III
16-May-2011	SL-167-SA5A-SB-1.0-2.0	6288934	N	METHOD	9012B	III
16-May-2011	SL-167-SA5A-SB-1.0-2.0MSD	P288934M321944A	MSD	METHOD	8015M	III
16-May-2011	SL-167-SA5A-SB-1.0-2.0MSD	P288934M322047A	MSD	3550B	8015B	III
16-May-2011	SL-167-SA5A-SB-1.0-2.0MS	P288934R321931A	MS	METHOD	8015M	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
16-May-2011	SL-167-SA5A-SB-1.0-2.0MS	P288934R322003A	MS	3550B	8015B	III
16-May-2011	TB-051611	6288942	TB	5030B	8015M	III
16-May-2011	TB-051611	6288942	TB	5030B	8260B	III
16-May-2011	TB-051611	6288942	TB	5030B	8260B SIM	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE151 | Laboratory: LL

EDD Filename: DE151_v1. | eQAPP Name: CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: DUP-17-SA5A-QC-051611 *Collected:* 5/16/2011 11:37:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	0.91	U	0.91	MDL	1.1	PQL	mg/Kg	UJ	Q

Sample ID: SL-002-SA5DN-SB-4.0-5.0 *Collected:* 5/16/2011 3:48:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	24.2		0.92	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-002-SA5DN-SB-9.0-10.0 *Collected:* 5/16/2011 3:52:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	12.6		0.92	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-003-SA5DN-SB-0.5-1.5 *Collected:* 5/16/2011 10:43:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	7.0		0.96	MDL	1.2	PQL	mg/Kg	J	Q
Nitrate-NO3	1.6	J	0.96	MDL	1.8	PQL	mg/Kg	J	Z

Sample ID: SL-003-SA5DN-SB-8.0-9.0 *Collected:* 5/16/2011 10:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	5.8		0.89	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-004-SA5DN-SB-3.5-4.5 *Collected:* 5/16/2011 12:39:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.8		0.96	MDL	1.2	PQL	mg/Kg	J	Q
Nitrate-NO3	1.5	J	0.96	MDL	1.8	PQL	mg/Kg	J	Z

Sample ID: SL-004-SA5DN-SB-9.0-10.0 *Collected:* 5/16/2011 12:47:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	6.7		0.91	MDL	1.1	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE151 **Laboratory: LL**

EDD Filename: DE151_v1. **eQAPP Name: CDM_SSFL_110509**

Method Category: **GENCHEM**

Method: **300.0** ***Matrix:*** **SO**

Sample ID: **SL-042-SA5A-SB-3.5-4.5** ***Collected:*** **5/16/2011 11:30:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	0.91	U	0.91	MDL	1.1	PQL	mg/Kg	UJ	Q

Sample ID: **SL-167-SA5A-SB-1.0-2.0** ***Collected:*** **5/16/2011 4:17:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.7		0.87	MDL	1.1	PQL	mg/Kg	J	Q
Nitrate-NO3	0.92	J	0.87	MDL	1.6	PQL	mg/Kg	J	Z

Method Category: **METALS**

Method: **6010B** ***Matrix:*** **AQ**

Sample ID: **EB15-SA5A-SB-051611** ***Collected:*** **5/16/2011 2:30:00** ***Analysis Type:*** **REA2** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	0.0195	J	0.0138	MDL	0.0500	PQL	mg/L	U	B

Method Category: **METALS**

Method: **6010B** ***Matrix:*** **SO**

Sample ID: **DUP-17-SA5A-QC-051611** ***Collected:*** **5/16/2011 11:37:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	8.74		0.981	MDL	5.51	PQL	mg/Kg	U	F
MANGANESE	304		0.0860	MDL	0.551	PQL	mg/Kg	J	E
POTASSIUM	2180		19.8	MDL	55.1	PQL	mg/Kg	J	E
SODIUM	108	J	41.1	MDL	110	PQL	mg/Kg	J	Z
TIN	3.31	J	1.10	MDL	11.0	PQL	mg/Kg	U	B
Zirconium	4.56	J	0.926	MDL	5.51	PQL	mg/Kg	J	Z

Sample ID: **SL-002-SA5DN-SB-4.0-5.0** ***Collected:*** **5/16/2011 3:48:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	515		0.0896	MDL	0.574	PQL	mg/Kg	J	E
POTASSIUM	3130		20.7	MDL	57.4	PQL	mg/Kg	J	E
TIN	3.05	J	1.15	MDL	11.5	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE151 **Laboratory: LL**

EDD Filename: DE151_v1. **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6010B** ***Matrix:*** **SO**

Sample ID: **SL-002-SA5DN-SB-4.0-5.0** ***Collected:*** **5/16/2011 3:48:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	5.51	J	0.964	MDL	5.74	PQL	mg/Kg	J	Z

Sample ID: **SL-002-SA5DN-SB-9.0-10.0** ***Collected:*** **5/16/2011 3:52:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	517		0.0886	MDL	0.568	PQL	mg/Kg	J	E
POTASSIUM	3300		20.4	MDL	56.8	PQL	mg/Kg	J	E
TIN	3.20	J	1.14	MDL	11.4	PQL	mg/Kg	U	B

Sample ID: **SL-003-SA5DN-SB-0.5-1.5** ***Collected:*** **5/16/2011 10:43:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	698		0.0909	MDL	0.583	PQL	mg/Kg	J	E
POTASSIUM	4160		21.0	MDL	58.3	PQL	mg/Kg	J	E
TIN	3.10	J	1.17	MDL	11.7	PQL	mg/Kg	U	B

Sample ID: **SL-003-SA5DN-SB-8.0-9.0** ***Collected:*** **5/16/2011 10:50:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	237		0.0846	MDL	0.542	PQL	mg/Kg	J	E
POTASSIUM	2650		19.5	MDL	54.2	PQL	mg/Kg	J	E
TIN	3.25	J	1.08	MDL	10.8	PQL	mg/Kg	U	B
Zirconium	5.09	J	0.911	MDL	5.42	PQL	mg/Kg	J	Z

Sample ID: **SL-004-SA5DN-SB-3.5-4.5** ***Collected:*** **5/16/2011 12:39:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	441		0.0898	MDL	0.576	PQL	mg/Kg	J	E
POTASSIUM	4490		20.7	MDL	57.6	PQL	mg/Kg	J	E
TIN	3.18	J	1.15	MDL	11.5	PQL	mg/Kg	U	B

Sample ID: **SL-004-SA5DN-SB-9.0-10.0** ***Collected:*** **5/16/2011 12:47:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	174		0.0859	MDL	0.550	PQL	mg/Kg	J	E

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE151 **Laboratory: LL**

EDD Filename: DE151_v1. **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-004-SA5DN-SB-9.0-10.0 *Collected:* 5/16/2011 12:47:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	2640		19.8	MDL	55.0	PQL	mg/Kg	J	E
TIN	2.81	J	1.10	MDL	11.0	PQL	mg/Kg	U	B
Zirconium	5.21	J	0.925	MDL	5.50	PQL	mg/Kg	J	Z

Sample ID: SL-042-SA5A-SB-3.5-4.5 *Collected:* 5/16/2011 11:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	8.21		0.975	MDL	5.48	PQL	mg/Kg	U	F
MANGANESE	252		0.0854	MDL	0.548	PQL	mg/Kg	J	E
POTASSIUM	1810		19.7	MDL	54.8	PQL	mg/Kg	J	E
TIN	3.40	J	1.10	MDL	11.0	PQL	mg/Kg	U	B
Zirconium	5.24	J	0.920	MDL	5.48	PQL	mg/Kg	J	Z

Sample ID: SL-167-SA5A-SB-1.0-2.0 *Collected:* 5/16/2011 4:17:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	7.69		0.926	MDL	5.20	PQL	mg/Kg	U	F
MANGANESE	269		0.0812	MDL	0.520	PQL	mg/Kg	J	E
POTASSIUM	2160		18.7	MDL	52.0	PQL	mg/Kg	J	E
SODIUM	88.9	J	38.8	MDL	104	PQL	mg/Kg	J	Z
TIN	2.92	J	1.04	MDL	10.4	PQL	mg/Kg	U	B
Zirconium	2.97	J	0.874	MDL	5.20	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: DUP-17-SA5A-QC-051611 *Collected:* 5/16/2011 11:37:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.207	J	0.0441	MDL	0.441	PQL	mg/Kg	J	Z

Sample ID: DUP-17-SA5A-QC-051611 *Collected:* 5/16/2011 11:37:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.918		0.0551	MDL	0.110	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE151 **Laboratory: LL**

EDD Filename: DE151_v1. **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6020** ***Matrix:*** **SO**

Sample ID: DUP-17-SA5A-QC-051611 ***Collected:*** 5/16/2011 11:37:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	114		0.119	MDL	0.441	PQL	mg/Kg	J	E

Sample ID: DUP-17-SA5A-QC-051611 ***Collected:*** 5/16/2011 11:37:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.250		0.0661	MDL	0.220	PQL	mg/Kg	J	Q
ARSENIC	6.91		0.0882	MDL	0.441	PQL	mg/Kg	J	A
BERYLLIUM	0.849		0.0176	MDL	0.110	PQL	mg/Kg	J	Q
CADMIUM	0.0742	J	0.0441	MDL	0.110	PQL	mg/Kg	J	Z
CHROMIUM	20.9		0.132	MDL	0.441	PQL	mg/Kg	J	Q
COBALT	8.87		0.0220	MDL	0.110	PQL	mg/Kg	J	Q, E
COPPER	8.59		0.0727	MDL	0.441	PQL	mg/Kg	J	E
LEAD	6.44		0.0115	MDL	0.220	PQL	mg/Kg	J	Q
NICKEL	15.2		0.110	MDL	0.441	PQL	mg/Kg	J	Q
SILVER	0.391		0.0132	MDL	0.110	PQL	mg/Kg	J	E, FD

Sample ID: SL-002-SA5DN-SB-4.0-5.0 ***Collected:*** 5/16/2011 3:48:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0763	J	0.0442	MDL	0.442	PQL	mg/Kg	J	Z

Sample ID: SL-002-SA5DN-SB-4.0-5.0 ***Collected:*** 5/16/2011 3:48:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.423		0.0552	MDL	0.110	PQL	mg/Kg	J	Q

Sample ID: SL-002-SA5DN-SB-4.0-5.0 ***Collected:*** 5/16/2011 3:48:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	196		0.119	MDL	0.442	PQL	mg/Kg	J	E

Sample ID: SL-002-SA5DN-SB-4.0-5.0 ***Collected:*** 5/16/2011 3:48:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.446		0.0662	MDL	0.221	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE151 **Laboratory: LL**

EDD Filename: DE151_v1. **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 ***Matrix:*** SO

Sample ID: SL-002-SA5DN-SB-4.0-5.0 ***Collected:*** 5/16/2011 3:48:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	8.95		0.0883	MDL	0.442	PQL	mg/Kg	J	A
BERYLLIUM	1.19		0.0177	MDL	0.110	PQL	mg/Kg	J	Q
CHROMIUM	39.9		0.132	MDL	0.442	PQL	mg/Kg	J	Q
COBALT	14.9		0.0221	MDL	0.110	PQL	mg/Kg	J	Q, E
COPPER	18.6		0.0729	MDL	0.442	PQL	mg/Kg	J	E
LEAD	13.0		0.0115	MDL	0.221	PQL	mg/Kg	J	Q
NICKEL	32.7		0.110	MDL	0.442	PQL	mg/Kg	J	Q
SILVER	0.0765	J	0.0132	MDL	0.110	PQL	mg/Kg	J	Z, E

Sample ID: SL-002-SA5DN-SB-9.0-10.0 ***Collected:*** 5/16/2011 3:52:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0860	J	0.0441	MDL	0.441	PQL	mg/Kg	J	Z

Sample ID: SL-002-SA5DN-SB-9.0-10.0 ***Collected:*** 5/16/2011 3:52:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.651		0.0551	MDL	0.110	PQL	mg/Kg	J	Q

Sample ID: SL-002-SA5DN-SB-9.0-10.0 ***Collected:*** 5/16/2011 3:52:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	165		0.119	MDL	0.441	PQL	mg/Kg	J	E

Sample ID: SL-002-SA5DN-SB-9.0-10.0 ***Collected:*** 5/16/2011 3:52:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.425		0.0662	MDL	0.221	PQL	mg/Kg	J	Q
ARSENIC	10.4		0.0882	MDL	0.441	PQL	mg/Kg	J	A
BERYLLIUM	1.10		0.0176	MDL	0.110	PQL	mg/Kg	J	Q
CHROMIUM	35.2		0.132	MDL	0.441	PQL	mg/Kg	J	Q
COBALT	10.5		0.0221	MDL	0.110	PQL	mg/Kg	J	Q, E
COPPER	19.8		0.0728	MDL	0.441	PQL	mg/Kg	J	E
LEAD	10.5		0.0115	MDL	0.221	PQL	mg/Kg	J	Q
NICKEL	25.6		0.110	MDL	0.441	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE151 **Laboratory: LL**

EDD Filename: DE151_v1. **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6020** ***Matrix:*** **SO**

Sample ID: **SL-002-SA5DN-SB-9.0-10.0** ***Collected:*** **5/16/2011 3:52:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0385	J	0.0132	MDL	0.110	PQL	mg/Kg	J	Z, E

Sample ID: **SL-003-SA5DN-SB-0.5-1.5** ***Collected:*** **5/16/2011 10:43:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.216	J	0.0471	MDL	0.471	PQL	mg/Kg	J	Z

Sample ID: **SL-003-SA5DN-SB-0.5-1.5** ***Collected:*** **5/16/2011 10:43:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.723		0.0588	MDL	0.118	PQL	mg/Kg	J	Q

Sample ID: **SL-003-SA5DN-SB-0.5-1.5** ***Collected:*** **5/16/2011 10:43:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	193		0.127	MDL	0.471	PQL	mg/Kg	J	E

Sample ID: **SL-003-SA5DN-SB-0.5-1.5** ***Collected:*** **5/16/2011 10:43:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.410		0.0706	MDL	0.235	PQL	mg/Kg	J	Q
ARSENIC	9.73		0.0942	MDL	0.471	PQL	mg/Kg	J	A
BERYLLIUM	1.21		0.0188	MDL	0.118	PQL	mg/Kg	J	Q
CHROMIUM	43.3		0.141	MDL	0.471	PQL	mg/Kg	J	Q
COBALT	14.9		0.0235	MDL	0.118	PQL	mg/Kg	J	Q, E
COPPER	23.1		0.0777	MDL	0.471	PQL	mg/Kg	J	E
LEAD	14.0		0.0122	MDL	0.235	PQL	mg/Kg	J	Q
NICKEL	30.3		0.118	MDL	0.471	PQL	mg/Kg	J	Q
SILVER	0.0639	J	0.0141	MDL	0.118	PQL	mg/Kg	J	Z, E

Sample ID: **SL-003-SA5DN-SB-8.0-9.0** ***Collected:*** **5/16/2011 10:50:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0623	J	0.0438	MDL	0.438	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE151 **Laboratory: LL**

EDD Filename: DE151_v1. **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 ***Matrix:*** SO

Sample ID: SL-003-SA5DN-SB-8.0-9.0 ***Collected:*** 5/16/2011 10:50:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.415		0.0548	MDL	0.110	PQL	mg/Kg	J	Q

Sample ID: SL-003-SA5DN-SB-8.0-9.0 ***Collected:*** 5/16/2011 10:50:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	149		0.118	MDL	0.438	PQL	mg/Kg	J	E

Sample ID: SL-003-SA5DN-SB-8.0-9.0 ***Collected:*** 5/16/2011 10:50:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.246		0.0657	MDL	0.219	PQL	mg/Kg	J	Q
ARSENIC	11.2		0.0876	MDL	0.438	PQL	mg/Kg	J	A
BERYLLIUM	1.04		0.0175	MDL	0.110	PQL	mg/Kg	J	Q
CHROMIUM	36.3		0.131	MDL	0.438	PQL	mg/Kg	J	Q
COBALT	8.24		0.0219	MDL	0.110	PQL	mg/Kg	J	Q, E
COPPER	21.1		0.0723	MDL	0.438	PQL	mg/Kg	J	E
LEAD	10.4		0.0114	MDL	0.219	PQL	mg/Kg	J	Q
NICKEL	23.2		0.110	MDL	0.438	PQL	mg/Kg	J	Q
SILVER	0.0713	J	0.0131	MDL	0.110	PQL	mg/Kg	J	Z, E

Sample ID: SL-004-SA5DN-SB-3.5-4.5 ***Collected:*** 5/16/2011 12:39:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.288	J	0.0465	MDL	0.465	PQL	mg/Kg	J	Z

Sample ID: SL-004-SA5DN-SB-3.5-4.5 ***Collected:*** 5/16/2011 12:39:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.609		0.0581	MDL	0.116	PQL	mg/Kg	J	Q

Sample ID: SL-004-SA5DN-SB-3.5-4.5 ***Collected:*** 5/16/2011 12:39:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	174		0.126	MDL	0.465	PQL	mg/Kg	J	E

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE151 | Laboratory: LL

EDD Filename: DE151_v1. | eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-004-SA5DN-SB-3.5-4.5 *Collected:* 5/16/2011 12:39:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.392		0.0698	MDL	0.233	PQL	mg/Kg	J	Q
ARSENIC	6.72		0.0930	MDL	0.465	PQL	mg/Kg	J	A
BERYLLIUM	1.10		0.0186	MDL	0.116	PQL	mg/Kg	J	Q
CHROMIUM	40.0		0.140	MDL	0.465	PQL	mg/Kg	J	Q
COBALT	11.7		0.0233	MDL	0.116	PQL	mg/Kg	J	Q, E
COPPER	21.8		0.0767	MDL	0.465	PQL	mg/Kg	J	E
LEAD	13.2		0.0121	MDL	0.233	PQL	mg/Kg	J	Q
NICKEL	25.6		0.116	MDL	0.465	PQL	mg/Kg	J	Q
SILVER	0.0679	J	0.0140	MDL	0.116	PQL	mg/Kg	J	Z, E

Sample ID: SL-004-SA5DN-SB-9.0-10.0 *Collected:* 5/16/2011 12:47:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0513	J	0.0445	MDL	0.445	PQL	mg/Kg	J	Z

Sample ID: SL-004-SA5DN-SB-9.0-10.0 *Collected:* 5/16/2011 12:47:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.426		0.0556	MDL	0.111	PQL	mg/Kg	J	Q

Sample ID: SL-004-SA5DN-SB-9.0-10.0 *Collected:* 5/16/2011 12:47:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	121		0.120	MDL	0.445	PQL	mg/Kg	J	E

Sample ID: SL-004-SA5DN-SB-9.0-10.0 *Collected:* 5/16/2011 12:47:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.270		0.0667	MDL	0.222	PQL	mg/Kg	J	Q
ARSENIC	5.52		0.0889	MDL	0.445	PQL	mg/Kg	J	A
BERYLLIUM	0.735		0.0178	MDL	0.111	PQL	mg/Kg	J	Q
CHROMIUM	24.6		0.133	MDL	0.445	PQL	mg/Kg	J	Q
COBALT	6.83		0.0222	MDL	0.111	PQL	mg/Kg	J	Q, E
COPPER	12.9		0.0734	MDL	0.445	PQL	mg/Kg	J	E
LEAD	6.59		0.0116	MDL	0.222	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE151 **Laboratory: LL**

EDD Filename: DE151_v1. **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6020** ***Matrix:*** **SO**

Sample ID: SL-004-SA5DN-SB-9.0-10.0 ***Collected:*** 5/16/2011 12:47:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NICKEL	16.3		0.111	MDL	0.445	PQL	mg/Kg	J	Q
SILVER	0.0345	J	0.0133	MDL	0.111	PQL	mg/Kg	J	Z, E

Sample ID: SL-042-SA5A-SB-3.5-4.5 ***Collected:*** 5/16/2011 11:30:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.248	J	0.0451	MDL	0.451	PQL	mg/Kg	J	Z

Sample ID: SL-042-SA5A-SB-3.5-4.5 ***Collected:*** 5/16/2011 11:30:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.50		0.0564	MDL	0.113	PQL	mg/Kg	J	Q

Sample ID: SL-042-SA5A-SB-3.5-4.5 ***Collected:*** 5/16/2011 11:30:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	120		0.122	MDL	0.451	PQL	mg/Kg	J	E

Sample ID: SL-042-SA5A-SB-3.5-4.5 ***Collected:*** 5/16/2011 11:30:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.312		0.0677	MDL	0.226	PQL	mg/Kg	J	Q
ARSENIC	9.05		0.0902	MDL	0.451	PQL	mg/Kg	J	A
BERYLLIUM	1.11		0.0180	MDL	0.113	PQL	mg/Kg	J	Q
CADMIUM	0.0923	J	0.0451	MDL	0.113	PQL	mg/Kg	J	Z
CHROMIUM	28.3		0.135	MDL	0.451	PQL	mg/Kg	J	Q
COBALT	9.21		0.0226	MDL	0.113	PQL	mg/Kg	J	Q, E
COPPER	11.1		0.0744	MDL	0.451	PQL	mg/Kg	J	E
LEAD	8.57		0.0117	MDL	0.226	PQL	mg/Kg	J	Q
NICKEL	18.9		0.113	MDL	0.451	PQL	mg/Kg	J	Q
SILVER	0.833		0.0135	MDL	0.113	PQL	mg/Kg	J	E, FD

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE151 **Laboratory: LL**

EDD Filename: DE151_v1. **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 ***Matrix:*** SO

Sample ID: SL-167-SA5A-SB-1.0-2.0 ***Collected:*** 5/16/2011 4:17:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.154	J	0.0420	MDL	0.420	PQL	mg/Kg	J	Z

Sample ID: SL-167-SA5A-SB-1.0-2.0 ***Collected:*** 5/16/2011 4:17:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.573		0.0525	MDL	0.105	PQL	mg/Kg	J	Q

Sample ID: SL-167-SA5A-SB-1.0-2.0 ***Collected:*** 5/16/2011 4:17:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	90.4		0.113	MDL	0.420	PQL	mg/Kg	J	E

Sample ID: SL-167-SA5A-SB-1.0-2.0 ***Collected:*** 5/16/2011 4:17:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.269		0.0630	MDL	0.210	PQL	mg/Kg	J	Q
ARSENIC	7.02		0.0841	MDL	0.420	PQL	mg/Kg	J	A
BERYLLIUM	0.749		0.0168	MDL	0.105	PQL	mg/Kg	J	Q
CHROMIUM	20.7		0.126	MDL	0.420	PQL	mg/Kg	J	Q
COBALT	7.70		0.0210	MDL	0.105	PQL	mg/Kg	J	Q, E
COPPER	27.4		0.0693	MDL	0.420	PQL	mg/Kg	J	E
LEAD	10.3		0.0109	MDL	0.210	PQL	mg/Kg	J	Q
NICKEL	14.3		0.105	MDL	0.420	PQL	mg/Kg	J	Q
SILVER	1.47		0.0126	MDL	0.105	PQL	mg/Kg	J	E

Method Category: METALS

Method: 7199 ***Matrix:*** SO

Sample ID: DUP-17-SA5A-QC-051611 ***Collected:*** 5/16/2011 11:37:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.40	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE151 | Laboratory: LL

EDD Filename: DE151_v1. | eQAPP Name: CDM_SSFL_110509

Method Category: METALS
Method: 7199 **Matrix:** SO

Sample ID: SL-003-SA5DN-SB-0.5-1.5 *Collected:* 5/16/2011 10:43:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.61	J	0.24	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-042-SA5A-SB-3.5-4.5 *Collected:* 5/16/2011 11:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.58	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-167-SA5A-SB-1.0-2.0 *Collected:* 5/16/2011 4:17:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.39	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Method Category: METALS
Method: 7471A **Matrix:** SO

Sample ID: SL-003-SA5DN-SB-8.0-9.0 *Collected:* 5/16/2011 10:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0306	J	0.0030	MDL	0.104	PQL	mg/Kg	J	Z

Method Category: SVOA
Method: 1625C **Matrix:** SO

Sample ID: SL-004-SA5DN-SB-3.5-4.5 *Collected:* 5/16/2011 12:39:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	287	J	200	MDL	399	PQL	ng/Kg	J	Z

Method Category: SVOA
Method: 8015M **Matrix:** SO

Sample ID: SL-003-SA5DN-SB-0.5-1.5 *Collected:* 5/16/2011 10:43:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	1.8	J	0.96	MDL	2.9	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE151 **Laboratory: LL**

EDD Filename: DE151_v1. **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8015M **Matrix: SO**

Sample ID: SL-003-SA5DN-SB-8.0-9.0 *Collected:* 5/16/2011 10:50:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	1.0	J	0.89	MDL	2.7	PQL	mg/Kg	J	Z

Sample ID: SL-004-SA5DN-SB-3.5-4.5 *Collected:* 5/16/2011 12:39:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	0.93	J	0.48	MDL	1.4	PQL	mg/Kg	J	Z

Sample ID: SL-167-SA5A-SB-1.0-2.0 *Collected:* 5/16/2011 4:17:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DIETHYLENE GLYCOL	5.4	U	5.4	MDL	11	PQL	mg/Kg	UJ	Q

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: DUP-17-SA5A-QC-051611 *Collected:* 5/16/2011 11:37:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	1.7	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z, S, FD
AROCLOR 1260	1.9		0.44	MDL	1.9	PQL	ug/Kg	J	S, FD
Aroclor 5460	1.3	J	1.1	MDL	3.7	PQL	ug/Kg	J	Z, S, L

Sample ID: SL-003-SA5DN-SB-8.0-9.0 *Collected:* 5/16/2011 10:50:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1242	0.86	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-042-SA5A-SB-3.5-4.5 *Collected:* 5/16/2011 11:30:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	3.2		0.37	MDL	1.9	PQL	ug/Kg	J	FD
AROCLOR 1260	0.44	U	0.44	MDL	1.9	PQL	ug/Kg	UJ	FD
Aroclor 5460	1.5	J	1.1	MDL	3.7	PQL	ug/Kg	J	Z, L

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE151 | Laboratory: LL

EDD Filename: DE151_v1. | eQAPP Name: CDM_SSFL_110509

Method Category: SVOA
Method: 8270C **Matrix:** AQ

Sample ID: EB15-SA5A-SB-051611 *Collected:* 5/16/2011 2:30:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4-METHYLPHENOL	2	U	2	MDL	6	PQL	ug/L	UJ	L
BENZOIC ACID	7	U	7	MDL	17	PQL	ug/L	UJ	E

Method Category: SVOA
Method: 8270C **Matrix:** SO

Sample ID: DUP-17-SA5A-QC-051611 *Collected:* 5/16/2011 11:37:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	370	U	370	MDL	1100	PQL	ug/Kg	UJ	L
4,6-DINITRO-2-METHYLPHENOL	190	U	190	MDL	560	PQL	ug/Kg	UJ	L

Sample ID: SL-002-SA5DN-SB-4.0-5.0 *Collected:* 5/16/2011 3:48:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	380	U	380	MDL	1100	PQL	ug/Kg	UJ	L
4,6-DINITRO-2-METHYLPHENOL	190	U	190	MDL	570	PQL	ug/Kg	UJ	L

Sample ID: SL-002-SA5DN-SB-9.0-10.0 *Collected:* 5/16/2011 3:52:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	380	U	380	MDL	1100	PQL	ug/Kg	UJ	L
4,6-DINITRO-2-METHYLPHENOL	190	U	190	MDL	570	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	35	J	19	MDL	380	PQL	ug/Kg	J	Z

Sample ID: SL-003-SA5DN-SB-0.5-1.5 *Collected:* 5/16/2011 10:43:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	390	U	390	MDL	1200	PQL	ug/Kg	UJ	L
4,6-DINITRO-2-METHYLPHENOL	200	U	200	MDL	590	PQL	ug/Kg	UJ	L

Sample ID: SL-003-SA5DN-SB-8.0-9.0 *Collected:* 5/16/2011 10:50:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	370	U	370	MDL	1100	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE151 | Laboratory: LL

EDD Filename: DE151_v1. | eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SL-003-SA5DN-SB-8.0-9.0 *Collected:* 5/16/2011 10:50:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,6-DINITRO-2-METHYLPHENOL	180	U	180	MDL	550	PQL	ug/Kg	UJ	L

Sample ID: SL-004-SA5DN-SB-3.5-4.5 *Collected:* 5/16/2011 12:39:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	400	U	400	MDL	1200	PQL	ug/Kg	UJ	L
4,6-DINITRO-2-METHYLPHENOL	200	U	200	MDL	600	PQL	ug/Kg	UJ	L

Sample ID: SL-004-SA5DN-SB-9.0-10.0 *Collected:* 5/16/2011 12:47:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	370	U	370	MDL	1100	PQL	ug/Kg	UJ	L
4,6-DINITRO-2-METHYLPHENOL	190	U	190	MDL	560	PQL	ug/Kg	UJ	L

Sample ID: SL-042-SA5A-SB-3.5-4.5 *Collected:* 5/16/2011 11:30:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	380	U	380	MDL	1100	PQL	ug/Kg	UJ	Q, L
4,6-DINITRO-2-METHYLPHENOL	190	U	190	MDL	560	PQL	ug/Kg	UJ	L
BENZIDINE	1300	U	1300	MDL	3800	PQL	ug/Kg	UJ	Q

Sample ID: SL-167-SA5A-SB-1.0-2.0 *Collected:* 5/16/2011 4:17:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	360	U	360	MDL	1100	PQL	ug/Kg	UJ	L
4,6-DINITRO-2-METHYLPHENOL	180	U	180	MDL	540	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	18	J	18	MDL	360	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8270C SIM **Matrix:** AQ

Sample ID: EB15-SA5A-SB-051611 *Collected:* 5/16/2011 2:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	0.031	J	0.011	MDL	0.054	PQL	ug/L	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE151 **Laboratory: LL**

EDD Filename: DE151_v1. **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA
Method: 8270C SIM **Matrix:** AQ

Sample ID: EB15-SA5A-SB-051611 *Collected:* 5/16/2011 2:30:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-METHYLNAPHTHALENE	0.033	J	0.011	MDL	0.054	PQL	ug/L	J	Z
N-NITROSODIMETHYLAMINE	0.030	J	0.011	MDL	0.054	PQL	ug/L	J	Z

Method Category: SVOA
Method: 8270C SIM **Matrix:** SO

Sample ID: SL-002-SA5DN-SB-4.0-5.0 *Collected:* 5/16/2011 3:48:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Di-n-octylphthalate	8.9	J	6.8	MDL	20	PQL	ug/Kg	J	Z

Sample ID: SL-004-SA5DN-SB-3.5-4.5 *Collected:* 5/16/2011 12:39:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORANTHENE	0.86	J	0.80	MDL	2.0	PQL	ug/Kg	J	Z
NAPHTHALENE	0.96	J	0.80	MDL	2.0	PQL	ug/Kg	U	F
PHENANTHRENE	1.0	J	0.80	MDL	2.0	PQL	ug/Kg	J	Z

Sample ID: SL-004-SA5DN-SB-9.0-10.0 *Collected:* 5/16/2011 12:47:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-METHYLNAPHTHALENE	0.81	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
CHRYSENE	0.61	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-167-SA5A-SB-1.0-2.0 *Collected:* 5/16/2011 4:17:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	0.66	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	1.0	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.4	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.2	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	0.98	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
CHRYSENE	1.2	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z
FLUORANTHENE	0.83	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	0.98	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE151 **Laboratory: LL**

EDD Filename: DE151_v1. **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA
Method: 8270C SIM **Matrix:** SO

Sample ID: SL-167-SA5A-SB-1.0-2.0 *Collected:* 5/16/2011 4:17:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PYRENE	0.76	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z

Method Category: SVOA
Method: 8315A **Matrix:** SO

Sample ID: SL-167-SA5A-SB-1.0-2.0 *Collected:* 5/16/2011 4:17:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FORMALDEHYDE	680	J	650	MDL	1600	PQL	ug/Kg	J	Z

Method Category: SVOA
Method: 8330A **Matrix:** SO

Sample ID: SL-003-SA5DN-SB-8.0-9.0 *Collected:* 5/16/2011 10:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DIAMINO-6-NITROTOLUENE	86	U	86	MDL	260	PQL	ug/Kg	R	L
2,6-Diamino-4-nitrotoluene	86	U	86	MDL	260	PQL	ug/Kg	R	L

Sample ID: SL-004-SA5DN-SB-3.5-4.5 *Collected:* 5/16/2011 12:39:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DIAMINO-6-NITROTOLUENE	92	U	92	MDL	280	PQL	ug/Kg	R	L
2,6-Diamino-4-nitrotoluene	92	U	92	MDL	280	PQL	ug/Kg	R	L

Sample ID: SL-004-SA5DN-SB-9.0-10.0 *Collected:* 5/16/2011 12:47:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DIAMINO-6-NITROTOLUENE	89	U	89	MDL	270	PQL	ug/Kg	R	L
2,6-Diamino-4-nitrotoluene	89	U	89	MDL	270	PQL	ug/Kg	R	L

Sample ID: SL-167-SA5A-SB-1.0-2.0 *Collected:* 5/16/2011 4:17:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DIAMINO-6-NITROTOLUENE	83	U	83	MDL	250	PQL	ug/Kg	R	L

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE151 | Laboratory: LL

EDD Filename: DE151_v1. | eQAPP Name: CDM_SSFL_110509

Method Category: SVOA
Method: 8330A **Matrix:** SO

Sample ID: SL-167-SA5A-SB-1.0-2.0 *Collected:* 5/16/2011 4:17:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,6-Diamino-4-nitrotoluene	83	U	83	MDL	250	PQL	ug/Kg	R	L

Method Category: VOA
Method: 8015B **Matrix:** SO

Sample ID: SL-003-SA5DN-SB-0.5-1.5 *Collected:* 5/16/2011 10:43:00 *Analysis Type:* REA4 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHANOL	230	J	120	MDL	600	PQL	ug/Kg	J	Z

Method Category: VOA
Method: 8260B **Matrix:** SO

Sample ID: DUP-17-SA5A-QC-051611 *Collected:* 5/16/2011 11:37:00 *Analysis Type:* RES *Dilution:* 0.97

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	7.4	U	7.4	MDL	8.8	PQL	ug/Kg	UJ	FD
METHYLENE CHLORIDE	4.1	J	0.26	MDL	4.4	PQL	ug/Kg	J	Z
TOLUENE	0.17	J	0.09	MDL	4.4	PQL	ug/Kg	J	Z

Sample ID: SL-002-SA5DN-SB-4.0-5.0 *Collected:* 5/16/2011 3:48:00 *Analysis Type:* RES *Dilution:* 0.87

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TOLUENE	0.08	J	0.08	MDL	4.0	PQL	ug/Kg	J	Z

Sample ID: SL-003-SA5DN-SB-0.5-1.5 *Collected:* 5/16/2011 10:43:00 *Analysis Type:* RES *Dilution:* 0.87

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-BUTANONE (MEK)	3.9	J	1.3	MDL	8.4	PQL	ug/Kg	J	Z
BENZENE	0.21	J	0.10	MDL	4.2	PQL	ug/Kg	J	Z
TOLUENE	0.13	J	0.08	MDL	4.2	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE151 **Laboratory: LL**

EDD Filename: DE151_v1. **eQAPP Name: CDM_SSFL_110509**

Method Category: **VOA**

Method: **8260B** ***Matrix:*** **SO**

Sample ID: **SL-003-SA5DN-SB-8.0-9.0** ***Collected:*** **5/16/2011 10:50:00** ***Analysis Type:*** **RES** ***Dilution:*** **1.03**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	1.1	J	0.28	MDL	4.6	PQL	ug/Kg	U	B
TOLUENE	0.12	J	0.09	MDL	4.6	PQL	ug/Kg	J	Z

Sample ID: **SL-004-SA5DN-SB-3.5-4.5** ***Collected:*** **5/16/2011 12:39:00** ***Analysis Type:*** **RES** ***Dilution:*** **0.84**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-BUTANONE (MEK)	3.2	J	1.2	MDL	8.0	PQL	ug/Kg	J	Z
BENZENE	0.17	J	0.10	MDL	4.0	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	0.88	J	0.24	MDL	4.0	PQL	ug/Kg	U	B
TOLUENE	0.15	J	0.08	MDL	4.0	PQL	ug/Kg	J	Z

Sample ID: **SL-004-SA5DN-SB-9.0-10.0** ***Collected:*** **5/16/2011 12:47:00** ***Analysis Type:*** **RES** ***Dilution:*** **0.87**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.81	J	0.24	MDL	3.9	PQL	ug/Kg	U	B

Sample ID: **SL-042-SA5A-SB-3.5-4.5** ***Collected:*** **5/16/2011 11:30:00** ***Analysis Type:*** **RES** ***Dilution:*** **0.94**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	7.4	J	7.1	MDL	8.5	PQL	ug/Kg	J	Z, FD
METHYLENE CHLORIDE	3.7	J	0.26	MDL	4.3	PQL	ug/Kg	J	Z
TOLUENE	0.12	J	0.09	MDL	4.3	PQL	ug/Kg	J	Z

Sample ID: **SL-167-SA5A-SB-1.0-2.0** ***Collected:*** **5/16/2011 4:17:00** ***Analysis Type:*** **RES** ***Dilution:*** **1.02**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ISOPROPYLBENZENE	0.66	J	0.07	MDL	4.4	PQL	ug/Kg	J	Z
TOLUENE	0.18	J	0.09	MDL	4.4	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE151 **Laboratory: LL**

EDD Filename: DE151_v1. **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
	Sampling to Leaching Estimation
	Sampling to Leaching Rejection
*#	Professional Judgment
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Continuing Calibration Verification Percent Recovery Lower Estimation
C	Continuing Calibration Verification Percent Recovery Lower Rejection
C	Continuing Calibration Verification Percent Recovery Upper Estimation
C	Continuing Calibration Verification Percent Recovery Upper Rejection
C	Continuing Calibration Verification Relative Response Factor
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Relative Response Factor
C	Initial Calibration Verification Correlation Coefficient

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE151 **Laboratory: LL**

EDD Filename: DE151_v1. **eQAPP Name: CDM_SSFL_110509**

C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Verification Percent Recovery Lower Estimation
C	Initial Calibration Verification Percent Recovery Lower Rejection
C	Initial Calibration Verification Percent Recovery Upper Estimation
C	Initial Calibration Verification Percent Recovery Upper Rejection
C	Initial Calibration Verification Relative Response Factor
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Laboratory Triplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination
F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE151 **Laboratory: LL**

EDD Filename: DE151_v1. **eQAPP Name: CDM_SSFL_110509**

L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Laboratory Triplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Q	Matrix Spike Upper Rejection
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

Level III ADR Outliers
(including Manual Review Outliers)

Quality Control Outlier Reports

DE151

Method Blank Outlier Report

Lab Reporting Batch ID: DE151 **Laboratory: LL**

EDD Filename: DE151_v1. **eQAPP Name: CDM_SSFL_110509**

Method: **6010B**
Matrix: **AQ**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P13848BB221840	5/19/2011 6:40:00 PM	BORON	0.0181 mg/L	EB15-SA5A-SB-051611

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
EB15-SA5A-SB-051611(REA2)	BORON	0.0195 mg/L	0.0195U mg/L

Method: **6010B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P13708BB220820	5/18/2011 6:20:00 AM	PHOSPHORUS TIN	1.24 mg/Kg 1.54 mg/Kg	DUP-17-SA5A-QC-051611 SL-002-SA5DN-SB-4.0-5.0 SL-002-SA5DN-SB-9.0-10.0 SL-003-SA5DN-SB-0.5-1.5 SL-003-SA5DN-SB-8.0-9.0 SL-004-SA5DN-SB-3.5-4.5 SL-004-SA5DN-SB-9.0-10.0 SL-042-SA5A-SB-3.5-4.5 SL-167-SA5A-SB-1.0-2.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
DUP-17-SA5A-QC-051611(RES)	TIN	3.31 mg/Kg	3.31U mg/Kg
SL-002-SA5DN-SB-4.0-5.0(RES)	TIN	3.05 mg/Kg	3.05U mg/Kg
SL-002-SA5DN-SB-9.0-10.0(RES)	TIN	3.20 mg/Kg	3.20U mg/Kg
SL-003-SA5DN-SB-0.5-1.5(RES)	TIN	3.10 mg/Kg	3.10U mg/Kg
SL-003-SA5DN-SB-8.0-9.0(RES)	TIN	3.25 mg/Kg	3.25U mg/Kg
SL-004-SA5DN-SB-3.5-4.5(RES)	TIN	3.18 mg/Kg	3.18U mg/Kg
SL-004-SA5DN-SB-9.0-10.0(RES)	TIN	2.81 mg/Kg	2.81U mg/Kg
SL-042-SA5A-SB-3.5-4.5(RES)	TIN	3.40 mg/Kg	3.40U mg/Kg
SL-167-SA5A-SB-1.0-2.0(RES)	TIN	2.92 mg/Kg	2.92U mg/Kg

Method: **6020**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P13726AB220859A	5/18/2011 8:59:00 AM	COPPER LEAD	0.0827 mg/Kg 0.0381 mg/Kg	DUP-17-SA5A-QC-051611 SL-002-SA5DN-SB-4.0-5.0 SL-002-SA5DN-SB-9.0-10.0 SL-003-SA5DN-SB-0.5-1.5 SL-003-SA5DN-SB-8.0-9.0 SL-004-SA5DN-SB-3.5-4.5 SL-004-SA5DN-SB-9.0-10.0 SL-042-SA5A-SB-3.5-4.5 SL-167-SA5A-SB-1.0-2.0

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Method Blank Outlier Report

Lab Reporting Batch ID: DE151 | Laboratory: LL

EDD Filename: DE151_v1. | eQAPP Name: CDM_SSFL_110509

Method: 6020
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

Method: 8260B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB60B211434A	5/20/2011 2:34:00 PM	METHYLENE CHLORIDE	0.39 ug/Kg	DUP-17-SA5A-QC-051611 SL-002-SA5DN-SB-4.0-5.0 SL-003-SA5DN-SB-0.5-1.5 SL-003-SA5DN-SB-8.0-9.0 SL-004-SA5DN-SB-3.5-4.5 SL-004-SA5DN-SB-9.0-10.0 SL-042-SA5A-SB-3.5-4.5 SL-167-SA5A-SB-1.0-2.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-003-SA5DN-SB-8.0-9.0(RES)	METHYLENE CHLORIDE	1.1 ug/Kg	4.6U ug/Kg
SL-004-SA5DN-SB-3.5-4.5(RES)	METHYLENE CHLORIDE	0.88 ug/Kg	4.0U ug/Kg
SL-004-SA5DN-SB-9.0-10.0(RES)	METHYLENE CHLORIDE	0.81 ug/Kg	3.9U ug/Kg

Method: 8270C SIM
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKLG13B261713	5/20/2011 5:13:00 PM	NAPHTHALENE	1.1 ug/Kg	DUP-17-SA5A-QC-051611 SL-002-SA5DN-SB-4.0-5.0 SL-002-SA5DN-SB-9.0-10.0 SL-003-SA5DN-SB-0.5-1.5 SL-003-SA5DN-SB-8.0-9.0 SL-004-SA5DN-SB-9.0-10.0 SL-042-SA5A-SB-3.5-4.5 SL-167-SA5A-SB-1.0-2.0

Equipment Rinsate Blank Outlier Report

Lab Reporting Batch ID: DE151 **Laboratory: LL**

EDD Filename: DE151_v1. **eQAPP Name: CDM_SSFL_110509**

Method: **8270C SIM**
Matrix: **SO**

Equipment Blank Sample ID	Collected Date	Analyte	Result	Associated Samples
EB15-SA5A-SB-051611 (RES)	5/16/2011 2:30:00 PM	1-METHYLNAPHTHALENE 2-METHYLNAPHTHALENE NAPHTHALENE N-NITROSODIMETHYLAMINE	0.031 ug/L 0.033 ug/L 0.22 ug/L 0.03 ug/L	DUP-17-SA5A-QC-051611 SL-002-SA5DN-SB-4.0-5.0 SL-002-SA5DN-SB-9.0-10.0 SL-003-SA5DN-SB-0.5-1.5 SL-003-SA5DN-SB-8.0-9.0 SL-004-SA5DN-SB-3.5-4.5 SL-004-SA5DN-SB-9.0-10.0 SL-042-SA5A-SB-3.5-4.5 SL-167-SA5A-SB-1.0-2.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-004-SA5DN-SB-3.5-4.5(RES)	NAPHTHALENE	0.96 ug/Kg	2.0U ug/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE151 | Laboratory: LL

EDD Filename: DE151_v1. | eQAPP Name: CDM_SSFL_110509

Method: 8015M
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-167-SA5A-SB-1.0-2.0MS SL-167-SA5A-SB-1.0-2.0MSD (SL-167-SA5A-SB-1.0-2.0)	DIETHYLENE GLYCOL	40	44	59.00-109.00	-	DIETHYLENE GLYCOL	J (all detects) UJ (all non-detects)

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-042-SA5A-SB-3.5-4.5MS SL-042-SA5A-SB-3.5-4.5MSD (DUP-17-SA5A-QC-051611 SL -002-SA5DN-SB-4.0-5.0 SL -002-SA5DN-SB-9.0-10.0 SL -003-SA5DN-SB-0.5-1.5 SL -003-SA5DN-SB-8.0-9.0 SL -004-SA5DN-SB-3.5-4.5 SL -004-SA5DN-SB-9.0-10.0 SL -042-SA5A-SB-3.5-4.5 SL -167-SA5A-SB-1.0-2.0)	ARSENIC BERYLLIUM CHROMIUM COBALT LEAD NICKEL VANADIUM	208 129 170 127 171 148 220	216 141 145 - 174 142 210	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	- - - - - - -	ARSENIC BERYLLIUM CHROMIUM COBALT LEAD NICKEL VANADIUM	J(all detects) As, V No Qual, >4x
SL-042-SA5A-SB-3.5-4.5MS SL-042-SA5A-SB-3.5-4.5MSD (DUP-17-SA5A-QC-051611 SL -002-SA5DN-SB-4.0-5.0 SL -002-SA5DN-SB-9.0-10.0 SL -003-SA5DN-SB-0.5-1.5 SL -003-SA5DN-SB-8.0-9.0 SL -004-SA5DN-SB-3.5-4.5 SL -004-SA5DN-SB-9.0-10.0 SL -042-SA5A-SB-3.5-4.5 SL -167-SA5A-SB-1.0-2.0)	ANTIMONY ZINC	64 42	68 34	75.00-125.00 75.00-125.00	- -	ANTIMONY ZINC	J(all detects) UJ(all non-detects) Zn No Qual, >4x
SL-042-SA5A-SB-3.5-4.5MS SL-042-SA5A-SB-3.5-4.5MSD (DUP-17-SA5A-QC-051611 SL -002-SA5DN-SB-4.0-5.0 SL -002-SA5DN-SB-9.0-10.0 SL -003-SA5DN-SB-0.5-1.5 SL -003-SA5DN-SB-8.0-9.0 SL -004-SA5DN-SB-3.5-4.5 SL -004-SA5DN-SB-9.0-10.0 SL -042-SA5A-SB-3.5-4.5 SL -167-SA5A-SB-1.0-2.0)	MOLYBDENUM	137	130	75.00-125.00	-	MOLYBDENUM	J(all detects)
SL-042-SA5A-SB-3.5-4.5MS SL-042-SA5A-SB-3.5-4.5MSD (DUP-17-SA5A-QC-051611 SL -002-SA5DN-SB-4.0-5.0 SL -002-SA5DN-SB-9.0-10.0 SL -003-SA5DN-SB-0.5-1.5 SL -003-SA5DN-SB-8.0-9.0 SL -004-SA5DN-SB-3.5-4.5 SL -004-SA5DN-SB-9.0-10.0 SL -042-SA5A-SB-3.5-4.5 SL -167-SA5A-SB-1.0-2.0)	BARIUM	248	282	75.00-125.00	-	BARIUM	No Qual, >4x

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE151 **Laboratory: LL**

EDD Filename: DE151_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-042-SA5A-SB-3.5-4.5MS SL-042-SA5A-SB-3.5-4.5MSD (DUP-17-SA5A-QC-051611 SL -002-SA5DN-SB-4.0-5.0 SL -002-SA5DN-SB-9.0-10.0 SL -003-SA5DN-SB-0.5-1.5 SL -003-SA5DN-SB-8.0-9.0 SL -004-SA5DN-SB-3.5-4.5 SL -004-SA5DN-SB-9.0-10.0 SL -042-SA5A-SB-3.5-4.5 SL -167-SA5A-SB-1.0-2.0)	ALUMINUM IRON MAGNESIUM MANGANESE TITANIUM	3976 2168 243 147 249	3125 1389 209 144 243	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	- - - - -	ALUMINUM IRON MAGNESIUM MANGANESE TITANIUM	No Qual, >4x

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-042-SA5A-SB-3.5-4.5MSD (SL-042-SA5A-SB-3.5-4.5)	4,6-DINITRO-2-METHYLPHENOL	-	-	24.00-116.00	35 (30.00)	4,6-DINITRO-2-METHYLPHEN	J(all detects)
SL-042-SA5A-SB-3.5-4.5MS SL-042-SA5A-SB-3.5-4.5MSD (SL-042-SA5A-SB-3.5-4.5)	2,4-DINITROPHENOL BENZIDINE	- 32	18 22	20.00-143.00 35.00-141.00	48 (30.00) 36 (30.00)	2,4-DINITROPHENOL BENZIDINE	J(all detects) UJ(all non-detects)

Method: 300.0
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-042-SA5A-SB-3.5-4.5MS (DUP-17-SA5A-QC-051611 SL -002-SA5DN-SB-4.0-5.0 SL -002-SA5DN-SB-9.0-10.0 SL -003-SA5DN-SB-0.5-1.5 SL -003-SA5DN-SB-8.0-9.0 SL -004-SA5DN-SB-3.5-4.5 SL -004-SA5DN-SB-9.0-10.0 SL -042-SA5A-SB-3.5-4.5 SL -167-SA5A-SB-1.0-2.0)	FLUORIDE	34	-	80.00-120.00	-	FLUORIDE	J(all detects) UJ(all non-detects)

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE151 **Laboratory: LL**

EDD Filename: DE151_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 6010B
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-042-SA5A-SB-3.5-4.5DUP	MANGANESE	25	20.00	
(DUP-17-SA5A-QC-051611	POTASSIUM	24	20.00	
SL -002-SA5DN-SB-4.0-5.0				
SL -002-SA5DN-SB-9.0-10.0				
SL -003-SA5DN-SB-0.5-1.5				J (all detects)
SL -003-SA5DN-SB-8.0-9.0				UJ (all non-detects)
SL -004-SA5DN-SB-3.5-4.5				
SL -004-SA5DN-SB-9.0-10.0				
SL -042-SA5A-SB-3.5-4.5				
SL -167-SA5A-SB-1.0-2.0)				

Method: 6020
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-042-SA5A-SB-3.5-4.5DUP	ANTIMONY	27	20.00	
(DUP-17-SA5A-QC-051611	BARIUM	21	20.00	
SL -002-SA5DN-SB-4.0-5.0	CADMIUM	200	20.00	
SL -002-SA5DN-SB-9.0-10.0	COBALT	37	20.00	
SL -003-SA5DN-SB-0.5-1.5	COPPER	35	20.00	J(all detects)
SL -003-SA5DN-SB-8.0-9.0	SILVER	0.6469	0.22 mg/Kg	UJ(all non-detects)
SL -004-SA5DN-SB-3.5-4.5	THALLIUM	22	20.00	
SL -004-SA5DN-SB-9.0-10.0				Sb, Cd, Tl No Qual,
SL -042-SA5A-SB-3.5-4.5				OK by difference
SL -167-SA5A-SB-1.0-2.0)				

Method: 7471A
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-042-SA5A-SB-3.5-4.5DUP	MERCURY	200	20.00	
(DUP-17-SA5A-QC-051611				
SL -002-SA5DN-SB-4.0-5.0				
SL -002-SA5DN-SB-9.0-10.0				
SL -003-SA5DN-SB-0.5-1.5				No Qual
SL -003-SA5DN-SB-8.0-9.0				OK by difference
SL -004-SA5DN-SB-3.5-4.5				
SL -004-SA5DN-SB-9.0-10.0				
SL -042-SA5A-SB-3.5-4.5				
SL -167-SA5A-SB-1.0-2.0)				

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE151 **Laboratory: LL**

EDD Filename: DE151_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 8082
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11386AQ242123A P11386AY242105A (EB15-SA5A-SB-051611)	Aroclor 5442	88	94	35.00-84.00	-	Aroclor 5432 Aroclor 5442 Aroclor 5460	J (all detects)

Method: 8270C
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P8WDLCSQ260631 P8WDLCSY260657 (EB15-SA5A-SB-051611)	4-METHYLPHENOL BENZOIC ACID	60 -	- -	61.00-103.00 10.00-69.00	- 31 (30.00)	4-METHYLPHENOL BENZOIC ACID	J(all detects) UJ(all non-detects)

Method: 8270C SIM
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P8WGLCSY262105 (EB15-SA5A-SB-051611)	BENZO(B)FLUORANTHENE	-	124	69.00-123.00	-	BENZO(B)FLUORANTHENE	J(all detects)

Method: 8330A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11436AQ242127A (SL-003-SA5DN-SB-0.5-1.5)	2,4,6-TRINITROTOLUENE 2-AMINO-4,6-DINITROTOLUENE NITROBENZENE PETN	121 126 145 132	- - - -	80.00-120.00 80.00-120.00 80.00-120.00 80.00-120.00	- - - -	2,4,6-TRINITROTOLUENE 2-AMINO-4,6-DINITROTOLUEN NITROBENZENE PETN	J(all detects)
P11454AQ242357A (SL-003-SA5DN-SB-8.0-9.0 SL -004-SA5DN-SB-3.5-4.5 SL -004-SA5DN-SB-9.0-10.0 SL -167-SA5A-SB-1.0-2.0)	NITROBENZENE PETN	132 123	- -	80.00-120.00 80.00-120.00	- -	NITROBENZENE PETN	J(all detects)
P11454AY240039A (SL-003-SA5DN-SB-8.0-9.0 SL -004-SA5DN-SB-3.5-4.5 SL -004-SA5DN-SB-9.0-10.0 SL -167-SA5A-SB-1.0-2.0)	2,4-DIAMINO-6-NITROTOLUENE 2,6-Diamino-4-nitrotoluene	- -	0 0	54.00-134.00 54.00-134.00	200 (30.00) 200 (30.00)	2,4-DIAMINO-6-NITROTOLUEN 2,6-Diamino-4-nitrotoluene	J(all detects) R(all non-detects)

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE151 **Laboratory: LL**

EDD Filename: DE151_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P13726AQ220902A (DUP-17-SA5A-QC-051611 SL -002-SA5DN -SB-4.0-5.0 SL -002-SA5DN -SB-9.0-10.0 SL -003-SA5DN -SB-0.5-1.5 SL -003-SA5DN -SB-8.0-9.0 SL -004-SA5DN -SB-3.5-4.5 SL -004-SA5DN -SB-9.0-10.0 SL -042-SA5A -SB-3.5-4.5 SL -167-SA5A -SB-1.0-2.0)	ANTIMONY	149	-	80.00-120.00	-	ANTIMONY	No Qual, SRM within QC limits

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P9LHLCSQ260452 (DUP-17-SA5A-QC-051611 SL -002-SA5DN -SB-4.0-5.0 SL -002-SA5DN -SB-9.0-10.0 SL -003-SA5DN -SB-0.5-1.5 SL -003-SA5DN -SB-8.0-9.0 SL -004-SA5DN -SB-3.5-4.5 SL -004-SA5DN -SB-9.0-10.0 SL -042-SA5A -SB-3.5-4.5 SL -167-SA5A -SB-1.0-2.0)	2,4-DINITROPHENOL 4,6-DINITRO-2-METHYLPHENOL	24 44	- -	37.00-120.00 53.00-110.00	- -	2,4-DINITROPHENOL 4,6-DINITRO-2-METHYLPHEN	J(all detects) UJ(all non-detects)

Method: 8260B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
LCSB60Q211503A (DUP-17-SA5A-QC-051611 SL -002-SA5DN -SB-4.0-5.0 SL -003-SA5DN -SB-0.5-1.5 SL -003-SA5DN -SB-8.0-9.0 SL -004-SA5DN -SB-3.5-4.5 SL -004-SA5DN -SB-9.0-10.0 SL -042-SA5A -SB-3.5-4.5 SL -167-SA5A -SB-1.0-2.0)	BROMOCHLOROMETHANE	125	-	79.00-124.00	-	BROMOCHLOROMETHANE	J(all detects)

Surrogate Outlier Report

Lab Reporting Batch ID: DE151 **Laboratory: LL**

EDD Filename: DE151_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 8082
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
DUP-17-SA5A-QC-051611	DECACHLOROBIPHENYL	128	45.00-120.00	All Target Analytes	J (all detects)

Method: 8315A
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-004-SA5DN-SB-3.5-4.5	Butyraldehyde	129	64.00-126.00	All Target Analytes	J(all detects)

Field Duplicate RPD Report

Lab Reporting Batch ID: DE151 **Laboratory: LL**

EDD Filename: DE151_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 160.3M
Matrix: SO

Analyte	Concentration (%) SL-042-SA5A-SB-3.5-4.5	Concentration (%) DUP-17-SA5A-QC-051611	Sample RPD	eQAPP RPD	Flag
MOISTURE	12.2	11.9	2		No Qualifiers Applied

Method: 6010B
Matrix: SO

Analyte	Concentration (mg/Kg) SL-042-SA5A-SB-3.5-4.5	Concentration (mg/Kg) DUP-17-SA5A-QC-051611	Sample RPD	eQAPP RPD	Flag
ALUMINUM	33800	29600	13	50.00	No Qualifiers Applied
BORON	8.21	8.74	6	50.00	
CALCIUM	3050	2780	9	50.00	
IRON	28200	26800	5	50.00	
LITHIUM	32.1	32.4	1	50.00	
MAGNESIUM	5730	5650	1	50.00	
MANGANESE	252	304	19	50.00	
PHOSPHORUS	322	322	0	50.00	
POTASSIUM	1810	2180	19	50.00	
SODIUM	112	108	4	50.00	
STRONTIUM	22.9	21.9	4	50.00	
TIN	3.40	3.31	3	50.00	
TITANIUM	1450	1520	5	50.00	
Zirconium	5.24	4.56	14	50.00	

Method: 6020
Matrix: SO

Analyte	Concentration (mg/Kg) SL-042-SA5A-SB-3.5-4.5	Concentration (mg/Kg) DUP-17-SA5A-QC-051611	Sample RPD	eQAPP RPD	Flag
ANTIMONY	0.312	0.250	22	50.00	No Qualifiers Applied
ARSENIC	9.05	6.91	27	50.00	
BARIUM	120	114	5	50.00	
BERYLLIUM	1.11	0.849	27	50.00	
CADMIUM	0.0923	0.0742	22	50.00	
CHROMIUM	28.3	20.9	30	50.00	
COBALT	9.21	8.87	4	50.00	
COPPER	11.1	8.59	25	50.00	
LEAD	8.57	6.44	28	50.00	
MOLYBDENUM	1.50	0.918	48	50.00	
NICKEL	18.9	15.2	22	50.00	
SELENIUM	0.248	0.207	18	50.00	
THALLIUM	0.295	0.306	4	50.00	
VANADIUM	55.1	43.0	25	50.00	
ZINC	52.4	54.4	4	50.00	
SILVER	0.833	0.391	72	50.00	J(all detects)

Method: 7199
Matrix: SO

Analyte	Concentration (mg/Kg) SL-042-SA5A-SB-3.5-4.5	Concentration (mg/Kg) DUP-17-SA5A-QC-051611	Sample RPD	eQAPP RPD	Flag
HEXAVALENT CHROMIUM	0.58	0.40	37	50.00	No Qualifiers Applied

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Field Duplicate RPD Report

Lab Reporting Batch ID: DE151 **Laboratory: LL**

EDD Filename: DE151_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 8082
Matrix: SO

Analyte	Concentration (ug/Kg) SL-042-SA5A-SB-3.5-4.5	Concentration (ug/Kg) DUP-17-SA5A-QC-051611	Sample RPD	eQAPP RPD	Flag
Aroclor 5460	1.5	1.3	14	50.00	No Qualifiers Applied
AROCLOR 1254	3.2	1.7	61	50.00	J(all detects)
AROCLOR 1260	1.9 U	1.9	200	50.00	UJ(all non-detects)

Method: 8260B
Matrix: SO

Analyte	Concentration (ug/Kg) SL-042-SA5A-SB-3.5-4.5	Concentration (ug/Kg) DUP-17-SA5A-QC-051611	Sample RPD	eQAPP RPD	Flag
METHYLENE CHLORIDE	3.7	4.1	10	50.00	No Qualifiers Applied
TOLUENE	0.12	0.17	34	50.00	
ACETONE	7.4	8.8 U	200	50.00	J(all detects) UJ(all non-detects)

Method: 9045M
Matrix: SO

Analyte	Concentration (pH unit) SL-042-SA5A-SB-3.5-4.5	Concentration (pH unit) DUP-17-SA5A-QC-051611	Sample RPD	eQAPP RPD	Flag
PH	6.53	6.43	2	50.00	No Qualifiers Applied

Method: ASTM D1498
Matrix: SO

Analyte	Concentration (mV) SL-042-SA5A-SB-3.5-4.5	Concentration (mV) DUP-17-SA5A-QC-051611	Sample RPD	eQAPP RPD	Flag
Oxidation Reduction Potential	389	407	5		No Qualifiers Applied

Reporting Limit Outliers

Lab Reporting Batch ID: DE151 | Laboratory: LL

EDD Filename: DE151_v1. | eQAPP Name: CDM_SSFL_110509

Method: 6010B
Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB15-SA5A-SB-051611	BORON	J	0.0195	0.0500	PQL	mg/L	J (all detects)

Method: 8270C SIM
Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB15-SA5A-SB-051611	1-METHYLNAPHTHALENE	J	0.031	0.054	PQL	ug/L	J (all detects)
	2-METHYLNAPHTHALENE	J	0.033	0.054	PQL	ug/L	
	N-NITROSODIMETHYLAMINE	J	0.030	0.054	PQL	ug/L	

Method: 1625C
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-004-SA5DN-SB-3.5-4.5	N-NITROSODIMETHYLAMINE	J	287	399	PQL	ng/Kg	J (all detects)

Method: 300.0
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-003-SA5DN-SB-0.5-1.5	Nitrate-NO3	J	1.6	1.8	PQL	mg/Kg	J (all detects)
SL-004-SA5DN-SB-3.5-4.5	Nitrate-NO3	J	1.5	1.8	PQL	mg/Kg	J (all detects)
SL-167-SA5A-SB-1.0-2.0	Nitrate-NO3	J	0.92	1.6	PQL	mg/Kg	J (all detects)

Method: 6010B
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-17-SA5A-QC-051611	SODIUM	J	108	110	PQL	mg/Kg	J (all detects)
	TIN	J	3.31	11.0	PQL	mg/Kg	
	Zirconium	J	4.56	5.51	PQL	mg/Kg	
SL-002-SA5DN-SB-4.0-5.0	TIN	J	3.05	11.5	PQL	mg/Kg	J (all detects)
	Zirconium	J	5.51	5.74	PQL	mg/Kg	
SL-002-SA5DN-SB-9.0-10.0	TIN	J	3.20	11.4	PQL	mg/Kg	J (all detects)
SL-003-SA5DN-SB-0.5-1.5	TIN	J	3.10	11.7	PQL	mg/Kg	J (all detects)
SL-003-SA5DN-SB-8.0-9.0	TIN	J	3.25	10.8	PQL	mg/Kg	J (all detects)
	Zirconium	J	5.09	5.42	PQL	mg/Kg	
SL-004-SA5DN-SB-3.5-4.5	TIN	J	3.18	11.5	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE151 **Laboratory: LL**

EDD Filename: DE151_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-004-SA5DN-SB-9.0-10.0	TIN Zirconium	J J	2.81 5.21	11.0 5.50	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-042-SA5A-SB-3.5-4.5	TIN Zirconium	J J	3.40 5.24	11.0 5.48	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-167-SA5A-SB-1.0-2.0	SODIUM TIN Zirconium	J J J	88.9 2.92 2.97	104 10.4 5.20	PQL PQL PQL	mg/Kg mg/Kg mg/Kg	J (all detects)

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-17-SA5A-QC-051611	CADMIUM SELENIUM	J J	0.0742 0.207	0.110 0.441	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-002-SA5DN-SB-4.0-5.0	SELENIUM SILVER	J J	0.0763 0.0765	0.442 0.110	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-002-SA5DN-SB-9.0-10.0	SELENIUM SILVER	J J	0.0860 0.0385	0.441 0.110	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-003-SA5DN-SB-0.5-1.5	SELENIUM SILVER	J J	0.216 0.0639	0.471 0.118	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-003-SA5DN-SB-8.0-9.0	SELENIUM SILVER	J J	0.0623 0.0713	0.438 0.110	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-004-SA5DN-SB-3.5-4.5	SELENIUM SILVER	J J	0.288 0.0679	0.465 0.116	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-004-SA5DN-SB-9.0-10.0	SELENIUM SILVER	J J	0.0513 0.0345	0.445 0.111	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-042-SA5A-SB-3.5-4.5	CADMIUM SELENIUM	J J	0.0923 0.248	0.113 0.451	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-167-SA5A-SB-1.0-2.0	SELENIUM	J	0.154	0.420	PQL	mg/Kg	J (all detects)

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-17-SA5A-QC-051611	HEXAVALENT CHROMIUM	J	0.40	1.1	PQL	mg/Kg	J (all detects)
SL-003-SA5DN-SB-0.5-1.5	HEXAVALENT CHROMIUM	J	0.61	1.2	PQL	mg/Kg	J (all detects)
SL-042-SA5A-SB-3.5-4.5	HEXAVALENT CHROMIUM	J	0.58	1.1	PQL	mg/Kg	J (all detects)
SL-167-SA5A-SB-1.0-2.0	HEXAVALENT CHROMIUM	J	0.39	1.1	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE151 **Laboratory: LL**

EDD Filename: DE151_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-003-SA5DN-SB-8.0-9.0	MERCURY	J	0.0306	0.104	PQL	mg/Kg	J (all detects)

Method: 8015B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-003-SA5DN-SB-0.5-1.5	METHANOL	J	230	600	PQL	ug/Kg	J (all detects)

Method: 8015M

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-003-SA5DN-SB-0.5-1.5	EFH (C15-C20)	J	1.8	2.9	PQL	mg/Kg	J (all detects)
SL-003-SA5DN-SB-8.0-9.0	EFH (C15-C20)	J	1.0	2.7	PQL	mg/Kg	J (all detects)
SL-004-SA5DN-SB-3.5-4.5	EFH (C30-C40)	J	0.93	1.4	PQL	mg/Kg	J (all detects)

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-17-SA5A-QC-051611	AROCLOR 1254 Aroclor 5460	J J	1.7 1.3	1.9 3.7	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-003-SA5DN-SB-8.0-9.0	AROCLOR 1242	J	0.86	1.9	PQL	ug/Kg	J (all detects)
SL-042-SA5A-SB-3.5-4.5	Aroclor 5460	J	1.5	3.7	PQL	ug/Kg	J (all detects)

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-17-SA5A-QC-051611	METHYLENE CHLORIDE TOLUENE	J J	4.1 0.17	4.4 4.4	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-002-SA5DN-SB-4.0-5.0	TOLUENE	J	0.08	4.0	PQL	ug/Kg	J (all detects)
SL-003-SA5DN-SB-0.5-1.5	2-BUTANONE (MEK) BENZENE TOLUENE	J J J	3.9 0.21 0.13	8.4 4.2 4.2	PQL PQL PQL	ug/Kg ug/Kg ug/Kg	J (all detects)
SL-003-SA5DN-SB-8.0-9.0	METHYLENE CHLORIDE TOLUENE	J J	1.1 0.12	4.6 4.6	PQL PQL	ug/Kg ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE151 **Laboratory: LL**

EDD Filename: DE151_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-004-SA5DN-SB-3.5-4.5	2-BUTANONE (MEK)	J	3.2	8.0	PQL	ug/Kg	J (all detects)
	BENZENE	J	0.17	4.0	PQL	ug/Kg	
	METHYLENE CHLORIDE	J	0.88	4.0	PQL	ug/Kg	
	TOLUENE	J	0.15	4.0	PQL	ug/Kg	
SL-004-SA5DN-SB-9.0-10.0	METHYLENE CHLORIDE	J	0.81	3.9	PQL	ug/Kg	J (all detects)
SL-042-SA5A-SB-3.5-4.5	ACETONE	J	7.4	8.5	PQL	ug/Kg	J (all detects)
	METHYLENE CHLORIDE	J	3.7	4.3	PQL	ug/Kg	
	TOLUENE	J	0.12	4.3	PQL	ug/Kg	
SL-167-SA5A-SB-1.0-2.0	ISOPROPYLBENZENE	J	0.66	4.4	PQL	ug/Kg	J (all detects)
	TOLUENE	J	0.18	4.4	PQL	ug/Kg	

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-002-SA5DN-SB-9.0-10.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	35	380	PQL	ug/Kg	J (all detects)
SL-167-SA5A-SB-1.0-2.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	18	360	PQL	ug/Kg	J (all detects)

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-002-SA5DN-SB-4.0-5.0	Di-n-octylphthalate	J	8.9	20	PQL	ug/Kg	J (all detects)
SL-004-SA5DN-SB-3.5-4.5	FLUORANTHENE	J	0.86	2.0	PQL	ug/Kg	J (all detects)
	NAPHTHALENE	J	0.96	2.0	PQL	ug/Kg	
	PHENANTHRENE	J	1.0	2.0	PQL	ug/Kg	
SL-004-SA5DN-SB-9.0-10.0	2-METHYLNAPHTHALENE	J	0.81	1.9	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	0.61	1.9	PQL	ug/Kg	
SL-167-SA5A-SB-1.0-2.0	ANTHRACENE	J	0.66	1.8	PQL	ug/Kg	J (all detects)
	BENZO(A)ANTHRACENE	J	1.0	1.8	PQL	ug/Kg	
	BENZO(A)PYRENE	J	1.4	1.8	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.2	1.8	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	0.98	1.8	PQL	ug/Kg	
	CHRYSENE	J	1.2	1.8	PQL	ug/Kg	
	FLUORANTHENE	J	0.83	1.8	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	0.98	1.8	PQL	ug/Kg	
	PYRENE	J	0.76	1.8	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE151 **Laboratory: LL**

EDD Filename: DE151_v1. **eQAPP Name: CDM_SSFL_110509**

Method: **8315A**

Matrix: **SO**

SampleID	*Analyte*	*Lab Qual*	*Result*	*Reporting Limit*	*RL Type*	*Units*	*Flag*
SL-167-SA5A-SB-1.0-2.0	FORMALDEHYDE	J	680	1600	PQL	ug/Kg	J (all detects)

LDC #: 26078K4 **VALIDATION COMPLETENESS WORKSHEET** Date: 8-29-11
SDG #: DE151 ADR Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: OL
2nd Reviewer: A

METHOD: Metals (EPA SW 846 Method 6010B/6020A/7000)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	N	Sampling dates:
II.	ICP/MS Tune	—	
III.	Calibration	—	
IV.	Blanks	A	No quals for ICB/CCB
V.	ICP Interference Check Sample (ICS) Analysis	N	
VI.	Matrix Spike Analysis	SW	MS/D
VII.	Duplicate Sample Analysis	SW	DUP
VIII.	Laboratory Control Samples (LCS)	N	LCS
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	SW	
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	—	
XV	Field Blanks	SW	EB=4

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:

1	SL-042-SA5A-SB-3.5-4.5	11	SL-042-SA5A-SB-3.5-4.5MS	21		31	
2	DUP-17-SA5A-QC-051611	12	SL-042-SA5A-SB-3.5-4.5MSD	22		32	
3	SL-167-SA5A-SB-1.0-2.0	13	SL-042-SA5A-SB-3.5-4.5DUP	23		33	
4	EB15-SA5A-SB-051611	14		24		34	
5	SL-002-SA5DN-SB-4.0-5.0	15		25		35	
6	SL-002-SA5DN-SB-9.0-10.0	16		26		36	
7	SL-003-SA5DN-SB-0.5-1.5	17		27		37	
8	SL-003-SA5DN-SB-8.0-6.0	18		28		38	
9	SL-004-SA5DN-SB-3.5-4.5	19		29		39	
10	SL-004-SA5DN-SB-9.0-10.0	20		30		40	

Notes:

LDC #: 26078K4

VALIDATION FINDINGS WORKSHEET
Field Blanks

Page: 1 of 1
Reviewer:
2nd Reviewer:

METHOD: Trace Metals (EPA SW846 6010B/7000)
Y N N/A Were field blanks identified in this SDG?
Y N N/A Were target analytes detected in the field blanks?
Blank units: ug/L **Associated sample units:** mg/Kg
Sampling date: 5/16/11 Soil factor applied 100x
Field blank type: (circle one) Field Blank / Rinsate / Other: Associated Samples: All Soil Reason Code: F

Analyte	Blank ID	Sample Identification																			
	4a	Action Level	1	2	3																
B	19.5	9.75	8.2	8.7	7.7																

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
Samples with analyte concentrations within five times the associated field blank concentration are listed above, these sample results were qualified as not detected, "U".

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 5A(MS/MSD)
MATRIX SPIKE/MATRIX SPIKE DUPLICATE
SDG No.: DE151
Matrix: SOIL Level (low/med): LOW

74X

Background Lab Sample ID: 6288929BKG Matrix Spike Lab Sample ID: 6288930MS Matrix Spike Duplicate Lab Sample ID: 6288931MSD
% Solids for Sample: 87.8
Batch Id(s): P13708B, P13726A, P13711B

Analyte	Mass	BKG Sample Result	C	MS Sample Result	C	MSD Sample Result	C	MS Spike Added	MSD Spike Added	Units	MS %R	Q	MSD %R	Q	RPD	Q	Control Limit %R	RPD	M
Aluminum		33759.8957		42468.5102		40807.8858		219.0293	225.5351	MG/KG	3976		3125		4			20	P
Antimony	121	0.3124		1.1552		1.2362		1.3142	1.3532	MG/KG	64	N	68	N	7		75 - 125	20	MS
Arsenic	75	9.0507		13.6105		13.9223		2.1903	2.2554	MG/KG	208		216		2			20	MS
Barium	137	119.6013		146.7496		151.4243		10.9515	11.2768	MG/KG	248		282		3			20	MS
Beryllium	9	1.1096		2.2429		2.3817		0.8761	0.9021	MG/KG	129	N	141	N	6		75 - 125	20	MS
Boron		8.2070		215.8709		225.6614		219.0293	225.5351	MG/KG	95		96		4		84 - 115	20	P
Cadmium	111	0.0923	B	1.3950		1.4928		1.0951	1.1277	MG/KG	119		124		7		75 - 125	20	MS
Calcium		3054.5284		3511.9743		3574.8427		438.0585	451.0702	MG/KG	104		115		2			20	P
Chromium	52	28.3272		46.9380		44.7011		10.9515	11.2768	MG/KG	170	N	145	N	5		75 - 125	20	MS
Cobalt	59	9.2086		78.9162		75.4640		54.7573	56.3838	MG/KG	127	N	118		4		75 - 125	20	MS
Copper	63	11.1008		24.5094		24.2676		10.9515	11.2768	MG/KG	122		117		1		75 - 125	20	MS
Iron		28185.0118		30559.4117		29750.8085		109.5146	112.7675	MG/KG	2168		1389		3			20	P
Lead	208	8.5703		14.1931		14.4703		3.2854	3.3830	MG/KG	171	N	174	N	2		75 - 125	20	MS
Lithium		32.1294		146.3784		147.6229		109.5146	112.7675	MG/KG	104		102		1		82 - 114	20	P
Magnesium		5733.0822		6266.3998		6203.4236		219.0293	225.5351	MG/KG	243		209		1			20	P
Manganese		252.2144		332.5368		333.5077		54.7573	56.3838	MG/KG	147		144		0			20	P
Mercury		0.0033	U	0.1721		0.1926		0.1799	0.1870	MG/KG	96		103		11		65 - 135	20	CV
Molybdenum	98	1.5021		16.4951		16.1889		10.9515	11.2768	MG/KG	137	N	130	N	2		75 - 125	20	MS
Nickel	60	18.9404		35.1542		35.0030		10.9515	11.2768	MG/KG	148	N	142	N	0		75 - 125	20	MS
Phosphorus		321.8120		426.9417		420.4707		109.5146	112.7675	MG/KG	96		87		2		75 - 125	20	P
Potassium		1813.6707		3008.1128		2954.4521		1095.1463	1127.6754	MG/KG	109		101		2		75 - 125	20	P
Selenium	78	0.2476	B	2.8189		2.8034		2.1903	2.2554	MG/KG	117		113		1		75 - 125	20	MS
Silver	107	0.8329		14.4012		14.2087		10.9515	11.2768	MG/KG	124		119		1		75 - 125	20	MS
Sodium		112.3872		1210.2320		1235.8917		1095.1463	1127.6754	MG/KG	100		100		2		75 - 125	20	P
Strontium		22.9346		135.1509		137.0351		109.5146	112.7675	MG/KG	102		101		1		75 - 115	20	P
Thallium	203	0.2948		0.8137		0.8604		0.4381	0.4511	MG/KG	118		125		6		75 - 125	20	MS
Tin		3.3982	B	380.3104		398.3919		438.0585	451.0702	MG/KG	86		88		5		80 - 110	20	P
Titanium		1450.5388		1723.0222		1724.0420		109.5146	112.7675	MG/KG	249		243		0			20	P
Vanadium	51	55.0531		79.1791		78.7343		10.9515	11.2768	MG/KG	220		210		1			20	MS
Zinc	66	52.4369		57.0571		56.2936		10.9515	11.2768	MG/KG	42		34		1			20	MS
Zirconium		5.2392	B	108.2092		111.6218		109.5146	112.7675	MG/KG	94		94		3		75 - 125	20	P

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry
CV = Cold Vapor
AF = Cold Vapor Atomic Fluorescence

CONCENTRATION QUALIFIERS:
U= Below MDL, B= Below LOQ
FLAGS:
N = Matrix Spike OOS, * = Duplicate OOS

DE151 4339

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 6
DUPLICATES
SDG No.: DE151
Matrix: SOIL Level (low/med): LOW

<5xRL

Background Lab Sample ID: 6288929BKG
% Solids for Duplicate: 88.0
Batch ID(s): P13708B, P13726A, P13711B
Concentration Units: MG/KG

Duplicate Lab Sample ID: 6288932DUP
% Solids for Sample: 87.8

Analyte	Mass	Control Limit	Samples (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum			33759.8957		35312.3197		4		P
Antimony	121	0.2	0.3124		0.2387		27		MS
Arsenic	75		9.0507		8.5750		5		MS
Barium	137		119.6013		97.1833		21	*	MS
Beryllium	9		1.1096		0.9856		12		MS
Boron		5.5	8.2070		8.6560		5		P
Cadmium	111		0.0923	B	0.0438	U	200		MS
Calcium			3054.5284		2945.5224		4		P
Chromium	52		28.3272		25.6264		10		MS
Cobalt	59		9.2086		6.3343		37	*	MS
Copper	63		11.1008		7.8237		35	*	MS
Iron			28185.0118		27927.6118		1		P
Lead	208		8.5703		7.7690		10		MS
Lithium			32.1294		31.4529		2		P
Magnesium			5733.0822		5456.8281		5		P
Manganese			252.2144		195.6296		25	*	P
Mercury			0.0033	U	0.0050	B	200		CV
Molybdenum	98		1.5021		1.7032		13		MS
Nickel	60		18.9404		15.5073		20		MS
Phosphorus			321.8120		290.5623		10		P
Potassium			1813.6707		1420.1148		24	*	P
Selenium	78		0.2476	B	0.2315	B	7		MS
Silver	107	0.1	0.8329		0.1860		127	*	MS
Sodium		109.5	112.3872		108.8894	B	3		P
Strontium			22.9346		22.6495		1		P
Thallium	203	0.1	0.2948		0.2368		22		MS
Tin			3.3982	B	3.2750	B	4		P
Titanium			1450.5388		1370.3750		6		P
Vanadium	51		55.0531		50.2891		9		MS
Zinc	66		52.4369		43.1488		19		MS
Zirconium		5.5	5.2392	B	5.6266		7		P

NOTE: An asterisk (*) in column "Q" indicates poor duplicate precision (RPD > 20% OR |(S) - (D)| > LOQ for values < 5x LOQ).
The data are considered to be valid because the laboratory control sample is within the control limits. See the Laboratory Control Sample.

out by difference (0.6469 (≤0.22))

DE151 4741

METHODS:	CONCENTRATION QUALIFIERS:
P = ICP Atomic Emission Spectrometer	U= Below MDL
MS = ICP Mass Spectrometry	B= Below LOQ
CV = Cold Vapor	FLAGS:
AF = Cold Vapor Atomic Fluorescence	* = Duplicate Out of Spec

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 9
SERIAL DILUTIONS
SDG No.: DE151
Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: 6288929BKG Serial Dilution Lab Sample ID: 6288929L
Batch ID(s): P13708B, P13726A
Concentration Units: UG/L

Analyte	Mass	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Diff.	Q	M
Aluminum		308268.3600		324173.7500		5		P
Antimony	121	1.3850		1.5000	U	100		MS
Arsenic	75	40.1300		44.6450		11	E	MS
Barium	137	530.3000		515.0000		3		MS
Beryllium	9	4.9200		5.0850		3		MS
Boron		74.9400		150.8000	B	101		P
Cadmium	111	0.4092	B	1.0000	U	100		MS
Calcium		27891.5100		29716.6000		7		P
Chromium	52	125.6000		136.3000		9		MS
Cobalt	59	40.8300		40.1900		2		MS
Copper	63	49.2200		48.2550		2		MS
Iron		257362.9800		260313.1000		1		P
Lead	208	38.0000		36.7200		3		MS
Lithium		293.3800		319.6500		9		P
Magnesium		52349.9200		54910.9000		5		P
Manganese		2303.0200		2496.0000		8		P
Molybdenum	98	6.6600		6.4350		3		MS
Nickel	60	83.9800		78.5000		7		MS
Phosphorus		2938.5300		3020.4000		3		P
Potassium		16560.9900		17540.9000		6		P
Selenium	78	1.0980	B	1.0745	B	2		MS
Silver	107	3.6930		3.6345		2		MS
Sodium		1026.2300		1865.0000	U	100		P
Strontium		209.4200		223.0500		7		P
Thallium	203	1.3070		1.1620	B	11		MS
Tin		31.0300	B	50.0000	U	100		P
Titanium		13245.1600		14336.0000		8		P
Vanadium	51	244.1000		259.7000		6		MS
Zinc	66	232.5000		316.8500		36		MS
Zirconium		47.8400	B	61.3000	B	28		P

NOTE: An E in column Q indicates the presence of a chemical or physical interference in the matrix when the % difference is greater than 10%. This applies only when (I) is greater than or equal to 50x MDL for ICP, 100x MDL for ICP-MS (6020), 50x MDL for ICP-MS (200.8), or 25x MDL for GFAA.

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry

CONCENTRATION QUALIFIERS: DE151 4743
U= Below MDL
B= Below LOQ
FLAGS:
E = Matrix Effects exist as proven by Serial Dilution or Spiked Dilution

SAMPLE DELIVERY GROUP

DX048

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
07-Feb-2011	SL-160-SA5B-SB-4.0-5.0	6200345	N	METHOD	1613B	III
07-Feb-2011	SL-162-SA5B-SB-4.0-5.0	6200347	N	METHOD	1613B	III
07-Feb-2011	SL-048-SA5A-SB-3.0-4.0	6200343	N	METHOD	1613B	III
07-Feb-2011	SL-161-SA5B-SB-4.0-5.0	6200346	N	METHOD	1613B	III
07-Feb-2011	SL-049-SA5A-SB-2.0-3.0	6200344	N	METHOD	1613B	III
07-Feb-2011	SL-163-SA5B-SB-3.5-4.5	6200348	N	METHOD	1613B	III
08-Feb-2011	SL-164-SA5B-SB-4.0-5.0	6201182	N	METHOD	1613B	III
08-Feb-2011	SL-168-SA5B-SB-4.0-5.0	6201181	N	METHOD	1613B	III
08-Feb-2011	SL-316-SA5B-SS-0.0-0.5	6201187	N	METHOD	1613B	III
08-Feb-2011	SL-313-SA5B-SB-4.0-5.0	6201183	N	METHOD	1613B	III
08-Feb-2011	SL-313-SA5B-SB-9.0-10.0	6201184	N	METHOD	1613B	III
08-Feb-2011	SL-328-SA5B-SS-0.0-0.5	6201189	N	METHOD	1613B	III
08-Feb-2011	SL-327-SA5B-SS-0.0-0.5	6201188	N	METHOD	1613B	III
08-Feb-2011	SL-314-SA5B-SB-4.0-5.0	6201185	N	METHOD	1613B	III
08-Feb-2011	SL-315-SA5B-SS-0.0-0.5	6201186	N	METHOD	1613B	III
10-Feb-2011	SL-321-SA5B-SS-0.0-0.5	6203567	N	METHOD	1613B	III
10-Feb-2011	SL-315-SA5B-SB-3.0-4.0	6203564	N	METHOD	1613B	III
10-Feb-2011	DUP-024-QC-021011	6203562	FD	METHOD	1613B	III
10-Feb-2011	EB31-SA5B-021011	6203563	EB	METHOD	1613B	III
10-Feb-2011	SL-319-SA5B-SB-4.0-5.0	6203566	N	METHOD	1613B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DX048 | Laboratory: LL

EDD Filename: DX048_v1 | eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 1613B **Matrix:** AQ

Sample ID: EB31-SA5B-021011 *Collected:* 2/10/2011 3:15:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	2.24	JB	0.416	MDL	10.3	PQL	pg/L	UJ	B, I
1,2,3,4,6,7,8-HPCDF	3.44	JB	0.852	MDL	10.3	PQL	pg/L	J	Z, I
1,2,3,4,7,8,9-HPCDF	1.99	JB	0.286	MDL	10.3	PQL	pg/L	UJ	B, I
1,2,3,4,7,8-HxCDD	1.25	JB	0.836	MDL	10.3	PQL	pg/L	J	Z, I
1,2,3,4,7,8-HXCDF	2.61	JB	1.46	MDL	10.3	PQL	pg/L	J	Z, I
1,2,3,6,7,8-HXCDD	3.93	JB	0.716	MDL	10.3	PQL	pg/L	J	Z, I
1,2,3,6,7,8-HXCDF	3.73	JB	1.07	MDL	10.3	PQL	pg/L	J	Z, I
1,2,3,7,8,9-HXCDD	2.52	JBQ	0.217	MDL	10.3	PQL	pg/L	J	Z
1,2,3,7,8,9-HXCDF	2.72	JB	0.171	MDL	10.3	PQL	pg/L	J	Z
1,2,3,7,8-PECDD	3.53	JB	0.252	MDL	10.3	PQL	pg/L	J	Z, I
1,2,3,7,8-PECDF	1.28	JB	0.129	MDL	10.3	PQL	pg/L	U	B
2,3,4,6,7,8-HXCDF	1.83	JB	0.294	MDL	10.3	PQL	pg/L	J	Z, I
2,3,4,7,8-PECDF	3.35	JB	0.234	MDL	10.3	PQL	pg/L	J	Z, I
2,3,7,8-TCDF	0.956	JB	0.0992	MDL	2.05	PQL	pg/L	J	Z
OCDD	3.15	JB	0.455	MDL	20.5	PQL	pg/L	UJ	B, I
OCDF	1.21	JB	0.694	MDL	20.5	PQL	pg/L	UJ	B, I

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: DUP-024-QC-021011 *Collected:* 2/10/2011 1:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	4.71	JB	0.0780	MDL	5.36	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	4.11	J	0.0909	MDL	5.36	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	3.86	JB	0.109	MDL	5.36	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	3.05	JB	0.0869	MDL	5.36	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	1.30	JB	0.0723	MDL	5.36	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	2.04	JB	0.0763	MDL	5.36	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.397	JB	0.0352	MDL	5.36	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	2.69	JB	0.0660	MDL	5.36	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	1.41	JB	0.0334	MDL	5.36	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.170	JB	0.0151	MDL	1.07	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.142	JQ	0.0383	MDL	1.07	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX048 | Laboratory: LL

EDD Filename: DX048_v1 | eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-048-SA5A-SB-3.0-4.0 *Collected:* 2/7/2011 12:28:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.923	JB	0.0313	MDL	5.49	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.277	JB	0.0142	MDL	5.49	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0693	JB	0.0199	MDL	5.49	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0314	JQ	0.0143	MDL	5.49	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.0458	JBQ	0.0124	MDL	5.49	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0847	JBQ	0.0144	MDL	5.49	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.0563	JBQ	0.00955	MDL	5.49	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0722	JB	0.0136	MDL	5.49	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0465	JBQ	0.0114	MDL	5.49	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0528	JBQ	0.0127	MDL	5.49	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0565	JB	0.00615	MDL	5.49	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0783	JB	0.00922	MDL	5.49	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0774	JB	0.00659	MDL	5.49	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0354	JBQ	0.0117	MDL	1.10	PQL	ng/Kg	U	B
OCDD	7.72	JB	0.0258	MDL	11.0	PQL	ng/Kg	J	Z
OCDF	0.431	JB	0.0234	MDL	11.0	PQL	ng/Kg	U	B

Sample ID: SL-049-SA5A-SB-2.0-3.0 *Collected:* 2/7/2011 3:19:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	1.75	JB	0.0390	MDL	5.69	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.418	JB	0.0207	MDL	5.69	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0520	JB	0.0192	MDL	5.69	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0325	JQ	0.0196	MDL	5.69	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.0982	JB	0.0198	MDL	5.69	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.112	JB	0.0184	MDL	5.69	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.0359	JBQ	0.0140	MDL	5.69	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.165	JB	0.0154	MDL	5.69	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.111	JBQ	0.0109	MDL	5.69	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0350	JBQ	0.0146	MDL	5.69	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0310	JBQ	0.00705	MDL	5.69	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0583	JBQ	0.00944	MDL	5.69	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0847	JBQ	0.00717	MDL	5.69	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0193	JBQ	0.0122	MDL	1.14	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX048 | Laboratory: LL

EDD Filename: DX048_v1 | eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-049-SA5A-SB-2.0-3.0 *Collected:* 2/7/2011 3:19:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
OCDF	1.29	JB	0.0324	MDL	11.4	PQL	ng/Kg	J	Z

Sample ID: SL-160-SA5B-SB-4.0-5.0 *Collected:* 2/7/2011 10:23:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	2.10	JB	0.0274	MDL	5.52	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.290	JBQ	0.0299	MDL	5.52	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.0918	J	0.0621	MDL	5.52	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.227	JBQ	0.0387	MDL	5.52	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.512	JB	0.0598	MDL	5.52	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.120	JBQ	0.0275	MDL	5.52	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.245	JBQ	0.0533	MDL	5.52	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.0391	JB	0.0247	MDL	5.52	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0715	JBQ	0.0262	MDL	5.52	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0131	JBQ	0.0127	MDL	5.52	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.219	JB	0.0216	MDL	5.52	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.0866	JB	0.0132	MDL	5.52	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0165	JBQ	0.0143	MDL	1.10	PQL	ng/Kg	U	B
OCDF	4.66	JB	0.0296	MDL	11.0	PQL	ng/Kg	J	Z

Sample ID: SL-161-SA5B-SB-4.0-5.0 *Collected:* 2/7/2011 2:33:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	4.21	JB	0.0379	MDL	5.53	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.483	JB	0.0539	MDL	5.53	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.246	JB	0.0814	MDL	5.53	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.334	JBQ	0.0546	MDL	5.53	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	1.13	JB	0.0822	MDL	5.53	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.256	JB	0.0386	MDL	5.53	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.591	JBQ	0.0746	MDL	5.53	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.0743	JBQ	0.0421	MDL	5.53	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.130	JB	0.0334	MDL	5.53	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.0442	JBQ	0.0124	MDL	5.53	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.329	JB	0.0308	MDL	5.53	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.135	JBQ	0.0137	MDL	5.53	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX048 | Laboratory: LL

EDD Filename: DX048_v1 | eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-161-SA5B-SB-4.0-5.0 *Collected:* 2/7/2011 2:33:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,3,7,8-TCDD	0.0344	JQ	0.0184	MDL	1.11	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.0746	J	0.0312	MDL	1.11	PQL	ng/Kg	J	Z
OCDF	9.85	JB	0.0409	MDL	11.1	PQL	ng/Kg	J	Z

Sample ID: SL-162-SA5B-SB-4.0-5.0 *Collected:* 2/7/2011 11:54:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	0.827	JB	0.0239	MDL	5.64	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.481	JB	0.0345	MDL	5.64	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.878	JB	0.0471	MDL	5.64	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	1.61	JB	0.0353	MDL	5.64	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.377	JB	0.0331	MDL	5.64	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.940	JB	0.0325	MDL	5.64	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.175	JBQ	0.0256	MDL	5.64	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.249	JB	0.0254	MDL	5.64	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.168	JBQ	0.0157	MDL	5.64	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.728	JB	0.0242	MDL	5.64	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.303	JB	0.0153	MDL	5.64	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0755	JBQ	0.0114	MDL	1.13	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.175	JBQ	0.0275	MDL	1.13	PQL	ng/Kg	J	Z

Sample ID: SL-163-SA5B-SB-3.5-4.5 *Collected:* 2/7/2011 3:36:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	0.716	JB	0.0338	MDL	5.39	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.394	JB	0.0634	MDL	5.39	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.415	JB	0.0511	MDL	5.39	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	1.48	JB	0.0627	MDL	5.39	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.290	JB	0.0359	MDL	5.39	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.801	JB	0.0583	MDL	5.39	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.102	JBQ	0.0345	MDL	5.39	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.148	JB	0.0320	MDL	5.39	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.0537	JBQ	0.0109	MDL	5.39	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.414	JB	0.0277	MDL	5.39	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.154	JB	0.0122	MDL	5.39	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX048 | Laboratory: LL

EDD Filename: DX048_v1 | eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-163-SA5B-SB-3.5-4.5 *Collected:* 2/7/2011 3:36:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,3,7,8-TCDD	0.0819	J	0.0117	MDL	1.08	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.145	J	0.0254	MDL	1.08	PQL	ng/Kg	J	Z

Sample ID: SL-164-SA5B-SB-4.0-5.0 *Collected:* 2/8/2011 10:08:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	1.43	JB	0.0584	MDL	5.40	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.992	J	0.114	MDL	5.40	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	1.04	JB	0.0693	MDL	5.40	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	3.84	JB	0.114	MDL	5.40	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.774	JB	0.0518	MDL	5.40	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	2.07	JB	0.108	MDL	5.40	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.284	JB	0.0563	MDL	5.40	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.446	JB	0.0529	MDL	5.40	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.352	JB	0.0332	MDL	5.40	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	1.01	JB	0.0447	MDL	5.40	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.704	JB	0.0332	MDL	5.40	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0833	JBQ	0.0180	MDL	1.08	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.821	J	0.0646	MDL	1.08	PQL	ng/Kg	J	Z

Sample ID: SL-168-SA5B-SB-4.0-5.0 *Collected:* 2/8/2011 11:49:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	2.82	JB	0.0171	MDL	5.59	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.344	JB	0.0297	MDL	5.59	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.199	JB	0.0450	MDL	5.59	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.322	JB	0.0340	MDL	5.59	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.966	JB	0.0463	MDL	5.59	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.177	JB	0.0235	MDL	5.59	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.718	JB	0.0426	MDL	5.59	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.301	JB	0.0278	MDL	5.59	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.115	JB	0.0244	MDL	5.59	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.103	JBQ	0.0114	MDL	5.59	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.253	JB	0.0220	MDL	5.59	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.201	JB	0.0135	MDL	5.59	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX048 | Laboratory: LL

EDD Filename: DX048_v1 | eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-168-SA5B-SB-4.0-5.0 *Collected:* 2/8/2011 11:49:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,3,7,8-TCDD	0.0206	J	0.00816	MDL	1.12	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.148	J	0.0279	MDL	1.12	PQL	ng/Kg	J	Z
OCDF	6.45	JB	0.0193	MDL	11.2	PQL	ng/Kg	J	Z

Sample ID: SL-313-SA5B-SB-4.0-5.0 *Collected:* 2/8/2011 2:24:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	2.19	JB	0.0297	MDL	5.55	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.195	JB	0.0264	MDL	5.55	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.211	JB	0.0544	MDL	5.55	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.139	JB	0.0418	MDL	5.55	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.799	JB	0.0513	MDL	5.55	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.151	JB	0.0286	MDL	5.55	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.684	JB	0.0440	MDL	5.55	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.152	JBQ	0.0213	MDL	5.55	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.119	JBQ	0.0243	MDL	5.55	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.0431	JB	0.00633	MDL	5.55	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.168	JBQ	0.0189	MDL	5.55	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.111	JB	0.00666	MDL	5.55	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0250	J	0.0103	MDL	1.11	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.0198	J	0.0122	MDL	1.11	PQL	ng/Kg	J	Z
OCDF	5.78	JB	0.0262	MDL	11.1	PQL	ng/Kg	J	Z

Sample ID: SL-313-SA5B-SB-9.0-10.0 *Collected:* 2/8/2011 2:33:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	0.470	JB	0.0303	MDL	5.59	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.931	J	0.0458	MDL	5.59	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.318	JB	0.0498	MDL	5.59	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	2.12	JB	0.0438	MDL	5.59	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.466	JB	0.0352	MDL	5.59	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	2.43	JB	0.0361	MDL	5.59	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.182	JB	0.0232	MDL	5.59	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.532	JB	0.0296	MDL	5.59	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.0885	JBQ	0.00816	MDL	5.59	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX048 **Laboratory: LL**

EDD Filename: DX048_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-313-SA5B-SB-9.0-10.0 *Collected:* 2/8/2011 2:33:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,3,4,6,7,8-HXCDF	0.747	JB	0.0212	MDL	5.59	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.216	JB	0.00860	MDL	5.59	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0444	JB	0.0104	MDL	1.12	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0499	J	0.0121	MDL	1.12	PQL	ng/Kg	J	Z

Sample ID: SL-314-SA5B-SB-4.0-5.0 *Collected:* 2/8/2011 4:10:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	0.645	JBQ	0.0496	MDL	5.54	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.979	J	0.0565	MDL	5.54	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.384	JBQ	0.0392	MDL	5.54	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	2.18	JB	0.0580	MDL	5.54	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.492	JB	0.0311	MDL	5.54	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	2.55	JB	0.0566	MDL	5.54	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.140	JB	0.0353	MDL	5.54	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.592	JB	0.0336	MDL	5.54	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.0687	JBQ	0.00897	MDL	5.54	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.737	JB	0.0289	MDL	5.54	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.209	JB	0.00908	MDL	5.54	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0408	JBQ	0.0104	MDL	1.11	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0337	JQ	0.0146	MDL	1.11	PQL	ng/Kg	J	Z

Sample ID: SL-315-SA5B-SB-3.0-4.0 *Collected:* 2/10/2011 10:55:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	0.778	JB	0.0498	MDL	5.39	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.141	J	0.0547	MDL	5.39	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.424	JB	0.0332	MDL	5.39	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	1.81	JB	0.0550	MDL	5.39	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.637	JB	0.0270	MDL	5.39	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	1.22	JB	0.0548	MDL	5.39	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.254	JB	0.0336	MDL	5.39	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.105	JB	0.0142	MDL	5.39	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.123	JB	0.00700	MDL	5.39	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.325	JB	0.0263	MDL	5.39	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX048 **Laboratory: LL**

EDD Filename: DX048_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: **SL-315-SA5B-SB-3.0-4.0** ***Collected:*** **2/10/2011 10:55:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,3,4,7,8-PECDF	0.182	JBQ	0.00722	MDL	5.39	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0282	JB	0.00991	MDL	1.08	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0325	J	0.0112	MDL	1.08	PQL	ng/Kg	J	Z

Sample ID: **SL-315-SA5B-SS-0.0-0.5** ***Collected:*** **2/8/2011 4:18:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	0.446	JB	0.0382	MDL	5.30	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.578	J	0.0508	MDL	5.30	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.306	JB	0.0353	MDL	5.30	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	1.67	JB	0.0493	MDL	5.30	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.418	JBQ	0.0265	MDL	5.30	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	1.58	JB	0.0465	MDL	5.30	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.138	JBQ	0.0258	MDL	5.30	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.279	JB	0.0215	MDL	5.30	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.0855	JB	0.00890	MDL	5.30	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.482	JBQ	0.0224	MDL	5.30	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.176	JBQ	0.00900	MDL	5.30	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0197	JB	0.00911	MDL	1.06	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0409	J	0.0167	MDL	1.06	PQL	ng/Kg	J	Z

Sample ID: **SL-316-SA5B-SS-0.0-0.5** ***Collected:*** **2/8/2011 2:02:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	3.81	JB	0.0229	MDL	5.24	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.260	JB	0.0299	MDL	5.24	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.358	J	0.0406	MDL	5.24	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.230	JB	0.0280	MDL	5.24	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	1.13	JB	0.0408	MDL	5.24	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.219	JB	0.0213	MDL	5.24	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.915	JB	0.0391	MDL	5.24	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.0991	JB	0.0231	MDL	5.24	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.194	JB	0.0181	MDL	5.24	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.0336	JBQ	0.00776	MDL	5.24	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.285	JBQ	0.0186	MDL	5.24	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX048 | Laboratory: LL

EDD Filename: DX048_v1 | eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-316-SA5B-SS-0.0-0.5 *Collected:* 2/8/2011 2:02:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,3,4,7,8-PECDF	0.141	JB	0.00776	MDL	5.24	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0205	JBQ	0.00870	MDL	1.05	PQL	ng/Kg	U	B

Sample ID: SL-319-SA5B-SB-4.0-5.0 *Collected:* 2/10/2011 3:27:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	0.865	JB	0.0621	MDL	5.36	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.112	J	0.0655	MDL	5.36	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.437	JB	0.0610	MDL	5.36	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	1.97	JB	0.0602	MDL	5.36	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.918	JB	0.0401	MDL	5.36	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	1.27	JB	0.0508	MDL	5.36	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.268	JB	0.0335	MDL	5.36	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.0761	JBQ	0.0162	MDL	5.36	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0750	JB	0.00697	MDL	5.36	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.335	JB	0.0256	MDL	5.36	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.125	JB	0.00793	MDL	5.36	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0273	JQ	0.0108	MDL	1.07	PQL	ng/Kg	J	Z

Sample ID: SL-321-SA5B-SS-0.0-0.5 *Collected:* 2/10/2011 9:06:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	2.33	JB	0.0867	MDL	5.28	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	4.21	J	0.0766	MDL	5.28	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	1.94	JB	0.0922	MDL	5.28	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	2.31	JB	0.0703	MDL	5.28	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.715	JB	0.0660	MDL	5.28	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	2.44	JB	0.0810	MDL	5.28	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.536	JB	0.0268	MDL	5.28	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	3.69	JB	0.0533	MDL	5.28	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	1.15	JB	0.0266	MDL	5.28	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.215	JB	0.0175	MDL	1.06	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.233	J	0.0315	MDL	1.06	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX048 **Laboratory: LL**

EDD Filename: DX048_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: SL-327-SA5B-SS-0.0-0.5 ***Collected:*** 2/8/2011 3:39:00 PM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	4.37	JB	0.0205	MDL	5.20	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.277	JB	0.0227	MDL	5.20	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.361	J	0.0455	MDL	5.20	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.232	JBQ	0.0325	MDL	5.20	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.980	JB	0.0452	MDL	5.20	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.271	JB	0.0251	MDL	5.20	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.904	JB	0.0443	MDL	5.20	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.114	JB	0.0228	MDL	5.20	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.209	JB	0.0184	MDL	5.20	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.380	JB	0.0197	MDL	5.20	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.210	JBQ	0.00874	MDL	5.20	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0236	JB	0.00937	MDL	1.04	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0369	JQ	0.0250	MDL	1.04	PQL	ng/Kg	J	Z
OCDF	9.57	JB	0.0252	MDL	10.4	PQL	ng/Kg	J	Z

Sample ID: SL-328-SA5B-SS-0.0-0.5 ***Collected:*** 2/8/2011 3:09:00 PM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	2.15	JB	0.0184	MDL	5.20	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.153	JB	0.0201	MDL	5.20	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.205	J	0.0453	MDL	5.20	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.192	JB	0.0390	MDL	5.20	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.740	JB	0.0438	MDL	5.20	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.176	JB	0.0282	MDL	5.20	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.696	JB	0.0392	MDL	5.20	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.119	JBQ	0.0239	MDL	5.20	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.136	JB	0.0153	MDL	5.20	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.142	JB	0.0102	MDL	5.20	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.212	JB	0.0222	MDL	5.20	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.446	JB	0.0103	MDL	5.20	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0182	JBQ	0.00998	MDL	1.04	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0890	JQ	0.0277	MDL	1.04	PQL	ng/Kg	J	Z
OCDF	5.18	JB	0.0261	MDL	10.4	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX048 **Laboratory: LL**

EDD Filename: DX048_v1 **eQAPP Name: CDM_SSFL_110509**

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DX048 **Laboratory: LL**

EDD Filename: DX048_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
*#	Professional Judgment
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Verification Correlation Coefficient
C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DX048 **Laboratory: LL**

EDD Filename: DX048_v1 **eQAPP Name: CDM_SSFL_110509**

F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation
L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery Lower Estimation

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DX048 **Laboratory: LL**

EDD Filename: DX048_v1 **eQAPP Name: CDM_SSFL_110509**

R	Continuing Calibration Verification Percent Recovery Lower Rejection
R	Continuing Calibration Verification Percent Recovery Upper Estimation
R	Continuing Calibration Verification Percent Recovery Upper Rejection
R	Continuing Calibration Verification Relative Response Factor
R	Initial Calibration Relative Response Factor
R	Initial Calibration Verification Percent Recovery Lower Estimation
R	Initial Calibration Verification Percent Recovery Lower Rejection
R	Initial Calibration Verification Percent Recovery Upper Estimation
R	Initial Calibration Verification Percent Recovery Upper Rejection
R	Initial Calibration Verification Relative Response Factor
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control Outlier Reports

DX048

Method Blank Outlier Report

Lab Reporting Batch ID: DX048 **Laboratory: LL**

EDD Filename: DX048_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **AQ**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLANKAB371838	2/17/2011 6:38:00 PM	1,2,3,4,6,7,8-HPCDD	0.911 pg/L	EB31-SA5B-021011
		1,2,3,4,6,7,8-HPCDF	0.206 pg/L	
		1,2,3,4,7,8,9-HPCDF	0.478 pg/L	
		1,2,3,4,7,8-HxCDD	0.240 pg/L	
		1,2,3,4,7,8-HXCDF	0.311 pg/L	
		1,2,3,6,7,8-HXCDD	0.155 pg/L	
		1,2,3,6,7,8-HXCDF	0.163 pg/L	
		1,2,3,7,8,9-HXCDD	0.237 pg/L	
		1,2,3,7,8,9-HXCDF	0.322 pg/L	
		1,2,3,7,8-PECDD	0.275 pg/L	
		1,2,3,7,8-PECDF	0.324 pg/L	
		2,3,4,6,7,8-HXCDF	0.214 pg/L	
		2,3,4,7,8-PECDF	0.495 pg/L	
		2,3,7,8-TCDD	0.136 pg/L	
		2,3,7,8-TCDF	0.109 pg/L	
		OCDD	2.00 pg/L	
		OCDF	0.292 pg/L	

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
EB31-SA5B-021011(RES)	1,2,3,4,6,7,8-HPCDD	2.24 pg/L	2.24U pg/L
EB31-SA5B-021011(RES)	1,2,3,4,7,8,9-HPCDF	1.99 pg/L	1.99U pg/L
EB31-SA5B-021011(RES)	1,2,3,7,8-PECDF	1.28 pg/L	1.28U pg/L
EB31-SA5B-021011(RES)	OCDD	3.15 pg/L	3.15U pg/L
EB31-SA5B-021011(RES)	OCDF	1.21 pg/L	1.21U pg/L

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLK0490B371340	2/24/2011 1:40:00 PM	1,2,3,4,6,7,8-HPCDD	0.135 ng/Kg	DUP-024-QC-021011
		1,2,3,4,6,7,8-HPCDF	0.144 ng/Kg	SL-048-SA5A-SB-3.0-4.0
		1,2,3,4,7,8,9-HPCDF	0.0364 ng/Kg	SL-049-SA5A-SB-2.0-3.0
		1,2,3,4,7,8-HXCDF	0.0290 ng/Kg	SL-160-SA5B-SB-4.0-5.0
		1,2,3,6,7,8-HXCDD	0.0154 ng/Kg	SL-164-SA5B-SB-4.0-5.0
		1,2,3,6,7,8-HXCDF	0.0270 ng/Kg	SL-313-SA5B-SB-9.0-10.0
		1,2,3,7,8,9-HXCDD	0.0248 ng/Kg	SL-314-SA5B-SB-4.0-5.0
		1,2,3,7,8,9-HXCDF	0.0398 ng/Kg	SL-315-SA5B-SB-3.0-4.0
		1,2,3,7,8-PECDD	0.0159 ng/Kg	SL-315-SA5B-SS-0.0-0.5
		1,2,3,7,8-PECDF	0.0168 ng/Kg	SL-316-SA5B-SS-0.0-0.5
		2,3,4,6,7,8-HXCDF	0.0418 ng/Kg	SL-319-SA5B-SB-4.0-5.0
		2,3,4,7,8-PECDF	0.0476 ng/Kg	SL-321-SA5B-SS-0.0-0.5
		2,3,7,8-TCDD	0.0139 ng/Kg	SL-327-SA5B-SS-0.0-0.5
		OCDD	0.324 ng/Kg	SL-328-SA5B-SS-0.0-0.5
		OCDF	0.153 ng/Kg	

Method Blank Outlier Report

Lab Reporting Batch ID: DX048 **Laboratory: LL**

EDD Filename: DX048_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLK0600B370254	3/6/2011 2:54:00 AM	1,2,3,4,6,7,8-HPCDD	0.118 ng/Kg	SL-161-SA5B-SB-4.0-5.0
		1,2,3,4,6,7,8-HPCDF	0.0509 ng/Kg	SL-163-SA5B-SB-3.5-4.5
		1,2,3,4,7,8,9-HPCDF	0.0321 ng/Kg	SL-168-SA5B-SB-4.0-5.0
		1,2,3,4,7,8-HxCDD	0.0135 ng/Kg	SL-313-SA5B-SB-4.0-5.0
		1,2,3,4,7,8-HXCDF	0.0267 ng/Kg	
		1,2,3,6,7,8-HXCDD	0.0102 ng/Kg	
		1,2,3,6,7,8-HXCDF	0.0145 ng/Kg	
		1,2,3,7,8,9-HXCDD	0.00946 ng/Kg	
		1,2,3,7,8,9-HXCDF	0.0364 ng/Kg	
		1,2,3,7,8-PECDD	0.0125 ng/Kg	
		1,2,3,7,8-PECDF	0.0121 ng/Kg	
		2,3,4,6,7,8-HXCDF	0.0191 ng/Kg	
		2,3,4,7,8-PECDF	0.0394 ng/Kg	
		OCDD	0.377 ng/Kg	
		OCDF	0.112 ng/Kg	
BLK0620B371305	3/8/2011 1:05:00 PM	1,2,3,4,6,7,8-HPCDD	0.355 ng/Kg	SL-162-SA5B-SB-4.0-5.0
		1,2,3,4,6,7,8-HPCDF	0.917 ng/Kg	
		1,2,3,4,7,8,9-HPCDF	0.128 ng/Kg	
		1,2,3,4,7,8-HxCDD	0.0364 ng/Kg	
		1,2,3,4,7,8-HXCDF	0.169 ng/Kg	
		1,2,3,6,7,8-HXCDD	0.0400 ng/Kg	
		1,2,3,6,7,8-HXCDF	0.135 ng/Kg	
		1,2,3,7,8,9-HXCDD	0.0571 ng/Kg	
		1,2,3,7,8,9-HXCDF	0.107 ng/Kg	
		1,2,3,7,8-PECDD	0.0408 ng/Kg	
		1,2,3,7,8-PECDF	0.0493 ng/Kg	
		2,3,4,6,7,8-HXCDF	0.271 ng/Kg	
		2,3,4,7,8-PECDF	0.149 ng/Kg	
		2,3,7,8-TCDD	0.0193 ng/Kg	
		2,3,7,8-TCDF	0.0236 ng/Kg	
		OCDD	0.681 ng/Kg	
		OCDF	0.618 ng/Kg	

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-048-SA5A-SB-3.0-4.0(RES)	1,2,3,4,6,7,8-HPCDF	0.277 ng/Kg	0.277U ng/Kg
SL-048-SA5A-SB-3.0-4.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0693 ng/Kg	0.0693U ng/Kg
SL-048-SA5A-SB-3.0-4.0(RES)	1,2,3,4,7,8-HXCDF	0.0458 ng/Kg	0.0458U ng/Kg
SL-048-SA5A-SB-3.0-4.0(RES)	1,2,3,6,7,8-HXCDF	0.0563 ng/Kg	0.0563U ng/Kg
SL-048-SA5A-SB-3.0-4.0(RES)	1,2,3,7,8,9-HXCDD	0.0722 ng/Kg	0.0722U ng/Kg
SL-048-SA5A-SB-3.0-4.0(RES)	1,2,3,7,8,9-HXCDF	0.0465 ng/Kg	0.0465U ng/Kg
SL-048-SA5A-SB-3.0-4.0(RES)	1,2,3,7,8-PECDD	0.0528 ng/Kg	0.0528U ng/Kg
SL-048-SA5A-SB-3.0-4.0(RES)	1,2,3,7,8-PECDF	0.0565 ng/Kg	0.0565U ng/Kg
SL-048-SA5A-SB-3.0-4.0(RES)	2,3,4,6,7,8-HXCDF	0.0783 ng/Kg	0.0783U ng/Kg
SL-048-SA5A-SB-3.0-4.0(RES)	2,3,4,7,8-PECDF	0.0774 ng/Kg	0.0774U ng/Kg
SL-048-SA5A-SB-3.0-4.0(RES)	2,3,7,8-TCDD	0.0354 ng/Kg	0.0354U ng/Kg
SL-048-SA5A-SB-3.0-4.0(RES)	OCDF	0.431 ng/Kg	0.431U ng/Kg
SL-049-SA5A-SB-2.0-3.0(RES)	1,2,3,4,6,7,8-HPCDF	0.418 ng/Kg	0.418U ng/Kg
SL-049-SA5A-SB-2.0-3.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0520 ng/Kg	0.0520U ng/Kg
SL-049-SA5A-SB-2.0-3.0(RES)	1,2,3,4,7,8-HXCDF	0.0982 ng/Kg	0.0982U ng/Kg
SL-049-SA5A-SB-2.0-3.0(RES)	1,2,3,6,7,8-HXCDF	0.0359 ng/Kg	0.0359U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX048 **Laboratory: LL**

EDD Filename: DX048_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-049-SA5A-SB-2.0-3.0(RES)	1,2,3,7,8,9-HXCDF	0.111 ng/Kg	0.111U ng/Kg
SL-049-SA5A-SB-2.0-3.0(RES)	1,2,3,7,8-PECDD	0.0350 ng/Kg	0.0350U ng/Kg
SL-049-SA5A-SB-2.0-3.0(RES)	1,2,3,7,8-PECDF	0.0310 ng/Kg	0.0310U ng/Kg
SL-049-SA5A-SB-2.0-3.0(RES)	2,3,4,6,7,8-HXCDF	0.0583 ng/Kg	0.0583U ng/Kg
SL-049-SA5A-SB-2.0-3.0(RES)	2,3,4,7,8-PECDF	0.0847 ng/Kg	0.0847U ng/Kg
SL-049-SA5A-SB-2.0-3.0(RES)	2,3,7,8-TCDD	0.0193 ng/Kg	0.0193U ng/Kg
SL-160-SA5B-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.120 ng/Kg	0.120U ng/Kg
SL-160-SA5B-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.0391 ng/Kg	0.0391U ng/Kg
SL-160-SA5B-SB-4.0-5.0(RES)	1,2,3,7,8-PECDD	0.0715 ng/Kg	0.0715U ng/Kg
SL-160-SA5B-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.0131 ng/Kg	0.0131U ng/Kg
SL-160-SA5B-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.0866 ng/Kg	0.0866U ng/Kg
SL-160-SA5B-SB-4.0-5.0(RES)	2,3,7,8-TCDD	0.0165 ng/Kg	0.0165U ng/Kg
SL-161-SA5B-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.0743 ng/Kg	0.0743U ng/Kg
SL-161-SA5B-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.0442 ng/Kg	0.0442U ng/Kg
SL-161-SA5B-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.135 ng/Kg	0.135U ng/Kg
SL-162-SA5B-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.377 ng/Kg	0.377U ng/Kg
SL-162-SA5B-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.175 ng/Kg	0.175U ng/Kg
SL-162-SA5B-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.168 ng/Kg	0.168U ng/Kg
SL-162-SA5B-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.728 ng/Kg	0.728U ng/Kg
SL-162-SA5B-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.303 ng/Kg	0.303U ng/Kg
SL-162-SA5B-SB-4.0-5.0(RES)	2,3,7,8-TCDD	0.0755 ng/Kg	0.0755U ng/Kg
SL-163-SA5B-SB-3.5-4.5(RES)	1,2,3,7,8,9-HXCDF	0.102 ng/Kg	0.102U ng/Kg
SL-163-SA5B-SB-3.5-4.5(RES)	1,2,3,7,8-PECDF	0.0537 ng/Kg	0.0537U ng/Kg
SL-163-SA5B-SB-3.5-4.5(RES)	2,3,4,7,8-PECDF	0.154 ng/Kg	0.154U ng/Kg
SL-313-SA5B-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.152 ng/Kg	0.152U ng/Kg
SL-313-SA5B-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.0431 ng/Kg	0.0431U ng/Kg
SL-313-SA5B-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.111 ng/Kg	0.111U ng/Kg
SL-313-SA5B-SB-9.0-10.0(RES)	1,2,3,7,8,9-HXCDF	0.182 ng/Kg	0.182U ng/Kg
SL-313-SA5B-SB-9.0-10.0(RES)	2,3,4,7,8-PECDF	0.216 ng/Kg	0.216U ng/Kg
SL-313-SA5B-SB-9.0-10.0(RES)	2,3,7,8-TCDD	0.0444 ng/Kg	0.0444U ng/Kg
SL-314-SA5B-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.140 ng/Kg	0.140U ng/Kg
SL-314-SA5B-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.0687 ng/Kg	0.0687U ng/Kg
SL-314-SA5B-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.209 ng/Kg	0.209U ng/Kg
SL-314-SA5B-SB-4.0-5.0(RES)	2,3,7,8-TCDD	0.0408 ng/Kg	0.0408U ng/Kg
SL-315-SA5B-SB-3.0-4.0(RES)	2,3,4,7,8-PECDF	0.182 ng/Kg	0.182U ng/Kg
SL-315-SA5B-SB-3.0-4.0(RES)	2,3,7,8-TCDD	0.0282 ng/Kg	0.0282U ng/Kg
SL-315-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.138 ng/Kg	0.138U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX048 **Laboratory: LL**

EDD Filename: DX048_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-315-SA5B-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.176 ng/Kg	0.176U ng/Kg
SL-315-SA5B-SS-0.0-0.5(RES)	2,3,7,8-TCDD	0.0197 ng/Kg	0.0197U ng/Kg
SL-316-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.0991 ng/Kg	0.0991U ng/Kg
SL-316-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.0336 ng/Kg	0.0336U ng/Kg
SL-316-SA5B-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.141 ng/Kg	0.141U ng/Kg
SL-316-SA5B-SS-0.0-0.5(RES)	2,3,7,8-TCDD	0.0205 ng/Kg	0.0205U ng/Kg
SL-319-SA5B-SB-4.0-5.0(RES)	1,2,3,7,8-PECDD	0.0761 ng/Kg	0.0761U ng/Kg
SL-319-SA5B-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.0750 ng/Kg	0.0750U ng/Kg
SL-319-SA5B-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.125 ng/Kg	0.125U ng/Kg
SL-327-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.114 ng/Kg	0.114U ng/Kg
SL-327-SA5B-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.210 ng/Kg	0.210U ng/Kg
SL-327-SA5B-SS-0.0-0.5(RES)	2,3,7,8-TCDD	0.0236 ng/Kg	0.0236U ng/Kg
SL-328-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.153 ng/Kg	0.153U ng/Kg
SL-328-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.119 ng/Kg	0.119U ng/Kg
SL-328-SA5B-SS-0.0-0.5(RES)	2,3,7,8-TCDD	0.0182 ng/Kg	0.0182U ng/Kg

Internal Standard Outlier Report

Lab Reporting Batch ID: DX048 Laboratory: LL

EDD Filename: DX048_v1 eQAPP Name: CDM_SSFL_110509

Method: 1613B
Matrix: AQ

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
EB31-SA5B-021011	13C-1,2,3,4,6,7,8-HpCDF	4	28.00-143.00	1,2,3,4,6,7,8-HpCDF	J (all detects) UJ(all non-detects)
	13C-1,2,3,4,7,8-HxCDD	9	32.00-141.00	1,2,3,4,7,8-HxCDD	
	13C-1,2,3,4,7,8-HxCDF	4	26.00-152.00	1,2,3,4,7,8-HxCDF	
	13C-1,2,3,6,7,8-HXCDF	5	26.00-123.00	1,2,3,6,7,8-HXCDF	
	13C-OCDF	8	17.00-157.00	OCDF	
EB31-SA5B-021011	13C-1,2,3,4,6,7,8-HpCDD	14	23.00-140.00	1,2,3,4,6,7,8-HpCDD	J(all detects) UJ(all non-detects)
	13C-1,2,3,4,7,8,9-HpCDF	14	26.00-138.00	1,2,3,4,7,8,9-HpCDF	
	13C-1,2,3,6,7,8-HxCDD	11	28.00-130.00	1,2,3,6,7,8-HxCDD	
	13C-1,2,3,7,8-PeCDD	21	25.00-181.00	1,2,3,7,8-PeCDD	
	13C-2,3,4,6,7,8-HxCDF	18	28.00-136.00	2,3,4,6,7,8-HxCDF	
	13C-2,3,4,7,8-PeCDF	14	21.00-178.00	2,3,4,7,8-PeCDF	
	13C-OCDD	12	17.00-157.00	OCDD	

Field Duplicate RPD Report

Lab Reporting Batch ID: DX049 **Laboratory: LL**

EDD Filename: DX049_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 160.3M
Matrix: SO

Analyte	Concentration (%)		Sample RPD	eQAPP RPD	Flag
	SL-333-SA5B-SS-0.0-0.5	DUP-024-QC-021011			
MOISTURE	5.8	6.800000000	16		No Qualifiers Applied

Method: 1613B
Matrix: SO

Analyte	Concentration (ng/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-333-SA5B-SS-0.0-0.5	DUP-024-QC-021011			
1,2,3,4,6,7,8-HPCDD	324	321.000000000	1	50.00	No Qualifiers Applied
1,2,3,4,6,7,8-HPCDF	54.1	52.900000000	2	50.00	
1,2,3,4,7,8,9-HPCDF	4.49	4.710000000	5	50.00	
1,2,3,4,7,8-HxCDD	4.08	4.110000000	1	50.00	
1,2,3,4,7,8-HXCDF	3.25	3.860000000	17	50.00	
1,2,3,6,7,8-HXCDD	8.49	8.910000000	5	50.00	
1,2,3,6,7,8-HXCDF	3.14	3.050000000	3	50.00	
1,2,3,7,8,9-HXCDD	7.84	8.240000000	5	50.00	
1,2,3,7,8,9-HXCDF	0.924	1.300000000	34	50.00	
1,2,3,7,8-PECDD	1.76	2.040000000	15	50.00	
1,2,3,7,8-PECDF	0.311	0.397000000	24	50.00	
2,3,4,6,7,8-HXCDF	2.48	2.690000000	8	50.00	
2,3,4,7,8-PECDF	1.02	1.410000000	32	50.00	
2,3,7,8-TCDD	0.113	0.170000000	40	50.00	
2,3,7,8-TCDF	0.106	0.142000000	29	50.00	
OCDD	3900	3810.000000000	2	50.00	
OCDF	98.5	99.400000000	1	50.00	

Reporting Limit Outliers

Lab Reporting Batch ID: DX048 **Laboratory: LL**

EDD Filename: DX048_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1613B

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB31-SA5B-021011	1,2,3,4,6,7,8-HPCDD	JB	2.24	10.3	PQL	pg/L	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	3.44	10.3	PQL	pg/L	
	1,2,3,4,7,8,9-HPCDF	JB	1.99	10.3	PQL	pg/L	
	1,2,3,4,7,8-HxCDD	JB	1.25	10.3	PQL	pg/L	
	1,2,3,4,7,8-HXCDF	JB	2.61	10.3	PQL	pg/L	
	1,2,3,6,7,8-HXCDD	JB	3.93	10.3	PQL	pg/L	
	1,2,3,6,7,8-HXCDF	JB	3.73	10.3	PQL	pg/L	
	1,2,3,7,8,9-HXCDD	JBQ	2.52	10.3	PQL	pg/L	
	1,2,3,7,8,9-HXCDF	JB	2.72	10.3	PQL	pg/L	
	1,2,3,7,8-PECDD	JB	3.53	10.3	PQL	pg/L	
	1,2,3,7,8-PECDF	JB	1.28	10.3	PQL	pg/L	
	2,3,4,6,7,8-HXCDF	JB	1.83	10.3	PQL	pg/L	
	2,3,4,7,8-PECDF	JB	3.35	10.3	PQL	pg/L	
	2,3,7,8-TCDF	JB	0.956	2.05	PQL	pg/L	
	OCDD	JB	3.15	20.5	PQL	pg/L	
	OCDF	JB	1.21	20.5	PQL	pg/L	

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-024-QC-021011	1,2,3,4,7,8,9-HPCDF	JB	4.71	5.36	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8-HxCDD	J	4.11	5.36	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	3.86	5.36	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	3.05	5.36	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	1.30	5.36	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	2.04	5.36	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.397	5.36	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	2.69	5.36	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	1.41	5.36	PQL	ng/Kg	
	2,3,7,8-TCDD	JB	0.170	1.07	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.142	1.07	PQL	ng/Kg	
SL-048-SA5A-SB-3.0-4.0	1,2,3,4,6,7,8-HPCDD	JB	0.923	5.49	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.277	5.49	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.0693	5.49	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JQ	0.0314	5.49	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0458	5.49	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.0847	5.49	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0563	5.49	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.0722	5.49	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.0465	5.49	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0528	5.49	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.0565	5.49	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.0783	5.49	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.0774	5.49	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0354	1.10	PQL	ng/Kg	
	OCDD	JB	7.72	11.0	PQL	ng/Kg	
	OCDF	JB	0.431	11.0	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX048 **Laboratory: LL**

EDD Filename: DX048_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-049-SA5A-SB-2.0-3.0	1,2,3,4,6,7,8-HPCDD	JB	1.75	5.69	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.418	5.69	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.0520	5.69	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JQ	0.0325	5.69	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.0982	5.69	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.112	5.69	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0359	5.69	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.165	5.69	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.111	5.69	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0350	5.69	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0310	5.69	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0583	5.69	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0847	5.69	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0193	1.14	PQL	ng/Kg	
	OCDF	JB	1.29	11.4	PQL	ng/Kg	
SL-160-SA5B-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDF	JB	2.10	5.52	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JBQ	0.290	5.52	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	J	0.0918	5.52	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.227	5.52	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.512	5.52	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.120	5.52	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.245	5.52	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.0391	5.52	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0715	5.52	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0131	5.52	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.219	5.52	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.0866	5.52	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0165	1.10	PQL	ng/Kg	
	OCDF	JB	4.66	11.0	PQL	ng/Kg	
SL-161-SA5B-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDF	JB	4.21	5.53	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JB	0.483	5.53	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.246	5.53	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.334	5.53	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	1.13	5.53	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.256	5.53	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.591	5.53	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.0743	5.53	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.130	5.53	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0442	5.53	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.329	5.53	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.135	5.53	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0344	1.11	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.0746	1.11	PQL	ng/Kg	
	OCDF	JB	9.85	11.1	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX048 **Laboratory: LL**

EDD Filename: DX048_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-162-SA5B-SB-4.0-5.0	1,2,3,4,7,8,9-HPCDF	JB	0.827	5.64	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.481	5.64	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.878	5.64	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	1.61	5.64	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.377	5.64	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.940	5.64	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.175	5.64	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	0.249	5.64	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.168	5.64	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.728	5.64	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.303	5.64	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0755	1.13	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.175	1.13	PQL	ng/Kg	
SL-163-SA5B-SB-3.5-4.5	1,2,3,4,7,8,9-HPCDF	JB	0.716	5.39	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.394	5.39	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.415	5.39	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	1.48	5.39	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.290	5.39	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.801	5.39	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.102	5.39	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	0.148	5.39	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0537	5.39	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.414	5.39	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.154	5.39	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.0819	1.08	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.145	1.08	PQL	ng/Kg	
SL-164-SA5B-SB-4.0-5.0	1,2,3,4,7,8,9-HPCDF	JB	1.43	5.40	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	J	0.992	5.40	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	1.04	5.40	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	3.84	5.40	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.774	5.40	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	2.07	5.40	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.284	5.40	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	0.446	5.40	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.352	5.40	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	1.01	5.40	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.704	5.40	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0833	1.08	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.821	1.08	PQL	ng/Kg	
SL-168-SA5B-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDF	JB	2.82	5.59	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.344	5.59	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.199	5.59	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.322	5.59	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.966	5.59	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.177	5.59	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.718	5.59	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.301	5.59	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	0.115	5.59	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.103	5.59	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.253	5.59	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.201	5.59	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.0206	1.12	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.148	1.12	PQL	ng/Kg	
	OCDF	JB	6.45	11.2	PQL	ng/Kg	

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Reporting Limit Outliers

Lab Reporting Batch ID: DX048 **Laboratory: LL**

EDD Filename: DX048_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-313-SA5B-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDF	JB	2.19	5.55	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.195	5.55	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.211	5.55	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.139	5.55	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.799	5.55	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.151	5.55	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.684	5.55	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.152	5.55	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.119	5.55	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.0431	5.55	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.168	5.55	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.111	5.55	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.0250	1.11	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.0198	1.11	PQL	ng/Kg	
	OCDF	JB	5.78	11.1	PQL	ng/Kg	
SL-313-SA5B-SB-9.0-10.0	1,2,3,4,7,8,9-HPCDF	JB	0.470	5.59	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	J	0.931	5.59	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.318	5.59	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	2.12	5.59	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.466	5.59	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	2.43	5.59	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.182	5.59	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	0.532	5.59	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0885	5.59	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.747	5.59	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.216	5.59	PQL	ng/Kg	
	2,3,7,8-TCDD	JB	0.0444	1.12	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.0499	1.12	PQL	ng/Kg	
SL-314-SA5B-SB-4.0-5.0	1,2,3,4,7,8,9-HPCDF	JBQ	0.645	5.54	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	J	0.979	5.54	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.384	5.54	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	2.18	5.54	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.492	5.54	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	2.55	5.54	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.140	5.54	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	0.592	5.54	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0687	5.54	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.737	5.54	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.209	5.54	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0408	1.11	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.0337	1.11	PQL	ng/Kg	
SL-315-SA5B-SB-3.0-4.0	1,2,3,4,7,8,9-HPCDF	JB	0.778	5.39	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	J	0.141	5.39	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.424	5.39	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	1.81	5.39	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.637	5.39	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	1.22	5.39	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.254	5.39	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	0.105	5.39	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.123	5.39	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.325	5.39	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.182	5.39	PQL	ng/Kg	
	2,3,7,8-TCDD	JB	0.0282	1.08	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.0325	1.08	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX048 **Laboratory: LL**

EDD Filename: DX048_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-315-SA5B-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	0.446	5.30	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8-HxCDD	J	0.578	5.30	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.306	5.30	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	1.67	5.30	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.418	5.30	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	1.58	5.30	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.138	5.30	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.279	5.30	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.0855	5.30	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.482	5.30	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.176	5.30	PQL	ng/Kg	
	2,3,7,8-TCDD	JB	0.0197	1.06	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.0409	1.06	PQL	ng/Kg	
SL-316-SA5B-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	3.81	5.24	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JB	0.260	5.24	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	J	0.358	5.24	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.230	5.24	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	1.13	5.24	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.219	5.24	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.915	5.24	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.0991	5.24	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.194	5.24	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0336	5.24	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.285	5.24	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.141	5.24	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0205	1.05	PQL	ng/Kg	
SL-319-SA5B-SB-4.0-5.0	1,2,3,4,7,8,9-HPCDF	JB	0.865	5.36	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8-HxCDD	J	0.112	5.36	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.437	5.36	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	1.97	5.36	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.918	5.36	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	1.27	5.36	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.268	5.36	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0761	5.36	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.0750	5.36	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.335	5.36	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.125	5.36	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.0273	1.07	PQL	ng/Kg	
SL-321-SA5B-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	2.33	5.28	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8-HxCDD	J	4.21	5.28	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	1.94	5.28	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	2.31	5.28	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.715	5.28	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	2.44	5.28	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.536	5.28	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	3.69	5.28	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	1.15	5.28	PQL	ng/Kg	
	2,3,7,8-TCDD	JB	0.215	1.06	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.233	1.06	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX048 | Laboratory: LL

EDD Filename: DX048_v1 | eQAPP Name: CDM_SSFL_110509

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-327-SA5B-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	4.37	5.20	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JB	0.277	5.20	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	J	0.361	5.20	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.232	5.20	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.980	5.20	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.271	5.20	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.904	5.20	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.114	5.20	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.209	5.20	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.380	5.20	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.210	5.20	PQL	ng/Kg	
	2,3,7,8-TCDD	JB	0.0236	1.04	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.0369	1.04	PQL	ng/Kg	
	OCDF	JB	9.57	10.4	PQL	ng/Kg	
SL-328-SA5B-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	2.15	5.20	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JB	0.153	5.20	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	J	0.205	5.20	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.192	5.20	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.740	5.20	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.176	5.20	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.696	5.20	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.119	5.20	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.136	5.20	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.142	5.20	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.212	5.20	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.446	5.20	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0182	1.04	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.0890	1.04	PQL	ng/Kg	
	OCDF	JB	5.18	10.4	PQL	ng/Kg	

SAMPLE DELIVERY GROUP

DX051

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
16-Feb-2011	SL-032-SA5A-SS-0.0-0.5	6208380	N	METHOD	1613B	III
16-Feb-2011	SL-041-SA5A-SS-0.0-0.5	6208381	N	METHOD	1613B	III
16-Feb-2011	SL-024-SA5A-SS-0.0-0.5	6208374	N	METHOD	1613B	III
16-Feb-2011	SL-026-SA5A-SS-0.0-0.5	6208376	N	METHOD	1613B	III
16-Feb-2011	SL-335-SA5B-SB-2.0-3.0	6208384	N	METHOD	1613B	III
16-Feb-2011	SL-031-SA5A-SS-0.0-0.5	6208379	N	METHOD	1613B	III
16-Feb-2011	SL-333-SA5B-SB-4.0-5.0	6208383	N	METHOD	1613B	III
16-Feb-2011	SL-028-SA5A-SS-0.0-0.5	6208377	N	METHOD	1613B	III
16-Feb-2011	SL-029-SA5A-SS-0.0-0.5	6208378	N	METHOD	1613B	III
16-Feb-2011	SL-025-SA5A-SS-0.0-0.5	6208375	N	METHOD	1613B	III
16-Feb-2011	SL-332-SA5B-SB-4.0-5.0	6208382	N	METHOD	1613B	III
18-Feb-2011	SL-049-SA5A-SS-0.0-0.5	6210682	N	METHOD	1613B	III
18-Feb-2011	SL-100-SA5A-SS-0.0-0.5	6210690	N	METHOD	1613B	III
18-Feb-2011	SL-101-SA5A-SS-0.0-0.5	6210691	N	METHOD	1613B	III
18-Feb-2011	DUP01-SA5A-QC-021811	6210681	FD	METHOD	1613B	III
18-Feb-2011	SL-099-SA5A-SS-0.0-0.5	6210687	N	METHOD	1613B	III
18-Feb-2011	SL-099-SA5A-SS-0.0-0.5MS	6210688	MS	METHOD	1613B	III
18-Feb-2011	SL-099-SA5A-SS-0.0-0.5MSD	6210689	MSD	METHOD	1613B	III
18-Feb-2011	SL-098-SA5A-SS-0.0-0.5	6210686	N	METHOD	1613B	III
18-Feb-2011	SL-052-SA5A-SS-0.0-0.5	6210683	N	METHOD	1613B	III
18-Feb-2011	SL-096-SA5A-SS-0.0-0.5	6210685	N	METHOD	1613B	III
18-Feb-2011	SL-053-SA5A-SS-0.0-0.5	6210684	N	METHOD	1613B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DX051 **Laboratory: LL**

EDD Filename: DX051_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: **DUP01-SA5A-QC-021811** ***Collected:*** **2/18/2011 10:35:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	2.50	JB	0.0579	MDL	5.55	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	1.46	J	0.0829	MDL	5.55	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	1.03	JB	0.0750	MDL	5.55	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	3.09	JB	0.0804	MDL	5.55	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.653	JB	0.0491	MDL	5.55	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	3.23	J	0.0767	MDL	5.55	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.222	JB	0.0434	MDL	5.55	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.790	JB	0.0515	MDL	5.55	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.111	JBQ	0.0164	MDL	5.55	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	1.02	JB	0.0368	MDL	5.55	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.357	JB	0.0173	MDL	5.55	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.121	J	0.0180	MDL	1.11	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.162	JB	0.0337	MDL	1.11	PQL	ng/Kg	J	Z

Sample ID: **SL-024-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 10:30:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	69.1	B	0.117	MDL	5.44	PQL	ng/Kg	J	I
1,2,3,4,6,7,8-HPCDF	7.36	B	0.218	MDL	5.44	PQL	ng/Kg	J	I
1,2,3,4,7,8,9-HPCDF	0.440	JB	0.0639	MDL	5.44	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.855	J	0.303	MDL	5.44	PQL	ng/Kg	J	Z, I
1,2,3,4,7,8-HXCDF	0.440	U	0.440	MDL	5.44	PQL	ng/Kg	UJ	I
1,2,3,6,7,8-HXCDD	2.58	JB	0.255	MDL	5.44	PQL	ng/Kg	J	Z, I
1,2,3,6,7,8-HXCDF	0.492	JB	0.277	MDL	5.44	PQL	ng/Kg	J	Z, I
1,2,3,7,8,9-HXCDD	2.09	J	0.0799	MDL	5.44	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.454	JB	0.0347	MDL	5.44	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.535	JBQ	0.0456	MDL	5.44	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.196	JB	0.0396	MDL	5.44	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.509	JB	0.0656	MDL	5.44	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.983	JB	0.0624	MDL	5.44	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0951	JQ	0.00936	MDL	1.09	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.483	JB	0.0421	MDL	1.09	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX051 **Laboratory: LL**

EDD Filename: DX051_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: **SL-025-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 1:28:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	0.560	JB	0.0558	MDL	5.83	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	1.25	J	0.131	MDL	5.83	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	3.46	JB	0.122	MDL	5.83	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.638	JB	0.0881	MDL	5.83	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	2.78	J	0.115	MDL	5.83	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.339	JBQ	0.0803	MDL	5.83	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.843	JB	0.0463	MDL	5.83	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.746	JB	0.0656	MDL	5.83	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	1.65	JB	0.0589	MDL	5.83	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0890	JQ	0.0176	MDL	1.17	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.906	JB	0.108	MDL	1.17	PQL	ng/Kg	J	Z

Sample ID: **SL-026-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 10:45:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	0.778	JB	0.0571	MDL	5.61	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	1.44	J	0.0920	MDL	5.61	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.488	JB	0.0887	MDL	5.61	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	3.23	JB	0.0886	MDL	5.61	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.522	JB	0.0643	MDL	5.61	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	2.64	J	0.0816	MDL	5.61	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.296	JB	0.0567	MDL	5.61	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.855	JB	0.0396	MDL	5.61	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.168	JB	0.0464	MDL	5.61	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.783	JB	0.0508	MDL	5.61	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	1.22	JB	0.0464	MDL	5.61	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0729	JQ	0.0163	MDL	1.12	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.486	JBQ	0.0825	MDL	1.12	PQL	ng/Kg	J	Z

Sample ID: **SL-028-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 12:55:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	2.65	JB	0.0204	MDL	5.54	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.190	JB	0.0374	MDL	5.54	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.290	JQ	0.0649	MDL	5.54	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX051 **Laboratory: LL**

EDD Filename: DX051_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: **SL-028-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 12:55:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8-HXCDF	0.246	JB	0.0274	MDL	5.54	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	1.08	JB	0.0665	MDL	5.54	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.181	JB	0.0210	MDL	5.54	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	1.08	J	0.0631	MDL	5.54	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.243	JB	0.0278	MDL	5.54	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.222	JB	0.0222	MDL	5.54	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.0648	JBQ	0.00898	MDL	5.54	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.171	JB	0.0218	MDL	5.54	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.130	JB	0.00987	MDL	5.54	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0435	JQ	0.0111	MDL	1.11	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.0329	JB	0.0173	MDL	1.11	PQL	ng/Kg	U	B
OCDF	6.52	JB	0.0376	MDL	11.1	PQL	ng/Kg	J	Z

Sample ID: **SL-029-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 1:10:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	3.56	JB	0.0401	MDL	5.66	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.281	JB	0.0378	MDL	5.66	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.453	J	0.0877	MDL	5.66	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	1.49	JB	0.0803	MDL	5.66	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.247	JB	0.0472	MDL	5.66	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	1.43	J	0.0632	MDL	5.66	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.167	JB	0.0323	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.344	JB	0.0231	MDL	5.66	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.0983	JBQ	0.0227	MDL	5.66	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.213	JB	0.0277	MDL	5.66	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.404	JB	0.0247	MDL	5.66	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0482	J	0.0118	MDL	1.13	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.169	JB	0.0447	MDL	1.13	PQL	ng/Kg	J	Z
OCDF	10.1	JB	0.0490	MDL	11.3	PQL	ng/Kg	J	Z

Sample ID: **SL-031-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 11:10:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,6,7,8-HXCDF	5.45	JB	0.114	MDL	5.65	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX051 **Laboratory: LL**

EDD Filename: DX051_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-031-SA5A-SS-0.0-0.5 *Collected:* 2/16/2011 11:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,7,8-PECDD	3.95	JB	0.0934	MDL	5.65	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	2.34	JB	0.0278	MDL	5.65	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	3.91	JB	0.0279	MDL	5.65	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.306	J	0.0176	MDL	1.13	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.491	JB	0.0267	MDL	1.13	PQL	ng/Kg	J	Z
OCDD	10600	EB	0.294	MDL	11.3	PQL	ng/Kg	J	*XI

Sample ID: SL-032-SA5A-SS-0.0-0.5 *Collected:* 2/16/2011 9:20:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	2.86	JB	0.0221	MDL	5.53	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.212	JBQ	0.0355	MDL	5.53	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.376	J	0.0739	MDL	5.53	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.208	JBQ	0.0534	MDL	5.53	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	1.16	JB	0.0713	MDL	5.53	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.207	JBQ	0.0409	MDL	5.53	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	1.13	J	0.0645	MDL	5.53	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.354	JB	0.0463	MDL	5.53	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.362	JBQ	0.0256	MDL	5.53	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.220	JBQ	0.0215	MDL	5.53	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.259	JB	0.0366	MDL	5.53	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.352	JB	0.0225	MDL	5.53	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0346	JQ	0.0117	MDL	1.11	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.223	JB	0.0363	MDL	1.11	PQL	ng/Kg	J	Z
OCDF	8.07	JB	0.0366	MDL	11.1	PQL	ng/Kg	J	Z

Sample ID: SL-041-SA5A-SS-0.0-0.5 *Collected:* 2/16/2011 9:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	0.877	JB	0.0549	MDL	5.54	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	1.12	J	0.0843	MDL	5.54	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.941	JB	0.0587	MDL	5.54	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	2.96	JB	0.0831	MDL	5.54	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.423	JB	0.0412	MDL	5.54	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	2.58	J	0.0776	MDL	5.54	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX051 | Laboratory: LL

EDD Filename: DX051_v1 | eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-041-SA5A-SS-0.0-0.5 *Collected:* 2/16/2011 9:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,7,8,9-HXCDF	0.334	JB	0.0432	MDL	5.54	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.640	JB	0.0349	MDL	5.54	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.195	JB	0.0186	MDL	5.54	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.589	JB	0.0361	MDL	5.54	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.363	JBQ	0.0190	MDL	5.54	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0846	JQ	0.0123	MDL	1.11	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.184	JBQ	0.0279	MDL	1.11	PQL	ng/Kg	J	Z

Sample ID: SL-049-SA5A-SS-0.0-0.5 *Collected:* 2/18/2011 8:25:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	0.792	JB	0.0512	MDL	5.59	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.562	J	0.0647	MDL	5.59	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.546	JB	0.0502	MDL	5.59	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	1.43	JB	0.0649	MDL	5.59	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.313	JB	0.0377	MDL	5.59	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	1.35	J	0.0616	MDL	5.59	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.295	JB	0.0438	MDL	5.59	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.308	JBQ	0.0356	MDL	5.59	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.113	JB	0.0191	MDL	5.59	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.449	JB	0.0357	MDL	5.59	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.370	JB	0.0204	MDL	5.59	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0417	JQ	0.0148	MDL	1.12	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.188	JBQ	0.0366	MDL	1.12	PQL	ng/Kg	J	Z

Sample ID: SL-052-SA5A-SS-0.0-0.5 *Collected:* 2/18/2011 11:28:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	0.507	JB	0.0375	MDL	5.55	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.409	J	0.0553	MDL	5.55	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.534	JB	0.0552	MDL	5.55	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.880	JB	0.0563	MDL	5.55	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.263	JBQ	0.0392	MDL	5.55	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.963	J	0.0497	MDL	5.55	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.297	JB	0.0444	MDL	5.55	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX051 **Laboratory: LL**

EDD Filename: DX051_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: **SL-052-SA5A-SS-0.0-0.5** ***Collected:*** **2/18/2011 11:28:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,7,8-PECDD	0.295	JB	0.0304	MDL	5.55	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.132	JB	0.0190	MDL	5.55	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.377	JB	0.0357	MDL	5.55	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.402	JB	0.0209	MDL	5.55	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.196	JBQ	0.0360	MDL	1.11	PQL	ng/Kg	J	Z

Sample ID: **SL-053-SA5A-SS-0.0-0.5** ***Collected:*** **2/18/2011 1:20:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	0.429	JB	0.0319	MDL	5.48	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.996	J	0.0635	MDL	5.48	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.891	JB	0.0566	MDL	5.48	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	3.65	JB	0.0627	MDL	5.48	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.317	JB	0.0384	MDL	5.48	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	2.60	J	0.0564	MDL	5.48	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.398	JB	0.0386	MDL	5.48	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.551	JB	0.0368	MDL	5.48	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.191	JB	0.0179	MDL	5.48	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.413	JB	0.0318	MDL	5.48	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.447	JB	0.0197	MDL	5.48	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0659	J	0.0140	MDL	1.10	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.253	JB	0.0322	MDL	1.10	PQL	ng/Kg	J	Z

Sample ID: **SL-096-SA5A-SS-0.0-0.5** ***Collected:*** **2/18/2011 12:56:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	2420	EB	0.427	MDL	5.86	PQL	ng/Kg	J	*XI
1,2,3,7,8,9-HXCDF	3.44	JB	0.0927	MDL	5.86	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	1.60	JB	0.0549	MDL	5.86	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	3.12	JB	0.0540	MDL	5.86	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.530	JB	0.0954	MDL	1.17	PQL	ng/Kg	J	Z
OCDD	46300	EB	0.400	MDL	11.7	PQL	ng/Kg	J	*XI

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX051 **Laboratory: LL**

EDD Filename: DX051_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: SL-098-SA5A-SS-0.0-0.5 ***Collected:*** 2/18/2011 11:05:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	2.60	JB	0.0985	MDL	5.66	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	1.56	J	0.119	MDL	5.66	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	2.75	JB	0.122	MDL	5.66	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	1.20	JB	0.0857	MDL	5.66	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	3.57	J	0.0980	MDL	5.66	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.433	JB	0.0686	MDL	5.66	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.752	JB	0.0573	MDL	5.66	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.330	JB	0.0484	MDL	5.66	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	1.55	JB	0.0573	MDL	5.66	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	1.26	JB	0.0493	MDL	5.66	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.120	J	0.0223	MDL	1.13	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.519	JB	0.117	MDL	1.13	PQL	ng/Kg	J	Z

Sample ID: SL-099-SA5A-SS-0.0-0.5 ***Collected:*** 2/18/2011 10:35:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	93.5	B	0.0889	MDL	5.52	PQL	ng/Kg	J	Q
1,2,3,4,7,8,9-HPCDF	2.14	JB	0.0689	MDL	5.52	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	1.36	J	0.0635	MDL	5.52	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.900	JB	0.0597	MDL	5.52	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	2.82	JB	0.0643	MDL	5.52	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.630	JB	0.0434	MDL	5.52	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	2.82	J	0.0597	MDL	5.52	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.268	JB	0.0501	MDL	5.52	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.779	JB	0.0485	MDL	5.52	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.139	JB	0.0187	MDL	5.52	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.964	JB	0.0396	MDL	5.52	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.375	JB	0.0193	MDL	5.52	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.121	JQ	0.0180	MDL	1.10	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.188	JB	0.0396	MDL	1.10	PQL	ng/Kg	J	Z

Sample ID: SL-100-SA5A-SS-0.0-0.5 ***Collected:*** 2/18/2011 8:50:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8-HxCDD	5.21	J	0.0767	MDL	5.91	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX051 **Laboratory: LL**

EDD Filename: DX051_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-100-SA5A-SS-0.0-0.5 *Collected:* 2/18/2011 8:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8-HXCDF	3.75	JB	0.0745	MDL	5.91	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	3.76	JB	0.0525	MDL	5.91	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.676	JB	0.0618	MDL	5.91	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	2.29	JB	0.0804	MDL	5.91	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.334	JBQ	0.0317	MDL	5.91	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	5.67	JB	0.0517	MDL	5.91	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.956	JB	0.0344	MDL	5.91	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.278	J	0.0248	MDL	1.18	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.281	JBQ	0.0745	MDL	1.18	PQL	ng/Kg	J	Z

Sample ID: SL-101-SA5A-SS-0.0-0.5 *Collected:* 2/18/2011 9:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	0.723	JB	0.0429	MDL	5.53	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.411	J	0.0569	MDL	5.53	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	2.17	JB	0.0774	MDL	5.53	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	1.28	JB	0.0588	MDL	5.53	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.310	JB	0.0552	MDL	5.53	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.998	J	0.0558	MDL	5.53	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.283	JBQ	0.0639	MDL	5.53	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.243	JBQ	0.0332	MDL	5.53	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.132	JB	0.0326	MDL	5.53	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.473	JB	0.0529	MDL	5.53	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.359	JB	0.0342	MDL	5.53	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0356	JQ	0.0164	MDL	1.11	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.144	JBQ	0.0428	MDL	1.11	PQL	ng/Kg	J	Z

Sample ID: SL-332-SA5B-SB-4.0-5.0 *Collected:* 2/16/2011 4:16:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	4.29	JB	0.0497	MDL	5.50	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.575	JB	0.0594	MDL	5.50	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.175	JB	0.0592	MDL	5.50	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.470	JB	0.0453	MDL	5.50	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	1.05	JB	0.0605	MDL	5.50	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX051 **Laboratory: LL**

EDD Filename: DX051_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: **SL-332-SA5B-SB-4.0-5.0** ***Collected:*** **2/16/2011 4:16:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,6,7,8-HXCDF	0.394	JB	0.0428	MDL	5.50	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.682	JB	0.0592	MDL	5.50	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.265	JBQ	0.0523	MDL	5.50	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.131	JBQ	0.0410	MDL	5.50	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.0829	JBQ	0.0318	MDL	5.50	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.363	JB	0.0444	MDL	5.50	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.878	JBQ	0.0299	MDL	5.50	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0329	J	0.0154	MDL	1.10	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.136	JB	0.0479	MDL	1.10	PQL	ng/Kg	J	Z
OCDF	7.91	JB	0.115	MDL	11.0	PQL	ng/Kg	J	Z

Sample ID: **SL-333-SA5B-SB-4.0-5.0** ***Collected:*** **2/16/2011 12:30:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	0.866	JB	0.0640	MDL	5.71	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.652	J	0.0923	MDL	5.71	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.961	JB	0.0866	MDL	5.71	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	1.20	JB	0.0913	MDL	5.71	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.768	JB	0.0589	MDL	5.71	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	1.22	J	0.0899	MDL	5.71	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.847	JB	0.0534	MDL	5.71	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.263	JBQ	0.0489	MDL	5.71	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.0591	JBQ	0.0200	MDL	5.71	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.493	JB	0.0503	MDL	5.71	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.665	JB	0.0207	MDL	5.71	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0454	J	0.0157	MDL	1.14	PQL	ng/Kg	J	Z

Sample ID: **SL-335-SA5B-SB-2.0-3.0** ***Collected:*** **2/16/2011 10:57:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	1.32	JB	0.0322	MDL	5.47	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.150	JB	0.0196	MDL	5.47	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0511	JB	0.0129	MDL	5.47	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0298	JB	0.0231	MDL	5.47	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.212	JB	0.0223	MDL	5.47	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX051 **Laboratory: LL**

EDD Filename: DX051_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: **SL-335-SA5B-SB-2.0-3.0** ***Collected:*** **2/16/2011 10:57:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,6,7,8-HXCDF	0.126	JBQ	0.0164	MDL	5.47	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.242	J	0.0171	MDL	5.47	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.0662	JBQ	0.00974	MDL	5.47	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0177	JBQ	0.0121	MDL	5.47	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0174	JBQ	0.00580	MDL	5.47	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0194	JB	0.00842	MDL	5.47	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0519	JBQ	0.00667	MDL	5.47	PQL	ng/Kg	U	B
OCDF	0.328	JBQ	0.0193	MDL	10.9	PQL	ng/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DX051 **Laboratory: LL**

EDD Filename: DX051_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
*XI	Compound Quantitation and CRQL
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Verification Correlation Coefficient
C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DX051 **Laboratory: LL**

EDD Filename: DX051_v1 **eQAPP Name: CDM_SSFL_110509**

F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation
L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery Lower Estimation

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DX051 **Laboratory: LL**

EDD Filename: DX051_v1 **eQAPP Name: CDM_SSFL_110509**

R	Continuing Calibration Verification Percent Recovery Lower Rejection
R	Continuing Calibration Verification Percent Recovery Upper Estimation
R	Continuing Calibration Verification Percent Recovery Upper Rejection
R	Continuing Calibration Verification Relative Response Factor
R	Initial Calibration Relative Response Factor
R	Initial Calibration Verification Percent Recovery Lower Estimation
R	Initial Calibration Verification Percent Recovery Lower Rejection
R	Initial Calibration Verification Percent Recovery Upper Estimation
R	Initial Calibration Verification Percent Recovery Upper Rejection
R	Initial Calibration Verification Relative Response Factor
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control Outlier Reports

DX051

Method Blank Outlier Report

Lab Reporting Batch ID: DX051 **Laboratory: LL**

EDD Filename: DX051_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLK0540B370110	2/27/2011 1:10:00 AM	1,2,3,4,6,7,8-HPCDD	0.119 ng/Kg	DUP01-SA5A-QC-021811
		1,2,3,4,6,7,8-HPCDF	0.0451 ng/Kg	SL-024-SA5A-SS-0.0-0.5
		1,2,3,4,7,8,9-HPCDF	0.0280 ng/Kg	SL-025-SA5A-SS-0.0-0.5
		1,2,3,4,7,8-HXCDF	0.0161 ng/Kg	SL-026-SA5A-SS-0.0-0.5
		1,2,3,6,7,8-HXCDD	0.0141 ng/Kg	SL-028-SA5A-SS-0.0-0.5
		1,2,3,6,7,8-HXCDF	0.0176 ng/Kg	SL-029-SA5A-SS-0.0-0.5
		1,2,3,7,8,9-HXCDF	0.0361 ng/Kg	SL-031-SA5A-SS-0.0-0.5
		1,2,3,7,8-PECDD	0.0223 ng/Kg	SL-032-SA5A-SS-0.0-0.5
		1,2,3,7,8-PECDF	0.0154 ng/Kg	SL-041-SA5A-SS-0.0-0.5
		2,3,4,6,7,8-HXCDF	0.0143 ng/Kg	SL-049-SA5A-SS-0.0-0.5
		2,3,4,7,8-PECDF	0.0405 ng/Kg	SL-052-SA5A-SS-0.0-0.5
		2,3,7,8-TCDF	0.0106 ng/Kg	SL-053-SA5A-SS-0.0-0.5
		OCDD	0.303 ng/Kg	SL-096-SA5A-SS-0.0-0.5
		OCDF	0.133 ng/Kg	SL-098-SA5A-SS-0.0-0.5
				SL-099-SA5A-SS-0.0-0.5
				SL-100-SA5A-SS-0.0-0.5
				SL-101-SA5A-SS-0.0-0.5
				SL-333-SA5B-SB-4.0-5.0
				SL-335-SA5B-SB-2.0-3.0
BLK0730B371431	3/16/2011 2:31:00 PM	1,2,3,4,6,7,8-HPCDD	0.208 ng/Kg	SL-332-SA5B-SB-4.0-5.0
		1,2,3,4,6,7,8-HPCDF	0.181 ng/Kg	
		1,2,3,4,7,8,9-HPCDF	0.0599 ng/Kg	
		1,2,3,4,7,8-HxCDD	0.00942 ng/Kg	
		1,2,3,4,7,8-HXCDF	0.0547 ng/Kg	
		1,2,3,6,7,8-HXCDD	0.0267 ng/Kg	
		1,2,3,6,7,8-HXCDF	0.0394 ng/Kg	
		1,2,3,7,8,9-HXCDD	0.0153 ng/Kg	
		1,2,3,7,8,9-HXCDF	0.0578 ng/Kg	
		1,2,3,7,8-PECDD	0.0159 ng/Kg	
		1,2,3,7,8-PECDF	0.0184 ng/Kg	
		2,3,4,6,7,8-HXCDF	0.0651 ng/Kg	
		2,3,4,7,8-PECDF	0.0583 ng/Kg	
		2,3,7,8-TCDF	0.0133 ng/Kg	
		OCDD	0.397 ng/Kg	
		OCDF	0.242 ng/Kg	

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-028-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.0648 ng/Kg	0.0648U ng/Kg
SL-028-SA5A-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.130 ng/Kg	0.130U ng/Kg
SL-028-SA5A-SS-0.0-0.5(RES)	2,3,7,8-TCDF	0.0329 ng/Kg	0.0329U ng/Kg
SL-029-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.167 ng/Kg	0.167U ng/Kg
SL-332-SA5B-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.265 ng/Kg	0.265U ng/Kg
SL-332-SA5B-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.0829 ng/Kg	0.0829U ng/Kg
SL-333-SA5B-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.0591 ng/Kg	0.0591U ng/Kg
SL-335-SA5B-SB-2.0-3.0(RES)	1,2,3,4,6,7,8-HPCDF	0.150 ng/Kg	0.150U ng/Kg
SL-335-SA5B-SB-2.0-3.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0511 ng/Kg	0.0511U ng/Kg
SL-335-SA5B-SB-2.0-3.0(RES)	1,2,3,4,7,8-HXCDF	0.0298 ng/Kg	0.0298U ng/Kg
SL-335-SA5B-SB-2.0-3.0(RES)	1,2,3,7,8,9-HXCDF	0.0662 ng/Kg	0.0662U ng/Kg
SL-335-SA5B-SB-2.0-3.0(RES)	1,2,3,7,8-PECDD	0.0177 ng/Kg	0.0177U ng/Kg
SL-335-SA5B-SB-2.0-3.0(RES)	1,2,3,7,8-PECDF	0.0174 ng/Kg	0.0174U ng/Kg
SL-335-SA5B-SB-2.0-3.0(RES)	2,3,4,6,7,8-HXCDF	0.0194 ng/Kg	0.0194U ng/Kg

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Method Blank Outlier Report

Lab Reporting Batch ID: DX051 **Laboratory: LL**

EDD Filename: DX051_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-335-SA5B-SB-2.0-3.0(RES)	2,3,4,7,8-PECDF	0.0519 ng/Kg	0.0519U ng/Kg
SL-335-SA5B-SB-2.0-3.0(RES)	OCDF	0.328 ng/Kg	0.328U ng/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DX051 **Laboratory: LL**

EDD Filename: DX051_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-099-SA5A-SS-0.0-0.5MS	1,2,3,4,6,7,8-HPCDD	-	-	40.00-135.00	22 (20.00)	1,2,3,4,6,7,8-HPCDD	J (all detects)
SL-099-SA5A-SS-0.0-0.5MSD	OCDD	231	245	40.00-135.00	-	OCDD	OCDD
(SL-099-SA5A-SS-0.0-0.5)							No Qual, >4x

Internal Standard Outlier Report

Lab Reporting Batch ID: DX051 **Laboratory: LL**

EDD Filename: DX051_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Sample ID	*Surrogate*	*Sample % Recovery*	*% Recovery Limits*	*Affected Compounds*	*Flag*
SL-024-SA5A-SS-0.0-0.5	13C-1,2,3,4,6,7,8-HpCDF 13C-1,2,3,4,7,8-HxCDF 13C-1,2,3,6,7,8-HXCDF	7 5 7	28.00-143.00 26.00-152.00 26.00-123.00	1,2,3,4,6,7,8-HpCDF 1,2,3,4,7,8-HxCDF 1,2,3,6,7,8-HXCDF	J (all detects) UJ(all non-detects)
SL-024-SA5A-SS-0.0-0.5	13C-1,2,3,4,6,7,8-HpCDD 13C-1,2,3,4,7,8-HxCDD 13C-1,2,3,6,7,8-HxCDD 13C-1,2,7,8-TCDD (CRS)	22 12 14 21	23.00-140.00 32.00-141.00 28.00-130.00 35.00-197.00	1,2,3,4,6,7,8-HpCDD 1,2,3,4,7,8-HxCDD 1,2,3,6,7,8-HxCDD	J(all detects) UJ(all non-detects)

Field Duplicate RPD Report

Lab Reporting Batch ID: DX051 **Laboratory: LL**

EDD Filename: DX051_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 160.3M
Matrix: SO

Analyte	Concentration (%)		Sample RPD	eQAPP RPD	Flag
	SL-099-SA5A-SS-0.0-0.5	DUP01-SA5A-QC-021811			
MOISTURE	9.4	9.9	5		No Qualifiers Applied

Method: 1613B
Matrix: SO

Analyte	Concentration (ng/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-099-SA5A-SS-0.0-0.5	DUP01-SA5A-QC-021811			
1,2,3,4,6,7,8-HPCDD	93.5	112	18	50.00	
1,2,3,4,6,7,8-HPCDF	23.4	25.9	10	50.00	
1,2,3,4,7,8,9-HPCDF	2.14	2.50	16	50.00	
1,2,3,4,7,8-HxCDD	1.36	1.46	7	50.00	
1,2,3,4,7,8-HXCDF	0.900	1.03	13	50.00	
1,2,3,6,7,8-HXCDD	2.82	3.09	9	50.00	
1,2,3,6,7,8-HXCDF	0.630	0.653	4	50.00	
1,2,3,7,8,9-HXCDD	2.82	3.23	14	50.00	
1,2,3,7,8,9-HXCDF	0.268	0.222	19	50.00	No Qualifiers Applied
1,2,3,7,8-PECDD	0.779	0.790	1	50.00	
1,2,3,7,8-PECDF	0.139	0.111	22	50.00	
2,3,4,6,7,8-HXCDF	0.964	1.02	6	50.00	
2,3,4,7,8-PECDF	0.375	0.357	5	50.00	
2,3,7,8-TCDD	0.121	0.121	0	50.00	
2,3,7,8-TCDF	0.188	0.162	15	50.00	
OCDD	1130	1540	31	50.00	
OCDF	94.6	119	23	50.00	

Reporting Limit Outliers

Lab Reporting Batch ID: DX051 **Laboratory: LL**

EDD Filename: DX051_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP01-SA5A-QC-021811	1,2,3,4,7,8,9-HPCDF	JB	2.50	5.55	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	J	1.46	5.55	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	1.03	5.55	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	3.09	5.55	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.653	5.55	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	J	3.23	5.55	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.222	5.55	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	0.790	5.55	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.111	5.55	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	1.02	5.55	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.357	5.55	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.121	1.11	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.162	1.11	PQL	ng/Kg	
SL-024-SA5A-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	0.440	5.44	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	J	0.855	5.44	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	2.58	5.44	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.492	5.44	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	J	2.09	5.44	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.454	5.44	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.535	5.44	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDF	JB	0.196	5.44	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.509	5.44	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.983	5.44	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0951	1.09	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.483	1.09	PQL	ng/Kg	
SL-025-SA5A-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	0.560	5.83	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	J	1.25	5.83	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	3.46	5.83	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.638	5.83	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	J	2.78	5.83	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.339	5.83	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	0.843	5.83	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.746	5.83	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	1.65	5.83	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0890	1.17	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.906	1.17	PQL	ng/Kg	
SL-026-SA5A-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	0.778	5.61	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	J	1.44	5.61	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.488	5.61	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	3.23	5.61	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.522	5.61	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	J	2.64	5.61	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.296	5.61	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	0.855	5.61	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.168	5.61	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.783	5.61	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	1.22	5.61	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0729	1.12	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.486	1.12	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX051 **Laboratory: LL**

EDD Filename: DX051_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-028-SA5A-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	2.65	5.54	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JB	0.190	5.54	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JQ	0.290	5.54	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.246	5.54	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	1.08	5.54	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.181	5.54	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	J	1.08	5.54	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.243	5.54	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.222	5.54	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0648	5.54	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.171	5.54	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.130	5.54	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0435	1.11	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.0329	1.11	PQL	ng/Kg	
	OCDF	JB	6.52	11.1	PQL	ng/Kg	
SL-029-SA5A-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	3.56	5.66	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JB	0.281	5.66	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	J	0.453	5.66	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	1.49	5.66	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.247	5.66	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	J	1.43	5.66	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.167	5.66	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.344	5.66	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0983	5.66	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.213	5.66	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.404	5.66	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.0482	1.13	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.169	1.13	PQL	ng/Kg	
	OCDF	JB	10.1	11.3	PQL	ng/Kg	
SL-031-SA5A-SS-0.0-0.5	1,2,3,6,7,8-HXCDF	JB	5.45	5.65	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	3.95	5.65	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	2.34	5.65	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	3.91	5.65	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.306	1.13	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.491	1.13	PQL	ng/Kg	
SL-032-SA5A-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	2.86	5.53	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JBQ	0.212	5.53	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	J	0.376	5.53	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.208	5.53	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	1.16	5.53	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.207	5.53	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	J	1.13	5.53	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.354	5.53	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.362	5.53	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.220	5.53	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.259	5.53	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.352	5.53	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0346	1.11	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.223	1.11	PQL	ng/Kg	
	OCDF	JB	8.07	11.1	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX051 **Laboratory: LL**

EDD Filename: DX051_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-041-SA5A-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	0.877	5.54	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	J	1.12	5.54	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.941	5.54	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	2.96	5.54	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.423	5.54	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	J	2.58	5.54	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.334	5.54	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	0.640	5.54	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.195	5.54	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.589	5.54	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.363	5.54	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0846	1.11	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.184	1.11	PQL	ng/Kg	
SL-049-SA5A-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	0.792	5.59	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	J	0.562	5.59	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.546	5.59	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	1.43	5.59	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.313	5.59	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	J	1.35	5.59	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.295	5.59	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.308	5.59	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.113	5.59	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.449	5.59	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.370	5.59	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0417	1.12	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.188	1.12	PQL	ng/Kg	
SL-052-SA5A-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	0.507	5.55	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	J	0.409	5.55	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.534	5.55	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.880	5.55	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.263	5.55	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	J	0.963	5.55	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.297	5.55	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	0.295	5.55	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.132	5.55	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.377	5.55	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.402	5.55	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.196	1.11	PQL	ng/Kg	
SL-053-SA5A-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	0.429	5.48	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	J	0.996	5.48	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.891	5.48	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	3.65	5.48	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.317	5.48	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	J	2.60	5.48	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.398	5.48	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	0.551	5.48	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.191	5.48	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.413	5.48	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.447	5.48	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.0659	1.10	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.253	1.10	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX051 **Laboratory: LL**

EDD Filename: DX051_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-096-SA5A-SS-0.0-0.5	1,2,3,7,8,9-HXCDF	JB	3.44	5.86	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDF	JB	1.60	5.86	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	3.12	5.86	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.530	1.17	PQL	ng/Kg	
SL-098-SA5A-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	2.60	5.66	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8-HxCDD	J	1.56	5.66	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	2.75	5.66	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	1.20	5.66	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	J	3.57	5.66	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.433	5.66	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.752	5.66	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.330	5.66	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	1.55	5.66	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	1.26	5.66	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.120	1.13	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.519	1.13	PQL	ng/Kg	
SL-099-SA5A-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	2.14	5.52	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8-HxCDD	J	1.36	5.52	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.900	5.52	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	2.82	5.52	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.630	5.52	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	J	2.82	5.52	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.268	5.52	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.779	5.52	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.139	5.52	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.964	5.52	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.375	5.52	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.121	1.10	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.188	1.10	PQL	ng/Kg	
SL-100-SA5A-SS-0.0-0.5	1,2,3,4,7,8-HxCDD	J	5.21	5.91	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8-HXCDF	JB	3.75	5.91	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	3.76	5.91	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.676	5.91	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	2.29	5.91	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.334	5.91	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	5.67	5.91	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.956	5.91	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.278	1.18	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.281	1.18	PQL	ng/Kg	
SL-101-SA5A-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	0.723	5.53	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8-HxCDD	J	0.411	5.53	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	2.17	5.53	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	1.28	5.53	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.310	5.53	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	J	0.998	5.53	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.283	5.53	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.243	5.53	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.132	5.53	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.473	5.53	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.359	5.53	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0356	1.11	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.144	1.11	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX051 **Laboratory: LL**

EDD Filename: DX051_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-332-SA5B-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDF	JB	4.29	5.50	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.575	5.50	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.175	5.50	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.470	5.50	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	1.05	5.50	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.394	5.50	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.682	5.50	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.265	5.50	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.131	5.50	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0829	5.50	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.363	5.50	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.878	5.50	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.0329	1.10	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.136	1.10	PQL	ng/Kg	
	OCDF	JB	7.91	11.0	PQL	ng/Kg	
SL-333-SA5B-SB-4.0-5.0	1,2,3,4,7,8,9-HPCDF	JB	0.866	5.71	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	J	0.652	5.71	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.961	5.71	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	1.20	5.71	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.768	5.71	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	J	1.22	5.71	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JB	0.847	5.71	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.263	5.71	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0591	5.71	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.493	5.71	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.665	5.71	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.0454	1.14	PQL	ng/Kg	
SL-335-SA5B-SB-2.0-3.0	1,2,3,4,6,7,8-HPCDD	JB	1.32	5.47	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.150	5.47	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.0511	5.47	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.0298	5.47	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.212	5.47	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.126	5.47	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	J	0.242	5.47	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JBQ	0.0662	5.47	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0177	5.47	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0174	5.47	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.0194	5.47	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0519	5.47	PQL	ng/Kg	
	OCDF	JBQ	0.328	10.9	PQL	ng/Kg	

LDC #: 25737T21

VALIDATION FINDINGS WORKSHEET
Compound Quantitation and Reported CRQLs

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC/MS Dioxins/Dibenzofurans (Method 1613)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were the correct internal standard (IS), quantitation ions and relative response factors (RRF) used to quantitate the compound?
Y N N/A Compound quantitation and CRQLs were adjusted to reflect all sample dilutions and dry weight factors (if necessary).

#	Date	Compound	Finding	Associated Samples	Qualifications
		OCDD	> calibration range	SL-031-SASA-SS-0.0-0.5	J det / P
		1.2.3.4.6.7.8-HpCDD	> calibration range	SL-096-SASA-SS-0.0-0.5	J det / P
		OCDD			

Comments: See sample calculation verification worksheet for recalculations

SAMPLE DELIVERY GROUP

DX052

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
17-Feb-2011	SL-336-SA5B-SB-4.0-5.0	6209582	N	METHOD	1613B	III
17-Feb-2011	SL-022-SA5A-SS-0.0-0.5	6209572	N	METHOD	1613B	III
17-Feb-2011	SL-021-SA5A-SS-0.0-0.5	6209571	N	METHOD	1613B	III
17-Feb-2011	SL-337-SA5B-SB-3.0-4.0	6209583	N	METHOD	1613B	III
17-Feb-2011	SL-035-SA5A-SS-0.0-0.5	6209573	N	METHOD	1613B	III
17-Feb-2011	SL-331-SA5B-SB-3.0-4.0	6209581	N	METHOD	1613B	III
17-Feb-2011	SL-321-SA5B-SB-3.0-4.0	6209579	N	METHOD	1613B	III
17-Feb-2011	SL-040-SA5A-SS-0.0-0.5	6209576	N	METHOD	1613B	III
17-Feb-2011	SL-037-SA5A-SS-0.0-0.5	6209575	N	METHOD	1613B	III
17-Feb-2011	SL-036-SA5A-SS-0.0-0.5	6209574	N	METHOD	1613B	III
17-Feb-2011	SL-050-SA5A-SS-0.0-0.5	6209577	N	METHOD	1613B	III
17-Feb-2011	SL-051-SA5A-SS-0.0-0.5	6209578	N	METHOD	1613B	III
17-Feb-2011	SL-322-SA5B-SB-3.0-4.0	6209580	N	METHOD	1613B	III
18-Feb-2011	SL-102-SA5A-SS-0.0-0.5	6210692	N	METHOD	1613B	III
18-Feb-2011	SL-241-SA5A-SS-0.0-0.5	6210693	N	METHOD	1613B	III
18-Feb-2011	SL-242-SA5A-SS-0.0-0.5	6210694	N	METHOD	1613B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DX052 **Laboratory: LL**

EDD Filename: DX052_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-021-SA5A-SS-0.0-0.5 *Collected:* 2/17/2011 9:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	3.95	JB	0.0254	MDL	5.57	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.228	JBQ	0.0381	MDL	5.57	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	1.36	JB	0.0746	MDL	5.57	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.324	JB	0.0460	MDL	5.57	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	3.02	JB	0.0767	MDL	5.57	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.177	JB	0.0369	MDL	5.57	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	3.34	JB	0.0717	MDL	5.57	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.440	JB	0.0447	MDL	5.57	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.899	J	0.0535	MDL	5.57	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.151	JB	0.0180	MDL	5.57	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.291	JB	0.0378	MDL	5.57	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.345	JB	0.0184	MDL	5.57	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.107	JQ	0.0200	MDL	1.11	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.0872	JQ	0.0343	MDL	1.11	PQL	ng/Kg	J	Z

Sample ID: SL-022-SA5A-SS-0.0-0.5 *Collected:* 2/17/2011 9:25:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	3.38	JB	0.0260	MDL	5.43	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.242	JBQ	0.0391	MDL	5.43	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	1.01	JB	0.0895	MDL	5.43	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.465	JB	0.0468	MDL	5.43	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	2.27	JB	0.0914	MDL	5.43	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.176	JB	0.0360	MDL	5.43	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	2.46	JB	0.0838	MDL	5.43	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.297	JB	0.0425	MDL	5.43	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.697	J	0.0477	MDL	5.43	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.159	JBQ	0.0217	MDL	5.43	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.273	JBQ	0.0346	MDL	5.43	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.487	JB	0.0227	MDL	5.43	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0753	J	0.0191	MDL	1.09	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.270	J	0.0406	MDL	1.09	PQL	ng/Kg	J	Z
OCDF	10.7	JB	0.0353	MDL	10.9	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX052 **Laboratory: LL**

EDD Filename: DX052_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: SL-035-SA5A-SS-0.0-0.5 ***Collected:*** 2/17/2011 10:40:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	2.57	JB	0.0210	MDL	5.41	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.243	JB	0.0345	MDL	5.41	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.246	JB	0.0601	MDL	5.41	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.334	JBQ	0.0438	MDL	5.41	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	1.20	JB	0.0640	MDL	5.41	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.189	JB	0.0348	MDL	5.41	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	1.46	JB	0.0593	MDL	5.41	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.333	JBQ	0.0424	MDL	5.41	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.224	J	0.0305	MDL	5.41	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.126	JBQ	0.0161	MDL	5.41	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.187	JB	0.0371	MDL	5.41	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.237	JBQ	0.0172	MDL	5.41	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0239	JQ	0.0201	MDL	1.08	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.0922	JQ	0.0330	MDL	1.08	PQL	ng/Kg	J	Z
OCDF	7.00	JB	0.0348	MDL	10.8	PQL	ng/Kg	J	Z

Sample ID: SL-036-SA5A-SS-0.0-0.5 ***Collected:*** 2/17/2011 1:58:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	0.954	JB	0.0676	MDL	5.49	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	3.40	JB	0.0996	MDL	5.49	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	2.09	JB	0.0852	MDL	5.49	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.786	JB	0.0728	MDL	5.49	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.476	JB	0.0692	MDL	5.49	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	1.61	J	0.0831	MDL	5.49	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.677	JBQ	0.0482	MDL	5.49	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.913	JB	0.0587	MDL	5.49	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	1.19	JB	0.0486	MDL	5.49	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.154	J	0.0224	MDL	1.10	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.324	J	0.109	MDL	1.10	PQL	ng/Kg	J	Z
OCDD	6230	EB	0.141	MDL	11.0	PQL	ng/Kg	J	*XI

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DX052 **Laboratory: LL**

EDD Filename: DX052_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: SL-037-SA5A-SS-0.0-0.5 ***Collected:*** 2/17/2011 1:28:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	0.701	JB	0.0532	MDL	5.38	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	1.56	JB	0.0865	MDL	5.38	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	1.58	JB	0.0678	MDL	5.38	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	4.00	JB	0.0904	MDL	5.38	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.655	JB	0.0554	MDL	5.38	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	3.46	JB	0.0891	MDL	5.38	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.420	JB	0.0604	MDL	5.38	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.858	J	0.0560	MDL	5.38	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.434	JB	0.0475	MDL	5.38	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.983	JB	0.0559	MDL	5.38	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	1.28	JB	0.0471	MDL	5.38	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0856	J	0.0213	MDL	1.08	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.464	J	0.119	MDL	1.08	PQL	ng/Kg	J	Z

Sample ID: SL-040-SA5A-SS-0.0-0.5 ***Collected:*** 2/17/2011 1:10:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	2.25	JB	0.0286	MDL	5.48	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.195	JB	0.0415	MDL	5.48	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.368	JBQ	0.0775	MDL	5.48	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.335	JB	0.0522	MDL	5.48	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.985	JB	0.0811	MDL	5.48	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.145	JB	0.0400	MDL	5.48	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	1.14	JB	0.0738	MDL	5.48	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.317	JB	0.0467	MDL	5.48	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.241	J	0.0342	MDL	5.48	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.110	JB	0.0220	MDL	5.48	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.198	JBQ	0.0382	MDL	5.48	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.198	JB	0.0212	MDL	5.48	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0518	JQ	0.0398	MDL	1.10	PQL	ng/Kg	J	Z
OCDF	6.49	JB	0.0346	MDL	11.0	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DX052 | Laboratory: LL

EDD Filename: DX052_v1 | eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-050-SA5A-SS-0.0-0.5 *Collected:* 2/17/2011 2:20:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	1.80	JB	0.0308	MDL	5.51	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.120	JB	0.0354	MDL	5.51	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.378	JB	0.0731	MDL	5.51	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.460	JB	0.0520	MDL	5.51	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	1.09	JBQ	0.0713	MDL	5.51	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.121	JBQ	0.0370	MDL	5.51	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	1.15	JB	0.0646	MDL	5.51	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.301	JB	0.0332	MDL	5.51	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.437	J	0.0412	MDL	5.51	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.0781	JBQ	0.0178	MDL	5.51	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.154	JB	0.0275	MDL	5.51	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.247	JB	0.0178	MDL	5.51	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0762	JQ	0.0211	MDL	1.10	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.0910	JQ	0.0283	MDL	1.10	PQL	ng/Kg	J	Z
OCDF	5.24	JB	0.0347	MDL	11.0	PQL	ng/Kg	J	Z

Sample ID: SL-051-SA5A-SS-0.0-0.5 *Collected:* 2/17/2011 2:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	0.515	JB	0.0549	MDL	5.54	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	2.57	JB	0.0792	MDL	5.54	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	1.15	JB	0.0722	MDL	5.54	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.465	JB	0.0526	MDL	5.54	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.519	JB	0.0617	MDL	5.54	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	1.79	J	0.0697	MDL	5.54	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.280	JBQ	0.0297	MDL	5.54	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.574	JB	0.0502	MDL	5.54	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.759	JB	0.0296	MDL	5.54	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.168	J	0.0217	MDL	1.11	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.370	J	0.0559	MDL	1.11	PQL	ng/Kg	J	Z

Sample ID: SL-102-SA5A-SS-0.0-0.5 *Collected:* 2/18/2011 9:18:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	0.626	JB	0.0398	MDL	5.67	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX052 **Laboratory: LL**

EDD Filename: DX052_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: **SL-102-SA5A-SS-0.0-0.5** ***Collected:*** **2/18/2011 9:18:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8-HxCDD	0.241	JBQ	0.0736	MDL	5.67	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.948	JB	0.0926	MDL	5.67	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.881	JB	0.0712	MDL	5.67	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.256	JBQ	0.0622	MDL	5.67	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.728	JB	0.0626	MDL	5.67	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.209	JBQ	0.0518	MDL	5.67	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.152	J	0.0319	MDL	5.67	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.0683	JBQ	0.0236	MDL	5.67	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.327	JB	0.0431	MDL	5.67	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.291	JB	0.0245	MDL	5.67	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.125	J	0.0431	MDL	1.13	PQL	ng/Kg	J	Z

Sample ID: **SL-241-SA5A-SS-0.0-0.5** ***Collected:*** **2/18/2011 10:50:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8-HxCDD	5.21	JB	0.149	MDL	5.79	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	3.74	JB	0.129	MDL	5.79	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	3.22	JB	0.0961	MDL	5.79	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.798	JB	0.106	MDL	5.79	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	2.09	J	0.140	MDL	5.79	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	1.59	JB	0.0562	MDL	5.79	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	4.47	JB	0.0915	MDL	5.79	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	2.42	JB	0.0578	MDL	5.79	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.200	JQ	0.0319	MDL	1.16	PQL	ng/Kg	J	Z

Sample ID: **SL-242-SA5A-SS-0.0-0.5** ***Collected:*** **2/18/2011 11:18:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	3.79	JB	0.0399	MDL	5.52	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.351	JBQ	0.0430	MDL	5.52	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.235	JB	0.0554	MDL	5.52	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.155	JB	0.0552	MDL	5.52	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.548	JB	0.0558	MDL	5.52	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.149	JBQ	0.0386	MDL	5.52	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX052 | Laboratory: LL

EDD Filename: DX052_v1 | eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-242-SA5A-SS-0.0-0.5 *Collected:* 2/18/2011 11:18:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,7,8,9-HXCDD	0.666	JB	0.0493	MDL	5.52	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.282	JB	0.0333	MDL	5.52	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.117	JQ	0.0250	MDL	5.52	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.0933	JB	0.0134	MDL	5.52	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.182	JB	0.0274	MDL	5.52	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.124	JBQ	0.0140	MDL	5.52	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0212	JQ	0.0209	MDL	1.10	PQL	ng/Kg	J	Z

Sample ID: SL-321-SA5B-SB-3.0-4.0 *Collected:* 2/17/2011 1:09:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.399	JB	0.0265	MDL	5.69	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.0701	JB	0.0114	MDL	5.69	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0491	JBQ	0.0178	MDL	5.69	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0698	JB	0.0228	MDL	5.69	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	1.84	JB	0.0298	MDL	5.69	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	1.26	JB	0.0150	MDL	5.69	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	1.94	JB	0.0293	MDL	5.69	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.130	JBQ	0.0178	MDL	5.69	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0867	JQ	0.0229	MDL	5.69	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.110	JB	0.00968	MDL	5.69	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.0410	JB	0.0140	MDL	5.69	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.113	JBQ	0.0107	MDL	5.69	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0232	JQ	0.0194	MDL	1.14	PQL	ng/Kg	J	Z
OCDD	1.96	JB	0.0272	MDL	11.4	PQL	ng/Kg	U	B
OCDF	0.157	JBQ	0.0237	MDL	11.4	PQL	ng/Kg	U	B

Sample ID: SL-322-SA5B-SB-3.0-4.0 *Collected:* 2/17/2011 3:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.234	JB	0.0190	MDL	5.34	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.0393	JB	0.00929	MDL	5.34	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0191	JBQ	0.0121	MDL	5.34	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0214	JB	0.0159	MDL	5.34	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0168	JBQ	0.0147	MDL	5.34	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX052 | Laboratory: LL

EDD Filename: DX052_v1 | eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-322-SA5B-SB-3.0-4.0 *Collected:* 2/17/2011 3:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,7,8,9-HXCDF	0.0168	JBQ	0.0114	MDL	5.34	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0213	JQ	0.0197	MDL	5.34	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.0273	JB	0.00929	MDL	5.34	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.00923	JBQ	0.00919	MDL	5.34	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0470	JBQ	0.00962	MDL	5.34	PQL	ng/Kg	U	B
OCDD	0.727	JB	0.0231	MDL	10.7	PQL	ng/Kg	U	B
OCDF	0.0866	JBQ	0.0201	MDL	10.7	PQL	ng/Kg	U	B

Sample ID: SL-331-SA5B-SB-3.0-4.0 *Collected:* 2/17/2011 11:44:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.179	JBQ	0.0189	MDL	5.38	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.0382	JB	0.0107	MDL	5.38	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0245	JBQ	0.0116	MDL	5.38	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0182	JBQ	0.0180	MDL	5.38	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.112	JB	0.0184	MDL	5.38	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.0274	JBQ	0.0122	MDL	5.38	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.204	JB	0.0170	MDL	5.38	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.0985	JBQ	0.0110	MDL	5.38	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0189	JQ	0.0154	MDL	5.38	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.0280	JBQ	0.00872	MDL	5.38	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0127	JBQ	0.00936	MDL	5.38	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0530	JBQ	0.00904	MDL	5.38	PQL	ng/Kg	U	B
OCDD	1.36	JB	0.0315	MDL	10.8	PQL	ng/Kg	U	B
OCDF	0.0746	JBQ	0.0167	MDL	10.8	PQL	ng/Kg	U	B

Sample ID: SL-336-SA5B-SB-4.0-5.0 *Collected:* 2/17/2011 9:19:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	1.47	JB	0.0546	MDL	5.77	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.127	JB	0.0163	MDL	5.77	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0661	JBQ	0.0193	MDL	5.77	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0879	JB	0.0270	MDL	5.77	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.192	JBQ	0.0283	MDL	5.77	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.0564	JBQ	0.0171	MDL	5.77	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX052 **Laboratory: LL**

EDD Filename: DX052_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: SL-336-SA5B-SB-4.0-5.0 ***Collected:*** 2/17/2011 9:19:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,7,8,9-HXCDD	0.254	JBQ	0.0256	MDL	5.77	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.229	JB	0.0164	MDL	5.77	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0461	JB	0.0112	MDL	5.77	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0336	JBQ	0.0132	MDL	5.77	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0735	JBQ	0.0117	MDL	5.77	PQL	ng/Kg	U	B
OCDF	0.334	JB	0.0249	MDL	11.5	PQL	ng/Kg	U	B

Sample ID: SL-337-SA5B-SB-3.0-4.0 ***Collected:*** 2/17/2011 10:33:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	0.440	JB	0.0267	MDL	5.71	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.0654	JBQ	0.0305	MDL	5.71	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.105	JBQ	0.0239	MDL	5.71	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.315	JB	0.0452	MDL	5.71	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.0732	JBQ	0.0178	MDL	5.71	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.434	JB	0.0412	MDL	5.71	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.275	JB	0.0167	MDL	5.71	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0372	JQ	0.0247	MDL	5.71	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.0423	JB	0.0120	MDL	5.71	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0297	JBQ	0.0134	MDL	5.71	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.112	JB	0.0122	MDL	5.71	PQL	ng/Kg	U	B
OCDF	1.08	JB	0.0322	MDL	11.4	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DX052 **Laboratory: LL**

EDD Filename: DX052_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
*XI	Compound Quantitation and CRQL
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Verification Correlation Coefficient
C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DX052 **Laboratory: LL**

EDD Filename: DX052_v1 **eQAPP Name: CDM_SSFL_110509**

F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation
L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery Lower Estimation

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DX052 **Laboratory: LL**

EDD Filename: DX052_v1 **eQAPP Name: CDM_SSFL_110509**

R	Continuing Calibration Verification Percent Recovery Lower Rejection
R	Continuing Calibration Verification Percent Recovery Upper Estimation
R	Continuing Calibration Verification Percent Recovery Upper Rejection
R	Continuing Calibration Verification Relative Response Factor
R	Initial Calibration Relative Response Factor
R	Initial Calibration Verification Percent Recovery Lower Estimation
R	Initial Calibration Verification Percent Recovery Lower Rejection
R	Initial Calibration Verification Percent Recovery Upper Estimation
R	Initial Calibration Verification Percent Recovery Upper Rejection
R	Initial Calibration Verification Relative Response Factor
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control Outlier Reports

DX052

Method Blank Outlier Report

Lab Reporting Batch ID: DX052 **Laboratory: LL**

EDD Filename: DX052_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLK0550B371308	3/3/2011 1:08:00 PM	1,2,3,4,6,7,8-HPCDD	0.162 ng/Kg	SL-021-SA5A-SS-0.0-0.5
		1,2,3,4,6,7,8-HPCDF	0.0644 ng/Kg	SL-022-SA5A-SS-0.0-0.5
		1,2,3,4,7,8,9-HPCDF	0.0566 ng/Kg	SL-035-SA5A-SS-0.0-0.5
		1,2,3,4,7,8-HxCDD	0.0169 ng/Kg	SL-036-SA5A-SS-0.0-0.5
		1,2,3,4,7,8-HXCDF	0.0232 ng/Kg	SL-037-SA5A-SS-0.0-0.5
		1,2,3,6,7,8-HXCDD	0.0223 ng/Kg	SL-040-SA5A-SS-0.0-0.5
		1,2,3,6,7,8-HXCDF	0.0318 ng/Kg	SL-050-SA5A-SS-0.0-0.5
		1,2,3,7,8,9-HXCDD	0.0217 ng/Kg	SL-051-SA5A-SS-0.0-0.5
		1,2,3,7,8,9-HXCDF	0.0591 ng/Kg	SL-102-SA5A-SS-0.0-0.5
		1,2,3,7,8-PECDF	0.0211 ng/Kg	SL-241-SA5A-SS-0.0-0.5
		2,3,4,6,7,8-HXCDF	0.0278 ng/Kg	SL-242-SA5A-SS-0.0-0.5
		2,3,4,7,8-PECDF	0.0643 ng/Kg	SL-321-SA5B-SB-3.0-4.0
		OCDD	0.458 ng/Kg	SL-322-SA5B-SB-3.0-4.0
		OCDF	0.148 ng/Kg	SL-331-SA5B-SB-3.0-4.0
				SL-336-SA5B-SB-4.0-5.0
				SL-337-SA5B-SB-3.0-4.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-021-SA5A-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.228 ng/Kg	0.228U ng/Kg
SL-022-SA5A-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.242 ng/Kg	0.242U ng/Kg
SL-035-SA5A-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.243 ng/Kg	0.243U ng/Kg
SL-035-SA5A-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.237 ng/Kg	0.237U ng/Kg
SL-040-SA5A-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.195 ng/Kg	0.195U ng/Kg
SL-040-SA5A-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.145 ng/Kg	0.145U ng/Kg
SL-040-SA5A-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.198 ng/Kg	0.198U ng/Kg
SL-050-SA5A-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.120 ng/Kg	0.120U ng/Kg
SL-050-SA5A-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.121 ng/Kg	0.121U ng/Kg
SL-050-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.0781 ng/Kg	0.0781U ng/Kg
SL-050-SA5A-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.247 ng/Kg	0.247U ng/Kg
SL-102-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.209 ng/Kg	0.209U ng/Kg
SL-102-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.0683 ng/Kg	0.0683U ng/Kg
SL-102-SA5A-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.291 ng/Kg	0.291U ng/Kg
SL-242-SA5A-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.149 ng/Kg	0.149U ng/Kg
SL-242-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.282 ng/Kg	0.282U ng/Kg
SL-242-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.0933 ng/Kg	0.0933U ng/Kg
SL-242-SA5A-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.124 ng/Kg	0.124U ng/Kg
SL-321-SA5B-SB-3.0-4.0(RES)	1,2,3,4,6,7,8-HPCDD	0.399 ng/Kg	0.399U ng/Kg
SL-321-SA5B-SB-3.0-4.0(RES)	1,2,3,4,6,7,8-HPCDF	0.0701 ng/Kg	0.0701U ng/Kg
SL-321-SA5B-SB-3.0-4.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0491 ng/Kg	0.0491U ng/Kg
SL-321-SA5B-SB-3.0-4.0(RES)	1,2,3,4,7,8-HXCDF	0.0698 ng/Kg	0.0698U ng/Kg
SL-321-SA5B-SB-3.0-4.0(RES)	1,2,3,7,8,9-HXCDF	0.130 ng/Kg	0.130U ng/Kg
SL-321-SA5B-SB-3.0-4.0(RES)	2,3,4,6,7,8-HXCDF	0.0410 ng/Kg	0.0410U ng/Kg
SL-321-SA5B-SB-3.0-4.0(RES)	2,3,4,7,8-PECDF	0.113 ng/Kg	0.113U ng/Kg
SL-321-SA5B-SB-3.0-4.0(RES)	OCDD	1.96 ng/Kg	1.96U ng/Kg

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Method Blank Outlier Report

Lab Reporting Batch ID: DX052 | Laboratory: LL

EDD Filename: DX052_v1 | eQAPP Name: CDM_SSFL_110509

Method: 1613B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-321-SA5B-SB-3.0-4.0(RES)	OCDF	0.157 ng/Kg	0.157U ng/Kg
SL-322-SA5B-SB-3.0-4.0(RES)	1,2,3,4,6,7,8-HPCDD	0.234 ng/Kg	0.234U ng/Kg
SL-322-SA5B-SB-3.0-4.0(RES)	1,2,3,4,6,7,8-HPCDF	0.0393 ng/Kg	0.0393U ng/Kg
SL-322-SA5B-SB-3.0-4.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0191 ng/Kg	0.0191U ng/Kg
SL-322-SA5B-SB-3.0-4.0(RES)	1,2,3,6,7,8-HXCDD	0.0214 ng/Kg	0.0214U ng/Kg
SL-322-SA5B-SB-3.0-4.0(RES)	1,2,3,7,8,9-HXCDD	0.0168 ng/Kg	0.0168U ng/Kg
SL-322-SA5B-SB-3.0-4.0(RES)	1,2,3,7,8,9-HXCDF	0.0168 ng/Kg	0.0168U ng/Kg
SL-322-SA5B-SB-3.0-4.0(RES)	1,2,3,7,8-PECDF	0.0273 ng/Kg	0.0273U ng/Kg
SL-322-SA5B-SB-3.0-4.0(RES)	2,3,4,6,7,8-HXCDF	0.00923 ng/Kg	0.00923U ng/Kg
SL-322-SA5B-SB-3.0-4.0(RES)	2,3,4,7,8-PECDF	0.0470 ng/Kg	0.0470U ng/Kg
SL-322-SA5B-SB-3.0-4.0(RES)	OCDD	0.727 ng/Kg	0.727U ng/Kg
SL-322-SA5B-SB-3.0-4.0(RES)	OCDF	0.0866 ng/Kg	0.0866U ng/Kg
SL-331-SA5B-SB-3.0-4.0(RES)	1,2,3,4,6,7,8-HPCDD	0.179 ng/Kg	0.179U ng/Kg
SL-331-SA5B-SB-3.0-4.0(RES)	1,2,3,4,6,7,8-HPCDF	0.0382 ng/Kg	0.0382U ng/Kg
SL-331-SA5B-SB-3.0-4.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0245 ng/Kg	0.0245U ng/Kg
SL-331-SA5B-SB-3.0-4.0(RES)	1,2,3,4,7,8-HXCDF	0.0182 ng/Kg	0.0182U ng/Kg
SL-331-SA5B-SB-3.0-4.0(RES)	1,2,3,6,7,8-HXCDF	0.0274 ng/Kg	0.0274U ng/Kg
SL-331-SA5B-SB-3.0-4.0(RES)	1,2,3,7,8,9-HXCDF	0.0985 ng/Kg	0.0985U ng/Kg
SL-331-SA5B-SB-3.0-4.0(RES)	1,2,3,7,8-PECDF	0.0280 ng/Kg	0.0280U ng/Kg
SL-331-SA5B-SB-3.0-4.0(RES)	2,3,4,6,7,8-HXCDF	0.0127 ng/Kg	0.0127U ng/Kg
SL-331-SA5B-SB-3.0-4.0(RES)	2,3,4,7,8-PECDF	0.0530 ng/Kg	0.0530U ng/Kg
SL-331-SA5B-SB-3.0-4.0(RES)	OCDD	1.36 ng/Kg	1.36U ng/Kg
SL-331-SA5B-SB-3.0-4.0(RES)	OCDF	0.0746 ng/Kg	0.0746U ng/Kg
SL-336-SA5B-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.127 ng/Kg	0.127U ng/Kg
SL-336-SA5B-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0661 ng/Kg	0.0661U ng/Kg
SL-336-SA5B-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.0879 ng/Kg	0.0879U ng/Kg
SL-336-SA5B-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.0564 ng/Kg	0.0564U ng/Kg
SL-336-SA5B-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.229 ng/Kg	0.229U ng/Kg
SL-336-SA5B-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.0461 ng/Kg	0.0461U ng/Kg
SL-336-SA5B-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.0336 ng/Kg	0.0336U ng/Kg
SL-336-SA5B-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.0735 ng/Kg	0.0735U ng/Kg
SL-336-SA5B-SB-4.0-5.0(RES)	OCDF	0.334 ng/Kg	0.334U ng/Kg
SL-337-SA5B-SB-3.0-4.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0654 ng/Kg	0.0654U ng/Kg
SL-337-SA5B-SB-3.0-4.0(RES)	1,2,3,4,7,8-HXCDF	0.105 ng/Kg	0.105U ng/Kg
SL-337-SA5B-SB-3.0-4.0(RES)	1,2,3,6,7,8-HXCDF	0.0732 ng/Kg	0.0732U ng/Kg
SL-337-SA5B-SB-3.0-4.0(RES)	1,2,3,7,8,9-HXCDF	0.275 ng/Kg	0.275U ng/Kg
SL-337-SA5B-SB-3.0-4.0(RES)	1,2,3,7,8-PECDF	0.0423 ng/Kg	0.0423U ng/Kg

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Method Blank Outlier Report

Lab Reporting Batch ID: DX052 | Laboratory: LL

EDD Filename: DX052_v1 | eQAPP Name: CDM_SSFL_110509

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-337-SA5B-SB-3.0-4.0(RES)	2,3,4,6,7,8-HXCDF	0.0297 ng/Kg	0.0297U ng/Kg
SL-337-SA5B-SB-3.0-4.0(RES)	2,3,4,7,8-PECDF	0.112 ng/Kg	0.112U ng/Kg

Reporting Limit Outliers

Lab Reporting Batch ID: DX052 | Laboratory: LL

EDD Filename: DX052_v1 | eQAPP Name: CDM_SSFL_110509

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-241-SA5A-SS-0.0-0.5	2,3,7,8-TCDF		1.26	1.16	PQL	ng/Kg	
SL-021-SA5A-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	3.95	5.57	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JBQ	0.228	5.57	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	1.36	5.57	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.324	5.57	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	3.02	5.57	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.177	5.57	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	3.34	5.57	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.440	5.57	PQL	ng/Kg	
	1,2,3,7,8-PECDD	J	0.899	5.57	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.151	5.57	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.291	5.57	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.345	5.57	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.107	1.11	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.0872	1.11	PQL	ng/Kg	
SL-022-SA5A-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	3.38	5.43	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JBQ	0.242	5.43	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	1.01	5.43	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.465	5.43	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	2.27	5.43	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.176	5.43	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	2.46	5.43	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.297	5.43	PQL	ng/Kg	
	1,2,3,7,8-PECDD	J	0.697	5.43	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.159	5.43	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.273	5.43	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.487	5.43	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.0753	1.09	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.270	1.09	PQL	ng/Kg	
	OCDF	JB	10.7	10.9	PQL	ng/Kg	
SL-035-SA5A-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	2.57	5.41	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JB	0.243	5.41	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.246	5.41	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.334	5.41	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	1.20	5.41	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.189	5.41	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	1.46	5.41	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.333	5.41	PQL	ng/Kg	
	1,2,3,7,8-PECDD	J	0.224	5.41	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.126	5.41	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.187	5.41	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.237	5.41	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0239	1.08	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.0922	1.08	PQL	ng/Kg	
	OCDF	JB	7.00	10.8	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX052 **Laboratory: LL**

EDD Filename: DX052_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-036-SA5A-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	0.954	5.49	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	3.40	5.49	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	2.09	5.49	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.786	5.49	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.476	5.49	PQL	ng/Kg	
	1,2,3,7,8-PECDD	J	1.61	5.49	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDF	JBQ	0.677	5.49	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.913	5.49	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	1.19	5.49	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.154	1.10	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.324	1.10	PQL	ng/Kg	
SL-037-SA5A-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	0.701	5.38	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	1.56	5.38	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	1.58	5.38	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	4.00	5.38	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.655	5.38	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	3.46	5.38	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.420	5.38	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	J	0.858	5.38	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.434	5.38	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.983	5.38	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	1.28	5.38	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.0856	1.08	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.464	1.08	PQL	ng/Kg	
SL-040-SA5A-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	2.25	5.48	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.195	5.48	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.368	5.48	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.335	5.48	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.985	5.48	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.145	5.48	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	1.14	5.48	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.317	5.48	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	J	0.241	5.48	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.110	5.48	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.198	5.48	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.198	5.48	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.0518	1.10	PQL	ng/Kg	
	OCDF	JB	6.49	11.0	PQL	ng/Kg	
SL-050-SA5A-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	1.80	5.51	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.120	5.51	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.378	5.51	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.460	5.51	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	1.09	5.51	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.121	5.51	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	1.15	5.51	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.301	5.51	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	J	0.437	5.51	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0781	5.51	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.154	5.51	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.247	5.51	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0762	1.10	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.0910	1.10	PQL	ng/Kg	
	OCDF	JB	5.24	11.0	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX052 **Laboratory: LL**

EDD Filename: DX052_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-051-SA5A-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	0.515	5.54	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	2.57	5.54	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	1.15	5.54	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.465	5.54	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.519	5.54	PQL	ng/Kg	
	1,2,3,7,8-PECDD	J	1.79	5.54	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDF	JBQ	0.280	5.54	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.574	5.54	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.759	5.54	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.168	1.11	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.370	1.11	PQL	ng/Kg	
SL-102-SA5A-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	0.626	5.67	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.241	5.67	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.948	5.67	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.881	5.67	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.256	5.67	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.728	5.67	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.209	5.67	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	J	0.152	5.67	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0683	5.67	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.327	5.67	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.291	5.67	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.125	1.13	PQL	ng/Kg	
SL-241-SA5A-SS-0.0-0.5	1,2,3,4,7,8-HxCDD	JB	5.21	5.79	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	3.74	5.79	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	3.22	5.79	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.798	5.79	PQL	ng/Kg	
	1,2,3,7,8-PECDD	J	2.09	5.79	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDF	JB	1.59	5.79	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	4.47	5.79	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	2.42	5.79	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.200	1.16	PQL	ng/Kg	
SL-242-SA5A-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	3.79	5.52	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.351	5.52	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.235	5.52	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.155	5.52	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.548	5.52	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.149	5.52	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.666	5.52	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JB	0.282	5.52	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JQ	0.117	5.52	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.0933	5.52	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.182	5.52	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.124	5.52	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.0212	1.10	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX052 **Laboratory: LL**

EDD Filename: DX052_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-321-SA5B-SB-3.0-4.0	1,2,3,4,6,7,8-HPCDD	JB	0.399	5.69	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.0701	5.69	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0491	5.69	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.0698	5.69	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	1.84	5.69	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	1.26	5.69	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	1.94	5.69	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.130	5.69	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JQ	0.0867	5.69	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.110	5.69	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.0410	5.69	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.113	5.69	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0232	1.14	PQL	ng/Kg	
	OCDD	JB	1.96	11.4	PQL	ng/Kg	
	OCDF	JBQ	0.157	11.4	PQL	ng/Kg	
SL-322-SA5B-SB-3.0-4.0	1,2,3,4,6,7,8-HPCDD	JB	0.234	5.34	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.0393	5.34	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0191	5.34	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.0214	5.34	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.0168	5.34	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.0168	5.34	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JQ	0.0213	5.34	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.0273	5.34	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.00923	5.34	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0470	5.34	PQL	ng/Kg	
	OCDD	JB	0.727	10.7	PQL	ng/Kg	
	OCDF	JBQ	0.0866	10.7	PQL	ng/Kg	
SL-331-SA5B-SB-3.0-4.0	1,2,3,4,6,7,8-HPCDD	JBQ	0.179	5.38	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.0382	5.38	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0245	5.38	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0182	5.38	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.112	5.38	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0274	5.38	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.204	5.38	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.0985	5.38	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JQ	0.0189	5.38	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0280	5.38	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0127	5.38	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0530	5.38	PQL	ng/Kg	
	OCDD	JB	1.36	10.8	PQL	ng/Kg	
	OCDF	JBQ	0.0746	10.8	PQL	ng/Kg	
SL-336-SA5B-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JB	1.47	5.77	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.127	5.77	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0661	5.77	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.0879	5.77	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.192	5.77	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0564	5.77	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.254	5.77	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.229	5.77	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.0461	5.77	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0336	5.77	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0735	5.77	PQL	ng/Kg	
	OCDF	JB	0.334	11.5	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX052 **Laboratory: LL**

EDD Filename: DX052_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	*Analyte*	*Lab Qual*	*Result*	*Reporting Limit*	*RL Type*	*Units*	*Flag*
SL-337-SA5B-SB-3.0-4.0	1,2,3,4,6,7,8-HPCDF	JB	0.440	5.71	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0654	5.71	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.105	5.71	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.315	5.71	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0732	5.71	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.434	5.71	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.275	5.71	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JQ	0.0372	5.71	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.0423	5.71	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0297	5.71	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.112	5.71	PQL	ng/Kg	
	OCDF	JB	1.08	11.4	PQL	ng/Kg	

LDC #: 25737U21

VALIDATION FINDINGS WORKSHEET
Compound Quantitation and Reported CRQLs

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC/MS Dioxins/Dibenzofurans (Method 1613)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were the correct internal standard (IS), quantitation ions and relative response factors (RRF) used to quantitate the compound?
Y N N/A Compound quantitation and CRQLs were adjusted to reflect all sample dilutions and dry weight factors (if necessary).

#	Date	Compound	Finding	Associated Samples	Qualifications
		OCDD	> calibration range	SL-036-SA5A-SS-0.0-0.5	J det / P

Comments: See sample calculation verification worksheet for recalculations

LDC #: 25737U2

VALIDATION FINDINGS WORKSHEET
Overall Assessment of Data

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC/MS Dioxins/Dibenzofurans (Method 1613B)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

All available information pertaining to the data were reviewed using professional judgement to compliment the determination of the overall quality of the data.

Y N N/A Was the overall quality and usability of the data acceptable?

#	Date	Sample ID	Finding	Associated Samples	Qualifications
		SL-241-SASA-SS-0.0-0.5	2,3,7,8-TCDF result from column SP2331	-	R/A

Comments:

SAMPLE DELIVERY GROUP

DX053

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
21-Feb-2011	SL-062-SA5A-SS-0.0-0.5	6211492	N	METHOD	1613B	III
21-Feb-2011	SL-064-SA5A-SS-0.0-0.5	6211494	N	METHOD	1613B	III
21-Feb-2011	SL-063-SA5A-SS-0.0-0.5	6211493	N	METHOD	1613B	III
21-Feb-2011	SL-028-SA5A-SB-3.5-4.5	6211497	N	METHOD	1613B	III
21-Feb-2011	SL-061-SA5A-SS-0.0-0.5	6211491	N	METHOD	1613B	III
21-Feb-2011	SL-060-SA5A-SS-0.0-0.5	6211490	N	METHOD	1613B	III
21-Feb-2011	SL-059-SA5A-SS-0.0-0.5	6211489	N	METHOD	1613B	III
21-Feb-2011	SL-025-SA5A-SB-4.5-5.5	6211496	N	METHOD	1613B	III
21-Feb-2011	SL-057-SA5A-SS-0.0-0.5	6211487	N	METHOD	1613B	III
21-Feb-2011	SL-058-SA5A-SS-0.0-0.5	6211488	N	METHOD	1613B	III
21-Feb-2011	SL-056-SA5A-SS-0.0-0.5	6211486	N	METHOD	1613B	III
21-Feb-2011	SL-055-SA5A-SS-0.0-0.5	6211485	N	METHOD	1613B	III
21-Feb-2011	SL-054-SA5A-SS-0.0-0.5	6211484	N	METHOD	1613B	III
21-Feb-2011	SL-029-SA5A-SB-3.0-4.0	6211498	N	METHOD	1613B	III
21-Feb-2011	SL-095-SA5A-SS-0.0-0.5	6211495	N	METHOD	1613B	III
23-Feb-2011	SL-036-SA5A-SB-4.0-5.0	6214511	N	METHOD	1613B	III
23-Feb-2011	SL-036-SA5A-SB-4.0-5.0MS	6214512	MS	METHOD	1613B	III
23-Feb-2011	SL-036-SA5A-SB-4.0-5.0MSD	6214513	MSD	METHOD	1613B	III
23-Feb-2011	DUP03-SA5A-QC-022311	6214510	FD	METHOD	1613B	III
23-Feb-2011	SL-037-SA5A-SB-4.0-5.0	6214514	N	METHOD	1613B	III
23-Feb-2011	SL-040-SA5A-SB-4.0-5.0	6214515	N	METHOD	1613B	III
23-Feb-2011	SL-040-SA5A-SB-9.0-10.0	6214516	N	METHOD	1613B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DX053 **Laboratory: LL**

EDD Filename: DX053_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: **DUP03-SA5A-QC-022311** ***Collected:*** **2/23/2011 10:31:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.184	JB	0.0220	MDL	5.28	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.0450	JBQ	0.00665	MDL	5.28	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0431	JBQ	0.0120	MDL	5.28	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0435	JBQ	0.0182	MDL	5.28	PQL	ng/Kg	UJ	B, FD
1,2,3,4,7,8-HXCDF	0.0265	JB	0.0144	MDL	5.28	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0560	JB	0.0189	MDL	5.28	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0375	JBQ	0.0118	MDL	5.28	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0638	JBQ	0.0181	MDL	5.28	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0593	JB	0.0137	MDL	5.28	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0565	JBQ	0.0276	MDL	5.28	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0488	JBQ	0.0184	MDL	5.28	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0219	JBQ	0.0128	MDL	5.28	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0744	JBQ	0.0175	MDL	5.28	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0317	U	0.0317	MDL	1.06	PQL	ng/Kg	UJ	FD
2,3,7,8-TCDF	0.0325	U	0.0325	MDL	1.06	PQL	ng/Kg	UJ	FD
OCDD	1.30	JB	0.0211	MDL	10.6	PQL	ng/Kg	U	B
OCDF	0.113	JBQ	0.0332	MDL	10.6	PQL	ng/Kg	U	B

Sample ID: **SL-025-SA5A-SB-4.5-5.5** ***Collected:*** **2/21/2011 11:44:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.211	JB	0.0366	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.0545	JB	0.0150	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.119	JBQ	0.0244	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0375	JBQ	0.0239	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0544	JBQ	0.0195	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0387	JB	0.0252	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0486	JB	0.0156	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0670	JBQ	0.0231	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0896	JBQ	0.0182	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0476	JBQ	0.0382	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0525	JBQ	0.0257	MDL	5.73	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0452	JB	0.0155	MDL	5.73	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0704	JBQ	0.0242	MDL	5.73	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX053 **Laboratory: LL**

EDD Filename: DX053_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: **SL-025-SA5A-SB-4.5-5.5** ***Collected:*** **2/21/2011 11:44:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
OCDD	1.01	JB	0.0365	MDL	11.5	PQL	ng/Kg	U	B
OCDF	0.209	JBQ	0.0522	MDL	11.5	PQL	ng/Kg	U	B

Sample ID: **SL-028-SA5A-SB-3.5-4.5** ***Collected:*** **2/21/2011 10:20:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.194	JB	0.0280	MDL	5.57	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.0395	JBQ	0.0107	MDL	5.57	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0343	JBQ	0.0173	MDL	5.57	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0319	JBQ	0.0200	MDL	5.57	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0360	JBQ	0.0196	MDL	5.57	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0354	JBQ	0.0193	MDL	5.57	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0370	JBQ	0.0148	MDL	5.57	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0659	JBQ	0.0186	MDL	5.57	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0650	JB	0.0160	MDL	5.57	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0323	JBQ	0.0261	MDL	5.57	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0579	JBQ	0.0170	MDL	5.57	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0434	JB	0.0141	MDL	5.57	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0444	JBQ	0.0173	MDL	5.57	PQL	ng/Kg	U	B
OCDD	0.553	JB	0.0295	MDL	11.1	PQL	ng/Kg	U	B
OCDF	0.210	JBQ	0.0392	MDL	11.1	PQL	ng/Kg	U	B

Sample ID: **SL-029-SA5A-SB-3.0-4.0** ***Collected:*** **2/21/2011 2:48:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.158	JB	0.0229	MDL	5.38	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.0584	JBQ	0.00914	MDL	5.38	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0432	JBQ	0.0158	MDL	5.38	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0364	JB	0.0187	MDL	5.38	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0708	JBQ	0.0170	MDL	5.38	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0546	JB	0.0131	MDL	5.38	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0846	JBQ	0.0181	MDL	5.38	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0841	JBQ	0.0138	MDL	5.38	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0872	JB	0.0256	MDL	5.38	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0904	JB	0.0157	MDL	5.38	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX053 **Laboratory: LL**

EDD Filename: DX053_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: **SL-029-SA5A-SB-3.0-4.0** ***Collected:*** **2/21/2011 2:48:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,3,4,6,7,8-HXCDF	0.0361	JBQ	0.0126	MDL	5.38	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0857	JBQ	0.0155	MDL	5.38	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0276	JBQ	0.0273	MDL	1.08	PQL	ng/Kg	U	B
OCDD	0.539	JB	0.0273	MDL	10.8	PQL	ng/Kg	U	B
OCDF	0.173	JB	0.0404	MDL	10.8	PQL	ng/Kg	U	B

Sample ID: **SL-036-SA5A-SB-4.0-5.0** ***Collected:*** **2/23/2011 10:25:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.250	JB	0.0227	MDL	5.33	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.0428	JBQ	0.00736	MDL	5.33	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0411	JB	0.0128	MDL	5.33	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0190	U	0.0190	MDL	5.33	PQL	ng/Kg	UJ	FD
1,2,3,4,7,8-HXCDF	0.0426	JBQ	0.0122	MDL	5.33	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0690	JBQ	0.0195	MDL	5.33	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0409	JBQ	0.0101	MDL	5.33	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0984	JB	0.0183	MDL	5.33	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0633	JB	0.0114	MDL	5.33	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0408	JBQ	0.0255	MDL	5.33	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0296	JBQ	0.0170	MDL	5.33	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0199	JBQ	0.0102	MDL	5.33	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0727	JBQ	0.0166	MDL	5.33	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0274	JB	0.0271	MDL	1.07	PQL	ng/Kg	UJ	B, FD
2,3,7,8-TCDF	0.0363	JB	0.0275	MDL	1.07	PQL	ng/Kg	UJ	B, FD
OCDD	1.74	JB	0.0225	MDL	10.7	PQL	ng/Kg	U	B
OCDF	0.129	JBQ	0.0344	MDL	10.7	PQL	ng/Kg	U	B

Sample ID: **SL-037-SA5A-SB-4.0-5.0** ***Collected:*** **2/23/2011 11:54:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.318	JB	0.0225	MDL	5.64	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.138	JB	0.0118	MDL	5.64	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.234	JBQ	0.0163	MDL	5.64	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.128	JBQ	0.0244	MDL	5.64	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.119	JB	0.0300	MDL	5.64	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX053 **Laboratory: LL**

EDD Filename: DX053_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-037-SA5A-SB-4.0-5.0 ***Collected:*** 2/23/2011 11:54:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,6,7,8-HXCDD	0.126	JBQ	0.0242	MDL	5.64	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.153	JB	0.0202	MDL	5.64	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.177	JBQ	0.0224	MDL	5.64	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.221	JB	0.0180	MDL	5.64	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.162	JBQ	0.0266	MDL	5.64	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.155	JB	0.0175	MDL	5.64	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.154	JBQ	0.0175	MDL	5.64	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.212	JBQ	0.0176	MDL	5.64	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0468	JBQ	0.0284	MDL	1.13	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0483	JBQ	0.0284	MDL	1.13	PQL	ng/Kg	U	B
OCDD	0.981	JB	0.0224	MDL	11.3	PQL	ng/Kg	U	B
OCDF	0.437	JB	0.0362	MDL	11.3	PQL	ng/Kg	U	B

Sample ID: SL-040-SA5A-SB-4.0-5.0 ***Collected:*** 2/23/2011 3:26:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.209	JBQ	0.0246	MDL	5.57	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.0697	JB	0.00847	MDL	5.57	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0887	JB	0.0144	MDL	5.57	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0317	JBQ	0.0208	MDL	5.57	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0569	JB	0.0169	MDL	5.57	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0756	JBQ	0.0210	MDL	5.57	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0429	JB	0.0135	MDL	5.57	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0530	JB	0.0208	MDL	5.57	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0646	JB	0.0162	MDL	5.57	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0293	JBQ	0.0283	MDL	5.57	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0424	JBQ	0.0177	MDL	5.57	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0324	JB	0.0143	MDL	5.57	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0721	JBQ	0.0191	MDL	5.57	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0415	JBQ	0.0346	MDL	1.11	PQL	ng/Kg	U	B
OCDD	0.623	JB	0.0287	MDL	11.1	PQL	ng/Kg	U	B
OCDF	0.210	JB	0.0452	MDL	11.1	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX053 **Laboratory: LL**

EDD Filename: DX053_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: **SL-040-SA5A-SB-9.0-10.0** ***Collected:*** **2/23/2011 3:36:00** ***Analysis Type:*** **RES** ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.185	JB	0.0247	MDL	5.27	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.375	JB	0.0153	MDL	5.27	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0910	JBQ	0.0201	MDL	5.27	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0298	JB	0.0202	MDL	5.27	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0454	JBQ	0.0192	MDL	5.27	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0369	JB	0.0208	MDL	5.27	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0565	JBQ	0.0139	MDL	5.27	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0292	JBQ	0.0195	MDL	5.27	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0641	JBQ	0.0149	MDL	5.27	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0370	JBQ	0.0169	MDL	5.27	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0530	JB	0.0132	MDL	5.27	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0699	JBQ	0.0162	MDL	5.27	PQL	ng/Kg	U	B
OCDD	0.556	JB	0.0240	MDL	10.5	PQL	ng/Kg	U	B
OCDF	0.600	JB	0.0408	MDL	10.5	PQL	ng/Kg	U	B

Sample ID: **SL-054-SA5A-SS-0.0-0.5** ***Collected:*** **2/21/2011 2:45:00** ***Analysis Type:*** **RES** ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	3.28	JB	0.0383	MDL	5.87	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.287	JB	0.0338	MDL	5.87	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.411	JB	0.0655	MDL	5.87	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.605	JB	0.0750	MDL	5.87	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	1.18	JB	0.0648	MDL	5.87	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.231	JBQ	0.0573	MDL	5.87	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	1.10	JB	0.0629	MDL	5.87	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.523	JB	0.0445	MDL	5.87	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.291	JBQ	0.0419	MDL	5.87	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.178	JB	0.0410	MDL	5.87	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.278	JB	0.0426	MDL	5.87	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.366	JBQ	0.0372	MDL	5.87	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0937	JBQ	0.0380	MDL	1.17	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.226	JBQ	0.0556	MDL	1.17	PQL	ng/Kg	U	B
OCDF	9.51	JB	0.0485	MDL	11.7	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX053 **Laboratory: LL**

EDD Filename: DX053_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: **SL-055-SA5A-SS-0.0-0.5** ***Collected:*** **2/21/2011 2:27:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	2.82	JB	0.0237	MDL	5.90	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.260	JB	0.0299	MDL	5.90	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.296	JB	0.0593	MDL	5.90	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.446	JB	0.0553	MDL	5.90	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.908	JB	0.0588	MDL	5.90	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.181	JBQ	0.0432	MDL	5.90	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.851	JB	0.0600	MDL	5.90	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.561	JB	0.0462	MDL	5.90	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.239	JBQ	0.0375	MDL	5.90	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.220	JB	0.0344	MDL	5.90	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.269	JBQ	0.0407	MDL	5.90	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.371	JBQ	0.0344	MDL	5.90	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.121	JB	0.0538	MDL	1.18	PQL	ng/Kg	U	B
OCDF	7.09	JB	0.0424	MDL	11.8	PQL	ng/Kg	J	Z

Sample ID: **SL-056-SA5A-SS-0.0-0.5** ***Collected:*** **2/21/2011 2:00:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	2.86	JB	0.0222	MDL	5.85	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.262	JB	0.0326	MDL	5.85	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.348	JBQ	0.0628	MDL	5.85	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.440	JB	0.0562	MDL	5.85	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	1.01	JB	0.0659	MDL	5.85	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.252	JBQ	0.0493	MDL	5.85	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.937	JB	0.0663	MDL	5.85	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.367	JB	0.0548	MDL	5.85	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.295	JBQ	0.0395	MDL	5.85	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.199	JBQ	0.0388	MDL	5.85	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.286	JB	0.0484	MDL	5.85	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.441	JB	0.0376	MDL	5.85	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.102	JBQ	0.0418	MDL	1.17	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.156	JBQ	0.0673	MDL	1.17	PQL	ng/Kg	U	B
OCDF	6.83	JB	0.0507	MDL	11.7	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX053 **Laboratory: LL**

EDD Filename: DX053_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: **SL-057-SA5A-SS-0.0-0.5** ***Collected:*** **2/21/2011 12:00:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	0.472	JB	0.0472	MDL	5.87	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.917	JBQ	0.0741	MDL	5.87	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.683	JB	0.0648	MDL	5.87	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	3.29	JB	0.0773	MDL	5.87	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.500	JB	0.0576	MDL	5.87	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	1.71	JB	0.0750	MDL	5.87	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.748	JBQ	0.0707	MDL	5.87	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.354	JBQ	0.0536	MDL	5.87	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.462	JB	0.0465	MDL	5.87	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.576	JBQ	0.0599	MDL	5.87	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.806	JBQ	0.0423	MDL	5.87	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.199	JBQ	0.0689	MDL	1.17	PQL	ng/Kg	U	B
OCDF	10.6	JB	0.0582	MDL	11.7	PQL	ng/Kg	J	Z

Sample ID: **SL-058-SA5A-SS-0.0-0.5** ***Collected:*** **2/21/2011 1:40:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	2.13	JB	0.0406	MDL	5.88	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.168	JB	0.0316	MDL	5.88	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.568	JBQ	0.0925	MDL	5.88	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.473	JB	0.0898	MDL	5.88	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	1.23	JB	0.0918	MDL	5.88	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.240	JB	0.0645	MDL	5.88	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	1.23	JB	0.0722	MDL	5.88	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.477	JB	0.0345	MDL	5.88	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.322	JB	0.0501	MDL	5.88	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.162	JBQ	0.0313	MDL	5.88	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.224	JBQ	0.0340	MDL	5.88	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.318	JB	0.0304	MDL	5.88	PQL	ng/Kg	U	B
OCDF	4.65	JB	0.0479	MDL	11.8	PQL	ng/Kg	J	Z

Sample ID: **SL-059-SA5A-SS-0.0-0.5** ***Collected:*** **2/21/2011 11:20:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	3.42	JB	0.0395	MDL	6.00	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX053 **Laboratory: LL**

EDD Filename: DX053_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: **SL-059-SA5A-SS-0.0-0.5** ***Collected:*** **2/21/2011 11:20:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	0.247	JB	0.0289	MDL	6.00	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.307	JBQ	0.0696	MDL	6.00	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.671	JB	0.108	MDL	6.00	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.976	JBQ	0.0678	MDL	6.00	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.388	JB	0.0765	MDL	6.00	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.762	JB	0.0481	MDL	6.00	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.517	JB	0.0406	MDL	6.00	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.197	JB	0.0361	MDL	6.00	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.250	JBQ	0.0346	MDL	6.00	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.328	JB	0.0400	MDL	6.00	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.499	JB	0.0388	MDL	6.00	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.258	JBQ	0.0521	MDL	1.20	PQL	ng/Kg	U	B
OCDF	6.63	JB	0.0505	MDL	12.0	PQL	ng/Kg	J	Z

Sample ID: **SL-060-SA5A-SS-0.0-0.5** ***Collected:*** **2/21/2011 10:55:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	3.29	JB	0.0298	MDL	5.79	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.234	JB	0.0333	MDL	5.79	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.292	JB	0.0691	MDL	5.79	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.612	JB	0.0845	MDL	5.79	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.812	JB	0.0693	MDL	5.79	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.366	JB	0.0621	MDL	5.79	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.715	JB	0.0686	MDL	5.79	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.510	JB	0.0565	MDL	5.79	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.303	JBQ	0.0414	MDL	5.79	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.391	JB	0.0373	MDL	5.79	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.344	JB	0.0523	MDL	5.79	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.641	JB	0.0392	MDL	5.79	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0615	JB	0.0446	MDL	1.16	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.235	JBQ	0.0679	MDL	1.16	PQL	ng/Kg	U	B
OCDF	5.20	JB	0.0502	MDL	11.6	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX053 **Laboratory: LL**

EDD Filename: DX053_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: **SL-061-SA5A-SS-0.0-0.5** ***Collected:*** **2/21/2011 10:35:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	3.43	JB	0.0196	MDL	5.88	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.237	JB	0.0287	MDL	5.88	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.382	JBQ	0.0655	MDL	5.88	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.468	JB	0.0550	MDL	5.88	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.883	JBQ	0.0689	MDL	5.88	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.234	JB	0.0431	MDL	5.88	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.747	JB	0.0624	MDL	5.88	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.401	JB	0.0479	MDL	5.88	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.258	JBQ	0.0362	MDL	5.88	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.248	JBQ	0.0286	MDL	5.88	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.301	JB	0.0434	MDL	5.88	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.358	JB	0.0277	MDL	5.88	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0582	JBQ	0.0314	MDL	1.18	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.164	JBQ	0.0438	MDL	1.18	PQL	ng/Kg	U	B
OCDF	5.54	JB	0.0423	MDL	11.8	PQL	ng/Kg	J	Z

Sample ID: **SL-062-SA5A-SS-0.0-0.5** ***Collected:*** **2/21/2011 9:05:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	2.12	JB	0.0378	MDL	5.87	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.294	JB	0.0525	MDL	5.87	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.307	JB	0.0743	MDL	5.87	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.518	JB	0.0670	MDL	5.87	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.547	JBQ	0.0776	MDL	5.87	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.244	JB	0.0532	MDL	5.87	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.474	JBQ	0.0707	MDL	5.87	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.311	JB	0.0624	MDL	5.87	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.214	JBQ	0.0475	MDL	5.87	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.211	JBQ	0.0424	MDL	5.87	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.260	JBQ	0.0504	MDL	5.87	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.412	JB	0.0434	MDL	5.87	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0765	JBQ	0.0516	MDL	1.17	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.127	JB	0.0746	MDL	1.17	PQL	ng/Kg	U	B
OCDF	4.93	JB	0.0732	MDL	11.7	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX053 **Laboratory: LL**

EDD Filename: DX053_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: **SL-063-SA5A-SS-0.0-0.5** ***Collected:*** **2/21/2011 9:58:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	1.18	JB	0.0427	MDL	5.86	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.342	JB	0.0696	MDL	5.86	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.643	JBQ	0.0714	MDL	5.86	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	1.08	JB	0.0698	MDL	5.86	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.344	JBQ	0.0528	MDL	5.86	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	1.02	JB	0.0679	MDL	5.86	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.357	JB	0.0600	MDL	5.86	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.266	JB	0.0394	MDL	5.86	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.210	JBQ	0.0381	MDL	5.86	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.532	JB	0.0502	MDL	5.86	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.474	JB	0.0386	MDL	5.86	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0895	JBQ	0.0393	MDL	1.17	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.306	JBQ	0.0739	MDL	1.17	PQL	ng/Kg	U	B

Sample ID: **SL-064-SA5A-SS-0.0-0.5** ***Collected:*** **2/21/2011 9:35:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	1.65	JB	0.0326	MDL	5.80	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.178	JBQ	0.0500	MDL	5.80	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.186	JBQ	0.0702	MDL	5.80	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.196	JB	0.0541	MDL	5.80	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.458	JBQ	0.0689	MDL	5.80	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.155	JBQ	0.0485	MDL	5.80	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.514	JB	0.0672	MDL	5.80	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.226	JBQ	0.0566	MDL	5.80	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.127	JBQ	0.0500	MDL	5.80	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.127	JBQ	0.0436	MDL	5.80	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.167	JB	0.0474	MDL	5.80	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.279	JBQ	0.0408	MDL	5.80	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0921	JBQ	0.0763	MDL	1.16	PQL	ng/Kg	U	B
OCDF	4.56	JB	0.0664	MDL	11.6	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX053 **Laboratory: LL**

EDD Filename: DX053_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: **SL-095-SA5A-SS-0.0-0.5** ***Collected:*** **2/21/2011 3:00:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	0.603	JB	0.0389	MDL	6.13	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	1.52	JB	0.0809	MDL	6.13	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	1.14	JB	0.0780	MDL	6.13	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	3.87	JB	0.0813	MDL	6.13	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.727	JB	0.0622	MDL	6.13	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	3.27	JB	0.0750	MDL	6.13	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.380	JB	0.0620	MDL	6.13	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.873	JB	0.0621	MDL	6.13	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.648	JBQ	0.0634	MDL	6.13	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.832	JB	0.0571	MDL	6.13	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	1.59	JB	0.0596	MDL	6.13	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.124	JB	0.0360	MDL	1.23	PQL	ng/Kg	U	B
2,3,7,8-TCDF	1.10	JB	0.116	MDL	1.23	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX053 **Laboratory: LL**

EDD Filename: DX053_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
*#	Professional Judgment
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Verification Correlation Coefficient
C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX053 **Laboratory: LL**

EDD Filename: DX053_v1 **eQAPP Name: CDM_SSFL_110509**

F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation
L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery Lower Estimation

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX053 **Laboratory: LL**

EDD Filename: DX053_v1 **eQAPP Name: CDM_SSFL_110509**

R	Continuing Calibration Verification Percent Recovery Lower Rejection
R	Continuing Calibration Verification Percent Recovery Upper Estimation
R	Continuing Calibration Verification Percent Recovery Upper Rejection
R	Continuing Calibration Verification Relative Response Factor
R	Initial Calibration Relative Response Factor
R	Initial Calibration Verification Percent Recovery Lower Estimation
R	Initial Calibration Verification Percent Recovery Lower Rejection
R	Initial Calibration Verification Percent Recovery Upper Estimation
R	Initial Calibration Verification Percent Recovery Upper Rejection
R	Initial Calibration Verification Relative Response Factor
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control Outlier Reports

DX053

Method Blank Outlier Report

Lab Reporting Batch ID: DX053 **Laboratory: LL**

EDD Filename: DX053_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLK0570B371406	3/4/2011 2:06:00 PM	1,2,3,4,6,7,8-HPCDD	0.159 ng/Kg	DUP03-SA5A-QC-022311
		1,2,3,4,6,7,8-HPCDF	0.0843 ng/Kg	SL-025-SA5A-SB-4.5-5.5
		1,2,3,4,7,8,9-HPCDF	0.0903 ng/Kg	SL-028-SA5A-SB-3.5-4.5
		1,2,3,4,7,8-HxCDD	0.0590 ng/Kg	SL-029-SA5A-SB-3.0-4.0
		1,2,3,4,7,8-HXCDF	0.0857 ng/Kg	SL-036-SA5A-SB-4.0-5.0
		1,2,3,6,7,8-HXCDD	0.0797 ng/Kg	SL-037-SA5A-SB-4.0-5.0
		1,2,3,6,7,8-HXCDF	0.0722 ng/Kg	SL-040-SA5A-SB-4.0-5.0
		1,2,3,7,8,9-HXCDD	0.0674 ng/Kg	SL-040-SA5A-SB-9.0-10.0
		1,2,3,7,8,9-HXCDF	0.111 ng/Kg	SL-054-SA5A-SS-0.0-0.5
		1,2,3,7,8-PECDD	0.118 ng/Kg	SL-055-SA5A-SS-0.0-0.5
		1,2,3,7,8-PECDF	0.0756 ng/Kg	SL-056-SA5A-SS-0.0-0.5
		2,3,4,6,7,8-HXCDF	0.0746 ng/Kg	SL-057-SA5A-SS-0.0-0.5
		2,3,4,7,8-PECDF	0.103 ng/Kg	SL-058-SA5A-SS-0.0-0.5
		2,3,7,8-TCDD	0.0468 ng/Kg	SL-059-SA5A-SS-0.0-0.5
		2,3,7,8-TCDF	0.0703 ng/Kg	SL-060-SA5A-SS-0.0-0.5
		OCDD	0.371 ng/Kg	SL-061-SA5A-SS-0.0-0.5
		OCDF	0.219 ng/Kg	SL-062-SA5A-SS-0.0-0.5
				SL-063-SA5A-SS-0.0-0.5
				SL-064-SA5A-SS-0.0-0.5
				SL-095-SA5A-SS-0.0-0.5

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
DUP03-SA5A-QC-022311(RES)	1,2,3,4,6,7,8-HPCDD	0.184 ng/Kg	0.184U ng/Kg
DUP03-SA5A-QC-022311(RES)	1,2,3,4,6,7,8-HPCDF	0.0450 ng/Kg	0.0450U ng/Kg
DUP03-SA5A-QC-022311(RES)	1,2,3,4,7,8,9-HPCDF	0.0431 ng/Kg	0.0431U ng/Kg
DUP03-SA5A-QC-022311(RES)	1,2,3,4,7,8-HxCDD	0.0435 ng/Kg	0.0435U ng/Kg
DUP03-SA5A-QC-022311(RES)	1,2,3,4,7,8-HXCDF	0.0265 ng/Kg	0.0265U ng/Kg
DUP03-SA5A-QC-022311(RES)	1,2,3,6,7,8-HXCDD	0.0560 ng/Kg	0.0560U ng/Kg
DUP03-SA5A-QC-022311(RES)	1,2,3,6,7,8-HXCDF	0.0375 ng/Kg	0.0375U ng/Kg
DUP03-SA5A-QC-022311(RES)	1,2,3,7,8,9-HXCDD	0.0638 ng/Kg	0.0638U ng/Kg
DUP03-SA5A-QC-022311(RES)	1,2,3,7,8,9-HXCDF	0.0593 ng/Kg	0.0593U ng/Kg
DUP03-SA5A-QC-022311(RES)	1,2,3,7,8-PECDD	0.0565 ng/Kg	0.0565U ng/Kg
DUP03-SA5A-QC-022311(RES)	1,2,3,7,8-PECDF	0.0488 ng/Kg	0.0488U ng/Kg
DUP03-SA5A-QC-022311(RES)	2,3,4,6,7,8-HXCDF	0.0219 ng/Kg	0.0219U ng/Kg
DUP03-SA5A-QC-022311(RES)	2,3,4,7,8-PECDF	0.0744 ng/Kg	0.0744U ng/Kg
DUP03-SA5A-QC-022311(RES)	OCDD	1.30 ng/Kg	1.30U ng/Kg
DUP03-SA5A-QC-022311(RES)	OCDF	0.113 ng/Kg	0.113U ng/Kg
SL-025-SA5A-SB-4.5-5.5(RES)	1,2,3,4,6,7,8-HPCDD	0.211 ng/Kg	0.211U ng/Kg
SL-025-SA5A-SB-4.5-5.5(RES)	1,2,3,4,6,7,8-HPCDF	0.0545 ng/Kg	0.0545U ng/Kg
SL-025-SA5A-SB-4.5-5.5(RES)	1,2,3,4,7,8,9-HPCDF	0.119 ng/Kg	0.119U ng/Kg
SL-025-SA5A-SB-4.5-5.5(RES)	1,2,3,4,7,8-HxCDD	0.0375 ng/Kg	0.0375U ng/Kg
SL-025-SA5A-SB-4.5-5.5(RES)	1,2,3,4,7,8-HXCDF	0.0544 ng/Kg	0.0544U ng/Kg
SL-025-SA5A-SB-4.5-5.5(RES)	1,2,3,6,7,8-HXCDD	0.0387 ng/Kg	0.0387U ng/Kg
SL-025-SA5A-SB-4.5-5.5(RES)	1,2,3,6,7,8-HXCDF	0.0486 ng/Kg	0.0486U ng/Kg
SL-025-SA5A-SB-4.5-5.5(RES)	1,2,3,7,8,9-HXCDD	0.0670 ng/Kg	0.0670U ng/Kg
SL-025-SA5A-SB-4.5-5.5(RES)	1,2,3,7,8,9-HXCDF	0.0896 ng/Kg	0.0896U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX053 **Laboratory: LL**

EDD Filename: DX053_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-025-SA5A-SB-4.5-5.5(RES)	1,2,3,7,8-PECDD	0.0476 ng/Kg	0.0476U ng/Kg
SL-025-SA5A-SB-4.5-5.5(RES)	1,2,3,7,8-PECDF	0.0525 ng/Kg	0.0525U ng/Kg
SL-025-SA5A-SB-4.5-5.5(RES)	2,3,4,6,7,8-HXCDF	0.0452 ng/Kg	0.0452U ng/Kg
SL-025-SA5A-SB-4.5-5.5(RES)	2,3,4,7,8-PECDF	0.0704 ng/Kg	0.0704U ng/Kg
SL-025-SA5A-SB-4.5-5.5(RES)	OCDD	1.01 ng/Kg	1.01U ng/Kg
SL-025-SA5A-SB-4.5-5.5(RES)	OCDF	0.209 ng/Kg	0.209U ng/Kg
SL-028-SA5A-SB-3.5-4.5(RES)	1,2,3,4,6,7,8-HPCDD	0.194 ng/Kg	0.194U ng/Kg
SL-028-SA5A-SB-3.5-4.5(RES)	1,2,3,4,6,7,8-HPCDF	0.0395 ng/Kg	0.0395U ng/Kg
SL-028-SA5A-SB-3.5-4.5(RES)	1,2,3,4,7,8,9-HPCDF	0.0343 ng/Kg	0.0343U ng/Kg
SL-028-SA5A-SB-3.5-4.5(RES)	1,2,3,4,7,8-HxCDD	0.0319 ng/Kg	0.0319U ng/Kg
SL-028-SA5A-SB-3.5-4.5(RES)	1,2,3,4,7,8-HXCDF	0.0360 ng/Kg	0.0360U ng/Kg
SL-028-SA5A-SB-3.5-4.5(RES)	1,2,3,6,7,8-HXCDD	0.0354 ng/Kg	0.0354U ng/Kg
SL-028-SA5A-SB-3.5-4.5(RES)	1,2,3,6,7,8-HXCDF	0.0370 ng/Kg	0.0370U ng/Kg
SL-028-SA5A-SB-3.5-4.5(RES)	1,2,3,7,8,9-HXCDD	0.0659 ng/Kg	0.0659U ng/Kg
SL-028-SA5A-SB-3.5-4.5(RES)	1,2,3,7,8,9-HXCDF	0.0650 ng/Kg	0.0650U ng/Kg
SL-028-SA5A-SB-3.5-4.5(RES)	1,2,3,7,8-PECDD	0.0323 ng/Kg	0.0323U ng/Kg
SL-028-SA5A-SB-3.5-4.5(RES)	1,2,3,7,8-PECDF	0.0579 ng/Kg	0.0579U ng/Kg
SL-028-SA5A-SB-3.5-4.5(RES)	2,3,4,6,7,8-HXCDF	0.0434 ng/Kg	0.0434U ng/Kg
SL-028-SA5A-SB-3.5-4.5(RES)	2,3,4,7,8-PECDF	0.0444 ng/Kg	0.0444U ng/Kg
SL-028-SA5A-SB-3.5-4.5(RES)	OCDD	0.553 ng/Kg	0.553U ng/Kg
SL-028-SA5A-SB-3.5-4.5(RES)	OCDF	0.210 ng/Kg	0.210U ng/Kg
SL-029-SA5A-SB-3.0-4.0(RES)	1,2,3,4,6,7,8-HPCDD	0.158 ng/Kg	0.158U ng/Kg
SL-029-SA5A-SB-3.0-4.0(RES)	1,2,3,4,6,7,8-HPCDF	0.0584 ng/Kg	0.0584U ng/Kg
SL-029-SA5A-SB-3.0-4.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0432 ng/Kg	0.0432U ng/Kg
SL-029-SA5A-SB-3.0-4.0(RES)	1,2,3,4,7,8-HxCDD	0.0364 ng/Kg	0.0364U ng/Kg
SL-029-SA5A-SB-3.0-4.0(RES)	1,2,3,4,7,8-HXCDF	0.0708 ng/Kg	0.0708U ng/Kg
SL-029-SA5A-SB-3.0-4.0(RES)	1,2,3,6,7,8-HXCDF	0.0546 ng/Kg	0.0546U ng/Kg
SL-029-SA5A-SB-3.0-4.0(RES)	1,2,3,7,8,9-HXCDD	0.0846 ng/Kg	0.0846U ng/Kg
SL-029-SA5A-SB-3.0-4.0(RES)	1,2,3,7,8,9-HXCDF	0.0841 ng/Kg	0.0841U ng/Kg
SL-029-SA5A-SB-3.0-4.0(RES)	1,2,3,7,8-PECDD	0.0872 ng/Kg	0.0872U ng/Kg
SL-029-SA5A-SB-3.0-4.0(RES)	1,2,3,7,8-PECDF	0.0904 ng/Kg	0.0904U ng/Kg
SL-029-SA5A-SB-3.0-4.0(RES)	2,3,4,6,7,8-HXCDF	0.0361 ng/Kg	0.0361U ng/Kg
SL-029-SA5A-SB-3.0-4.0(RES)	2,3,4,7,8-PECDF	0.0857 ng/Kg	0.0857U ng/Kg
SL-029-SA5A-SB-3.0-4.0(RES)	2,3,7,8-TCDF	0.0276 ng/Kg	0.0276U ng/Kg
SL-029-SA5A-SB-3.0-4.0(RES)	OCDD	0.539 ng/Kg	0.539U ng/Kg
SL-029-SA5A-SB-3.0-4.0(RES)	OCDF	0.173 ng/Kg	0.173U ng/Kg
SL-036-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.250 ng/Kg	0.250U ng/Kg

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Method Blank Outlier Report

Lab Reporting Batch ID: DX053 **Laboratory: LL**

EDD Filename: DX053_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-036-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.0428 ng/Kg	0.0428U ng/Kg
SL-036-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0411 ng/Kg	0.0411U ng/Kg
SL-036-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.0426 ng/Kg	0.0426U ng/Kg
SL-036-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDD	0.0690 ng/Kg	0.0690U ng/Kg
SL-036-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.0409 ng/Kg	0.0409U ng/Kg
SL-036-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDD	0.0984 ng/Kg	0.0984U ng/Kg
SL-036-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.0633 ng/Kg	0.0633U ng/Kg
SL-036-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDD	0.0408 ng/Kg	0.0408U ng/Kg
SL-036-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.0296 ng/Kg	0.0296U ng/Kg
SL-036-SA5A-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.0199 ng/Kg	0.0199U ng/Kg
SL-036-SA5A-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.0727 ng/Kg	0.0727U ng/Kg
SL-036-SA5A-SB-4.0-5.0(RES)	2,3,7,8-TCDD	0.0274 ng/Kg	0.0274U ng/Kg
SL-036-SA5A-SB-4.0-5.0(RES)	2,3,7,8-TCDF	0.0363 ng/Kg	0.0363U ng/Kg
SL-036-SA5A-SB-4.0-5.0(RES)	OCDD	1.74 ng/Kg	1.74U ng/Kg
SL-036-SA5A-SB-4.0-5.0(RES)	OCDF	0.129 ng/Kg	0.129U ng/Kg
SL-037-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.318 ng/Kg	0.318U ng/Kg
SL-037-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.138 ng/Kg	0.138U ng/Kg
SL-037-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.234 ng/Kg	0.234U ng/Kg
SL-037-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HxCDD	0.128 ng/Kg	0.128U ng/Kg
SL-037-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.119 ng/Kg	0.119U ng/Kg
SL-037-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDD	0.126 ng/Kg	0.126U ng/Kg
SL-037-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.153 ng/Kg	0.153U ng/Kg
SL-037-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDD	0.177 ng/Kg	0.177U ng/Kg
SL-037-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.221 ng/Kg	0.221U ng/Kg
SL-037-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDD	0.162 ng/Kg	0.162U ng/Kg
SL-037-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.155 ng/Kg	0.155U ng/Kg
SL-037-SA5A-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.154 ng/Kg	0.154U ng/Kg
SL-037-SA5A-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.212 ng/Kg	0.212U ng/Kg
SL-037-SA5A-SB-4.0-5.0(RES)	2,3,7,8-TCDD	0.0468 ng/Kg	0.0468U ng/Kg
SL-037-SA5A-SB-4.0-5.0(RES)	2,3,7,8-TCDF	0.0483 ng/Kg	0.0483U ng/Kg
SL-037-SA5A-SB-4.0-5.0(RES)	OCDD	0.981 ng/Kg	0.981U ng/Kg
SL-037-SA5A-SB-4.0-5.0(RES)	OCDF	0.437 ng/Kg	0.437U ng/Kg
SL-040-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.209 ng/Kg	0.209U ng/Kg
SL-040-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.0697 ng/Kg	0.0697U ng/Kg
SL-040-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0887 ng/Kg	0.0887U ng/Kg
SL-040-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HxCDD	0.0317 ng/Kg	0.0317U ng/Kg
SL-040-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.0569 ng/Kg	0.0569U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX053 **Laboratory: LL**

EDD Filename: DX053_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-040-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDD	0.0756 ng/Kg	0.0756U ng/Kg
SL-040-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.0429 ng/Kg	0.0429U ng/Kg
SL-040-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDD	0.0530 ng/Kg	0.0530U ng/Kg
SL-040-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.0646 ng/Kg	0.0646U ng/Kg
SL-040-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDD	0.0293 ng/Kg	0.0293U ng/Kg
SL-040-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.0424 ng/Kg	0.0424U ng/Kg
SL-040-SA5A-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.0324 ng/Kg	0.0324U ng/Kg
SL-040-SA5A-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.0721 ng/Kg	0.0721U ng/Kg
SL-040-SA5A-SB-4.0-5.0(RES)	2,3,7,8-TCDD	0.0415 ng/Kg	0.0415U ng/Kg
SL-040-SA5A-SB-4.0-5.0(RES)	OCDD	0.623 ng/Kg	0.623U ng/Kg
SL-040-SA5A-SB-4.0-5.0(RES)	OCDF	0.210 ng/Kg	0.210U ng/Kg
SL-040-SA5A-SB-9.0-10.0(RES)	1,2,3,4,6,7,8-HPCDD	0.185 ng/Kg	0.185U ng/Kg
SL-040-SA5A-SB-9.0-10.0(RES)	1,2,3,4,6,7,8-HPCDF	0.375 ng/Kg	0.375U ng/Kg
SL-040-SA5A-SB-9.0-10.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0910 ng/Kg	0.0910U ng/Kg
SL-040-SA5A-SB-9.0-10.0(RES)	1,2,3,4,7,8-HxCDD	0.0298 ng/Kg	0.0298U ng/Kg
SL-040-SA5A-SB-9.0-10.0(RES)	1,2,3,4,7,8-HXCDF	0.0454 ng/Kg	0.0454U ng/Kg
SL-040-SA5A-SB-9.0-10.0(RES)	1,2,3,6,7,8-HXCDD	0.0369 ng/Kg	0.0369U ng/Kg
SL-040-SA5A-SB-9.0-10.0(RES)	1,2,3,6,7,8-HXCDF	0.0565 ng/Kg	0.0565U ng/Kg
SL-040-SA5A-SB-9.0-10.0(RES)	1,2,3,7,8,9-HXCDD	0.0292 ng/Kg	0.0292U ng/Kg
SL-040-SA5A-SB-9.0-10.0(RES)	1,2,3,7,8,9-HXCDF	0.0641 ng/Kg	0.0641U ng/Kg
SL-040-SA5A-SB-9.0-10.0(RES)	1,2,3,7,8-PECDF	0.0370 ng/Kg	0.0370U ng/Kg
SL-040-SA5A-SB-9.0-10.0(RES)	2,3,4,6,7,8-HXCDF	0.0530 ng/Kg	0.0530U ng/Kg
SL-040-SA5A-SB-9.0-10.0(RES)	2,3,4,7,8-PECDF	0.0699 ng/Kg	0.0699U ng/Kg
SL-040-SA5A-SB-9.0-10.0(RES)	OCDD	0.556 ng/Kg	0.556U ng/Kg
SL-040-SA5A-SB-9.0-10.0(RES)	OCDF	0.600 ng/Kg	0.600U ng/Kg
SL-054-SA5A-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.287 ng/Kg	0.287U ng/Kg
SL-054-SA5A-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.231 ng/Kg	0.231U ng/Kg
SL-054-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.523 ng/Kg	0.523U ng/Kg
SL-054-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.291 ng/Kg	0.291U ng/Kg
SL-054-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.178 ng/Kg	0.178U ng/Kg
SL-054-SA5A-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.278 ng/Kg	0.278U ng/Kg
SL-054-SA5A-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.366 ng/Kg	0.366U ng/Kg
SL-054-SA5A-SS-0.0-0.5(RES)	2,3,7,8-TCDD	0.0937 ng/Kg	0.0937U ng/Kg
SL-054-SA5A-SS-0.0-0.5(RES)	2,3,7,8-TCDF	0.226 ng/Kg	0.226U ng/Kg
SL-055-SA5A-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.260 ng/Kg	0.260U ng/Kg
SL-055-SA5A-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.181 ng/Kg	0.181U ng/Kg
SL-055-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.239 ng/Kg	0.239U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX053 **Laboratory: LL**

EDD Filename: DX053_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-055-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.220 ng/Kg	0.220U ng/Kg
SL-055-SA5A-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.269 ng/Kg	0.269U ng/Kg
SL-055-SA5A-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.371 ng/Kg	0.371U ng/Kg
SL-055-SA5A-SS-0.0-0.5(RES)	2,3,7,8-TCDF	0.121 ng/Kg	0.121U ng/Kg
SL-056-SA5A-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.262 ng/Kg	0.262U ng/Kg
SL-056-SA5A-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.252 ng/Kg	0.252U ng/Kg
SL-056-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.367 ng/Kg	0.367U ng/Kg
SL-056-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.295 ng/Kg	0.295U ng/Kg
SL-056-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.199 ng/Kg	0.199U ng/Kg
SL-056-SA5A-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.286 ng/Kg	0.286U ng/Kg
SL-056-SA5A-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.441 ng/Kg	0.441U ng/Kg
SL-056-SA5A-SS-0.0-0.5(RES)	2,3,7,8-TCDD	0.102 ng/Kg	0.102U ng/Kg
SL-056-SA5A-SS-0.0-0.5(RES)	2,3,7,8-TCDF	0.156 ng/Kg	0.156U ng/Kg
SL-057-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.354 ng/Kg	0.354U ng/Kg
SL-057-SA5A-SS-0.0-0.5(RES)	2,3,7,8-TCDF	0.199 ng/Kg	0.199U ng/Kg
SL-058-SA5A-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.168 ng/Kg	0.168U ng/Kg
SL-058-SA5A-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.240 ng/Kg	0.240U ng/Kg
SL-058-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.477 ng/Kg	0.477U ng/Kg
SL-058-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.322 ng/Kg	0.322U ng/Kg
SL-058-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.162 ng/Kg	0.162U ng/Kg
SL-058-SA5A-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.224 ng/Kg	0.224U ng/Kg
SL-058-SA5A-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.318 ng/Kg	0.318U ng/Kg
SL-059-SA5A-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.247 ng/Kg	0.247U ng/Kg
SL-059-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.517 ng/Kg	0.517U ng/Kg
SL-059-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.197 ng/Kg	0.197U ng/Kg
SL-059-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.250 ng/Kg	0.250U ng/Kg
SL-059-SA5A-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.328 ng/Kg	0.328U ng/Kg
SL-059-SA5A-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.499 ng/Kg	0.499U ng/Kg
SL-059-SA5A-SS-0.0-0.5(RES)	2,3,7,8-TCDF	0.258 ng/Kg	0.258U ng/Kg
SL-060-SA5A-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.234 ng/Kg	0.234U ng/Kg
SL-060-SA5A-SS-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.292 ng/Kg	0.292U ng/Kg
SL-060-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.510 ng/Kg	0.510U ng/Kg
SL-060-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.303 ng/Kg	0.303U ng/Kg
SL-060-SA5A-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.344 ng/Kg	0.344U ng/Kg
SL-060-SA5A-SS-0.0-0.5(RES)	2,3,7,8-TCDD	0.0615 ng/Kg	0.0615U ng/Kg
SL-060-SA5A-SS-0.0-0.5(RES)	2,3,7,8-TCDF	0.235 ng/Kg	0.235U ng/Kg
SL-061-SA5A-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.237 ng/Kg	0.237U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX053 **Laboratory: LL**

EDD Filename: DX053_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-061-SA5A-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.234 ng/Kg	0.234U ng/Kg
SL-061-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.401 ng/Kg	0.401U ng/Kg
SL-061-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.258 ng/Kg	0.258U ng/Kg
SL-061-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.248 ng/Kg	0.248U ng/Kg
SL-061-SA5A-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.301 ng/Kg	0.301U ng/Kg
SL-061-SA5A-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.358 ng/Kg	0.358U ng/Kg
SL-061-SA5A-SS-0.0-0.5(RES)	2,3,7,8-TCDD	0.0582 ng/Kg	0.0582U ng/Kg
SL-061-SA5A-SS-0.0-0.5(RES)	2,3,7,8-TCDF	0.164 ng/Kg	0.164U ng/Kg
SL-062-SA5A-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.294 ng/Kg	0.294U ng/Kg
SL-062-SA5A-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.244 ng/Kg	0.244U ng/Kg
SL-062-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.311 ng/Kg	0.311U ng/Kg
SL-062-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.214 ng/Kg	0.214U ng/Kg
SL-062-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.211 ng/Kg	0.211U ng/Kg
SL-062-SA5A-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.260 ng/Kg	0.260U ng/Kg
SL-062-SA5A-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.412 ng/Kg	0.412U ng/Kg
SL-062-SA5A-SS-0.0-0.5(RES)	2,3,7,8-TCDD	0.0765 ng/Kg	0.0765U ng/Kg
SL-062-SA5A-SS-0.0-0.5(RES)	2,3,7,8-TCDF	0.127 ng/Kg	0.127U ng/Kg
SL-063-SA5A-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.344 ng/Kg	0.344U ng/Kg
SL-063-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.357 ng/Kg	0.357U ng/Kg
SL-063-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.266 ng/Kg	0.266U ng/Kg
SL-063-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.210 ng/Kg	0.210U ng/Kg
SL-063-SA5A-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.474 ng/Kg	0.474U ng/Kg
SL-063-SA5A-SS-0.0-0.5(RES)	2,3,7,8-TCDD	0.0895 ng/Kg	0.0895U ng/Kg
SL-063-SA5A-SS-0.0-0.5(RES)	2,3,7,8-TCDF	0.306 ng/Kg	0.306U ng/Kg
SL-064-SA5A-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.178 ng/Kg	0.178U ng/Kg
SL-064-SA5A-SS-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.186 ng/Kg	0.186U ng/Kg
SL-064-SA5A-SS-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.196 ng/Kg	0.196U ng/Kg
SL-064-SA5A-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.155 ng/Kg	0.155U ng/Kg
SL-064-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.226 ng/Kg	0.226U ng/Kg
SL-064-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.127 ng/Kg	0.127U ng/Kg
SL-064-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.127 ng/Kg	0.127U ng/Kg
SL-064-SA5A-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.167 ng/Kg	0.167U ng/Kg
SL-064-SA5A-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.279 ng/Kg	0.279U ng/Kg
SL-064-SA5A-SS-0.0-0.5(RES)	2,3,7,8-TCDF	0.0921 ng/Kg	0.0921U ng/Kg
SL-095-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.380 ng/Kg	0.380U ng/Kg
SL-095-SA5A-SS-0.0-0.5(RES)	2,3,7,8-TCDD	0.124 ng/Kg	0.124U ng/Kg

Field Duplicate RPD Report

Lab Reporting Batch ID: DX053 **Laboratory: LL**

EDD Filename: DX053_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 160.3M
Matrix: SO

Analyte	Concentration (%)		Sample RPD	eQAPP RPD	Flag
	SL-036-SA5A-SB-4.0-5.0	DUP03-SA5A-QC-022311			
MOISTURE	6.2	5.3	16		No Qualifiers Applied

Method: 1613B
Matrix: SO

Analyte	Concentration (ng/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-036-SA5A-SB-4.0-5.0	DUP03-SA5A-QC-022311			
1,2,3,4,6,7,8-HPCDD	0.250	0.184	30	50.00	No Qualifiers Applied
1,2,3,4,6,7,8-HPCDF	0.0428	0.0450	5	50.00	
1,2,3,4,7,8,9-HPCDF	0.0411	0.0431	5	50.00	
1,2,3,4,7,8-HXCDF	0.0426	0.0265	47	50.00	
1,2,3,6,7,8-HXCDD	0.0690	0.0560	21	50.00	
1,2,3,6,7,8-HXCDF	0.0409	0.0375	9	50.00	
1,2,3,7,8,9-HXCDD	0.0984	0.0638	43	50.00	
1,2,3,7,8,9-HXCDF	0.0633	0.0593	7	50.00	
1,2,3,7,8-PECDD	0.0408	0.0565	32	50.00	
1,2,3,7,8-PECDF	0.0296	0.0488	49	50.00	
2,3,4,6,7,8-HXCDF	0.0199	0.0219	10	50.00	
2,3,4,7,8-PECDF	0.0727	0.0744	2	50.00	
OCDD	1.74	1.30	29	50.00	
OCDF	0.129	0.113	13	50.00	
1,2,3,4,7,8-HxCDD	5.33 U	0.0435	200	50.00	J(all detects) UJ(all non-detects)
2,3,7,8-TCDD	0.0274	1.06 U	200	50.00	
2,3,7,8-TCDF	0.0363	1.06 U	200	50.00	

Reporting Limit Outliers

Lab Reporting Batch ID: DX053 **Laboratory: LL**

EDD Filename: DX053_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP03-SA5A-QC-022311	1,2,3,4,6,7,8-HPCDD	JB	0.184	5.28	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JBQ	0.0450	5.28	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0431	5.28	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0435	5.28	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.0265	5.28	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.0560	5.28	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0375	5.28	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.0638	5.28	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JB	0.0593	5.28	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0565	5.28	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0488	5.28	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0219	5.28	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0744	5.28	PQL	ng/Kg	
	OCDD	JB	1.30	10.6	PQL	ng/Kg	
	OCDF	JBQ	0.113	10.6	PQL	ng/Kg	
SL-025-SA5A-SB-4.5-5.5	1,2,3,4,6,7,8-HPCDD	JB	0.211	5.73	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.0545	5.73	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.119	5.73	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0375	5.73	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0544	5.73	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.0387	5.73	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0486	5.73	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.0670	5.73	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JBQ	0.0896	5.73	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0476	5.73	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0525	5.73	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.0452	5.73	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0704	5.73	PQL	ng/Kg	
	OCDD	JB	1.01	11.5	PQL	ng/Kg	
	OCDF	JBQ	0.209	11.5	PQL	ng/Kg	
SL-028-SA5A-SB-3.5-4.5	1,2,3,4,6,7,8-HPCDD	JB	0.194	5.57	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JBQ	0.0395	5.57	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0343	5.57	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0319	5.57	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0360	5.57	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.0354	5.57	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0370	5.57	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.0659	5.57	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JB	0.0650	5.57	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0323	5.57	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0579	5.57	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.0434	5.57	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0444	5.57	PQL	ng/Kg	
	OCDD	JB	0.553	11.1	PQL	ng/Kg	
	OCDF	JBQ	0.210	11.1	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX053 **Laboratory: LL**

EDD Filename: DX053_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-029-SA5A-SB-3.0-4.0	1,2,3,4,6,7,8-HPCDD	JB	0.158	5.38	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JBQ	0.0584	5.38	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0432	5.38	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.0364	5.38	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0708	5.38	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0546	5.38	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.0846	5.38	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.0841	5.38	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.0872	5.38	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.0904	5.38	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0361	5.38	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0857	5.38	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.0276	1.08	PQL	ng/Kg	
	OCDD	JB	0.539	10.8	PQL	ng/Kg	
	OCDF	JB	0.173	10.8	PQL	ng/Kg	
SL-036-SA5A-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JB	0.250	5.33	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JBQ	0.0428	5.33	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.0411	5.33	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0426	5.33	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.0690	5.33	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0409	5.33	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.0984	5.33	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.0633	5.33	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0408	5.33	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0296	5.33	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0199	5.33	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0727	5.33	PQL	ng/Kg	
	2,3,7,8-TCDD	JB	0.0274	1.07	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.0363	1.07	PQL	ng/Kg	
	OCDD	JB	1.74	10.7	PQL	ng/Kg	
	OCDF	JBQ	0.129	10.7	PQL	ng/Kg	
SL-037-SA5A-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JB	0.318	5.64	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.138	5.64	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.234	5.64	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.128	5.64	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.119	5.64	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.126	5.64	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.153	5.64	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.177	5.64	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.221	5.64	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.162	5.64	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.155	5.64	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.154	5.64	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.212	5.64	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0468	1.13	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.0483	1.13	PQL	ng/Kg	
	OCDD	JB	0.981	11.3	PQL	ng/Kg	
	OCDF	JB	0.437	11.3	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX053 **Laboratory: LL**

EDD Filename: DX053_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-040-SA5A-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JBQ	0.209	5.57	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.0697	5.57	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.0887	5.57	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0317	5.57	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.0569	5.57	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.0756	5.57	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0429	5.57	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.0530	5.57	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.0646	5.57	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0293	5.57	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0424	5.57	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.0324	5.57	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0721	5.57	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0415	1.11	PQL	ng/Kg	
	OCDD	JB	0.623	11.1	PQL	ng/Kg	
	OCDF	JB	0.210	11.1	PQL	ng/Kg	
SL-040-SA5A-SB-9.0-10.0	1,2,3,4,6,7,8-HPCDD	JB	0.185	5.27	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.375	5.27	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0910	5.27	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.0298	5.27	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0454	5.27	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.0369	5.27	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0565	5.27	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.0292	5.27	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.0641	5.27	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0370	5.27	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.0530	5.27	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0699	5.27	PQL	ng/Kg	
	OCDD	JB	0.556	10.5	PQL	ng/Kg	
	OCDF	JB	0.600	10.5	PQL	ng/Kg	
SL-054-SA5A-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	3.28	5.87	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JB	0.287	5.87	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.411	5.87	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.605	5.87	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	1.18	5.87	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.231	5.87	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	1.10	5.87	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.523	5.87	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.291	5.87	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.178	5.87	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.278	5.87	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.366	5.87	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0937	1.17	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.226	1.17	PQL	ng/Kg	
	OCDF	JB	9.51	11.7	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX053 **Laboratory: LL**

EDD Filename: DX053_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-055-SA5A-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	2.82	5.90	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JB	0.260	5.90	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.296	5.90	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.446	5.90	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.908	5.90	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.181	5.90	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.851	5.90	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.561	5.90	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.239	5.90	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.220	5.90	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.269	5.90	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.371	5.90	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.121	1.18	PQL	ng/Kg	
	OCDF	JB	7.09	11.8	PQL	ng/Kg	
SL-056-SA5A-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	2.86	5.85	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JB	0.262	5.85	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.348	5.85	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.440	5.85	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	1.01	5.85	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.252	5.85	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.937	5.85	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.367	5.85	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.295	5.85	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.199	5.85	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.286	5.85	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.441	5.85	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.102	1.17	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.156	1.17	PQL	ng/Kg	
	OCDF	JB	6.83	11.7	PQL	ng/Kg	
SL-057-SA5A-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	0.472	5.87	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8-HxCDD	JBQ	0.917	5.87	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.683	5.87	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	3.29	5.87	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.500	5.87	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	1.71	5.87	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.748	5.87	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.354	5.87	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.462	5.87	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.576	5.87	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.806	5.87	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.199	1.17	PQL	ng/Kg	
	OCDF	JB	10.6	11.7	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX053 **Laboratory: LL**

EDD Filename: DX053_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-058-SA5A-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	2.13	5.88	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JB	0.168	5.88	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.568	5.88	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.473	5.88	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	1.23	5.88	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.240	5.88	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	1.23	5.88	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.477	5.88	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.322	5.88	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.162	5.88	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.224	5.88	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.318	5.88	PQL	ng/Kg	
	OCDF	JB	4.65	11.8	PQL	ng/Kg	
SL-059-SA5A-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	3.42	6.00	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JB	0.247	6.00	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.307	6.00	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.671	6.00	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.976	6.00	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.388	6.00	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.762	6.00	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.517	6.00	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.197	6.00	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.250	6.00	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.328	6.00	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.499	6.00	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.258	1.20	PQL	ng/Kg	
	OCDF	JB	6.63	12.0	PQL	ng/Kg	
SL-060-SA5A-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	3.29	5.79	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JB	0.234	5.79	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.292	5.79	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.612	5.79	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.812	5.79	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.366	5.79	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.715	5.79	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.510	5.79	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.303	5.79	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.391	5.79	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.344	5.79	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.641	5.79	PQL	ng/Kg	
	2,3,7,8-TCDD	JB	0.0615	1.16	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.235	1.16	PQL	ng/Kg	
	OCDF	JB	5.20	11.6	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX053 **Laboratory: LL**

EDD Filename: DX053_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-061-SA5A-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	3.43	5.88	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.237	5.88	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.382	5.88	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.468	5.88	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.883	5.88	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.234	5.88	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.747	5.88	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.401	5.88	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.258	5.88	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.248	5.88	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.301	5.88	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.358	5.88	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0582	1.18	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.164	1.18	PQL	ng/Kg	
	OCDF	JB	5.54	11.8	PQL	ng/Kg	
SL-062-SA5A-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	2.12	5.87	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.294	5.87	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.307	5.87	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.518	5.87	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.547	5.87	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.244	5.87	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.474	5.87	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.311	5.87	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.214	5.87	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.211	5.87	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.260	5.87	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.412	5.87	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0765	1.17	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.127	1.17	PQL	ng/Kg	
	OCDF	JB	4.93	11.7	PQL	ng/Kg	
SL-063-SA5A-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	1.18	5.86	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.342	5.86	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.643	5.86	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	1.08	5.86	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.344	5.86	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	1.02	5.86	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.357	5.86	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	0.266	5.86	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.210	5.86	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.532	5.86	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.474	5.86	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0895	1.17	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.306	1.17	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX053 **Laboratory: LL**

EDD Filename: DX053_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-064-SA5A-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	1.65	5.80	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JBQ	0.178	5.80	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.186	5.80	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.196	5.80	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.458	5.80	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.155	5.80	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.514	5.80	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.226	5.80	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.127	5.80	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.127	5.80	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.167	5.80	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.279	5.80	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.0921	1.16	PQL	ng/Kg	
	OCDF	JB	4.56	11.6	PQL	ng/Kg	
SL-095-SA5A-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	0.603	6.13	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8-HxCDD	JB	1.52	6.13	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	1.14	6.13	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	3.87	6.13	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.727	6.13	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	3.27	6.13	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.380	6.13	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.873	6.13	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.648	6.13	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.832	6.13	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	1.59	6.13	PQL	ng/Kg	
	2,3,7,8-TCDD	JB	0.124	1.23	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	1.10	1.23	PQL	ng/Kg	

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
22-Feb-2011	SL-196-SA5A-SS-0.0-0.5	6213456	N	METHOD	1613B	III
22-Feb-2011	SL-031-SA5A-SB-4.0-5.0	6213467	N	METHOD	1613B	III
22-Feb-2011	SL-197-SA5A-SS-0.0-0.5	6213457	N	METHOD	1613B	III
22-Feb-2011	SL-175-SA5A-SS-0.0-0.3	6213451	N	METHOD	1613B	III
22-Feb-2011	DUP02-SA5A-QC-022211	6213450	FD	METHOD	1613B	III
22-Feb-2011	SL-181-SA5A-SS-0.0-0.5	6213453	N	METHOD	1613B	III
22-Feb-2011	SL-181-SA5A-SS-0.0-0.5MS	6213454	MS	METHOD	1613B	III
22-Feb-2011	SL-181-SA5A-SS-0.0-0.5MSD	6213455	MSD	METHOD	1613B	III
22-Feb-2011	SL-180-SA5A-SS-0.0-0.5	6213452	N	METHOD	1613B	III
22-Feb-2011	SL-026-SA5A-SB-3.5-4.5	6213466	N	METHOD	1613B	III
22-Feb-2011	SL-214-SA5A-SS-0.0-0.5	6213461	N	METHOD	1613B	III
22-Feb-2011	SL-024-SA5A-SB-2.5-3.5	6213465	N	METHOD	1613B	III
22-Feb-2011	SL-215-SA5A-SS-0.0-0.5	6213462	N	METHOD	1613B	III
22-Feb-2011	SL-210-SA5A-SS-0.0-0.5	6213458	N	METHOD	1613B	III
22-Feb-2011	SL-211-SA5A-SS-0.0-0.5	6213459	N	METHOD	1613B	III
22-Feb-2011	SL-212-SA5A-SS-0.0-0.5	6213460	N	METHOD	1613B	III
22-Feb-2011	SL-217-SA5A-SS-0.0-0.5	6213463	N	METHOD	1613B	III
22-Feb-2011	SL-218-SA5A-SS-0.0-0.5	6213464	N	METHOD	1613B	III
22-Feb-2011	SL-035-SA5A-SB-4.0-5.0	6213468	N	METHOD	1613B	III

III = EPA Level 3 Data Review
IV = EPA Level 4 Data Validation
N = Normal Sample
FD = Field Duplicate
TB = Trip Blank
FB = Field Blank
MS = Matrix Spike
MSD = Matrix Spike Duplicate

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DX054 **Laboratory: LL**

EDD Filename: PrepDX054_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: **DUP02-SA5A-QC-022211** ***Collected:*** **2/22/2011 10:10:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	1.21	JB	0.0421	MDL	5.75	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.722	JBQ	0.0738	MDL	5.75	PQL	ng/Kg	J	Z, FD
1,2,3,4,7,8-HXCDF	2.01	JB	0.0480	MDL	5.75	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	1.06	JB	0.0423	MDL	5.75	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	2.81	JB	0.0667	MDL	5.75	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.560	JB	0.0402	MDL	5.75	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.549	JBQ	0.0517	MDL	5.75	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.741	JB	0.0318	MDL	5.75	PQL	ng/Kg	J	Z, FD
2,3,4,6,7,8-HXCDF	1.13	JB	0.0387	MDL	5.75	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	1.42	JB	0.0323	MDL	5.75	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.104	J	0.0174	MDL	1.15	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	1.06	JB	0.0872	MDL	1.15	PQL	ng/Kg	J	Z

Sample ID: **SL-024-SA5A-SB-2.5-3.5** ***Collected:*** **2/22/2011 12:35:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.405	JB	0.0248	MDL	5.58	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	1.07	JB	0.0166	MDL	5.58	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.0955	JB	0.0215	MDL	5.58	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0305	JBQ	0.0211	MDL	5.58	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.257	J	0.0414	MDL	5.58	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.0743	JBQ	0.0213	MDL	5.58	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.161	JB	0.0262	MDL	5.58	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0847	JBQ	0.0203	MDL	5.58	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0830	JBQ	0.0334	MDL	5.58	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0661	JQ	0.0205	MDL	5.58	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.0590	JBQ	0.0115	MDL	5.58	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.225	JB	0.0233	MDL	5.58	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.120	JBQ	0.0121	MDL	5.58	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0272	JQ	0.0215	MDL	1.12	PQL	ng/Kg	J	Z
OCDD	1.32	JB	0.0292	MDL	11.2	PQL	ng/Kg	U	B
OCDF	0.527	JB	0.0326	MDL	11.2	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX054 **Laboratory: LL**

EDD Filename: PrepDX054_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: **SL-026-SA5A-SB-3.5-4.5** ***Collected:*** **2/22/2011 11:19:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.426	JB	0.0279	MDL	5.24	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.969	JB	0.0148	MDL	5.24	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.154	JB	0.0277	MDL	5.24	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0588	JBQ	0.0207	MDL	5.24	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.195	J	0.0272	MDL	5.24	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.110	JB	0.0214	MDL	5.24	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.141	JBQ	0.0239	MDL	5.24	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0925	JBQ	0.0214	MDL	5.24	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.114	JB	0.0349	MDL	5.24	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0528	JQ	0.0235	MDL	5.24	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.0576	JBQ	0.0165	MDL	5.24	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.275	JB	0.0262	MDL	5.24	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.147	JBQ	0.0171	MDL	5.24	PQL	ng/Kg	U	B
OCDD	1.01	JB	0.0328	MDL	10.5	PQL	ng/Kg	U	B
OCDF	0.706	JB	0.0397	MDL	10.5	PQL	ng/Kg	U	B

Sample ID: **SL-031-SA5A-SB-4.0-5.0** ***Collected:*** **2/22/2011 9:04:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.460	JB	0.0207	MDL	5.51	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	1.03	JB	0.0117	MDL	5.51	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.148	JB	0.0219	MDL	5.51	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0289	JBQ	0.0180	MDL	5.51	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.196	JQ	0.0251	MDL	5.51	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.0656	JB	0.0191	MDL	5.51	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.158	JB	0.0213	MDL	5.51	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0347	JB	0.0195	MDL	5.51	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0835	JB	0.0312	MDL	5.51	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0429	JB	0.0131	MDL	5.51	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.239	JB	0.0226	MDL	5.51	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.132	JB	0.0146	MDL	5.51	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0258	J	0.0247	MDL	1.10	PQL	ng/Kg	J	Z
OCDD	1.09	JB	0.0267	MDL	11.0	PQL	ng/Kg	U	B
OCDF	0.755	JB	0.0356	MDL	11.0	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX054 **Laboratory: LL**

EDD Filename: PrepDX054_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: **SL-035-SA5A-SB-4.0-5.0** ***Collected:*** **2/22/2011 4:15:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.481	JB	0.0231	MDL	5.52	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	1.13	JB	0.0136	MDL	5.52	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.102	JBQ	0.0216	MDL	5.52	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0268	JBQ	0.0167	MDL	5.52	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.178	JQ	0.0216	MDL	5.52	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.0419	JBQ	0.0174	MDL	5.52	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.146	JB	0.0195	MDL	5.52	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0649	JBQ	0.0164	MDL	5.52	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0742	JBQ	0.0248	MDL	5.52	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0342	JBQ	0.0114	MDL	5.52	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.255	JB	0.0211	MDL	5.52	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.121	JB	0.0115	MDL	5.52	PQL	ng/Kg	U	B
OCDD	1.50	JB	0.0265	MDL	11.0	PQL	ng/Kg	J	Z
OCDF	0.643	JBQ	0.0294	MDL	11.0	PQL	ng/Kg	U	B

Sample ID: **SL-175-SA5A-SS-0.0-0.3** ***Collected:*** **2/22/2011 9:52:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	1.52	JB	0.351	MDL	5.72	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	1.86	JBQ	0.378	MDL	5.72	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	1.63	J	0.383	MDL	5.72	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	4.37	JB	0.395	MDL	5.72	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	1.53	JB	0.313	MDL	5.72	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	3.46	JB	0.274	MDL	5.72	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.375	JBQ	0.141	MDL	5.72	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.833	JQ	0.157	MDL	5.72	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.441	JBQ	0.116	MDL	5.72	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	1.11	JB	0.145	MDL	5.72	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	1.11	JBQ	0.134	MDL	5.72	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.133	JQ	0.109	MDL	1.14	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX054 **Laboratory: LL**

EDD Filename: PrepDX054_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: **SL-180-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 10:35:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	0.890	JB	0.180	MDL	5.77	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.439	JB	0.246	MDL	5.77	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	1.73	JQ	0.238	MDL	5.77	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	3.70	JB	0.240	MDL	5.77	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.584	JBQ	0.169	MDL	5.77	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	1.88	JB	0.221	MDL	5.77	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.699	JBQ	0.134	MDL	5.77	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.485	JQ	0.166	MDL	5.77	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.167	JBQ	0.115	MDL	5.77	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.645	JBQ	0.114	MDL	5.77	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.624	JBQ	0.111	MDL	5.77	PQL	ng/Kg	J	Z

Sample ID: **SL-181-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 10:10:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	1.30	JB	0.0754	MDL	5.83	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	1.52	JB	0.114	MDL	5.83	PQL	ng/Kg	J	Z, FD
1,2,3,4,7,8-HXCDF	2.42	J	0.118	MDL	5.83	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	5.39	JB	0.114	MDL	5.83	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	1.74	JB	0.0838	MDL	5.83	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	2.51	JB	0.106	MDL	5.83	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.592	JB	0.0758	MDL	5.83	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.642	JQ	0.0648	MDL	5.83	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.343	JB	0.0615	MDL	5.83	PQL	ng/Kg	J	Z, FD
2,3,4,6,7,8-HXCDF	1.42	JB	0.0650	MDL	5.83	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	1.60	JB	0.0593	MDL	5.83	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0990	J	0.0362	MDL	1.17	PQL	ng/Kg	J	Z

Sample ID: **SL-196-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 8:40:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	0.570	JB	0.0434	MDL	5.60	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.518	JB	0.0587	MDL	5.60	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	1.06	J	0.0797	MDL	5.60	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX054 **Laboratory: LL**

EDD Filename: PrepDX054_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: **SL-196-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 8:40:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,6,7,8-HXCDD	1.30	JB	0.0598	MDL	5.60	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.409	JB	0.0606	MDL	5.60	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	1.08	JB	0.0574	MDL	5.60	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.330	JB	0.0541	MDL	5.60	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.288	J	0.0309	MDL	5.60	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.187	JB	0.0420	MDL	5.60	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.460	JB	0.0468	MDL	5.60	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.942	JB	0.0398	MDL	5.60	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0582	J	0.0270	MDL	1.12	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.122	JB	0.0538	MDL	1.12	PQL	ng/Kg	U	B

Sample ID: **SL-197-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 9:08:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	4.45	JB	0.0467	MDL	5.95	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.355	JB	0.0335	MDL	5.95	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.465	JB	0.0848	MDL	5.95	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.638	J	0.0869	MDL	5.95	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	1.55	JB	0.0802	MDL	5.95	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.393	JBQ	0.0648	MDL	5.95	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	1.37	JB	0.0705	MDL	5.95	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.408	JB	0.0430	MDL	5.95	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.699	J	0.0667	MDL	5.95	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.258	JBQ	0.0319	MDL	5.95	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.513	JB	0.0400	MDL	5.95	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.636	JB	0.0314	MDL	5.95	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.479	J	0.0443	MDL	1.19	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.282	JB	0.0506	MDL	1.19	PQL	ng/Kg	J	Z
OCDF	10.8	JB	0.0565	MDL	11.9	PQL	ng/Kg	J	Z

Sample ID: **SL-210-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 1:13:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	3.40	JB	0.0327	MDL	5.41	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.242	JB	0.0261	MDL	5.41	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX054 **Laboratory: LL**

EDD Filename: PrepDX054_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: **SL-210-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 1:13:00** ***Analysis Type:*** **RES** ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8-HxCDD	0.195	JB	0.0502	MDL	5.41	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.673	J	0.0682	MDL	5.41	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.601	JB	0.0490	MDL	5.41	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.465	JB	0.0509	MDL	5.41	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.573	JB	0.0474	MDL	5.41	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.283	JB	0.0381	MDL	5.41	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.186	J	0.0255	MDL	5.41	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.187	JBQ	0.0234	MDL	5.41	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.360	JB	0.0342	MDL	5.41	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.436	JB	0.0225	MDL	5.41	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0859	JQ	0.0241	MDL	1.08	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.0803	JBQ	0.0332	MDL	1.08	PQL	ng/Kg	U	B
OCDF	5.17	JB	0.0313	MDL	10.8	PQL	ng/Kg	J	Z

Sample ID: **SL-211-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 1:36:00** ***Analysis Type:*** **RES** ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	1.71	JB	0.0326	MDL	5.49	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.148	JB	0.0226	MDL	5.49	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.135	JBQ	0.0498	MDL	5.49	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.189	JQ	0.0413	MDL	5.49	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.472	JB	0.0457	MDL	5.49	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.170	JB	0.0308	MDL	5.49	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.349	JB	0.0364	MDL	5.49	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.153	JBQ	0.0193	MDL	5.49	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.116	JQ	0.0204	MDL	5.49	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.0663	JBQ	0.0143	MDL	5.49	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.170	JB	0.0175	MDL	5.49	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.255	JBQ	0.0147	MDL	5.49	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0304	JQ	0.0203	MDL	1.10	PQL	ng/Kg	J	Z
OCDF	3.65	JB	0.0402	MDL	11.0	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX054 **Laboratory: LL**

EDD Filename: PrepDX054_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: **SL-212-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 2:14:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	2.38	JB	0.0447	MDL	5.85	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.469	JB	0.0423	MDL	5.85	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.0991	JB	0.0339	MDL	5.85	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0718	JB	0.0406	MDL	5.85	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.283	J	0.0643	MDL	5.85	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.177	JB	0.0374	MDL	5.85	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.148	JBQ	0.0434	MDL	5.85	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.125	JBQ	0.0311	MDL	5.85	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0963	JB	0.0323	MDL	5.85	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.149	J	0.0323	MDL	5.85	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.0345	JBQ	0.0216	MDL	5.85	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.216	JB	0.0267	MDL	5.85	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.501	JB	0.0237	MDL	5.85	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.0455	JBQ	0.0344	MDL	1.17	PQL	ng/Kg	U	B
OCDF	0.904	JB	0.0643	MDL	11.7	PQL	ng/Kg	J	Z

Sample ID: **SL-214-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 12:28:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	3.80	JB	0.0344	MDL	5.52	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.625	JB	0.0395	MDL	5.52	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.0695	JB	0.0263	MDL	5.52	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0501	JB	0.0365	MDL	5.52	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0877	JQ	0.0344	MDL	5.52	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.272	JB	0.0341	MDL	5.52	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.0840	JBQ	0.0248	MDL	5.52	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.331	JB	0.0288	MDL	5.52	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.0812	JB	0.0155	MDL	5.52	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0229	JBQ	0.0145	MDL	5.52	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0536	JB	0.0141	MDL	5.52	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.130	JBQ	0.0143	MDL	5.52	PQL	ng/Kg	U	B
OCDF	3.34	JB	0.0485	MDL	11.0	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX054 **Laboratory: LL**

EDD Filename: PrepDX054_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: **SL-215-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 12:55:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	3.79	JB	0.0250	MDL	5.70	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.357	JBQ	0.0277	MDL	5.70	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.220	JB	0.0458	MDL	5.70	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.230	J	0.0356	MDL	5.70	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.689	JB	0.0474	MDL	5.70	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.155	JB	0.0268	MDL	5.70	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.561	JB	0.0450	MDL	5.70	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.118	JB	0.0267	MDL	5.70	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.133	JQ	0.0236	MDL	5.70	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.0529	JB	0.0155	MDL	5.70	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.153	JBQ	0.0236	MDL	5.70	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.171	JB	0.0153	MDL	5.70	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0287	J	0.0197	MDL	1.14	PQL	ng/Kg	J	Z

Sample ID: **SL-217-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 2:46:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	1.66	JB	0.0531	MDL	5.85	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	1.82	JB	0.102	MDL	5.85	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	4.04	JB	0.0939	MDL	5.85	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	1.66	JB	0.135	MDL	5.85	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	3.24	JB	0.0792	MDL	5.85	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.612	JB	0.0860	MDL	5.85	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	1.02	J	0.0745	MDL	5.85	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.819	JB	0.140	MDL	5.85	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	1.61	JB	0.0787	MDL	5.85	PQL	ng/Kg	J	Z

Sample ID: **SL-218-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 3:10:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	3.02	JB	0.0385	MDL	5.92	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.323	JB	0.0323	MDL	5.92	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.354	JBQ	0.0586	MDL	5.92	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	2.23	J	0.0812	MDL	5.92	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.935	JB	0.0600	MDL	5.92	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX054 **Laboratory: LL**

EDD Filename: PrepDX054_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: **SL-218-SA5A-SS-0.0-0.5** ***Collected:*** **2/22/2011 3:10:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,6,7,8-HXCDF	0.370	JB	0.0604	MDL	5.92	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.741	JB	0.0542	MDL	5.92	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.168	JB	0.0488	MDL	5.92	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.210	J	0.0359	MDL	5.92	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.199	JBQ	0.0492	MDL	5.92	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.659	JB	0.0454	MDL	5.92	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	1.38	JB	0.0499	MDL	5.92	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0555	JQ	0.0272	MDL	1.18	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.316	JBQ	0.0942	MDL	1.18	PQL	ng/Kg	J	Z
OCDF	6.27	JB	0.0333	MDL	11.8	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX054 **Laboratory: LL**

EDD Filename: PrepDX054_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
*#	Professional Judgment
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Verification Correlation Coefficient
C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX054 **Laboratory: LL**

EDD Filename: PrepDX054_v1 **eQAPP Name: CDM_SSFL_110509**

F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation
L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery Lower Estimation

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX054 **Laboratory: LL**

EDD Filename: PrepDX054_v1 **eQAPP Name: CDM_SSFL_110509**

R	Continuing Calibration Verification Percent Recovery Lower Rejection
R	Continuing Calibration Verification Percent Recovery Upper Estimation
R	Continuing Calibration Verification Percent Recovery Upper Rejection
R	Continuing Calibration Verification Relative Response Factor
R	Initial Calibration Relative Response Factor
R	Initial Calibration Verification Percent Recovery Lower Estimation
R	Initial Calibration Verification Percent Recovery Lower Rejection
R	Initial Calibration Verification Percent Recovery Upper Estimation
R	Initial Calibration Verification Percent Recovery Upper Rejection
R	Initial Calibration Verification Relative Response Factor
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control Outlier Reports

DX054

Method Blank Outlier Report

Lab Reporting Batch ID: DX054 **Laboratory: LL**

EDD Filename: DX054_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLK0610B371450	3/16/2011 2:50:00 PM	2,3,7,8-TCDF	0.0295 ng/Kg	SL-024-SA5A-SB-2.5-3.5 SL-026-SA5A-SB-3.5-4.5 SL-031-SA5A-SB-4.0-5.0 SL-035-SA5A-SB-4.0-5.0 SL-175-SA5A-SS-0.0-0.3 SL-180-SA5A-SS-0.0-0.5 SL-181-SA5A-SS-0.0-0.5 SL-196-SA5A-SS-0.0-0.5 SL-197-SA5A-SS-0.0-0.5 SL-210-SA5A-SS-0.0-0.5 SL-211-SA5A-SS-0.0-0.5 SL-212-SA5A-SS-0.0-0.5 SL-214-SA5A-SS-0.0-0.5 SL-215-SA5A-SS-0.0-0.5 SL-217-SA5A-SS-0.0-0.5 SL-218-SA5A-SS-0.0-0.5
BLK0610B371822	3/7/2011 6:22:00 PM	1,2,3,4,6,7,8-HPCDD 1,2,3,4,6,7,8-HPCDF 1,2,3,4,7,8,9-HPCDF 1,2,3,4,7,8-HxCDD 1,2,3,6,7,8-HXCDD 1,2,3,6,7,8-HXCDF 1,2,3,7,8,9-HXCDD 1,2,3,7,8,9-HXCDF 1,2,3,7,8-PECDF 2,3,4,6,7,8-HXCDF 2,3,4,7,8-PECDF 2,3,7,8-TCDF OCDD OCDF	0.101 ng/Kg 0.0740 ng/Kg 0.0771 ng/Kg 0.0404 ng/Kg 0.0402 ng/Kg 0.0509 ng/Kg 0.0521 ng/Kg 0.0710 ng/Kg 0.0203 ng/Kg 0.0262 ng/Kg 0.0718 ng/Kg 0.0342 ng/Kg 0.294 ng/Kg 0.171 ng/Kg	SL-024-SA5A-SB-2.5-3.5 SL-026-SA5A-SB-3.5-4.5 SL-031-SA5A-SB-4.0-5.0 SL-035-SA5A-SB-4.0-5.0 SL-175-SA5A-SS-0.0-0.3 SL-180-SA5A-SS-0.0-0.5 SL-181-SA5A-SS-0.0-0.5 SL-196-SA5A-SS-0.0-0.5 SL-197-SA5A-SS-0.0-0.5 SL-210-SA5A-SS-0.0-0.5 SL-211-SA5A-SS-0.0-0.5 SL-212-SA5A-SS-0.0-0.5 SL-214-SA5A-SS-0.0-0.5 SL-215-SA5A-SS-0.0-0.5 SL-217-SA5A-SS-0.0-0.5 SL-218-SA5A-SS-0.0-0.5
BLK0730B371431	3/16/2011 2:31:00 PM	1,2,3,4,6,7,8-HPCDD 1,2,3,4,6,7,8-HPCDF 1,2,3,4,7,8,9-HPCDF 1,2,3,4,7,8-HxCDD 1,2,3,4,7,8-HXCDF 1,2,3,6,7,8-HXCDD 1,2,3,6,7,8-HXCDF 1,2,3,7,8,9-HXCDD 1,2,3,7,8,9-HXCDF 1,2,3,7,8-PECDD 1,2,3,7,8-PECDF 2,3,4,6,7,8-HXCDF 2,3,4,7,8-PECDF 2,3,7,8-TCDF OCDD OCDF	0.208 ng/Kg 0.181 ng/Kg 0.0599 ng/Kg 0.00942 ng/Kg 0.0547 ng/Kg 0.0267 ng/Kg 0.0394 ng/Kg 0.0153 ng/Kg 0.0578 ng/Kg 0.0159 ng/Kg 0.0184 ng/Kg 0.0651 ng/Kg 0.0583 ng/Kg 0.0133 ng/Kg 0.397 ng/Kg 0.242 ng/Kg	DUP02-SA5A-QC-022211

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-024-SA5A-SB-2.5-3.5(RES)	1,2,3,4,6,7,8-HPCDD	0.405 ng/Kg	0.405U ng/Kg
SL-024-SA5A-SB-2.5-3.5(RES)	1,2,3,4,7,8,9-HPCDF	0.0955 ng/Kg	0.0955U ng/Kg
SL-024-SA5A-SB-2.5-3.5(RES)	1,2,3,4,7,8-HxCDD	0.0305 ng/Kg	0.0305U ng/Kg
SL-024-SA5A-SB-2.5-3.5(RES)	1,2,3,6,7,8-HXCDD	0.0743 ng/Kg	0.0743U ng/Kg
SL-024-SA5A-SB-2.5-3.5(RES)	1,2,3,6,7,8-HXCDF	0.161 ng/Kg	0.161U ng/Kg
SL-024-SA5A-SB-2.5-3.5(RES)	1,2,3,7,8,9-HXCDD	0.0847 ng/Kg	0.0847U ng/Kg

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Method Blank Outlier Report

Lab Reporting Batch ID: DX054 **Laboratory: LL**

EDD Filename: DX054_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-024-SA5A-SB-2.5-3.5(RES)	1,2,3,7,8,9-HXCDF	0.0830 ng/Kg	0.0830U ng/Kg
SL-024-SA5A-SB-2.5-3.5(RES)	1,2,3,7,8-PECDF	0.0590 ng/Kg	0.0590U ng/Kg
SL-024-SA5A-SB-2.5-3.5(RES)	2,3,4,7,8-PECDF	0.120 ng/Kg	0.120U ng/Kg
SL-024-SA5A-SB-2.5-3.5(RES)	OCDD	1.32 ng/Kg	1.32U ng/Kg
SL-024-SA5A-SB-2.5-3.5(RES)	OCDF	0.527 ng/Kg	0.527U ng/Kg
SL-026-SA5A-SB-3.5-4.5(RES)	1,2,3,4,6,7,8-HPCDD	0.426 ng/Kg	0.426U ng/Kg
SL-026-SA5A-SB-3.5-4.5(RES)	1,2,3,4,7,8,9-HPCDF	0.154 ng/Kg	0.154U ng/Kg
SL-026-SA5A-SB-3.5-4.5(RES)	1,2,3,4,7,8-HxCDD	0.0588 ng/Kg	0.0588U ng/Kg
SL-026-SA5A-SB-3.5-4.5(RES)	1,2,3,6,7,8-HXCDD	0.110 ng/Kg	0.110U ng/Kg
SL-026-SA5A-SB-3.5-4.5(RES)	1,2,3,6,7,8-HXCDF	0.141 ng/Kg	0.141U ng/Kg
SL-026-SA5A-SB-3.5-4.5(RES)	1,2,3,7,8,9-HXCDD	0.0925 ng/Kg	0.0925U ng/Kg
SL-026-SA5A-SB-3.5-4.5(RES)	1,2,3,7,8,9-HXCDF	0.114 ng/Kg	0.114U ng/Kg
SL-026-SA5A-SB-3.5-4.5(RES)	1,2,3,7,8-PECDF	0.0576 ng/Kg	0.0576U ng/Kg
SL-026-SA5A-SB-3.5-4.5(RES)	2,3,4,7,8-PECDF	0.147 ng/Kg	0.147U ng/Kg
SL-026-SA5A-SB-3.5-4.5(RES)	OCDD	1.01 ng/Kg	1.01U ng/Kg
SL-026-SA5A-SB-3.5-4.5(RES)	OCDF	0.706 ng/Kg	0.706U ng/Kg
SL-031-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.460 ng/Kg	0.460U ng/Kg
SL-031-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.148 ng/Kg	0.148U ng/Kg
SL-031-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HxCDD	0.0289 ng/Kg	0.0289U ng/Kg
SL-031-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDD	0.0656 ng/Kg	0.0656U ng/Kg
SL-031-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.158 ng/Kg	0.158U ng/Kg
SL-031-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDD	0.0347 ng/Kg	0.0347U ng/Kg
SL-031-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.0835 ng/Kg	0.0835U ng/Kg
SL-031-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.0429 ng/Kg	0.0429U ng/Kg
SL-031-SA5A-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.132 ng/Kg	0.132U ng/Kg
SL-031-SA5A-SB-4.0-5.0(RES)	OCDD	1.09 ng/Kg	1.09U ng/Kg
SL-031-SA5A-SB-4.0-5.0(RES)	OCDF	0.755 ng/Kg	0.755U ng/Kg
SL-035-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.481 ng/Kg	0.481U ng/Kg
SL-035-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.102 ng/Kg	0.102U ng/Kg
SL-035-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HxCDD	0.0268 ng/Kg	0.0268U ng/Kg
SL-035-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDD	0.0419 ng/Kg	0.0419U ng/Kg
SL-035-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.146 ng/Kg	0.146U ng/Kg
SL-035-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDD	0.0649 ng/Kg	0.0649U ng/Kg
SL-035-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.0742 ng/Kg	0.0742U ng/Kg
SL-035-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.0342 ng/Kg	0.0342U ng/Kg
SL-035-SA5A-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.121 ng/Kg	0.121U ng/Kg
SL-035-SA5A-SB-4.0-5.0(RES)	OCDF	0.643 ng/Kg	0.643U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX054 **Laboratory: LL**

EDD Filename: DX054_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-196-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.330 ng/Kg	0.330U ng/Kg
SL-196-SA5A-SS-0.0-0.5(RES)	2,3,7,8-TCDF	0.122 ng/Kg	0.122U ng/Kg
SL-197-SA5A-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.355 ng/Kg	0.355U ng/Kg
SL-210-SA5A-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.242 ng/Kg	0.242U ng/Kg
SL-210-SA5A-SS-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.195 ng/Kg	0.195U ng/Kg
SL-210-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.283 ng/Kg	0.283U ng/Kg
SL-210-SA5A-SS-0.0-0.5(RES)	2,3,7,8-TCDF	0.0803 ng/Kg	0.0803U ng/Kg
SL-211-SA5A-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.148 ng/Kg	0.148U ng/Kg
SL-211-SA5A-SS-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.135 ng/Kg	0.135U ng/Kg
SL-211-SA5A-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.170 ng/Kg	0.170U ng/Kg
SL-211-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.153 ng/Kg	0.153U ng/Kg
SL-211-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.0663 ng/Kg	0.0663U ng/Kg
SL-211-SA5A-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.255 ng/Kg	0.255U ng/Kg
SL-212-SA5A-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.0991 ng/Kg	0.0991U ng/Kg
SL-212-SA5A-SS-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.0718 ng/Kg	0.0718U ng/Kg
SL-212-SA5A-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDD	0.177 ng/Kg	0.177U ng/Kg
SL-212-SA5A-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.148 ng/Kg	0.148U ng/Kg
SL-212-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDD	0.125 ng/Kg	0.125U ng/Kg
SL-212-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.0963 ng/Kg	0.0963U ng/Kg
SL-212-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.0345 ng/Kg	0.0345U ng/Kg
SL-212-SA5A-SS-0.0-0.5(RES)	2,3,7,8-TCDF	0.0455 ng/Kg	0.0455U ng/Kg
SL-214-SA5A-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.0695 ng/Kg	0.0695U ng/Kg
SL-214-SA5A-SS-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.0501 ng/Kg	0.0501U ng/Kg
SL-214-SA5A-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.0840 ng/Kg	0.0840U ng/Kg
SL-214-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.0812 ng/Kg	0.0812U ng/Kg
SL-214-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.0229 ng/Kg	0.0229U ng/Kg
SL-214-SA5A-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.0536 ng/Kg	0.0536U ng/Kg
SL-214-SA5A-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.130 ng/Kg	0.130U ng/Kg
SL-215-SA5A-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.357 ng/Kg	0.357U ng/Kg
SL-215-SA5A-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.155 ng/Kg	0.155U ng/Kg
SL-215-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.118 ng/Kg	0.118U ng/Kg
SL-215-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.0529 ng/Kg	0.0529U ng/Kg
SL-215-SA5A-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.171 ng/Kg	0.171U ng/Kg
SL-218-SA5A-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.323 ng/Kg	0.323U ng/Kg
SL-218-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.168 ng/Kg	0.168U ng/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DX054 **Laboratory: LL**

EDD Filename: DX054_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1613B

Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-181-SA5A-SS-0.0-0.5MSD (SL-181-SA5A-SS-0.0-0.5)	OCDD	-	17	40.00-135.00	-	OCDD	No Qual, >4x

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Field Duplicate RPD Report

Lab Reporting Batch ID: DX054 **Laboratory: LL**

EDD Filename: PrepDX054_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 160.3M
Matrix: SO

Analyte	Concentration (%)		Sample RPD	eQAPP RPD	Flag
	SL-181-SA5A-SS-0.0-0.5	DUP02-SA5A-QC-022211			
MOISTURE	14.2	13.1	8		No Qualifiers Applied

Method: 1613B
Matrix: SO

Analyte	Concentration (ng/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-181-SA5A-SS-0.0-0.5	DUP02-SA5A-QC-022211			
1,2,3,4,6,7,8-HPCDD	123	130	6	50.00	No Qualifiers Applied
1,2,3,4,6,7,8-HPCDF	18.3	16.1	13	50.00	
1,2,3,4,7,8,9-HPCDF	1.30	1.21	7	50.00	
1,2,3,4,7,8-HXCDF	2.42	2.01	19	50.00	
1,2,3,6,7,8-HXCDD	5.39	6.72	22	50.00	
1,2,3,6,7,8-HXCDF	1.74	1.06	49	50.00	
1,2,3,7,8,9-HXCDD	2.51	2.81	11	50.00	
1,2,3,7,8,9-HXCDF	0.592	0.560	6	50.00	
1,2,3,7,8-PECDD	0.642	0.549	16	50.00	
2,3,4,6,7,8-HXCDF	1.42	1.13	23	50.00	
2,3,4,7,8-PECDF	1.60	1.42	12	50.00	
2,3,7,8-TCDD	0.0990	0.104	5	50.00	
2,3,7,8-TCDF	1.35	1.06	24	50.00	
OCDD	1300	1280	2	50.00	
OCDF	41.6	39.5	5	50.00	
1,2,3,4,7,8-HxCDD	1.52	0.722	71	50.00	J(all detects)
1,2,3,7,8-PECDF	0.343	0.741	73	50.00	

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Reporting Limit Outliers

Lab Reporting Batch ID: DX054 **Laboratory: LL**

EDD Filename: DX054_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP02-SA5A-QC-022211	1,2,3,4,7,8,9-HPCDF	JB	1.21	5.75	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8-HxCDD	JBQ	0.722	5.75	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	2.01	5.75	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	1.06	5.75	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	2.81	5.75	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.560	5.75	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.549	5.75	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.741	5.75	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	1.13	5.75	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	1.42	5.75	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.104	1.15	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	1.06	1.15	PQL	ng/Kg	
SL-024-SA5A-SB-2.5-3.5	1,2,3,4,6,7,8-HPCDD	JB	0.405	5.58	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	1.07	5.58	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.0955	5.58	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0305	5.58	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	J	0.257	5.58	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.0743	5.58	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.161	5.58	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.0847	5.58	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.0830	5.58	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JQ	0.0661	5.58	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0590	5.58	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.225	5.58	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.120	5.58	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0272	1.12	PQL	ng/Kg	
	OCDD	JB	1.32	11.2	PQL	ng/Kg	
	OCDF	JB	0.527	11.2	PQL	ng/Kg	
SL-026-SA5A-SB-3.5-4.5	1,2,3,4,6,7,8-HPCDD	JB	0.426	5.24	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.969	5.24	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.154	5.24	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0588	5.24	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	J	0.195	5.24	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.110	5.24	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.141	5.24	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.0925	5.24	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.114	5.24	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JQ	0.0528	5.24	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0576	5.24	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.275	5.24	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.147	5.24	PQL	ng/Kg	
	OCDD	JB	1.01	10.5	PQL	ng/Kg	
	OCDF	JB	0.706	10.5	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX054 **Laboratory: LL**

EDD Filename: DX054_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-031-SA5A-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JB	0.460	5.51	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	1.03	5.51	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.148	5.51	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0289	5.51	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JQ	0.196	5.51	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.0656	5.51	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.158	5.51	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.0347	5.51	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.0835	5.51	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.0429	5.51	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.239	5.51	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.132	5.51	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.0258	1.10	PQL	ng/Kg	
	OCDD	JB	1.09	11.0	PQL	ng/Kg	
	OCDF	JB	0.755	11.0	PQL	ng/Kg	
SL-035-SA5A-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JB	0.481	5.52	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	1.13	5.52	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.102	5.52	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0268	5.52	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JQ	0.178	5.52	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.0419	5.52	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.146	5.52	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.0649	5.52	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.0742	5.52	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0342	5.52	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.255	5.52	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.121	5.52	PQL	ng/Kg	
	OCDD	JB	1.50	11.0	PQL	ng/Kg	
	OCDF	JBQ	0.643	11.0	PQL	ng/Kg	
SL-175-SA5A-SS-0.0-0.3	1,2,3,4,7,8,9-HPCDF	JB	1.52	5.72	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8-HxCDD	JBQ	1.86	5.72	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	J	1.63	5.72	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	4.37	5.72	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	1.53	5.72	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	3.46	5.72	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.375	5.72	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JQ	0.833	5.72	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.441	5.72	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	1.11	5.72	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	1.11	5.72	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.133	1.14	PQL	ng/Kg	
SL-180-SA5A-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	0.890	5.77	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8-HxCDD	JB	0.439	5.77	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JQ	1.73	5.77	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	3.70	5.77	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.584	5.77	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	1.88	5.77	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.699	5.77	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JQ	0.485	5.77	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.167	5.77	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.645	5.77	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.624	5.77	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX054 **Laboratory: LL**

EDD Filename: DX054_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-181-SA5A-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	1.30	5.83	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	1.52	5.83	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	J	2.42	5.83	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	5.39	5.83	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	1.74	5.83	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	2.51	5.83	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.592	5.83	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JQ	0.642	5.83	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.343	5.83	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	1.42	5.83	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	1.60	5.83	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.0990	1.17	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.517	1.17	PQL	ng/Kg	
SL-196-SA5A-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	0.570	5.60	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.518	5.60	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	J	1.06	5.60	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	1.30	5.60	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.409	5.60	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	1.08	5.60	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.330	5.60	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	J	0.288	5.60	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.187	5.60	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.460	5.60	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.942	5.60	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.0582	1.12	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.122	1.12	PQL	ng/Kg	
SL-197-SA5A-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	4.45	5.95	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.355	5.95	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.465	5.95	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	J	0.638	5.95	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	1.55	5.95	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.393	5.95	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	1.37	5.95	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.408	5.95	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	J	0.699	5.95	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.258	5.95	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.513	5.95	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.636	5.95	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.479	1.19	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.282	1.19	PQL	ng/Kg	
	OCDF	JB	10.8	11.9	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX054 **Laboratory: LL**

EDD Filename: DX054_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-210-SA5A-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	3.40	5.41	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JB	0.242	5.41	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.195	5.41	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	J	0.673	5.41	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.601	5.41	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.465	5.41	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.573	5.41	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.283	5.41	PQL	ng/Kg	
	1,2,3,7,8-PECDD	J	0.186	5.41	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.187	5.41	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.360	5.41	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.436	5.41	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0859	1.08	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.0803	1.08	PQL	ng/Kg	
	OCDF	JB	5.17	10.8	PQL	ng/Kg	
SL-211-SA5A-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	1.71	5.49	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JB	0.148	5.49	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.135	5.49	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JQ	0.189	5.49	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.472	5.49	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.170	5.49	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.349	5.49	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.153	5.49	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JQ	0.116	5.49	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0663	5.49	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.170	5.49	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.255	5.49	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0304	1.10	PQL	ng/Kg	
	OCDF	JB	3.65	11.0	PQL	ng/Kg	
SL-212-SA5A-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDD	JB	2.38	5.85	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.469	5.85	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.0991	5.85	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.0718	5.85	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	J	0.283	5.85	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.177	5.85	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.148	5.85	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.125	5.85	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.0963	5.85	PQL	ng/Kg	
	1,2,3,7,8-PECDD	J	0.149	5.85	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0345	5.85	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.216	5.85	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.501	5.85	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.0455	1.17	PQL	ng/Kg	
	OCDF	JB	0.904	11.7	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX054 **Laboratory: LL**

EDD Filename: DX054_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-214-SA5A-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDD	JB	3.80	5.52	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.625	5.52	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.0695	5.52	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.0501	5.52	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JQ	0.0877	5.52	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.272	5.52	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0840	5.52	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDD	JB	0.331	5.52	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.0812	5.52	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0229	5.52	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.0536	5.52	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.130	5.52	PQL	ng/Kg	
	OCDF	JB	3.34	11.0	PQL	ng/Kg	
SL-215-SA5A-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	3.79	5.70	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.357	5.70	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.220	5.70	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	J	0.230	5.70	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.689	5.70	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.155	5.70	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.561	5.70	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JB	0.118	5.70	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JQ	0.133	5.70	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.0529	5.70	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.153	5.70	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.171	5.70	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.0287	1.14	PQL	ng/Kg	
SL-217-SA5A-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	1.66	5.85	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	1.82	5.85	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	4.04	5.85	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	1.66	5.85	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	3.24	5.85	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JB	0.612	5.85	PQL	ng/Kg	
	1,2,3,7,8-PECDD	J	1.02	5.85	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.819	5.85	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	1.61	5.85	PQL	ng/Kg	
SL-218-SA5A-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	3.02	5.92	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.323	5.92	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.354	5.92	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	J	2.23	5.92	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.935	5.92	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.370	5.92	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.741	5.92	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.168	5.92	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	J	0.210	5.92	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.199	5.92	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.659	5.92	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	1.38	5.92	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0555	1.18	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.316	1.18	PQL	ng/Kg	
	OCDF	JB	6.27	11.8	PQL	ng/Kg	

LDC #: 25764 K21

VALIDATION FINDINGS WORKSHEET
Overall Assessment of Data

Page: 1 of 1
Reviewer: A
2nd Reviewer: [illegible]

METHOD: GC/MS Dioxins/Dibenzofurans (Method 1613B)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

All available information pertaining to the data were reviewed using professional judgement to compliment the determination of the overall quality of the data.

Y N N/A Was the overall quality and usability of the data acceptable?

#	Date	Sample ID	Finding	Associated Samples	Qualifications
		SL-175-SASA-SS-0.0-0.3	2,3,7,8-TCDF from column DB5MS	–	R/A
		SL-181-SASA-SS-0.0-0.5	2,3,7,8-TCDF from column SP2331	–	R/A
		↓-217-↓ ↓ ↓			

Comments:

SAMPLE DELIVERY GROUP

DX055

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
23-Feb-2011	SL-016-SA5A-SS-0.0-0.5	6214555	N	METHOD	1613B	III
23-Feb-2011	SL-010-SA5A-SS-0.0-0.5	6214552	N	METHOD	1613B	III
23-Feb-2011	SL-009-SA5A-SS-0.0-0.5	6214551	N	METHOD	1613B	III
23-Feb-2011	SL-013-SA5A-SS-0.0-0.5	6214554	N	METHOD	1613B	III
23-Feb-2011	SL-019-SA5A-SS-0.0-0.5	6214558	N	METHOD	1613B	III
23-Feb-2011	SL-012-SA5A-SS-0.0-0.5	6214553	N	METHOD	1613B	III
23-Feb-2011	SL-006-SA5A-SS-0.0-0.5	6214550	N	METHOD	1613B	III
23-Feb-2011	SL-018-SA5A-SS-0.0-0.5	6214557	N	METHOD	1613B	III
23-Feb-2011	SL-017-SA5A-SS-0.0-0.5	6214556	N	METHOD	1613B	III
23-Feb-2011	DUP-04-SA5A-QC-022311	6214544	FD	METHOD	1613B	III
23-Feb-2011	SL-004-SA5A-SS-0.0-0.5	6214547	N	METHOD	1613B	III
23-Feb-2011	SL-004-SA5A-SS-0.0-0.5MS	6214548	MS	METHOD	1613B	III
23-Feb-2011	SL-004-SA5A-SS-0.0-0.5MSD	6214549	MSD	METHOD	1613B	III
23-Feb-2011	SL-001-SA5A-SS-0.0-0.5	6214545	N	METHOD	1613B	III
23-Feb-2011	SL-002-SA5A-SS-0.0-0.5	6214546	N	METHOD	1613B	III
23-Feb-2011	EB01-SA5A-022311	6214559	EB	METHOD	1613B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DX055 **Laboratory: LL**

EDD Filename: DX055_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA
Method: 1613B **Matrix:** AQ

Sample ID: EB01-SA5A-022311 **Collected:** 2/23/2011 2:50:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	1.68	JBQ	0.148	MDL	10.6	PQL	pg/L	U	B
1,2,3,4,6,7,8-HPCDF	0.322	JB	0.0944	MDL	10.6	PQL	pg/L	U	B
1,2,3,4,7,8-HXCDF	0.190	JBQ	0.0699	MDL	10.6	PQL	pg/L	U	B
1,2,3,6,7,8-HXCDD	0.172	JBQ	0.109	MDL	10.6	PQL	pg/L	U	B
1,2,3,6,7,8-HXCDF	0.136	JBQ	0.0620	MDL	10.6	PQL	pg/L	U	B
1,2,3,7,8,9-HXCDF	0.153	JBQ	0.0690	MDL	10.6	PQL	pg/L	U	B
1,2,3,7,8-PECDF	0.161	JBQ	0.0606	MDL	10.6	PQL	pg/L	U	B
2,3,4,6,7,8-HXCDF	0.238	JB	0.0590	MDL	10.6	PQL	pg/L	U	B
2,3,4,7,8-PECDF	0.398	JB	0.0563	MDL	10.6	PQL	pg/L	U	B
2,3,7,8-TCDD	0.107	JQ	0.103	MDL	2.11	PQL	pg/L	J	Z
2,3,7,8-TCDF	0.132	JBQ	0.0652	MDL	2.11	PQL	pg/L	U	B
OCDD	4.71	JB	0.333	MDL	21.1	PQL	pg/L	U	B
OCDF	0.501	JBQ	0.194	MDL	21.1	PQL	pg/L	U	B

Method Category: SVOA
Method: 1613B **Matrix:** SO

Sample ID: DUP-04-SA5A-QC-022311 **Collected:** 2/23/2011 1:35:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	37.1	B	0.0651	MDL	5.54	PQL	ng/Kg	J	FD
1,2,3,4,6,7,8-HPCDF	4.87	JB	0.0453	MDL	5.54	PQL	ng/Kg	J	Z, FD
1,2,3,4,7,8,9-HPCDF	0.359	JB	0.0533	MDL	5.54	PQL	ng/Kg	J	Z, FD
1,2,3,4,7,8-HxCDD	0.141	JBQ	0.0483	MDL	5.54	PQL	ng/Kg	J	Z, FD
1,2,3,4,7,8-HXCDF	1.01	JB	0.0658	MDL	5.54	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	1.19	JB	0.0484	MDL	5.54	PQL	ng/Kg	J	Z, FD
1,2,3,6,7,8-HXCDF	0.262	JB	0.0465	MDL	5.54	PQL	ng/Kg	J	Z, FD
1,2,3,7,8,9-HXCDD	0.455	JB	0.0415	MDL	5.54	PQL	ng/Kg	J	Z, FD
1,2,3,7,8,9-HXCDF	0.191	JB	0.0404	MDL	5.54	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.0738	JBQ	0.0176	MDL	5.54	PQL	ng/Kg	J	Z, FD
1,2,3,7,8-PECDF	0.0659	JB	0.0237	MDL	5.54	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.280	JB	0.0346	MDL	5.54	PQL	ng/Kg	J	Z, FD
2,3,4,7,8-PECDF	0.403	JB	0.0257	MDL	5.54	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.00997	U	0.00997	MDL	1.11	PQL	ng/Kg	UJ	FD

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX055 **Laboratory: LL**

EDD Filename: DX055_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: DUP-04-SA5A-QC-022311 **Collected:** 2/23/2011 1:35:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,3,7,8-TCDF	0.118	J	0.0580	MDL	1.11	PQL	ng/Kg	J	Z, FD
OCDD	388	B	0.0722	MDL	11.1	PQL	ng/Kg	J	FD
OCDF	12.4	B	0.0278	MDL	11.1	PQL	ng/Kg	J	FD

Sample ID: SL-001-SA5A-SS-0.0-0.5 **Collected:** 2/23/2011 1:53:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	1.80	J	0.0285	MDL	5.54	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.208	JQ	0.0364	MDL	5.54	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.0975	JQ	0.0384	MDL	5.54	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.821	J	0.0506	MDL	5.54	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.512	J	0.0397	MDL	5.54	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.163	J	0.0360	MDL	5.54	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.373	J	0.0381	MDL	5.54	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.202	J	0.0369	MDL	5.54	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.0899	JQ	0.0208	MDL	5.54	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.0972	J	0.0389	MDL	5.54	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.178	J	0.0308	MDL	5.54	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.471	J	0.0412	MDL	5.54	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0216	JQ	0.0139	MDL	1.11	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	1.05	J	0.154	MDL	1.11	PQL	ng/Kg	J	Z
OCDF	3.67	J	0.0223	MDL	11.1	PQL	ng/Kg	J	Z

Sample ID: SL-002-SA5A-SS-0.0-0.5 **Collected:** 2/23/2011 2:25:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	3.81	J	0.0376	MDL	5.51	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.361	J	0.0416	MDL	5.51	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.125	J	0.0562	MDL	5.51	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	1.43	J	0.0708	MDL	5.51	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	1.12	J	0.0564	MDL	5.51	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.280	JQ	0.0496	MDL	5.51	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.444	J	0.0528	MDL	5.51	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.164	JQ	0.0469	MDL	5.51	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.115	J	0.0205	MDL	5.51	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX055 **Laboratory: LL**

EDD Filename: DX055_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: **SL-002-SA5A-SS-0.0-0.5** ***Collected:*** **2/23/2011 2:25:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,7,8-PECDF	0.151	J	0.0343	MDL	5.51	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.260	J	0.0411	MDL	5.51	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.621	J	0.0346	MDL	5.51	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0325	J	0.0136	MDL	1.10	PQL	ng/Kg	J	Z
OCDF	9.70	J	0.0291	MDL	11.0	PQL	ng/Kg	J	Z

Sample ID: **SL-004-SA5A-SS-0.0-0.5** ***Collected:*** **2/23/2011 1:35:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	164		0.138	MDL	5.59	PQL	ng/Kg	J	Q, Q, FD
1,2,3,4,6,7,8-HPCDF	10.7		0.0801	MDL	5.59	PQL	ng/Kg	J	FD
1,2,3,4,7,8,9-HPCDF	0.780	J	0.0737	MDL	5.59	PQL	ng/Kg	J	Z, FD
1,2,3,4,7,8-HxCDD	0.328	J	0.0803	MDL	5.59	PQL	ng/Kg	J	Z, FD
1,2,3,4,7,8-HXCDF	1.37	J	0.0914	MDL	5.59	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	4.46	J	0.0762	MDL	5.59	PQL	ng/Kg	J	Z, FD
1,2,3,6,7,8-HXCDF	0.552	J	0.0659	MDL	5.59	PQL	ng/Kg	J	Z, FD
1,2,3,7,8,9-HXCDD	1.46	J	0.0708	MDL	5.59	PQL	ng/Kg	J	Z, FD
1,2,3,7,8,9-HXCDF	0.227	J	0.0500	MDL	5.59	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.223	J	0.0248	MDL	5.59	PQL	ng/Kg	J	Z, FD
1,2,3,7,8-PECDF	0.0814	J	0.0306	MDL	5.59	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.577	J	0.0452	MDL	5.59	PQL	ng/Kg	J	Z, FD
2,3,4,7,8-PECDF	0.517	J	0.0311	MDL	5.59	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0403	J	0.0141	MDL	1.12	PQL	ng/Kg	J	Z, FD
2,3,7,8-TCDF	0.309	J	0.0701	MDL	1.12	PQL	ng/Kg	J	Z, FD
OCDD	1410		0.0941	MDL	11.2	PQL	ng/Kg	J	FD
OCDF	25.0		0.0427	MDL	11.2	PQL	ng/Kg	J	FD

Sample ID: **SL-006-SA5A-SS-0.0-0.5** ***Collected:*** **2/23/2011 11:14:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	3.29	J	0.0421	MDL	5.66	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.416	J	0.0264	MDL	5.66	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.0779	J	0.0319	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0611	J	0.0256	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.245	J	0.0240	MDL	5.66	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX055 **Laboratory: LL**

EDD Filename: DX055_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: **SL-006-SA5A-SS-0.0-0.5** ***Collected:*** **2/23/2011 11:14:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,6,7,8-HXCDD	0.159	J	0.0248	MDL	5.66	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.0676	JQ	0.0156	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.130	JQ	0.0219	MDL	5.66	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.0956	J	0.0148	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0524	JQ	0.0158	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0257	JQ	0.0122	MDL	5.66	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0475	J	0.0118	MDL	5.66	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0702	JQ	0.0136	MDL	5.66	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0305	J	0.0136	MDL	1.13	PQL	ng/Kg	J	Z
OCDF	1.12	J	0.0423	MDL	11.3	PQL	ng/Kg	J	Z

Sample ID: **SL-009-SA5A-SS-0.0-0.5** ***Collected:*** **2/23/2011 9:25:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	2.84	J	0.0634	MDL	5.63	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.284	J	0.0529	MDL	5.63	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.207	J	0.0654	MDL	5.63	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.231	JQ	0.0855	MDL	5.63	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.745	J	0.0597	MDL	5.63	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.360	JQ	0.0651	MDL	5.63	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.513	J	0.0506	MDL	5.63	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.274	JQ	0.0482	MDL	5.63	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.110	JQ	0.0259	MDL	5.63	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.0892	J	0.0300	MDL	5.63	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.225	J	0.0384	MDL	5.63	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.508	J	0.0327	MDL	5.63	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0279	JQ	0.0153	MDL	1.13	PQL	ng/Kg	J	Z
OCDF	5.78	J	0.0473	MDL	11.3	PQL	ng/Kg	J	Z

Sample ID: **SL-010-SA5A-SS-0.0-0.5** ***Collected:*** **2/23/2011 9:05:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	3.88	J	0.0279	MDL	5.53	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.265	JQ	0.0407	MDL	5.53	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.338	J	0.0537	MDL	5.53	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX055 **Laboratory: LL**

EDD Filename: DX055_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B ***Matrix:*** SO

Sample ID: SL-010-SA5A-SS-0.0-0.5 ***Collected:*** 2/23/2011 9:05:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8-HXCDF	0.242	J	0.0450	MDL	5.53	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.772	J	0.0529	MDL	5.53	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.174	J	0.0288	MDL	5.53	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.547	J	0.0522	MDL	5.53	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.0836	J	0.0341	MDL	5.53	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.174	J	0.0187	MDL	5.53	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.0350	JQ	0.00841	MDL	5.53	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.192	J	0.0249	MDL	5.53	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.0808	JQ	0.00907	MDL	5.53	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0229	JQ	0.0149	MDL	1.11	PQL	ng/Kg	J	Z
OCDF	11.0	J	0.0438	MDL	11.1	PQL	ng/Kg	J	Z

Sample ID: SL-012-SA5A-SS-0.0-0.5 ***Collected:*** 2/23/2011 10:27:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	1.80	J	0.0289	MDL	5.94	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.166	JQ	0.0424	MDL	5.94	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.166	J	0.0461	MDL	5.94	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.764	J	0.0474	MDL	5.94	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.489	J	0.0473	MDL	5.94	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.150	J	0.0324	MDL	5.94	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.352	J	0.0451	MDL	5.94	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.115	JQ	0.0399	MDL	5.94	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0909	J	0.0214	MDL	5.94	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.0388	J	0.0156	MDL	5.94	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.140	J	0.0289	MDL	5.94	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.157	J	0.0179	MDL	5.94	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0158	J	0.0131	MDL	1.19	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.0505	J	0.0303	MDL	1.19	PQL	ng/Kg	J	Z
OCDF	4.94	J	0.0359	MDL	11.9	PQL	ng/Kg	J	Z

Sample ID: SL-013-SA5A-SS-0.0-0.5 ***Collected:*** 2/23/2011 9:49:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	1.98	JB	0.0237	MDL	5.62	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX055 **Laboratory: LL**

EDD Filename: DX055_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: **SL-013-SA5A-SS-0.0-0.5** ***Collected:*** **2/23/2011 9:49:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	0.203	JB	0.0334	MDL	5.62	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.146	JB	0.0427	MDL	5.62	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.177	JB	0.0304	MDL	5.62	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.381	JB	0.0427	MDL	5.62	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.0970	JBQ	0.0215	MDL	5.62	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.281	JB	0.0409	MDL	5.62	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.0896	JBQ	0.0225	MDL	5.62	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.100	JB	0.0134	MDL	5.62	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.0271	JBQ	0.00787	MDL	5.62	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.115	JB	0.0199	MDL	5.62	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.0858	JBQ	0.00844	MDL	5.62	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0178	JQ	0.0109	MDL	1.12	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.0152	JQ	0.0134	MDL	1.12	PQL	ng/Kg	J	Z
OCDF	7.62	JB	0.0265	MDL	11.2	PQL	ng/Kg	J	Z

Sample ID: **SL-016-SA5A-SS-0.0-0.5** ***Collected:*** **2/23/2011 8:35:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	6140	EB	0.544	MDL	5.68	PQL	ng/Kg	J	*XI
1,2,3,4,7,8-HxCDD	5.52	JB	0.239	MDL	5.68	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	3.88	JB	0.166	MDL	5.68	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	2.62	JB	0.135	MDL	5.68	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	1.71	JB	0.107	MDL	5.68	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	2.69	JB	0.0879	MDL	5.68	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.321	JB	0.0271	MDL	5.68	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	3.83	JB	0.0950	MDL	5.68	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	1.03	JB	0.0278	MDL	5.68	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.143	JQ	0.0462	MDL	1.14	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.111	JQ	0.0311	MDL	1.14	PQL	ng/Kg	J	Z
OCDD	75800	EB	0.917	MDL	11.4	PQL	ng/Kg	J	*XI

Sample ID: **SL-017-SA5A-SS-0.0-0.5** ***Collected:*** **2/23/2011 1:20:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	0.578	JB	0.0751	MDL	5.55	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX055 **Laboratory: LL**

EDD Filename: DX055_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B ***Matrix:*** SO

Sample ID: SL-017-SA5A-SS-0.0-0.5 ***Collected:*** 2/23/2011 1:20:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8-HxCDD	0.305	JB	0.0831	MDL	5.55	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	1.75	JB	0.117	MDL	5.55	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	1.71	JB	0.0744	MDL	5.55	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.383	JB	0.0849	MDL	5.55	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.694	JB	0.0623	MDL	5.55	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.276	JB	0.0592	MDL	5.55	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.138	JBQ	0.0255	MDL	5.55	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.164	JB	0.0351	MDL	5.55	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.394	JB	0.0542	MDL	5.55	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.642	JB	0.0377	MDL	5.55	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0257	JQ	0.0156	MDL	1.11	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.128	J	0.0748	MDL	1.11	PQL	ng/Kg	J	Z

Sample ID: SL-018-SA5A-SS-0.0-0.5 ***Collected:*** 2/23/2011 1:05:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	0.394	JB	0.0596	MDL	5.56	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	1.11	JB	0.0841	MDL	5.56	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	1.62	JB	0.0745	MDL	5.56	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.425	JB	0.0578	MDL	5.56	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.633	JB	0.0687	MDL	5.56	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.240	JB	0.0542	MDL	5.56	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.0732	JB	0.0217	MDL	5.56	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.0876	JBQ	0.0296	MDL	5.56	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.288	JB	0.0479	MDL	5.56	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.579	JB	0.0316	MDL	5.56	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0192	JQ	0.0123	MDL	1.11	PQL	ng/Kg	J	Z
OCDF	10.2	JB	0.0385	MDL	11.1	PQL	ng/Kg	J	Z

Sample ID: SL-019-SA5A-SS-0.0-0.5 ***Collected:*** 2/23/2011 10:10:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	5.91	JB	0.135	MDL	6.26	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	5.39	JB	0.113	MDL	6.26	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	4.79	JB	0.162	MDL	6.26	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX055 **Laboratory: LL**

EDD Filename: DX055_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: **SL-019-SA5A-SS-0.0-0.5** ***Collected:*** **2/23/2011 10:10:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,6,7,8-HXCDF	3.26	JB	0.123	MDL	6.26	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	1.55	JB	0.0994	MDL	6.26	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	2.63	JB	0.0862	MDL	6.26	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.715	JB	0.0398	MDL	6.26	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	2.91	JB	0.0817	MDL	6.26	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	1.58	JB	0.0389	MDL	6.26	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.317	J	0.0275	MDL	1.25	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.287	J	0.0551	MDL	1.25	PQL	ng/Kg	J	Z
OCDD	8360	EB	0.309	MDL	12.5	PQL	ng/Kg	J	*XI

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DX055 **Laboratory: LL**

EDD Filename: DX055_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
	Sampling to Leaching Estimation
	Sampling to Leaching Rejection
*XI	Compound Quantitation and CRQL
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Continuing Calibration Verification Percent Recovery Lower Estimation
C	Continuing Calibration Verification Percent Recovery Lower Rejection
C	Continuing Calibration Verification Percent Recovery Upper Estimation
C	Continuing Calibration Verification Percent Recovery Upper Rejection
C	Continuing Calibration Verification Relative Response Factor
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Relative Response Factor
C	Initial Calibration Verification Correlation Coefficient

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DX055 **Laboratory: LL**

EDD Filename: DX055_v1 **eQAPP Name: CDM_SSFL_110509**

C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Verification Percent Recovery Lower Estimation
C	Initial Calibration Verification Percent Recovery Lower Rejection
C	Initial Calibration Verification Percent Recovery Upper Estimation
C	Initial Calibration Verification Percent Recovery Upper Rejection
C	Initial Calibration Verification Relative Response Factor
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Laboratory Triplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination
F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DX055 **Laboratory: LL**

EDD Filename: DX055_v1 **eQAPP Name: CDM_SSFL_110509**

L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Laboratory Triplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Q	Matrix Spike Upper Rejection
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control Outlier Reports

DX055

Method Blank Outlier Report

Lab Reporting Batch ID: DX055 **Laboratory: LL**

EDD Filename: DX055_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **AQ**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLK0610B370100	3/6/2011 1:00:00 AM	1,2,3,4,6,7,8-HPCDD	1.78 pg/L	EB01-SA5A-022311
		1,2,3,4,6,7,8-HPCDF	0.346 pg/L	
		1,2,3,4,7,8,9-HPCDF	0.421 pg/L	
		1,2,3,4,7,8-HxCDD	0.151 pg/L	
		1,2,3,4,7,8-HXCDF	0.374 pg/L	
		1,2,3,6,7,8-HXCDD	0.243 pg/L	
		1,2,3,6,7,8-HXCDF	0.231 pg/L	
		1,2,3,7,8,9-HXCDD	0.274 pg/L	
		1,2,3,7,8,9-HXCDF	0.222 pg/L	
		1,2,3,7,8-PECDD	0.301 pg/L	
		1,2,3,7,8-PECDF	0.224 pg/L	
		2,3,4,6,7,8-HXCDF	0.212 pg/L	
		2,3,4,7,8-PECDF	0.439 pg/L	
		2,3,7,8-TCDF	0.105 pg/L	
		OCDD	4.41 pg/L	
		OCDF	0.659 pg/L	

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
EB01-SA5A-022311(RES)	1,2,3,4,6,7,8-HPCDD	1.68 pg/L	1.68U pg/L
EB01-SA5A-022311(RES)	1,2,3,4,6,7,8-HPCDF	0.322 pg/L	0.322U pg/L
EB01-SA5A-022311(RES)	1,2,3,4,7,8-HXCDF	0.190 pg/L	0.190U pg/L
EB01-SA5A-022311(RES)	1,2,3,6,7,8-HXCDD	0.172 pg/L	0.172U pg/L
EB01-SA5A-022311(RES)	1,2,3,6,7,8-HXCDF	0.136 pg/L	0.136U pg/L
EB01-SA5A-022311(RES)	1,2,3,7,8,9-HXCDF	0.153 pg/L	0.153U pg/L
EB01-SA5A-022311(RES)	1,2,3,7,8-PECDF	0.161 pg/L	0.161U pg/L
EB01-SA5A-022311(RES)	2,3,4,6,7,8-HXCDF	0.238 pg/L	0.238U pg/L
EB01-SA5A-022311(RES)	2,3,4,7,8-PECDF	0.398 pg/L	0.398U pg/L
EB01-SA5A-022311(RES)	2,3,7,8-TCDF	0.132 pg/L	0.132U pg/L
EB01-SA5A-022311(RES)	OCDD	4.71 pg/L	4.71U pg/L
EB01-SA5A-022311(RES)	OCDF	0.501 pg/L	0.501U pg/L

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLK0600B370254	3/6/2011 2:54:00 AM	1,2,3,4,6,7,8-HPCDD	0.118 ng/Kg	DUP-04-SA5A-QC-022311
		1,2,3,4,6,7,8-HPCDF	0.0509 ng/Kg	SL-001-SA5A-SS-0.0-0.5
		1,2,3,4,7,8,9-HPCDF	0.0321 ng/Kg	SL-002-SA5A-SS-0.0-0.5
		1,2,3,4,7,8-HxCDD	0.0135 ng/Kg	SL-004-SA5A-SS-0.0-0.5
		1,2,3,4,7,8-HXCDF	0.0267 ng/Kg	SL-006-SA5A-SS-0.0-0.5
		1,2,3,6,7,8-HXCDD	0.0102 ng/Kg	SL-009-SA5A-SS-0.0-0.5
		1,2,3,6,7,8-HXCDF	0.0145 ng/Kg	SL-010-SA5A-SS-0.0-0.5
		1,2,3,7,8,9-HXCDD	0.00946 ng/Kg	SL-012-SA5A-SS-0.0-0.5
		1,2,3,7,8,9-HXCDF	0.0364 ng/Kg	SL-013-SA5A-SS-0.0-0.5
		1,2,3,7,8-PECDD	0.0125 ng/Kg	SL-016-SA5A-SS-0.0-0.5
		1,2,3,7,8-PECDF	0.0121 ng/Kg	SL-017-SA5A-SS-0.0-0.5
		2,3,4,6,7,8-HXCDF	0.0191 ng/Kg	SL-018-SA5A-SS-0.0-0.5
		2,3,4,7,8-PECDF	0.0394 ng/Kg	SL-019-SA5A-SS-0.0-0.5
		OCDD	0.377 ng/Kg	
		OCDF	0.112 ng/Kg	

Method Blank Outlier Report

Lab Reporting Batch ID: DX055 **Laboratory: LL**

EDD Filename: DX055_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-002-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.164 ng/Kg	0.164U ng/Kg
SL-006-SA5A-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.0779 ng/Kg	0.0779U ng/Kg
SL-006-SA5A-SS-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.0611 ng/Kg	0.0611U ng/Kg
SL-006-SA5A-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.0676 ng/Kg	0.0676U ng/Kg
SL-006-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.0956 ng/Kg	0.0956U ng/Kg
SL-006-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.0524 ng/Kg	0.0524U ng/Kg
SL-006-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.0257 ng/Kg	0.0257U ng/Kg
SL-006-SA5A-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.0475 ng/Kg	0.0475U ng/Kg
SL-006-SA5A-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.0702 ng/Kg	0.0702U ng/Kg
SL-010-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.0836 ng/Kg	0.0836U ng/Kg
SL-010-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.0350 ng/Kg	0.0350U ng/Kg
SL-010-SA5A-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.0808 ng/Kg	0.0808U ng/Kg
SL-012-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.115 ng/Kg	0.115U ng/Kg
SL-012-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.0388 ng/Kg	0.0388U ng/Kg
SL-012-SA5A-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.157 ng/Kg	0.157U ng/Kg
SL-013-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.0896 ng/Kg	0.0896U ng/Kg
SL-013-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.0271 ng/Kg	0.0271U ng/Kg
SL-013-SA5A-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.0858 ng/Kg	0.0858U ng/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DX055 **Laboratory: LL**

EDD Filename: DX055_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-004-SA5A-SS-0.0-0.5MS **SL-004-SA5A-SS-0.0-0.5MSD** (SL-004-SA5A-SS-0.0-0.5)	OCDD	-68	1254	40.00-135.00	108 (20.00)	OCDD	No Qual, >4x
SL-004-SA5A-SS-0.0-0.5MSD (SL-004-SA5A-SS-0.0-0.5)	1,2,3,4,6,7,8-HPCDD	-	364	40.00-135.00	89 (20.00)	1,2,3,4,6,7,8-HPCDD	J(all detects)

Field Duplicate RPD Report

Lab Reporting Batch ID: DX055 **Laboratory: LL**

EDD Filename: DX055_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 160.3M
Matrix: SO

Analyte	Concentration (%)		Sample RPD	eQAPP RPD	Flag
	SL-004-SA5A-SS-0.0-0.5	DUP-04-SA5A-QC-022311			
MOISTURE	10.6	9.7	9		No Qualifiers Applied

Method: 1613B
Matrix: SO

Analyte	Concentration (ng/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-004-SA5A-SS-0.0-0.5	DUP-04-SA5A-QC-022311			
1,2,3,4,7,8-HXCDF	1.37	1.01	30	50.00	No Qualifiers Applied
1,2,3,7,8,9-HXCDF	0.227	0.191	17	50.00	
1,2,3,7,8-PECDF	0.0814	0.0659	21	50.00	
2,3,4,7,8-PECDF	0.517	0.403	25	50.00	
1,2,3,4,6,7,8-HPCDD	164	37.1	126	50.00	J(all detects) UJ(all non-detects)
1,2,3,4,6,7,8-HPCDF	10.7	4.87	75	50.00	
1,2,3,4,7,8,9-HPCDF	0.780	0.359	74	50.00	
1,2,3,4,7,8-HxCDD	0.328	0.141	80	50.00	
1,2,3,6,7,8-HXCDD	4.46	1.19	116	50.00	
1,2,3,6,7,8-HXCDF	0.552	0.262	71	50.00	
1,2,3,7,8,9-HXCDD	1.46	0.455	105	50.00	
1,2,3,7,8-PECDD	0.223	0.0738	101	50.00	
2,3,4,6,7,8-HXCDF	0.577	0.280	69	50.00	
2,3,7,8-TCDD	0.0403	1.11 U	200	50.00	
2,3,7,8-TCDF	0.309	0.118	89	50.00	
OCDD	1410	388	114	50.00	
OCDF	25.0	12.4	67	50.00	

Reporting Limit Outliers

Lab Reporting Batch ID: DX055 **Laboratory: LL**

EDD Filename: DX055_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1613B
Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB01-SA5A-022311	1,2,3,4,6,7,8-HPCDD	JBQ	1.68	10.6	PQL	pg/L	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.322	10.6	PQL	pg/L	
	1,2,3,4,7,8-HXCDF	JBQ	0.190	10.6	PQL	pg/L	
	1,2,3,6,7,8-HXCDD	JBQ	0.172	10.6	PQL	pg/L	
	1,2,3,6,7,8-HXCDF	JBQ	0.136	10.6	PQL	pg/L	
	1,2,3,7,8,9-HXCDF	JBQ	0.153	10.6	PQL	pg/L	
	1,2,3,7,8-PECDF	JBQ	0.161	10.6	PQL	pg/L	
	2,3,4,6,7,8-HXCDF	JB	0.238	10.6	PQL	pg/L	
	2,3,4,7,8-PECDF	JB	0.398	10.6	PQL	pg/L	
	2,3,7,8-TCDD	JQ	0.107	2.11	PQL	pg/L	
	2,3,7,8-TCDF	JBQ	0.132	2.11	PQL	pg/L	
	OCDD	JB	4.71	21.1	PQL	pg/L	
	OCDF	JBQ	0.501	21.1	PQL	pg/L	

Method: 1613B
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-04-SA5A-QC-022311	1,2,3,4,6,7,8-HPCDF	JB	4.87	5.54	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JB	0.359	5.54	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.141	5.54	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	1.01	5.54	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	1.19	5.54	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.262	5.54	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.455	5.54	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.191	5.54	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0738	5.54	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.0659	5.54	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.280	5.54	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.403	5.54	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.118	1.11	PQL	ng/Kg	
SL-001-SA5A-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	J	1.80	5.54	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JQ	0.208	5.54	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JQ	0.0975	5.54	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	J	0.821	5.54	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	J	0.512	5.54	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	J	0.163	5.54	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	J	0.373	5.54	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	J	0.202	5.54	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JQ	0.0899	5.54	PQL	ng/Kg	
	1,2,3,7,8-PECDF	J	0.0972	5.54	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	J	0.178	5.54	PQL	ng/Kg	
	2,3,4,7,8-PECDF	J	0.471	5.54	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0216	1.11	PQL	ng/Kg	
	2,3,7,8-TCDF	J	1.05	1.11	PQL	ng/Kg	
	OCDF	J	3.67	11.1	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX055 **Laboratory: LL**

EDD Filename: DX055_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-002-SA5A-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	J	3.81	5.51	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	J	0.361	5.51	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	J	0.125	5.51	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	J	1.43	5.51	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	J	1.12	5.51	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JQ	0.280	5.51	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	J	0.444	5.51	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JQ	0.164	5.51	PQL	ng/Kg	
	1,2,3,7,8-PECDD	J	0.115	5.51	PQL	ng/Kg	
	1,2,3,7,8-PECDF	J	0.151	5.51	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	J	0.260	5.51	PQL	ng/Kg	
	2,3,4,7,8-PECDF	J	0.621	5.51	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.0325	1.10	PQL	ng/Kg	
	OCDF	J	9.70	11.0	PQL	ng/Kg	
SL-004-SA5A-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	J	0.780	5.59	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8-HxCDD	J	0.328	5.59	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	J	1.37	5.59	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	J	4.46	5.59	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	J	0.552	5.59	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	J	1.46	5.59	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	J	0.227	5.59	PQL	ng/Kg	
	1,2,3,7,8-PECDD	J	0.223	5.59	PQL	ng/Kg	
	1,2,3,7,8-PECDF	J	0.0814	5.59	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	J	0.577	5.59	PQL	ng/Kg	
	2,3,4,7,8-PECDF	J	0.517	5.59	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.0403	1.12	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.309	1.12	PQL	ng/Kg	
SL-006-SA5A-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDD	J	3.29	5.66	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	J	0.416	5.66	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	J	0.0779	5.66	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	J	0.0611	5.66	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	J	0.245	5.66	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	J	0.159	5.66	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JQ	0.0676	5.66	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JQ	0.130	5.66	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	J	0.0956	5.66	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JQ	0.0524	5.66	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JQ	0.0257	5.66	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	J	0.0475	5.66	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JQ	0.0702	5.66	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.0305	1.13	PQL	ng/Kg	
	OCDF	J	1.12	11.3	PQL	ng/Kg	
SL-009-SA5A-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	J	2.84	5.63	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	J	0.284	5.63	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	J	0.207	5.63	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JQ	0.231	5.63	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	J	0.745	5.63	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JQ	0.360	5.63	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	J	0.513	5.63	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JQ	0.274	5.63	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JQ	0.110	5.63	PQL	ng/Kg	
	1,2,3,7,8-PECDF	J	0.0892	5.63	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	J	0.225	5.63	PQL	ng/Kg	
	2,3,4,7,8-PECDF	J	0.508	5.63	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0279	1.13	PQL	ng/Kg	
	OCDF	J	5.78	11.3	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX055 **Laboratory: LL**

EDD Filename: DX055_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-010-SA5A-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	J	3.88	5.53	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JQ	0.265	5.53	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	J	0.338	5.53	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	J	0.242	5.53	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	J	0.772	5.53	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	J	0.174	5.53	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	J	0.547	5.53	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	J	0.0836	5.53	PQL	ng/Kg	
	1,2,3,7,8-PECDD	J	0.174	5.53	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JQ	0.0350	5.53	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	J	0.192	5.53	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JQ	0.0808	5.53	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0229	1.11	PQL	ng/Kg	
	OCDF	J	11.0	11.1	PQL	ng/Kg	
SL-012-SA5A-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	J	1.80	5.94	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JQ	0.166	5.94	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	J	0.166	5.94	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	J	0.764	5.94	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	J	0.489	5.94	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	J	0.150	5.94	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	J	0.352	5.94	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JQ	0.115	5.94	PQL	ng/Kg	
	1,2,3,7,8-PECDD	J	0.0909	5.94	PQL	ng/Kg	
	1,2,3,7,8-PECDF	J	0.0388	5.94	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	J	0.140	5.94	PQL	ng/Kg	
	2,3,4,7,8-PECDF	J	0.157	5.94	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.0158	1.19	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.0505	1.19	PQL	ng/Kg	
	OCDF	J	4.94	11.9	PQL	ng/Kg	
SL-013-SA5A-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	1.98	5.62	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JB	0.203	5.62	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.146	5.62	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.177	5.62	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.381	5.62	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0970	5.62	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.281	5.62	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.0896	5.62	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.100	5.62	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0271	5.62	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.115	5.62	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0858	5.62	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0178	1.12	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.0152	1.12	PQL	ng/Kg	
	OCDF	JB	7.62	11.2	PQL	ng/Kg	
SL-016-SA5A-SS-0.0-0.5	1,2,3,4,7,8-HxCDD	JB	5.52	5.68	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8-HXCDF	JB	3.88	5.68	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	2.62	5.68	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	1.71	5.68	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	2.69	5.68	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.321	5.68	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	3.83	5.68	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	1.03	5.68	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.143	1.14	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.111	1.14	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX055 **Laboratory: LL**

EDD Filename: DX055_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-017-SA5A-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	0.578	5.55	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8-HxCDD	JB	0.305	5.55	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	1.75	5.55	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	1.71	5.55	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.383	5.55	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.694	5.55	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.276	5.55	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.138	5.55	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.164	5.55	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.394	5.55	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.642	5.55	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0257	1.11	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.128	1.11	PQL	ng/Kg	
SL-018-SA5A-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	0.394	5.56	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8-HXCDF	JB	1.11	5.56	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	1.62	5.56	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.425	5.56	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.633	5.56	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.240	5.56	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.0732	5.56	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0876	5.56	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.288	5.56	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.579	5.56	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0192	1.11	PQL	ng/Kg	
	OCDF	JB	10.2	11.1	PQL	ng/Kg	
SL-019-SA5A-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	5.91	6.26	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8-HxCDD	JB	5.39	6.26	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	4.79	6.26	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	3.26	6.26	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	1.55	6.26	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	2.63	6.26	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.715	6.26	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	2.91	6.26	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	1.58	6.26	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.317	1.25	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.287	1.25	PQL	ng/Kg	

LDC #: 25907A

VALIDATION FINDINGS WORKSHEET

Compound Quantitation and Reported CRQLs

Reviewer: GR

2nd Reviewer: [illegible]

METHOD: HRGC/HRMS Dioxins/Dibenzofurans (EPA Method 1613B)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were the correct internal standard (IS), quantitation ions and relative response factors (RRF) used to quantitate the compound?

Y N N/A Compound quantitation and CRQLs were adjusted to reflect all sample dilutions and dry weight factors (if necessary).

#	Date	Sample ID	Finding	Associated Samples	Qualifications
		SL-016 SASA-SS-0.0-0.5	OCDD, 1,2,3,4,6,7,8-HPCDD	7 ~~linear~~ cal range	J/~~D~~
				↓	↓
		SL-019-SASA SS0.0-0.5	OCDD	↓	↓

SAMPLE DELIVERY GROUP

DX056

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
24-Feb-2011	SL-007-SA5A-SS-0.0-0.5	6216231	N	METHOD	1613B	III
24-Feb-2011	SL-008-SA5A-SS-0.0-0.5	6216232	N	METHOD	1613B	III
24-Feb-2011	SL-233-SA5A-SS-0.0-0.5	6216241	N	METHOD	1613B	III
24-Feb-2011	SL-021-SA5A-SB-3.0-4.0	6216244	N	METHOD	1613B	III
24-Feb-2011	SL-122-SA5A-SS-0.0-0.5	6216247	N	METHOD	1613B	III
24-Feb-2011	SL-121-SA5A-SS-0.0-0.5	6216236	N	METHOD	1613B	III
24-Feb-2011	SL-250-SA5A-SS-0.0-0.5	6216242	N	METHOD	1613B	III
24-Feb-2011	SL-119-SA5A-SS-0.0-0.5	6216234	N	METHOD	1613B	III
24-Feb-2011	SL-120-SA5A-SS-0.0-0.5	6216235	N	METHOD	1613B	III
24-Feb-2011	SL-022-SA5A-SB-4.0-5.0	6216245	N	METHOD	1613B	III
24-Feb-2011	SL-110-SA5A-SS-0.0-0.5	6216233	N	METHOD	1613B	III
24-Feb-2011	SL-143-SA5A-SS-0.0-0.5	6216240	N	METHOD	1613B	III
24-Feb-2011	SL-251-SA5A-SS-0.0-0.5	6216243	N	METHOD	1613B	III
24-Feb-2011	SL-136-SA5A-SS-0.0-0.5	6216237	N	METHOD	1613B	III
24-Feb-2011	SL-138-SA5A-SS-0.0-0.5	6216239	N	METHOD	1613B	III
24-Feb-2011	SL-137-SA5A-SS-0.0-0.5	6216238	N	METHOD	1613B	III
24-Feb-2011	SL-050-SA5A-SB-4.0-5.0	6216246	N	METHOD	1613B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DX056 **Laboratory: LL**

EDD Filename: DX056_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: **SL-007-SA5A-SS-0.0-0.5** ***Collected:*** **2/24/2011 8:45:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	2.28	JB	0.0158	MDL	5.58	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.237	JBQ	0.0170	MDL	5.58	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.329	JB	0.0304	MDL	5.58	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.295	JB	0.0267	MDL	5.58	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	1.21	JB	0.0289	MDL	5.58	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.187	JB	0.0200	MDL	5.58	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.978	JB	0.0278	MDL	5.58	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.392	JB	0.0170	MDL	5.58	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.213	JBQ	0.0229	MDL	5.58	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.0995	JB	0.00938	MDL	5.58	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.345	JB	0.0157	MDL	5.58	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.204	JB	0.00926	MDL	5.58	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0321	JB	0.0121	MDL	1.12	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0456	JB	0.0143	MDL	1.12	PQL	ng/Kg	U	B
OCDF	6.44	JB	0.0186	MDL	11.2	PQL	ng/Kg	J	Z

Sample ID: **SL-008-SA5A-SS-0.0-0.5** ***Collected:*** **2/24/2011 9:05:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	4.47	JB	0.0227	MDL	5.52	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.354	JB	0.0187	MDL	5.52	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.286	JB	0.0284	MDL	5.52	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.554	JB	0.0350	MDL	5.52	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.753	JB	0.0275	MDL	5.52	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.241	JB	0.0270	MDL	5.52	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.738	JB	0.0235	MDL	5.52	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.237	JB	0.0175	MDL	5.52	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.167	JB	0.0147	MDL	5.52	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.113	JB	0.0128	MDL	5.52	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.503	JB	0.0165	MDL	5.52	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.265	JB	0.0118	MDL	5.52	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0146	JBQ	0.00983	MDL	1.10	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0666	JB	0.0218	MDL	1.10	PQL	ng/Kg	U	B
OCDF	7.62	JB	0.0148	MDL	11.0	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX056 **Laboratory: LL**

EDD Filename: DX056_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B ***Matrix:*** SO

Sample ID: SL-021-SA5A-SB-3.0-4.0 ***Collected:*** 2/24/2011 9:48:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.130	JB	0.0124	MDL	5.55	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.0558	JB	0.0110	MDL	5.55	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0170	JBQ	0.00966	MDL	5.55	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0415	JBQ	0.0109	MDL	5.55	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0152	JBQ	0.00943	MDL	5.55	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0149	JBQ	0.00766	MDL	5.55	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0402	JBQ	0.00788	MDL	5.55	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0430	JBQ	0.00511	MDL	5.55	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0195	JBQ	0.0101	MDL	5.55	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0205	JBQ	0.00455	MDL	5.55	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0275	JB	0.00477	MDL	5.55	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0380	JBQ	0.00477	MDL	5.55	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0132	JBQ	0.00677	MDL	1.11	PQL	ng/Kg	U	B
OCDD	0.728	JB	0.0220	MDL	11.1	PQL	ng/Kg	U	B
OCDF	0.0888	JBQ	0.0143	MDL	11.1	PQL	ng/Kg	U	B

Sample ID: SL-022-SA5A-SB-4.0-5.0 ***Collected:*** 2/24/2011 11:23:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.159	JBQ	0.0114	MDL	5.51	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.0711	JB	0.00397	MDL	5.51	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0107	JBQ	0.00518	MDL	5.51	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0129	JBQ	0.00981	MDL	5.51	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0280	JBQ	0.00540	MDL	5.51	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0327	JBQ	0.00992	MDL	5.51	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0198	JBQ	0.00485	MDL	5.51	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0424	JB	0.00904	MDL	5.51	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0357	JBQ	0.00496	MDL	5.51	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0273	JBQ	0.00507	MDL	5.51	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0228	JBQ	0.00485	MDL	5.51	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0577	JB	0.00496	MDL	5.51	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0105	JBQ	0.00860	MDL	1.10	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.00983	JBQ	0.00662	MDL	1.10	PQL	ng/Kg	U	B
OCDD	0.549	JB	0.0185	MDL	11.0	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX056 **Laboratory: LL**

EDD Filename: DX056_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: **SL-022-SA5A-SB-4.0-5.0** ***Collected:*** **2/24/2011 11:23:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
OCDF	0.0776	JBQ	0.0101	MDL	11.0	PQL	ng/Kg	U	B

Sample ID: **SL-050-SA5A-SB-4.0-5.0** ***Collected:*** **2/24/2011 3:30:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.166	JB	0.0116	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.0536	JB	0.00767	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0220	JBQ	0.00836	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0339	JBQ	0.00871	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0349	JB	0.00962	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0385	JB	0.00836	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0430	JBQ	0.00710	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0425	JBQ	0.00790	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0431	JBQ	0.00687	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0731	JBQ	0.0123	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0676	JB	0.00538	MDL	5.73	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0341	JBQ	0.00584	MDL	5.73	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0826	JBQ	0.00561	MDL	5.73	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0171	JBQ	0.00985	MDL	1.15	PQL	ng/Kg	U	B
OCDD	0.531	JB	0.0151	MDL	11.5	PQL	ng/Kg	U	B
OCDF	0.109	JB	0.0135	MDL	11.5	PQL	ng/Kg	U	B

Sample ID: **SL-110-SA5A-SS-0.0-0.5** ***Collected:*** **2/24/2011 1:08:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	4.04	JB	0.0417	MDL	5.92	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	2.88	JB	0.0576	MDL	5.92	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	4.61	JB	0.109	MDL	5.92	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	2.54	JB	0.0791	MDL	5.92	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	4.24	JB	0.0432	MDL	5.92	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	1.74	JB	0.0424	MDL	5.92	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	1.36	JB	0.0367	MDL	5.92	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.632	JB	0.0329	MDL	5.92	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	2.97	JB	0.0404	MDL	5.92	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	2.02	JB	0.0320	MDL	5.92	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX056 **Laboratory: LL**

EDD Filename: DX056_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-110-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 1:08:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,3,7,8-TCDD	0.159	JB	0.0169	MDL	1.18	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.683	JB	0.0690	MDL	1.18	PQL	ng/Kg	J	Z

Sample ID: SL-119-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 10:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,7,8,9-HXCDF	2.14	JB	0.0569	MDL	6.18	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	3.25	JB	0.0585	MDL	6.18	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	1.36	JB	0.0523	MDL	6.18	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	3.71	JB	0.0481	MDL	6.18	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.327	J	0.0229	MDL	1.24	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	1.01	JB	0.103	MDL	1.24	PQL	ng/Kg	J	Z
OCDD	13000	EB	0.203	MDL	12.4	PQL	ng/Kg	J	*XI

Sample ID: SL-120-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 11:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	0.855	JB	0.0365	MDL	5.54	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.575	JB	0.0537	MDL	5.54	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	1.45	JB	0.0656	MDL	5.54	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	1.90	JB	0.0501	MDL	5.54	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.541	JBQ	0.0473	MDL	5.54	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	1.04	JB	0.0437	MDL	5.54	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.220	JBQ	0.0310	MDL	5.54	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.338	JB	0.0385	MDL	5.54	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.363	JB	0.0275	MDL	5.54	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.686	JB	0.0277	MDL	5.54	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.697	JB	0.0272	MDL	5.54	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0204	JBQ	0.0195	MDL	1.11	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.530	JB	0.0908	MDL	1.11	PQL	ng/Kg	J	Z

Sample ID: SL-121-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 10:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	4.54	JB	0.0310	MDL	5.54	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX056 **Laboratory: LL**

EDD Filename: DX056_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B *Matrix:* SO

Sample ID: SL-121-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 10:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	0.544	JB	0.0350	MDL	5.54	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.209	JB	0.0323	MDL	5.54	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.614	JB	0.0274	MDL	5.54	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	1.14	JB	0.0336	MDL	5.54	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.415	JB	0.0258	MDL	5.54	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.472	JB	0.0316	MDL	5.54	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.149	JB	0.0246	MDL	5.54	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.126	JBQ	0.0233	MDL	5.54	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.914	JB	0.0305	MDL	5.54	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.434	JB	0.0254	MDL	5.54	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	1.19	JB	0.0289	MDL	5.54	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0333	JQ	0.0113	MDL	1.11	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.354	JB	0.0614	MDL	1.11	PQL	ng/Kg	J	Z
OCDF	9.77	JB	0.0247	MDL	11.1	PQL	ng/Kg	J	Z

Sample ID: SL-122-SA5A-SS-0.0-0.5 *Collected:* 2/24/2011 9:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	2.73	JB	0.0219	MDL	5.44	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.304	JB	0.0213	MDL	5.44	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.181	JB	0.0273	MDL	5.44	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.385	JBQ	0.0255	MDL	5.44	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.605	JB	0.0279	MDL	5.44	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.165	JB	0.0197	MDL	5.44	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.300	JB	0.0263	MDL	5.44	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.0767	JBQ	0.0176	MDL	5.44	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.119	JB	0.0163	MDL	5.44	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.209	JB	0.0180	MDL	5.44	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.163	JB	0.0165	MDL	5.44	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0186	JB	0.00958	MDL	1.09	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0640	JBQ	0.0425	MDL	1.09	PQL	ng/Kg	U	B
OCDF	7.08	JB	0.0183	MDL	10.9	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX056 **Laboratory: LL**

EDD Filename: DX056_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B ***Matrix:*** SO

Sample ID: SL-136-SA5A-SS-0.0-0.5 ***Collected:*** 2/24/2011 2:25:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	4.41	JB	0.0292	MDL	5.46	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.409	JB	0.0244	MDL	5.46	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.525	JB	0.0439	MDL	5.46	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.614	JB	0.0274	MDL	5.46	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.301	JB	0.0325	MDL	5.46	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.366	JB	0.0238	MDL	5.46	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.362	JB	0.0231	MDL	5.46	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.139	JB	0.0175	MDL	5.46	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.115	JB	0.0127	MDL	5.46	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.300	JB	0.0202	MDL	5.46	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.353	JB	0.0121	MDL	5.46	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0351	JB	0.0102	MDL	1.09	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0626	JB	0.0142	MDL	1.09	PQL	ng/Kg	U	B
OCDF	8.31	JB	0.0202	MDL	10.9	PQL	ng/Kg	J	Z

Sample ID: SL-137-SA5A-SS-0.0-0.5 ***Collected:*** 2/24/2011 3:28:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	2.56	JB	0.0526	MDL	5.97	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	1.05	JB	0.0391	MDL	5.97	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	3.16	JB	0.0481	MDL	5.97	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	3.95	JB	0.0393	MDL	5.97	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	1.45	JB	0.0432	MDL	5.97	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	1.88	JB	0.0370	MDL	5.97	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	1.18	JB	0.0425	MDL	5.97	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.549	JB	0.0401	MDL	5.97	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.751	JB	0.0351	MDL	5.97	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	1.77	JB	0.0413	MDL	5.97	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	1.42	JB	0.0346	MDL	5.97	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0963	J	0.0162	MDL	1.19	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.554	JB	0.0730	MDL	1.19	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX056 **Laboratory: LL**

EDD Filename: DX056_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-138-SA5A-SS-0.0-0.5 **Collected:** 2/24/2011 3:00:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	0.642	JB	0.0287	MDL	5.68	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.414	JB	0.0404	MDL	5.68	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	1.38	JB	0.0368	MDL	5.68	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.556	JB	0.0405	MDL	5.68	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.793	JB	0.0288	MDL	5.68	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.318	JB	0.0232	MDL	5.68	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.229	JB	0.0240	MDL	5.68	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.136	JB	0.0161	MDL	5.68	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.421	JB	0.0219	MDL	5.68	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.366	JB	0.0158	MDL	5.68	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0470	JBQ	0.0104	MDL	1.14	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.139	JB	0.0268	MDL	1.14	PQL	ng/Kg	J	Z

Sample ID: SL-143-SA5A-SS-0.0-0.5 **Collected:** 2/24/2011 1:38:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	0.897	JB	0.0337	MDL	5.66	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.445	JB	0.0372	MDL	5.66	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	2.28	JB	0.0568	MDL	5.66	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	1.82	JB	0.0374	MDL	5.66	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.791	JB	0.0425	MDL	5.66	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.844	JB	0.0331	MDL	5.66	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.439	JB	0.0360	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.283	JB	0.0282	MDL	5.66	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.725	JB	0.0373	MDL	5.66	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.634	JB	0.0330	MDL	5.66	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	1.45	JB	0.0351	MDL	5.66	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0422	JBQ	0.0123	MDL	1.13	PQL	ng/Kg	U	B
2,3,7,8-TCDF	1.12	JB	0.0962	MDL	1.13	PQL	ng/Kg	J	Z

Sample ID: SL-233-SA5A-SS-0.0-0.5 **Collected:** 2/24/2011 9:22:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	1.50	JB	0.0184	MDL	5.49	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.123	JB	0.0176	MDL	5.49	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX056 **Laboratory: LL**

EDD Filename: DX056_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: **SL-233-SA5A-SS-0.0-0.5** ***Collected:*** **2/24/2011 9:22:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8-HxCDD	0.0527	JBQ	0.0225	MDL	5.49	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.648	JB	0.0387	MDL	5.49	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.264	JB	0.0213	MDL	5.49	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.116	JBQ	0.0273	MDL	5.49	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.189	JB	0.0195	MDL	5.49	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.129	JB	0.0209	MDL	5.49	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0461	JBQ	0.0118	MDL	5.49	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0482	JB	0.0134	MDL	5.49	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.135	JBQ	0.0186	MDL	5.49	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.265	JB	0.0133	MDL	5.49	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0162	JB	0.00923	MDL	1.10	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0454	JBQ	0.0234	MDL	1.10	PQL	ng/Kg	U	B
OCDF	3.38	JB	0.0193	MDL	11.0	PQL	ng/Kg	J	Z

Sample ID: **SL-250-SA5A-SS-0.0-0.5** ***Collected:*** **2/24/2011 10:20:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	1.14	JB	0.0439	MDL	5.51	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.382	JB	0.0553	MDL	5.51	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.903	JB	0.0520	MDL	5.51	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	2.62	JB	0.0548	MDL	5.51	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.592	JB	0.0430	MDL	5.51	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.994	JB	0.0491	MDL	5.51	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.201	JB	0.0377	MDL	5.51	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.191	JB	0.0370	MDL	5.51	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.708	JB	0.0327	MDL	5.51	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	1.99	JB	0.0314	MDL	5.51	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0532	JQ	0.0348	MDL	1.10	PQL	ng/Kg	J	Z

Sample ID: **SL-251-SA5A-SS-0.0-0.5** ***Collected:*** **2/24/2011 2:05:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	1.86	JB	0.0211	MDL	5.58	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.172	JBQ	0.0240	MDL	5.58	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0701	JB	0.0285	MDL	5.58	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX056 **Laboratory: LL**

EDD Filename: DX056_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: **SL-251-SA5A-SS-0.0-0.5** ***Collected:*** **2/24/2011 2:05:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8-HXCDF	0.157	JB	0.0193	MDL	5.58	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.518	JB	0.0296	MDL	5.58	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.113	JBQ	0.0156	MDL	5.58	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.317	JB	0.0280	MDL	5.58	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.254	JB	0.0155	MDL	5.58	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0607	JBQ	0.0160	MDL	5.58	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0552	JB	0.00904	MDL	5.58	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.120	JB	0.0141	MDL	5.58	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.144	JB	0.00871	MDL	5.58	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0126	JBQ	0.00938	MDL	1.12	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0432	JBQ	0.0134	MDL	1.12	PQL	ng/Kg	U	B
OCDF	3.69	JB	0.0205	MDL	11.2	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DX056 **Laboratory: LL**

EDD Filename: DX056_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
	Sampling to Leaching Estimation
	Sampling to Leaching Rejection
*XI	Compound Quantitation and CRQL
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Continuing Calibration Verification Percent Recovery Lower Estimation
C	Continuing Calibration Verification Percent Recovery Lower Rejection
C	Continuing Calibration Verification Percent Recovery Upper Estimation
C	Continuing Calibration Verification Percent Recovery Upper Rejection
C	Continuing Calibration Verification Relative Response Factor
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Relative Response Factor
C	Initial Calibration Verification Correlation Coefficient

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DX056 **Laboratory: LL**

EDD Filename: DX056_v1 **eQAPP Name: CDM_SSFL_110509**

C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Verification Percent Recovery Lower Estimation
C	Initial Calibration Verification Percent Recovery Lower Rejection
C	Initial Calibration Verification Percent Recovery Upper Estimation
C	Initial Calibration Verification Percent Recovery Upper Rejection
C	Initial Calibration Verification Relative Response Factor
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Laboratory Triplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination
F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX056 **Laboratory: LL**

EDD Filename: DX056_v1 **eQAPP Name: CDM_SSFL_110509**

L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Laboratory Triplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Q	Matrix Spike Upper Rejection
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control Outlier Reports

DX056

Method Blank Outlier Report

Lab Reporting Batch ID: DX056 **Laboratory: LL**

EDD Filename: DX056_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLK0620B371305	3/8/2011 1:05:00 PM	1,2,3,4,6,7,8-HPCDD	0.355 ng/Kg	SL-007-SA5A-SS-0.0-0.5
		1,2,3,4,6,7,8-HPCDF	0.917 ng/Kg	SL-008-SA5A-SS-0.0-0.5
		1,2,3,4,7,8,9-HPCDF	0.128 ng/Kg	SL-021-SA5A-SB-3.0-4.0
		1,2,3,4,7,8-HxCDD	0.0364 ng/Kg	SL-022-SA5A-SB-4.0-5.0
		1,2,3,4,7,8-HXCDF	0.169 ng/Kg	SL-050-SA5A-SB-4.0-5.0
		1,2,3,6,7,8-HXCDD	0.0400 ng/Kg	SL-110-SA5A-SS-0.0-0.5
		1,2,3,6,7,8-HXCDF	0.135 ng/Kg	SL-120-SA5A-SS-0.0-0.5
		1,2,3,7,8,9-HXCDD	0.0571 ng/Kg	SL-122-SA5A-SS-0.0-0.5
		1,2,3,7,8,9-HXCDF	0.107 ng/Kg	SL-136-SA5A-SS-0.0-0.5
		1,2,3,7,8-PECDD	0.0406 ng/Kg	SL-138-SA5A-SS-0.0-0.5
		1,2,3,7,8-PECDF	0.0493 ng/Kg	SL-143-SA5A-SS-0.0-0.5
		2,3,4,6,7,8-HXCDF	0.271 ng/Kg	SL-233-SA5A-SS-0.0-0.5
		2,3,4,7,8-PECDF	0.149 ng/Kg	SL-251-SA5A-SS-0.0-0.5
		2,3,7,8-TCDD	0.0193 ng/Kg	
		2,3,7,8-TCDF	0.0236 ng/Kg	
		OCDD	0.681 ng/Kg	
		OCDF	0.618 ng/Kg	
BLK0730B371431	3/16/2011 2:31:00 PM	1,2,3,4,6,7,8-HPCDD	0.208 ng/Kg	SL-119-SA5A-SS-0.0-0.5
		1,2,3,4,6,7,8-HPCDF	0.181 ng/Kg	SL-121-SA5A-SS-0.0-0.5
		1,2,3,4,7,8,9-HPCDF	0.0599 ng/Kg	SL-137-SA5A-SS-0.0-0.5
		1,2,3,4,7,8-HxCDD	0.00942 ng/Kg	SL-250-SA5A-SS-0.0-0.5
		1,2,3,4,7,8-HXCDF	0.0547 ng/Kg	
		1,2,3,6,7,8-HXCDD	0.0267 ng/Kg	
		1,2,3,6,7,8-HXCDF	0.0394 ng/Kg	
		1,2,3,7,8,9-HXCDD	0.0153 ng/Kg	
		1,2,3,7,8,9-HXCDF	0.0578 ng/Kg	
		1,2,3,7,8-PECDD	0.0159 ng/Kg	
		1,2,3,7,8-PECDF	0.0184 ng/Kg	
		2,3,4,6,7,8-HXCDF	0.0651 ng/Kg	
		2,3,4,7,8-PECDF	0.0583 ng/Kg	
		2,3,7,8-TCDF	0.0133 ng/Kg	
		OCDD	0.397 ng/Kg	
		OCDF	0.242 ng/Kg	

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-007-SA5A-SS-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDF	2.28 ng/Kg	2.28U ng/Kg
SL-007-SA5A-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.237 ng/Kg	0.237U ng/Kg
SL-007-SA5A-SS-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.295 ng/Kg	0.295U ng/Kg
SL-007-SA5A-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.187 ng/Kg	0.187U ng/Kg
SL-007-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.392 ng/Kg	0.392U ng/Kg
SL-007-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.0995 ng/Kg	0.0995U ng/Kg
SL-007-SA5A-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.345 ng/Kg	0.345U ng/Kg
SL-007-SA5A-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.204 ng/Kg	0.204U ng/Kg
SL-007-SA5A-SS-0.0-0.5(RES)	2,3,7,8-TCDD	0.0321 ng/Kg	0.0321U ng/Kg
SL-007-SA5A-SS-0.0-0.5(RES)	2,3,7,8-TCDF	0.0456 ng/Kg	0.0456U ng/Kg
SL-008-SA5A-SS-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDF	4.47 ng/Kg	4.47U ng/Kg
SL-008-SA5A-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.354 ng/Kg	0.354U ng/Kg
SL-008-SA5A-SS-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.554 ng/Kg	0.554U ng/Kg
SL-008-SA5A-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.241 ng/Kg	0.241U ng/Kg
SL-008-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.237 ng/Kg	0.237U ng/Kg
SL-008-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.167 ng/Kg	0.167U ng/Kg
SL-008-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.113 ng/Kg	0.113U ng/Kg
SL-008-SA5A-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.503 ng/Kg	0.503U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX056 **Laboratory: LL**

EDD Filename: DX056_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-008-SA5A-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.265 ng/Kg	0.265U ng/Kg
SL-008-SA5A-SS-0.0-0.5(RES)	2,3,7,8-TCDD	0.0146 ng/Kg	0.0146U ng/Kg
SL-008-SA5A-SS-0.0-0.5(RES)	2,3,7,8-TCDF	0.0666 ng/Kg	0.0666U ng/Kg
SL-021-SA5A-SB-3.0-4.0(RES)	1,2,3,4,6,7,8-HPCDD	0.130 ng/Kg	0.130U ng/Kg
SL-021-SA5A-SB-3.0-4.0(RES)	1,2,3,4,6,7,8-HPCDF	0.0558 ng/Kg	0.0558U ng/Kg
SL-021-SA5A-SB-3.0-4.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0170 ng/Kg	0.0170U ng/Kg
SL-021-SA5A-SB-3.0-4.0(RES)	1,2,3,4,7,8-HXCDF	0.0415 ng/Kg	0.0415U ng/Kg
SL-021-SA5A-SB-3.0-4.0(RES)	1,2,3,6,7,8-HXCDD	0.0152 ng/Kg	0.0152U ng/Kg
SL-021-SA5A-SB-3.0-4.0(RES)	1,2,3,6,7,8-HXCDF	0.0149 ng/Kg	0.0149U ng/Kg
SL-021-SA5A-SB-3.0-4.0(RES)	1,2,3,7,8,9-HXCDD	0.0402 ng/Kg	0.0402U ng/Kg
SL-021-SA5A-SB-3.0-4.0(RES)	1,2,3,7,8,9-HXCDF	0.0430 ng/Kg	0.0430U ng/Kg
SL-021-SA5A-SB-3.0-4.0(RES)	1,2,3,7,8-PECDD	0.0195 ng/Kg	0.0195U ng/Kg
SL-021-SA5A-SB-3.0-4.0(RES)	1,2,3,7,8-PECDF	0.0205 ng/Kg	0.0205U ng/Kg
SL-021-SA5A-SB-3.0-4.0(RES)	2,3,4,6,7,8-HXCDF	0.0275 ng/Kg	0.0275U ng/Kg
SL-021-SA5A-SB-3.0-4.0(RES)	2,3,4,7,8-PECDF	0.0380 ng/Kg	0.0380U ng/Kg
SL-021-SA5A-SB-3.0-4.0(RES)	2,3,7,8-TCDF	0.0132 ng/Kg	0.0132U ng/Kg
SL-021-SA5A-SB-3.0-4.0(RES)	OCDD	0.728 ng/Kg	0.728U ng/Kg
SL-021-SA5A-SB-3.0-4.0(RES)	OCDF	0.0888 ng/Kg	0.0888U ng/Kg
SL-022-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.159 ng/Kg	0.159U ng/Kg
SL-022-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.0711 ng/Kg	0.0711U ng/Kg
SL-022-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0107 ng/Kg	0.0107U ng/Kg
SL-022-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HxCDD	0.0129 ng/Kg	0.0129U ng/Kg
SL-022-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.0280 ng/Kg	0.0280U ng/Kg
SL-022-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDD	0.0327 ng/Kg	0.0327U ng/Kg
SL-022-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.0198 ng/Kg	0.0198U ng/Kg
SL-022-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDD	0.0424 ng/Kg	0.0424U ng/Kg
SL-022-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.0357 ng/Kg	0.0357U ng/Kg
SL-022-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.0273 ng/Kg	0.0273U ng/Kg
SL-022-SA5A-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.0228 ng/Kg	0.0228U ng/Kg
SL-022-SA5A-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.0577 ng/Kg	0.0577U ng/Kg
SL-022-SA5A-SB-4.0-5.0(RES)	2,3,7,8-TCDD	0.0105 ng/Kg	0.0105U ng/Kg
SL-022-SA5A-SB-4.0-5.0(RES)	2,3,7,8-TCDF	0.00983 ng/Kg	0.00983U ng/Kg
SL-022-SA5A-SB-4.0-5.0(RES)	OCDD	0.549 ng/Kg	0.549U ng/Kg
SL-022-SA5A-SB-4.0-5.0(RES)	OCDF	0.0776 ng/Kg	0.0776U ng/Kg
SL-050-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.166 ng/Kg	0.166U ng/Kg
SL-050-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.0536 ng/Kg	0.0536U ng/Kg
SL-050-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0220 ng/Kg	0.0220U ng/Kg
SL-050-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HxCDD	0.0339 ng/Kg	0.0339U ng/Kg
SL-050-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.0349 ng/Kg	0.0349U ng/Kg
SL-050-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDD	0.0385 ng/Kg	0.0385U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX056 **Laboratory: LL**

EDD Filename: DX056_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-050-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.0430 ng/Kg	0.0430U ng/Kg
SL-050-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDD	0.0425 ng/Kg	0.0425U ng/Kg
SL-050-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.0431 ng/Kg	0.0431U ng/Kg
SL-050-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDD	0.0731 ng/Kg	0.0731U ng/Kg
SL-050-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.0676 ng/Kg	0.0676U ng/Kg
SL-050-SA5A-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.0341 ng/Kg	0.0341U ng/Kg
SL-050-SA5A-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.0826 ng/Kg	0.0826U ng/Kg
SL-050-SA5A-SB-4.0-5.0(RES)	2,3,7,8-TCDD	0.0171 ng/Kg	0.0171U ng/Kg
SL-050-SA5A-SB-4.0-5.0(RES)	OCDD	0.531 ng/Kg	0.531U ng/Kg
SL-050-SA5A-SB-4.0-5.0(RES)	OCDF	0.109 ng/Kg	0.109U ng/Kg
SL-120-SA5A-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.541 ng/Kg	0.541U ng/Kg
SL-120-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.220 ng/Kg	0.220U ng/Kg
SL-120-SA5A-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.686 ng/Kg	0.686U ng/Kg
SL-120-SA5A-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.697 ng/Kg	0.697U ng/Kg
SL-120-SA5A-SS-0.0-0.5(RES)	2,3,7,8-TCDD	0.0204 ng/Kg	0.0204U ng/Kg
SL-121-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.149 ng/Kg	0.149U ng/Kg
SL-122-SA5A-SS-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDF	2.73 ng/Kg	2.73U ng/Kg
SL-122-SA5A-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.304 ng/Kg	0.304U ng/Kg
SL-122-SA5A-SS-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.181 ng/Kg	0.181U ng/Kg
SL-122-SA5A-SS-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.385 ng/Kg	0.385U ng/Kg
SL-122-SA5A-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.165 ng/Kg	0.165U ng/Kg
SL-122-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.0767 ng/Kg	0.0767U ng/Kg
SL-122-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.119 ng/Kg	0.119U ng/Kg
SL-122-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.209 ng/Kg	0.209U ng/Kg
SL-122-SA5A-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.163 ng/Kg	0.163U ng/Kg
SL-122-SA5A-SS-0.0-0.5(RES)	2,3,7,8-TCDD	0.0186 ng/Kg	0.0186U ng/Kg
SL-122-SA5A-SS-0.0-0.5(RES)	2,3,7,8-TCDF	0.0640 ng/Kg	0.0640U ng/Kg
SL-136-SA5A-SS-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDF	4.41 ng/Kg	4.41U ng/Kg
SL-136-SA5A-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.409 ng/Kg	0.409U ng/Kg
SL-136-SA5A-SS-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.525 ng/Kg	0.525U ng/Kg
SL-136-SA5A-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.301 ng/Kg	0.301U ng/Kg
SL-136-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.362 ng/Kg	0.362U ng/Kg
SL-136-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.139 ng/Kg	0.139U ng/Kg
SL-136-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.115 ng/Kg	0.115U ng/Kg
SL-136-SA5A-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.300 ng/Kg	0.300U ng/Kg
SL-136-SA5A-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.353 ng/Kg	0.353U ng/Kg
SL-136-SA5A-SS-0.0-0.5(RES)	2,3,7,8-TCDD	0.0351 ng/Kg	0.0351U ng/Kg
SL-136-SA5A-SS-0.0-0.5(RES)	2,3,7,8-TCDF	0.0626 ng/Kg	0.0626U ng/Kg
SL-138-SA5A-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.556 ng/Kg	0.556U ng/Kg
SL-138-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.318 ng/Kg	0.318U ng/Kg

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Method Blank Outlier Report

Lab Reporting Batch ID: DX056 **Laboratory: LL**

EDD Filename: DX056_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-138-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.136 ng/Kg	0.136U ng/Kg
SL-138-SA5A-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.421 ng/Kg	0.421U ng/Kg
SL-138-SA5A-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.366 ng/Kg	0.366U ng/Kg
SL-138-SA5A-SS-0.0-0.5(RES)	2,3,7,8-TCDD	0.0470 ng/Kg	0.0470U ng/Kg
SL-143-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.439 ng/Kg	0.439U ng/Kg
SL-143-SA5A-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.634 ng/Kg	0.634U ng/Kg
SL-143-SA5A-SS-0.0-0.5(RES)	2,3,7,8-TCDD	0.0422 ng/Kg	0.0422U ng/Kg
SL-233-SA5A-SS-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDF	1.50 ng/Kg	1.50U ng/Kg
SL-233-SA5A-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.123 ng/Kg	0.123U ng/Kg
SL-233-SA5A-SS-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.0527 ng/Kg	0.0527U ng/Kg
SL-233-SA5A-SS-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.648 ng/Kg	0.648U ng/Kg
SL-233-SA5A-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.116 ng/Kg	0.116U ng/Kg
SL-233-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDD	0.189 ng/Kg	0.189U ng/Kg
SL-233-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.129 ng/Kg	0.129U ng/Kg
SL-233-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.0461 ng/Kg	0.0461U ng/Kg
SL-233-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.0482 ng/Kg	0.0482U ng/Kg
SL-233-SA5A-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.135 ng/Kg	0.135U ng/Kg
SL-233-SA5A-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.265 ng/Kg	0.265U ng/Kg
SL-233-SA5A-SS-0.0-0.5(RES)	2,3,7,8-TCDD	0.0162 ng/Kg	0.0162U ng/Kg
SL-233-SA5A-SS-0.0-0.5(RES)	2,3,7,8-TCDF	0.0454 ng/Kg	0.0454U ng/Kg
SL-250-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.201 ng/Kg	0.201U ng/Kg
SL-251-SA5A-SS-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDF	1.86 ng/Kg	1.86U ng/Kg
SL-251-SA5A-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.172 ng/Kg	0.172U ng/Kg
SL-251-SA5A-SS-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.0701 ng/Kg	0.0701U ng/Kg
SL-251-SA5A-SS-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.157 ng/Kg	0.157U ng/Kg
SL-251-SA5A-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.113 ng/Kg	0.113U ng/Kg
SL-251-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.254 ng/Kg	0.254U ng/Kg
SL-251-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.0607 ng/Kg	0.0607U ng/Kg
SL-251-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.0552 ng/Kg	0.0552U ng/Kg
SL-251-SA5A-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.120 ng/Kg	0.120U ng/Kg
SL-251-SA5A-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.144 ng/Kg	0.144U ng/Kg
SL-251-SA5A-SS-0.0-0.5(RES)	2,3,7,8-TCDD	0.0126 ng/Kg	0.0126U ng/Kg
SL-251-SA5A-SS-0.0-0.5(RES)	2,3,7,8-TCDF	0.0432 ng/Kg	0.0432U ng/Kg

Reporting Limit Outliers

Lab Reporting Batch ID: DX056 **Laboratory: LL**

EDD Filename: DX056_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-007-SA5A-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	2.28	5.58	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.237	5.58	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.329	5.58	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.295	5.58	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	1.21	5.58	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.187	5.58	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.978	5.58	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.392	5.58	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.213	5.58	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.0995	5.58	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.345	5.58	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.204	5.58	PQL	ng/Kg	
	2,3,7,8-TCDD	JB	0.0321	1.12	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.0456	1.12	PQL	ng/Kg	
	OCDF	JB	6.44	11.2	PQL	ng/Kg	
SL-008-SA5A-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	4.47	5.52	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.354	5.52	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.286	5.52	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.554	5.52	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.753	5.52	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.241	5.52	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.738	5.52	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.237	5.52	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	0.167	5.52	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.113	5.52	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.503	5.52	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.265	5.52	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0146	1.10	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.0666	1.10	PQL	ng/Kg	
	OCDF	JB	7.62	11.0	PQL	ng/Kg	
SL-021-SA5A-SB-3.0-4.0	1,2,3,4,6,7,8-HPCDD	JB	0.130	5.55	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.0558	5.55	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0170	5.55	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0415	5.55	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.0152	5.55	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0149	5.55	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.0402	5.55	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.0430	5.55	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.0195	5.55	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0205	5.55	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.0275	5.55	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0380	5.55	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.0132	1.11	PQL	ng/Kg	
	OCDD	JB	0.728	11.1	PQL	ng/Kg	
	OCDF	JBQ	0.0888	11.1	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX056 **Laboratory: LL**

EDD Filename: DX056_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-022-SA5A-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JBQ	0.159	5.51	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.0711	5.51	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0107	5.51	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0129	5.51	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0280	5.51	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.0327	5.51	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0198	5.51	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.0424	5.51	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.0357	5.51	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0273	5.51	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0228	5.51	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.0577	5.51	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0105	1.10	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.00983	1.10	PQL	ng/Kg	
	OCDD	JB	0.549	11.0	PQL	ng/Kg	
	OCDF	JBQ	0.0776	11.0	PQL	ng/Kg	
SL-050-SA5A-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JB	0.166	5.73	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.0536	5.73	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0220	5.73	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0339	5.73	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.0349	5.73	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.0385	5.73	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0430	5.73	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.0425	5.73	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.0431	5.73	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0731	5.73	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.0676	5.73	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0341	5.73	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0826	5.73	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0171	1.15	PQL	ng/Kg	
	OCDD	JB	0.531	11.5	PQL	ng/Kg	
	OCDF	JB	0.109	11.5	PQL	ng/Kg	
SL-110-SA5A-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	4.04	5.92	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8-HxCDD	JB	2.88	5.92	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	4.61	5.92	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	2.54	5.92	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	4.24	5.92	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	1.74	5.92	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	1.36	5.92	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.632	5.92	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	2.97	5.92	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	2.02	5.92	PQL	ng/Kg	
	2,3,7,8-TCDD	JB	0.159	1.18	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.683	1.18	PQL	ng/Kg	
SL-119-SA5A-SS-0.0-0.5	1,2,3,7,8,9-HXCDF	JB	2.14	6.18	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	3.25	6.18	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	1.36	6.18	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	3.71	6.18	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.327	1.24	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	1.01	1.24	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX056 **Laboratory: LL**

EDD Filename: DX056_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-120-SA5A-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	0.855	5.54	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.575	5.54	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	1.45	5.54	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	1.90	5.54	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.541	5.54	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	1.04	5.54	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.220	5.54	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	0.338	5.54	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.363	5.54	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.686	5.54	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.697	5.54	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0204	1.11	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.530	1.11	PQL	ng/Kg	
SL-121-SA5A-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	4.54	5.54	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.544	5.54	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.209	5.54	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.614	5.54	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	1.14	5.54	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.415	5.54	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.472	5.54	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.149	5.54	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.126	5.54	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.914	5.54	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.434	5.54	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	1.19	5.54	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0333	1.11	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.354	1.11	PQL	ng/Kg	
	OCDF	JB	9.77	11.1	PQL	ng/Kg	
SL-122-SA5A-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	2.73	5.44	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.304	5.44	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.181	5.44	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.385	5.44	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.605	5.44	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.165	5.44	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.300	5.44	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.0767	5.44	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	0.119	5.44	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.209	5.44	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.163	5.44	PQL	ng/Kg	
	2,3,7,8-TCDD	JB	0.0186	1.09	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.0640	1.09	PQL	ng/Kg	
	OCDF	JB	7.08	10.9	PQL	ng/Kg	
SL-136-SA5A-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	4.41	5.46	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.409	5.46	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.525	5.46	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.614	5.46	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.301	5.46	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.366	5.46	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.362	5.46	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.139	5.46	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDF	JB	0.115	5.46	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.300	5.46	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.353	5.46	PQL	ng/Kg	
	2,3,7,8-TCDD	JB	0.0351	1.09	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.0626	1.09	PQL	ng/Kg	
	OCDF	JB	8.31	10.9	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX056 **Laboratory: LL**

EDD Filename: DX056_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-137-SA5A-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	2.56	5.97	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	1.05	5.97	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	3.16	5.97	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	3.95	5.97	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	1.45	5.97	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	1.88	5.97	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	1.18	5.97	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	0.549	5.97	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.751	5.97	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	1.77	5.97	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	1.42	5.97	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.0963	1.19	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.554	1.19	PQL	ng/Kg	
SL-138-SA5A-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	0.642	5.68	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.414	5.68	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	1.38	5.68	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.556	5.68	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.793	5.68	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.318	5.68	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.229	5.68	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDF	JB	0.136	5.68	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.421	5.68	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.366	5.68	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0470	1.14	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.139	1.14	PQL	ng/Kg	
SL-143-SA5A-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	0.897	5.66	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.445	5.66	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	2.28	5.66	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	1.82	5.66	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.791	5.66	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.844	5.66	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.439	5.66	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	0.283	5.66	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.725	5.66	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.634	5.66	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	1.45	5.66	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0422	1.13	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	1.12	1.13	PQL	ng/Kg	
SL-233-SA5A-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	1.50	5.49	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.123	5.49	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0527	5.49	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.648	5.49	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.264	5.49	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.116	5.49	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.189	5.49	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.129	5.49	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.0461	5.49	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.0482	5.49	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.135	5.49	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.265	5.49	PQL	ng/Kg	
	2,3,7,8-TCDD	JB	0.0162	1.10	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.0454	1.10	PQL	ng/Kg	
	OCDF	JB	3.38	11.0	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX056 **Laboratory: LL**

EDD Filename: DX056_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-250-SA5A-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	1.14	5.51	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.382	5.51	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.903	5.51	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	2.62	5.51	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.592	5.51	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.994	5.51	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JB	0.201	5.51	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.191	5.51	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.708	5.51	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	1.99	5.51	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0532	1.10	PQL	ng/Kg	
SL-251-SA5A-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	1.86	5.58	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.172	5.58	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.0701	5.58	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.157	5.58	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.518	5.58	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.113	5.58	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.317	5.58	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.254	5.58	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.0607	5.58	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.0552	5.58	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.120	5.58	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.144	5.58	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0126	1.12	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.0432	1.12	PQL	ng/Kg	
	OCDF	JB	3.69	11.2	PQL	ng/Kg	

LDC #: 25907B

VALIDATION FINDINGS WORKSHEET

Compound Quantitation and Reported CRQLs

Reviewer: QR

2nd Reviewer: [illegible]

METHOD: HRGC/HRMS Dioxins/Dibenzofurans (EPA Method 1613B)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were the correct internal standard (IS), quantitation ions and relative response factors (RRF) used to quantitate the compound?

Y N N/A Compound quantitation and CRQLs were adjusted to reflect all sample dilutions and dry weight factors (if necessary).

#	Date	Sample ID	Finding	~~Associated Samples~~	Qualifications
		SL-119-SASA-SS-00-0.5	OCDD	7 ~~linear~~ range Cal	J det/AP

SAMPLE DELIVERY GROUP

DX057

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
25-Feb-2011	SL-126-SA5A-SS-0.0-0.5	6216911	N	METHOD	1613B	III
25-Feb-2011	SL-127-SA5A-SS-0.0-0.5	6216912	N	METHOD	1613B	III
25-Feb-2011	SL-132-SA5A-SS-0.0-0.5	6216914	N	METHOD	1613B	III
25-Feb-2011	SL-053-SA5A-SB-3.0-4.0	6216925	N	METHOD	1613B	III
25-Feb-2011	SL-133-SA5A-SS-0.0-0.5	6216915	N	METHOD	1613B	III
25-Feb-2011	SL-146-SA5A-SS-0.0-0.5	6216920	N	METHOD	1613B	III
25-Feb-2011	SL-144-SA5A-SS-0.0-0.5	6216919	N	METHOD	1613B	III
25-Feb-2011	SL-054-SA5A-SB-4.0-5.0	6216926	N	METHOD	1613B	III
25-Feb-2011	SL-054-SA5A-SB-9.0-10.0	6216927	N	METHOD	1613B	III
25-Feb-2011	SL-055-SA5A-SB-2.0-3.0	6216928	N	METHOD	1613B	III
25-Feb-2011	SL-171-SA5A-SS-0.0-0.5	6216921	N	METHOD	1613B	III
25-Feb-2011	SL-173-SA5A-SS-0.0-0.5	6216923	N	METHOD	1613B	III
25-Feb-2011	SL-172-SA5A-SS-0.0-0.5	6216922	N	METHOD	1613B	III
25-Feb-2011	SL-174-SA5A-SS-0.0-0.5	6216924	N	METHOD	1613B	III
25-Feb-2011	SL-056-SA5A-SB-4.0-5.0	6216929	N	METHOD	1613B	III
25-Feb-2011	SL-056-SA5A-SB-7.0-8.0	6216930	N	METHOD	1613B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DX057 **Laboratory: LL**

EDD Filename: DX057_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B ***Matrix:*** SO

Sample ID: SL-053-SA5A-SB-3.0-4.0 ***Collected:*** 2/25/2011 9:28:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.196	JBQ	0.0167	MDL	5.64	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.0452	JBQ	0.00711	MDL	5.64	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0329	JB	0.0107	MDL	5.64	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0132	JB	0.00801	MDL	5.64	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0487	JB	0.0147	MDL	5.64	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0408	JB	0.00722	MDL	5.64	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0837	JBQ	0.0137	MDL	5.64	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0297	JBQ	0.00869	MDL	5.64	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0177	JBQ	0.0148	MDL	5.64	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0173	JBQ	0.00993	MDL	5.64	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0170	JBQ	0.00734	MDL	5.64	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0369	JBQ	0.00926	MDL	5.64	PQL	ng/Kg	U	B
OCDD	1.25	JB	0.0256	MDL	11.3	PQL	ng/Kg	U	B
OCDF	0.103	JB	0.0226	MDL	11.3	PQL	ng/Kg	U	B

Sample ID: SL-054-SA5A-SB-4.0-5.0 ***Collected:*** 2/25/2011 11:25:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.181	JBQ	0.0165	MDL	5.61	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.0493	JBQ	0.00628	MDL	5.61	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0244	JBQ	0.00998	MDL	5.61	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0167	JBQ	0.00863	MDL	5.61	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0277	JBQ	0.0152	MDL	5.61	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0143	JBQ	0.00695	MDL	5.61	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0218	JBQ	0.0148	MDL	5.61	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0317	JB	0.00908	MDL	5.61	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0287	JBQ	0.0167	MDL	5.61	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0125	JBQ	0.00942	MDL	5.61	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0193	JBQ	0.00774	MDL	5.61	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0466	JB	0.00919	MDL	5.61	PQL	ng/Kg	U	B
OCDD	0.713	JB	0.0258	MDL	11.2	PQL	ng/Kg	U	B
OCDF	0.0896	JBQ	0.0254	MDL	11.2	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX057 **Laboratory: LL**

EDD Filename: DX057_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: **SL-054-SA5A-SB-9.0-10.0** ***Collected:*** **2/25/2011 11:30:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.187	JBQ	0.0162	MDL	5.76	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.0613	JBQ	0.00611	MDL	5.76	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0267	JB	0.00910	MDL	5.76	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0180	JB	0.00772	MDL	5.76	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0107	JB	0.00680	MDL	5.76	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0242	JBQ	0.00818	MDL	5.76	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0103	JBQ	0.0100	MDL	5.76	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0128	JB	0.00703	MDL	5.76	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0606	JBQ	0.00979	MDL	5.76	PQL	ng/Kg	U	B
OCDD	0.814	JB	0.0256	MDL	11.5	PQL	ng/Kg	U	B
OCDF	0.116	JB	0.0204	MDL	11.5	PQL	ng/Kg	U	B

Sample ID: **SL-055-SA5A-SB-2.0-3.0** ***Collected:*** **2/25/2011 12:38:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.169	JB	0.0172	MDL	5.65	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.0519	JBQ	0.00689	MDL	5.65	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0246	JBQ	0.00983	MDL	5.65	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.216	JB	0.0250	MDL	5.65	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0704	JBQ	0.00780	MDL	5.65	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.380	JB	0.0247	MDL	5.65	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0425	JBQ	0.00983	MDL	5.65	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0245	JBQ	0.0173	MDL	5.65	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0237	JBQ	0.0108	MDL	5.65	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0199	JBQ	0.00847	MDL	5.65	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0315	JBQ	0.0110	MDL	5.65	PQL	ng/Kg	U	B
OCDD	0.719	JBQ	0.0226	MDL	11.3	PQL	ng/Kg	U	B
OCDF	0.123	JBQ	0.0236	MDL	11.3	PQL	ng/Kg	U	B

Sample ID: **SL-056-SA5A-SB-4.0-5.0** ***Collected:*** **2/25/2011 3:43:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.160	JB	0.0174	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.0491	JB	0.00711	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0201	JB	0.0109	MDL	5.73	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX057 **Laboratory: LL**

EDD Filename: DX057_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: **SL-056-SA5A-SB-4.0-5.0** ***Collected:*** **2/25/2011 3:43:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8-HXCDF	0.0223	JBQ	0.0106	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0501	JB	0.0192	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0223	JBQ	0.00906	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.152	JB	0.0190	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0892	JBQ	0.0117	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0357	JBQ	0.0209	MDL	5.73	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0205	JBQ	0.00963	MDL	5.73	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0366	JBQ	0.0110	MDL	5.73	PQL	ng/Kg	U	B
OCDD	0.724	JB	0.0251	MDL	11.5	PQL	ng/Kg	U	B
OCDF	0.120	JBQ	0.0237	MDL	11.5	PQL	ng/Kg	U	B

Sample ID: **SL-056-SA5A-SB-7.0-8.0** ***Collected:*** **2/25/2011 3:47:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.212	JBQ	0.0242	MDL	5.83	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.0500	JBQ	0.00828	MDL	5.83	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0267	JBQ	0.0117	MDL	5.83	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0194	JBQ	0.0107	MDL	5.83	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0439	JBQ	0.0184	MDL	5.83	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0175	JBQ	0.00956	MDL	5.83	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0315	JBQ	0.0196	MDL	5.83	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0335	JBQ	0.0121	MDL	5.83	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0622	JBQ	0.0245	MDL	5.83	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0289	JBQ	0.0162	MDL	5.83	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0207	JB	0.0104	MDL	5.83	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0526	JB	0.0152	MDL	5.83	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0336	JBQ	0.0296	MDL	1.17	PQL	ng/Kg	U	B
OCDD	0.795	JB	0.0280	MDL	11.7	PQL	ng/Kg	U	B

Sample ID: **SL-126-SA5A-SS-0.0-0.5** ***Collected:*** **2/25/2011 8:50:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	0.829	JB	0.0385	MDL	6.00	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.541	JB	0.0640	MDL	6.00	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	1.36	JB	0.0836	MDL	6.00	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX057 **Laboratory: LL**

EDD Filename: DX057_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B *Matrix:* SO

Sample ID: SL-126-SA5A-SS-0.0-0.5 *Collected:* 2/25/2011 8:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,6,7,8-HXCDD	1.64	JB	0.0598	MDL	6.00	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.802	JB	0.0603	MDL	6.00	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	1.28	JB	0.0483	MDL	6.00	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.828	JB	0.0421	MDL	6.00	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.364	JB	0.0305	MDL	6.00	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.393	JBQ	0.0369	MDL	6.00	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	1.00	JB	0.0376	MDL	6.00	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	1.01	JB	0.0383	MDL	6.00	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0584	JQ	0.0226	MDL	1.20	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.400	JB	0.0592	MDL	1.20	PQL	ng/Kg	U	B

Sample ID: SL-127-SA5A-SS-0.0-0.5 *Collected:* 2/25/2011 9:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	1.80	JB	0.0434	MDL	5.80	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	1.12	JB	0.0602	MDL	5.80	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	1.70	JB	0.0589	MDL	5.80	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	2.82	JB	0.0594	MDL	5.80	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	1.06	JB	0.0469	MDL	5.80	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	2.11	JB	0.0604	MDL	5.80	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.969	JB	0.0494	MDL	5.80	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.509	JB	0.0392	MDL	5.80	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.311	JB	0.0265	MDL	5.80	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	1.48	JB	0.0392	MDL	5.80	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.687	JB	0.0266	MDL	5.80	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0734	JQ	0.0209	MDL	1.16	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.193	JBQ	0.0383	MDL	1.16	PQL	ng/Kg	U	B

Sample ID: SL-132-SA5A-SS-0.0-0.5 *Collected:* 2/25/2011 9:20:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	0.590	JB	0.0307	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.229	JB	0.0414	MDL	5.66	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.558	JB	0.0359	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	1.12	JB	0.0424	MDL	5.66	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX057 **Laboratory: LL**

EDD Filename: DX057_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: **SL-132-SA5A-SS-0.0-0.5** ***Collected:*** **2/25/2011 9:20:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,6,7,8-HXCDF	0.398	JBQ	0.0299	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.532	JB	0.0397	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.411	JB	0.0313	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.136	JB	0.0215	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.124	JB	0.0170	MDL	5.66	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.584	JB	0.0277	MDL	5.66	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.341	JB	0.0170	MDL	5.66	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0656	JBQ	0.0251	MDL	1.13	PQL	ng/Kg	U	B

Sample ID: **SL-133-SA5A-SS-0.0-0.5** ***Collected:*** **2/25/2011 10:00:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	0.765	JB	0.0280	MDL	5.67	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.546	JB	0.0461	MDL	5.67	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.792	JB	0.0345	MDL	5.67	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	1.42	JB	0.0475	MDL	5.67	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.387	JBQ	0.0303	MDL	5.67	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	1.17	JB	0.0450	MDL	5.67	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.542	JB	0.0338	MDL	5.67	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.271	JB	0.0314	MDL	5.67	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.162	JBQ	0.0183	MDL	5.67	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.523	JB	0.0293	MDL	5.67	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.254	JB	0.0186	MDL	5.67	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0316	J	0.0200	MDL	1.13	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.0523	JBQ	0.0261	MDL	1.13	PQL	ng/Kg	U	B

Sample ID: **SL-144-SA5A-SS-0.0-0.5** ***Collected:*** **2/25/2011 11:05:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	4.43	JB	0.0226	MDL	5.70	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.416	JBQ	0.0335	MDL	5.70	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.296	JB	0.0497	MDL	5.70	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.548	JB	0.0442	MDL	5.70	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.752	JB	0.0503	MDL	5.70	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.231	JB	0.0382	MDL	5.70	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX057 **Laboratory: LL**

EDD Filename: DX057_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: **SL-144-SA5A-SS-0.0-0.5** ***Collected:*** **2/25/2011 11:05:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,7,8,9-HXCDD	0.511	JB	0.0487	MDL	5.70	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.191	JB	0.0418	MDL	5.70	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.133	JBQ	0.0214	MDL	5.70	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.105	JBQ	0.0192	MDL	5.70	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.235	JBQ	0.0382	MDL	5.70	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.136	JBQ	0.0185	MDL	5.70	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0503	JB	0.0223	MDL	1.14	PQL	ng/Kg	U	B
OCDF	8.41	JB	0.0307	MDL	11.4	PQL	ng/Kg	U	B

Sample ID: **SL-146-SA5A-SS-0.0-0.5** ***Collected:*** **2/25/2011 10:45:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,7,8-PECDD	3.07	JB	0.0812	MDL	5.73	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	1.68	JB	0.0423	MDL	5.73	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	3.26	JB	0.0428	MDL	5.73	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.225	J	0.0323	MDL	1.15	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.180	JB	0.0461	MDL	1.15	PQL	ng/Kg	U	B
OCDD	11500	EB	0.144	MDL	11.5	PQL	ng/Kg	J	*XI

Sample ID: **SL-171-SA5A-SS-0.0-0.5** ***Collected:*** **2/25/2011 1:10:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	1.30	JB	0.0177	MDL	5.68	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.139	JBQ	0.0247	MDL	5.68	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.181	JB	0.0427	MDL	5.68	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.390	JB	0.0325	MDL	5.68	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.545	JB	0.0451	MDL	5.68	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.0982	JB	0.0289	MDL	5.68	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.521	JB	0.0427	MDL	5.68	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.171	JB	0.0356	MDL	5.68	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.139	JBQ	0.0335	MDL	5.68	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.135	JB	0.0230	MDL	5.68	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.115	JBQ	0.0309	MDL	5.68	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.250	JB	0.0233	MDL	5.68	PQL	ng/Kg	U	B
2,3,7,8-TCDD	1.02	J	0.0272	MDL	1.14	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX057 **Laboratory: LL**

EDD Filename: DX057_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-171-SA5A-SS-0.0-0.5 **Collected:** 2/25/2011 1:10:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,3,7,8-TCDF	0.109	JB	0.0379	MDL	1.14	PQL	ng/Kg	U	B
OCDF	3.59	JB	0.0303	MDL	11.4	PQL	ng/Kg	U	B

Sample ID: SL-172-SA5A-SS-0.0-0.5 **Collected:** 2/25/2011 1:45:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	3.91	JB	0.0209	MDL	5.63	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.269	JBQ	0.0243	MDL	5.63	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.245	JB	0.0400	MDL	5.63	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	2.15	JB	0.0547	MDL	5.63	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.832	JB	0.0425	MDL	5.63	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.334	JB	0.0473	MDL	5.63	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.650	JB	0.0412	MDL	5.63	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.212	JB	0.0524	MDL	5.63	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.192	JB	0.0262	MDL	5.63	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.823	JB	0.0426	MDL	5.63	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.329	JB	0.0447	MDL	5.63	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.737	JB	0.0413	MDL	5.63	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0869	JQ	0.0212	MDL	1.13	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.179	JBQ	0.0617	MDL	1.13	PQL	ng/Kg	U	B
OCDF	12.3	B	0.0280	MDL	11.3	PQL	ng/Kg	U	B

Sample ID: SL-173-SA5A-SS-0.0-0.5 **Collected:** 2/25/2011 1:25:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	2.40	JB	0.0245	MDL	5.68	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.213	JB	0.0183	MDL	5.68	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.227	JB	0.0471	MDL	5.68	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.504	JB	0.0536	MDL	5.68	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.737	JB	0.0415	MDL	5.68	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.290	JB	0.0405	MDL	5.68	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.646	JB	0.0397	MDL	5.68	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.167	JBQ	0.0312	MDL	5.68	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.294	JBQ	0.0252	MDL	5.68	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.247	JB	0.0329	MDL	5.68	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX057 **Laboratory: LL**

EDD Filename: DX057_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: **SL-173-SA5A-SS-0.0-0.5** ***Collected:*** **2/25/2011 1:25:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,3,4,6,7,8-HXCDF	0.241	JB	0.0274	MDL	5.68	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.672	JB	0.0328	MDL	5.68	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.254	JB	0.0635	MDL	1.14	PQL	ng/Kg	U	B
OCDF	4.88	JB	0.0220	MDL	11.4	PQL	ng/Kg	U	B

Sample ID: **SL-174-SA5A-SS-0.0-0.5** ***Collected:*** **2/25/2011 2:10:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	0.934	JB	0.0171	MDL	5.91	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0875	JB	0.0181	MDL	5.91	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.125	JB	0.0385	MDL	5.91	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.334	JBQ	0.0336	MDL	5.91	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.621	JB	0.0395	MDL	5.91	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.0809	JB	0.0255	MDL	5.91	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.604	JBQ	0.0392	MDL	5.91	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.180	JB	0.0258	MDL	5.91	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.127	JB	0.0214	MDL	5.91	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0501	JB	0.0193	MDL	5.91	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0999	JB	0.0221	MDL	5.91	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.123	JB	0.0188	MDL	5.91	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0642	J	0.0181	MDL	1.18	PQL	ng/Kg	J	Z
OCDF	2.59	JB	0.0283	MDL	11.8	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX057 **Laboratory: LL**

EDD Filename: DX057_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
	Sampling to Leaching Estimation
	Sampling to Leaching Rejection
*XI	Compound Quantitation and CRQL
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Continuing Calibration Verification Percent Recovery Lower Estimation
C	Continuing Calibration Verification Percent Recovery Lower Rejection
C	Continuing Calibration Verification Percent Recovery Upper Estimation
C	Continuing Calibration Verification Percent Recovery Upper Rejection
C	Continuing Calibration Verification Relative Response Factor
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Relative Response Factor
C	Initial Calibration Verification Correlation Coefficient

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DX057 **Laboratory: LL**

EDD Filename: DX057_v1 **eQAPP Name: CDM_SSFL_110509**

C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Verification Percent Recovery Lower Estimation
C	Initial Calibration Verification Percent Recovery Lower Rejection
C	Initial Calibration Verification Percent Recovery Upper Estimation
C	Initial Calibration Verification Percent Recovery Upper Rejection
C	Initial Calibration Verification Relative Response Factor
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Laboratory Triplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination
F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DX057 **Laboratory: LL**

EDD Filename: DX057_v1 **eQAPP Name: CDM_SSFL_110509**

L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Laboratory Triplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Q	Matrix Spike Upper Rejection
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control Outlier Reports

DX057

Method Blank Outlier Report

Lab Reporting Batch ID: DX057 **Laboratory: LL**

EDD Filename: DX057_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLK0630B371932	3/8/2011 7:32:00 PM	1,2,3,4,6,7,8-HPCDD	1.58 ng/Kg	SL-053-SA5A-SB-3.0-4.0
		1,2,3,4,6,7,8-HPCDF	0.848 ng/Kg	SL-054-SA5A-SB-4.0-5.0
		1,2,3,4,7,8,9-HPCDF	0.702 ng/Kg	SL-054-SA5A-SB-9.0-10.0
		1,2,3,4,7,8-HxCDD	0.0426 ng/Kg	SL-055-SA5A-SB-2.0-3.0
		1,2,3,4,7,8-HXCDF	0.221 ng/Kg	SL-056-SA5A-SB-4.0-5.0
		1,2,3,6,7,8-HXCDD	0.106 ng/Kg	SL-056-SA5A-SB-7.0-8.0
		1,2,3,6,7,8-HXCDF	0.159 ng/Kg	SL-126-SA5A-SS-0.0-0.5
		1,2,3,7,8,9-HXCDD	0.133 ng/Kg	SL-127-SA5A-SS-0.0-0.5
		1,2,3,7,8,9-HXCDF	0.379 ng/Kg	SL-132-SA5A-SS-0.0-0.5
		1,2,3,7,8-PECDD	0.0750 ng/Kg	SL-133-SA5A-SS-0.0-0.5
		1,2,3,7,8-PECDF	0.160 ng/Kg	SL-144-SA5A-SS-0.0-0.5
		2,3,4,6,7,8-HXCDF	1.81 ng/Kg	SL-146-SA5A-SS-0.0-0.5
		2,3,4,7,8-PECDF	0.477 ng/Kg	SL-171-SA5A-SS-0.0-0.5
		2,3,7,8-TCDF	0.0934 ng/Kg	SL-172-SA5A-SS-0.0-0.5
		OCDD	3.07 ng/Kg	SL-173-SA5A-SS-0.0-0.5
		OCDF	2.51 ng/Kg	SL-174-SA5A-SS-0.0-0.5

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-053-SA5A-SB-3.0-4.0(RES)	1,2,3,4,6,7,8-HPCDD	0.196 ng/Kg	0.196U ng/Kg
SL-053-SA5A-SB-3.0-4.0(RES)	1,2,3,4,6,7,8-HPCDF	0.0452 ng/Kg	0.0452U ng/Kg
SL-053-SA5A-SB-3.0-4.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0329 ng/Kg	0.0329U ng/Kg
SL-053-SA5A-SB-3.0-4.0(RES)	1,2,3,4,7,8-HXCDF	0.0132 ng/Kg	0.0132U ng/Kg
SL-053-SA5A-SB-3.0-4.0(RES)	1,2,3,6,7,8-HXCDD	0.0487 ng/Kg	0.0487U ng/Kg
SL-053-SA5A-SB-3.0-4.0(RES)	1,2,3,6,7,8-HXCDF	0.0408 ng/Kg	0.0408U ng/Kg
SL-053-SA5A-SB-3.0-4.0(RES)	1,2,3,7,8,9-HXCDD	0.0837 ng/Kg	0.0837U ng/Kg
SL-053-SA5A-SB-3.0-4.0(RES)	1,2,3,7,8,9-HXCDF	0.0297 ng/Kg	0.0297U ng/Kg
SL-053-SA5A-SB-3.0-4.0(RES)	1,2,3,7,8-PECDD	0.0177 ng/Kg	0.0177U ng/Kg
SL-053-SA5A-SB-3.0-4.0(RES)	1,2,3,7,8-PECDF	0.0173 ng/Kg	0.0173U ng/Kg
SL-053-SA5A-SB-3.0-4.0(RES)	2,3,4,6,7,8-HXCDF	0.0170 ng/Kg	0.0170U ng/Kg
SL-053-SA5A-SB-3.0-4.0(RES)	2,3,4,7,8-PECDF	0.0369 ng/Kg	0.0369U ng/Kg
SL-053-SA5A-SB-3.0-4.0(RES)	OCDD	1.25 ng/Kg	1.25U ng/Kg
SL-053-SA5A-SB-3.0-4.0(RES)	OCDF	0.103 ng/Kg	0.103U ng/Kg
SL-054-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.181 ng/Kg	0.181U ng/Kg
SL-054-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.0493 ng/Kg	0.0493U ng/Kg
SL-054-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0244 ng/Kg	0.0244U ng/Kg
SL-054-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.0167 ng/Kg	0.0167U ng/Kg
SL-054-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDD	0.0277 ng/Kg	0.0277U ng/Kg
SL-054-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.0143 ng/Kg	0.0143U ng/Kg
SL-054-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDD	0.0218 ng/Kg	0.0218U ng/Kg
SL-054-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.0317 ng/Kg	0.0317U ng/Kg
SL-054-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDD	0.0287 ng/Kg	0.0287U ng/Kg
SL-054-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.0125 ng/Kg	0.0125U ng/Kg
SL-054-SA5A-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.0193 ng/Kg	0.0193U ng/Kg
SL-054-SA5A-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.0466 ng/Kg	0.0466U ng/Kg
SL-054-SA5A-SB-4.0-5.0(RES)	OCDD	0.713 ng/Kg	0.713U ng/Kg
SL-054-SA5A-SB-4.0-5.0(RES)	OCDF	0.0896 ng/Kg	0.0896U ng/Kg
SL-054-SA5A-SB-9.0-10.0(RES)	1,2,3,4,6,7,8-HPCDD	0.187 ng/Kg	0.187U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX057 **Laboratory: LL**

EDD Filename: DX057_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-054-SA5A-SB-9.0-10.0(RES)	1,2,3,4,6,7,8-HPCDF	0.0613 ng/Kg	0.0613U ng/Kg
SL-054-SA5A-SB-9.0-10.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0267 ng/Kg	0.0267U ng/Kg
SL-054-SA5A-SB-9.0-10.0(RES)	1,2,3,4,7,8-HXCDF	0.0180 ng/Kg	0.0180U ng/Kg
SL-054-SA5A-SB-9.0-10.0(RES)	1,2,3,6,7,8-HXCDF	0.0107 ng/Kg	0.0107U ng/Kg
SL-054-SA5A-SB-9.0-10.0(RES)	1,2,3,7,8,9-HXCDF	0.0242 ng/Kg	0.0242U ng/Kg
SL-054-SA5A-SB-9.0-10.0(RES)	1,2,3,7,8-PECDF	0.0103 ng/Kg	0.0103U ng/Kg
SL-054-SA5A-SB-9.0-10.0(RES)	2,3,4,6,7,8-HXCDF	0.0128 ng/Kg	0.0128U ng/Kg
SL-054-SA5A-SB-9.0-10.0(RES)	2,3,4,7,8-PECDF	0.0606 ng/Kg	0.0606U ng/Kg
SL-054-SA5A-SB-9.0-10.0(RES)	OCDD	0.814 ng/Kg	0.814U ng/Kg
SL-054-SA5A-SB-9.0-10.0(RES)	OCDF	0.116 ng/Kg	0.116U ng/Kg
SL-055-SA5A-SB-2.0-3.0(RES)	1,2,3,4,6,7,8-HPCDD	0.169 ng/Kg	0.169U ng/Kg
SL-055-SA5A-SB-2.0-3.0(RES)	1,2,3,4,6,7,8-HPCDF	0.0519 ng/Kg	0.0519U ng/Kg
SL-055-SA5A-SB-2.0-3.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0246 ng/Kg	0.0246U ng/Kg
SL-055-SA5A-SB-2.0-3.0(RES)	1,2,3,6,7,8-HXCDD	0.216 ng/Kg	0.216U ng/Kg
SL-055-SA5A-SB-2.0-3.0(RES)	1,2,3,6,7,8-HXCDF	0.0704 ng/Kg	0.0704U ng/Kg
SL-055-SA5A-SB-2.0-3.0(RES)	1,2,3,7,8,9-HXCDD	0.380 ng/Kg	0.380U ng/Kg
SL-055-SA5A-SB-2.0-3.0(RES)	1,2,3,7,8,9-HXCDF	0.0425 ng/Kg	0.0425U ng/Kg
SL-055-SA5A-SB-2.0-3.0(RES)	1,2,3,7,8-PECDD	0.0245 ng/Kg	0.0245U ng/Kg
SL-055-SA5A-SB-2.0-3.0(RES)	1,2,3,7,8-PECDF	0.0237 ng/Kg	0.0237U ng/Kg
SL-055-SA5A-SB-2.0-3.0(RES)	2,3,4,6,7,8-HXCDF	0.0199 ng/Kg	0.0199U ng/Kg
SL-055-SA5A-SB-2.0-3.0(RES)	2,3,4,7,8-PECDF	0.0315 ng/Kg	0.0315U ng/Kg
SL-055-SA5A-SB-2.0-3.0(RES)	OCDD	0.719 ng/Kg	0.719U ng/Kg
SL-055-SA5A-SB-2.0-3.0(RES)	OCDF	0.123 ng/Kg	0.123U ng/Kg
SL-056-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.160 ng/Kg	0.160U ng/Kg
SL-056-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.0491 ng/Kg	0.0491U ng/Kg
SL-056-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0201 ng/Kg	0.0201U ng/Kg
SL-056-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.0223 ng/Kg	0.0223U ng/Kg
SL-056-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDD	0.0501 ng/Kg	0.0501U ng/Kg
SL-056-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.0223 ng/Kg	0.0223U ng/Kg
SL-056-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDD	0.152 ng/Kg	0.152U ng/Kg
SL-056-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.0892 ng/Kg	0.0892U ng/Kg
SL-056-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDD	0.0357 ng/Kg	0.0357U ng/Kg
SL-056-SA5A-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.0205 ng/Kg	0.0205U ng/Kg
SL-056-SA5A-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.0366 ng/Kg	0.0366U ng/Kg
SL-056-SA5A-SB-4.0-5.0(RES)	OCDD	0.724 ng/Kg	0.724U ng/Kg
SL-056-SA5A-SB-4.0-5.0(RES)	OCDF	0.120 ng/Kg	0.120U ng/Kg
SL-056-SA5A-SB-7.0-8.0(RES)	1,2,3,4,6,7,8-HPCDD	0.212 ng/Kg	0.212U ng/Kg
SL-056-SA5A-SB-7.0-8.0(RES)	1,2,3,4,6,7,8-HPCDF	0.0500 ng/Kg	0.0500U ng/Kg
SL-056-SA5A-SB-7.0-8.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0267 ng/Kg	0.0267U ng/Kg
SL-056-SA5A-SB-7.0-8.0(RES)	1,2,3,4,7,8-HXCDF	0.0194 ng/Kg	0.0194U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX057 **Laboratory: LL**

EDD Filename: DX057_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-056-SA5A-SB-7.0-8.0(RES)	1,2,3,6,7,8-HXCDD	0.0439 ng/Kg	0.0439U ng/Kg
SL-056-SA5A-SB-7.0-8.0(RES)	1,2,3,6,7,8-HXCDF	0.0175 ng/Kg	0.0175U ng/Kg
SL-056-SA5A-SB-7.0-8.0(RES)	1,2,3,7,8,9-HXCDD	0.0315 ng/Kg	0.0315U ng/Kg
SL-056-SA5A-SB-7.0-8.0(RES)	1,2,3,7,8,9-HXCDF	0.0335 ng/Kg	0.0335U ng/Kg
SL-056-SA5A-SB-7.0-8.0(RES)	1,2,3,7,8-PECDD	0.0622 ng/Kg	0.0622U ng/Kg
SL-056-SA5A-SB-7.0-8.0(RES)	1,2,3,7,8-PECDF	0.0289 ng/Kg	0.0289U ng/Kg
SL-056-SA5A-SB-7.0-8.0(RES)	2,3,4,6,7,8-HXCDF	0.0207 ng/Kg	0.0207U ng/Kg
SL-056-SA5A-SB-7.0-8.0(RES)	2,3,4,7,8-PECDF	0.0526 ng/Kg	0.0526U ng/Kg
SL-056-SA5A-SB-7.0-8.0(RES)	2,3,7,8-TCDF	0.0336 ng/Kg	0.0336U ng/Kg
SL-056-SA5A-SB-7.0-8.0(RES)	OCDD	0.795 ng/Kg	0.795U ng/Kg
SL-126-SA5A-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.829 ng/Kg	0.829U ng/Kg
SL-126-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.828 ng/Kg	0.828U ng/Kg
SL-126-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.364 ng/Kg	0.364U ng/Kg
SL-126-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.393 ng/Kg	0.393U ng/Kg
SL-126-SA5A-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	1.00 ng/Kg	1.00U ng/Kg
SL-126-SA5A-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	1.01 ng/Kg	1.01U ng/Kg
SL-126-SA5A-SS-0.0-0.5(RES)	2,3,7,8-TCDF	0.400 ng/Kg	0.400U ng/Kg
SL-127-SA5A-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	1.80 ng/Kg	1.80U ng/Kg
SL-127-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.969 ng/Kg	0.969U ng/Kg
SL-127-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.311 ng/Kg	0.311U ng/Kg
SL-127-SA5A-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	1.48 ng/Kg	1.48U ng/Kg
SL-127-SA5A-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.687 ng/Kg	0.687U ng/Kg
SL-127-SA5A-SS-0.0-0.5(RES)	2,3,7,8-TCDF	0.193 ng/Kg	0.193U ng/Kg
SL-132-SA5A-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.590 ng/Kg	0.590U ng/Kg
SL-132-SA5A-SS-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.558 ng/Kg	0.558U ng/Kg
SL-132-SA5A-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.398 ng/Kg	0.398U ng/Kg
SL-132-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDD	0.532 ng/Kg	0.532U ng/Kg
SL-132-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.411 ng/Kg	0.411U ng/Kg
SL-132-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.136 ng/Kg	0.136U ng/Kg
SL-132-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.124 ng/Kg	0.124U ng/Kg
SL-132-SA5A-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.584 ng/Kg	0.584U ng/Kg
SL-132-SA5A-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.341 ng/Kg	0.341U ng/Kg
SL-132-SA5A-SS-0.0-0.5(RES)	2,3,7,8-TCDF	0.0656 ng/Kg	0.0656U ng/Kg
SL-133-SA5A-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.765 ng/Kg	0.765U ng/Kg
SL-133-SA5A-SS-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.792 ng/Kg	0.792U ng/Kg
SL-133-SA5A-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.387 ng/Kg	0.387U ng/Kg
SL-133-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.542 ng/Kg	0.542U ng/Kg
SL-133-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.271 ng/Kg	0.271U ng/Kg
SL-133-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.162 ng/Kg	0.162U ng/Kg
SL-133-SA5A-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.523 ng/Kg	0.523U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX057 **Laboratory: LL**

EDD Filename: DX057_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-133-SA5A-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.254 ng/Kg	0.254U ng/Kg
SL-133-SA5A-SS-0.0-0.5(RES)	2,3,7,8-TCDF	0.0523 ng/Kg	0.0523U ng/Kg
SL-144-SA5A-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.416 ng/Kg	0.416U ng/Kg
SL-144-SA5A-SS-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.548 ng/Kg	0.548U ng/Kg
SL-144-SA5A-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.231 ng/Kg	0.231U ng/Kg
SL-144-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDD	0.511 ng/Kg	0.511U ng/Kg
SL-144-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.191 ng/Kg	0.191U ng/Kg
SL-144-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.133 ng/Kg	0.133U ng/Kg
SL-144-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.105 ng/Kg	0.105U ng/Kg
SL-144-SA5A-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.235 ng/Kg	0.235U ng/Kg
SL-144-SA5A-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.136 ng/Kg	0.136U ng/Kg
SL-144-SA5A-SS-0.0-0.5(RES)	2,3,7,8-TCDF	0.0503 ng/Kg	0.0503U ng/Kg
SL-144-SA5A-SS-0.0-0.5(RES)	OCDF	8.41 ng/Kg	8.41U ng/Kg
SL-146-SA5A-SS-0.0-0.5(RES)	2,3,7,8-TCDF	0.180 ng/Kg	0.180U ng/Kg
SL-171-SA5A-SS-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDF	1.30 ng/Kg	1.30U ng/Kg
SL-171-SA5A-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.139 ng/Kg	0.139U ng/Kg
SL-171-SA5A-SS-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.181 ng/Kg	0.181U ng/Kg
SL-171-SA5A-SS-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.390 ng/Kg	0.390U ng/Kg
SL-171-SA5A-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.0982 ng/Kg	0.0982U ng/Kg
SL-171-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDD	0.521 ng/Kg	0.521U ng/Kg
SL-171-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.171 ng/Kg	0.171U ng/Kg
SL-171-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.139 ng/Kg	0.139U ng/Kg
SL-171-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.135 ng/Kg	0.135U ng/Kg
SL-171-SA5A-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.115 ng/Kg	0.115U ng/Kg
SL-171-SA5A-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.250 ng/Kg	0.250U ng/Kg
SL-171-SA5A-SS-0.0-0.5(RES)	2,3,7,8-TCDF	0.109 ng/Kg	0.109U ng/Kg
SL-171-SA5A-SS-0.0-0.5(RES)	OCDF	3.59 ng/Kg	3.59U ng/Kg
SL-172-SA5A-SS-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDF	3.91 ng/Kg	3.91U ng/Kg
SL-172-SA5A-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.269 ng/Kg	0.269U ng/Kg
SL-172-SA5A-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.334 ng/Kg	0.334U ng/Kg
SL-172-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDD	0.650 ng/Kg	0.650U ng/Kg
SL-172-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.212 ng/Kg	0.212U ng/Kg
SL-172-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.192 ng/Kg	0.192U ng/Kg
SL-172-SA5A-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.329 ng/Kg	0.329U ng/Kg
SL-172-SA5A-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.737 ng/Kg	0.737U ng/Kg
SL-172-SA5A-SS-0.0-0.5(RES)	2,3,7,8-TCDF	0.179 ng/Kg	0.179U ng/Kg
SL-172-SA5A-SS-0.0-0.5(RES)	OCDF	12.3 ng/Kg	12.3U ng/Kg
SL-173-SA5A-SS-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDF	2.40 ng/Kg	2.40U ng/Kg
SL-173-SA5A-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.213 ng/Kg	0.213U ng/Kg
SL-173-SA5A-SS-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.504 ng/Kg	0.504U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX057 **Laboratory: LL**

EDD Filename: DX057_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-173-SA5A-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.290 ng/Kg	0.290U ng/Kg
SL-173-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDD	0.646 ng/Kg	0.646U ng/Kg
SL-173-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.167 ng/Kg	0.167U ng/Kg
SL-173-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.294 ng/Kg	0.294U ng/Kg
SL-173-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.247 ng/Kg	0.247U ng/Kg
SL-173-SA5A-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.241 ng/Kg	0.241U ng/Kg
SL-173-SA5A-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.672 ng/Kg	0.672U ng/Kg
SL-173-SA5A-SS-0.0-0.5(RES)	2,3,7,8-TCDF	0.254 ng/Kg	0.254U ng/Kg
SL-173-SA5A-SS-0.0-0.5(RES)	OCDF	4.88 ng/Kg	4.88U ng/Kg
SL-174-SA5A-SS-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDF	0.934 ng/Kg	0.934U ng/Kg
SL-174-SA5A-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.0875 ng/Kg	0.0875U ng/Kg
SL-174-SA5A-SS-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.125 ng/Kg	0.125U ng/Kg
SL-174-SA5A-SS-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.334 ng/Kg	0.334U ng/Kg
SL-174-SA5A-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.0809 ng/Kg	0.0809U ng/Kg
SL-174-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDD	0.604 ng/Kg	0.604U ng/Kg
SL-174-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.180 ng/Kg	0.180U ng/Kg
SL-174-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.127 ng/Kg	0.127U ng/Kg
SL-174-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.0501 ng/Kg	0.0501U ng/Kg
SL-174-SA5A-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.0999 ng/Kg	0.0999U ng/Kg
SL-174-SA5A-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.123 ng/Kg	0.123U ng/Kg
SL-174-SA5A-SS-0.0-0.5(RES)	OCDF	2.59 ng/Kg	2.59U ng/Kg

Reporting Limit Outliers

Lab Reporting Batch ID: DX057 **Laboratory: LL**

EDD Filename: DX057_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-053-SA5A-SB-3.0-4.0	1,2,3,4,6,7,8-HPCDD	JBQ	0.196	5.64	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JBQ	0.0452	5.64	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.0329	5.64	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.0132	5.64	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.0487	5.64	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0408	5.64	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.0837	5.64	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.0297	5.64	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0177	5.64	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0173	5.64	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0170	5.64	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0369	5.64	PQL	ng/Kg	
	OCDD	JB	1.25	11.3	PQL	ng/Kg	
	OCDF	JB	0.103	11.3	PQL	ng/Kg	
SL-054-SA5A-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JBQ	0.181	5.61	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JBQ	0.0493	5.61	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0244	5.61	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0167	5.61	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.0277	5.61	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0143	5.61	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.0218	5.61	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.0317	5.61	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0287	5.61	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0125	5.61	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0193	5.61	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.0466	5.61	PQL	ng/Kg	
	OCDD	JB	0.713	11.2	PQL	ng/Kg	
	OCDF	JBQ	0.0896	11.2	PQL	ng/Kg	
SL-054-SA5A-SB-9.0-10.0	1,2,3,4,6,7,8-HPCDD	JBQ	0.187	5.76	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JBQ	0.0613	5.76	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.0267	5.76	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.0180	5.76	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0107	5.76	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.0242	5.76	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0103	5.76	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.0128	5.76	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0606	5.76	PQL	ng/Kg	
	OCDD	JB	0.814	11.5	PQL	ng/Kg	
	OCDF	JB	0.116	11.5	PQL	ng/Kg	
SL-055-SA5A-SB-2.0-3.0	1,2,3,4,6,7,8-HPCDD	JB	0.169	5.65	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JBQ	0.0519	5.65	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0246	5.65	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.216	5.65	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0704	5.65	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.380	5.65	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.0425	5.65	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0245	5.65	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0237	5.65	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0199	5.65	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0315	5.65	PQL	ng/Kg	
	OCDD	JBQ	0.719	11.3	PQL	ng/Kg	
	OCDF	JBQ	0.123	11.3	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX057 **Laboratory: LL**

EDD Filename: DX057_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-056-SA5A-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JB	0.160	5.73	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.0491	5.73	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.0201	5.73	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0223	5.73	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.0501	5.73	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0223	5.73	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.152	5.73	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.0892	5.73	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0357	5.73	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0205	5.73	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0366	5.73	PQL	ng/Kg	
	OCDD	JB	0.724	11.5	PQL	ng/Kg	
	OCDF	JBQ	0.120	11.5	PQL	ng/Kg	
SL-056-SA5A-SB-7.0-8.0	1,2,3,4,6,7,8-HPCDD	JBQ	0.212	5.83	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JBQ	0.0500	5.83	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0267	5.83	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0194	5.83	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.0439	5.83	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0175	5.83	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.0315	5.83	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.0335	5.83	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0622	5.83	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0289	5.83	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.0207	5.83	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.0526	5.83	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.0336	1.17	PQL	ng/Kg	
	OCDD	JB	0.795	11.7	PQL	ng/Kg	
SL-126-SA5A-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	0.829	6.00	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8-HxCDD	JB	0.541	6.00	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	1.36	6.00	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	1.64	6.00	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.802	6.00	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	1.28	6.00	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.828	6.00	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.364	6.00	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.393	6.00	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	1.00	6.00	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	1.01	6.00	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0584	1.20	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.400	1.20	PQL	ng/Kg	
SL-127-SA5A-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	1.80	5.80	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8-HxCDD	JB	1.12	5.80	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	1.70	5.80	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	2.82	5.80	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	1.06	5.80	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	2.11	5.80	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.969	5.80	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.509	5.80	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.311	5.80	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	1.48	5.80	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.687	5.80	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0734	1.16	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.193	1.16	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX057 **Laboratory: LL**

EDD Filename: DX057_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-132-SA5A-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	0.590	5.66	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8-HxCDD	JB	0.229	5.66	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.558	5.66	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	1.12	5.66	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.398	5.66	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.532	5.66	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.411	5.66	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.136	5.66	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.124	5.66	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.584	5.66	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.341	5.66	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.0656	1.13	PQL	ng/Kg	
SL-133-SA5A-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	0.765	5.67	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8-HxCDD	JB	0.546	5.67	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.792	5.67	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	1.42	5.67	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.387	5.67	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	1.17	5.67	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.542	5.67	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.271	5.67	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.162	5.67	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.523	5.67	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.254	5.67	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.0316	1.13	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.0523	1.13	PQL	ng/Kg	
SL-144-SA5A-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	4.43	5.70	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JBQ	0.416	5.70	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.296	5.70	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.548	5.70	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.752	5.70	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.231	5.70	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.511	5.70	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.191	5.70	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.133	5.70	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.105	5.70	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.235	5.70	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.136	5.70	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.0503	1.14	PQL	ng/Kg	
	OCDF	JB	8.41	11.4	PQL	ng/Kg	
SL-146-SA5A-SS-0.0-0.5	1,2,3,7,8-PECDD	JB	3.07	5.73	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDF	JB	1.68	5.73	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	3.26	5.73	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.225	1.15	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.180	1.15	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX057 **Laboratory: LL**

EDD Filename: DX057_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-171-SA5A-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	1.30	5.68	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JBQ	0.139	5.68	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.181	5.68	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.390	5.68	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.545	5.68	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0982	5.68	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.521	5.68	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.171	5.68	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.139	5.68	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.135	5.68	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.115	5.68	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.250	5.68	PQL	ng/Kg	
	2,3,7,8-TCDD	J	1.02	1.14	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.109	1.14	PQL	ng/Kg	
	OCDF	JB	3.59	11.4	PQL	ng/Kg	
SL-172-SA5A-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	3.91	5.63	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JBQ	0.269	5.63	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.245	5.63	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	2.15	5.63	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.832	5.63	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.334	5.63	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.650	5.63	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.212	5.63	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.192	5.63	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.823	5.63	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.329	5.63	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.737	5.63	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0869	1.13	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.179	1.13	PQL	ng/Kg	
SL-173-SA5A-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	2.40	5.68	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JB	0.213	5.68	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.227	5.68	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.504	5.68	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.737	5.68	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.290	5.68	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.646	5.68	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.167	5.68	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.294	5.68	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.247	5.68	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.241	5.68	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.672	5.68	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.254	1.14	PQL	ng/Kg	
	OCDF	JB	4.88	11.4	PQL	ng/Kg	
SL-174-SA5A-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	0.934	5.91	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JB	0.0875	5.91	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.125	5.91	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.334	5.91	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.621	5.91	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0809	5.91	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.604	5.91	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.180	5.91	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.127	5.91	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.0501	5.91	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.0999	5.91	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.123	5.91	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.0642	1.18	PQL	ng/Kg	
	OCDF	JB	2.59	11.8	PQL	ng/Kg	

LDC #: 25907C

VALIDATION FINDINGS WORKSHEET

Compound Quantitation and Reported CRQLs

Reviewer: OC

2nd Reviewer: C

METHOD: HRGC/HRMS Dioxins/Dibenzofurans (EPA Method 1613B)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were the correct internal standard (IS), quantitation ions and relative response factors (RRF) used to quantitate the compound?

Y N N/A Compound quantitation and CRQLs were adjusted to reflect all sample dilutions and dry weight factors (if necessary).

#	Date	Sample ID	Finding	~~Associated Samples~~	Qualifications
		SL-146-SA5A-SS0.0-0.5	OCDD	7 ~~linear~~ cal range	J det/~~A~~P

SAMPLE DELIVERY GROUP

DX058

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
28-Feb-2011	SL-145-SA5A-SS-0.0-0.5	6217831	N	METHOD	1613B	III
28-Feb-2011	SL-111-SA5A-SS-0.0-0.5	6217830	N	METHOD	1613B	III
28-Feb-2011	SL-253-SA5A-SS-0.0-0.5	6217832	N	METHOD	1613B	III
28-Feb-2011	SL-087-SA5A-SS-0.0-0.5	6217822	N	METHOD	1613B	III
28-Feb-2011	SL-087-SA5A-SS-0.0-0.5MS	6217823	MS	METHOD	1613B	III
28-Feb-2011	SL-087-SA5A-SS-0.0-0.5MSD	6217824	MSD	METHOD	1613B	III
28-Feb-2011	DUP-05-SA5A-QC-022811	6217821	FD	METHOD	1613B	III
28-Feb-2011	EB02-SA5A-022811	6217834	EB	METHOD	1613B	III
28-Feb-2011	SL-106-SA5A-SS-0.0-0.5	6217826	N	METHOD	1613B	III
28-Feb-2011	SL-105-SA5A-SS-0.0-0.5	6217825	N	METHOD	1613B	III
28-Feb-2011	SL-107-SA5A-SS-0.0-0.5	6217827	N	METHOD	1613B	III
28-Feb-2011	SL-108-SA5A-SS-0.0-0.5	6217828	N	METHOD	1613B	III
28-Feb-2011	SL-109-SA5A-SS-0.0-0.5	6217829	N	METHOD	1613B	III
28-Feb-2011	SL-237-SA5A-SB-4.0-5.0	6217836	N	METHOD	1613B	III
28-Feb-2011	EB03-SA5A-022811	6217835	EB	METHOD	1613B	III
28-Feb-2011	SL-237-SA5A-SB-9.0-10.0	6217837	N	METHOD	1613B	III
28-Feb-2011	SL-255-SA5A-SS-0.0-0.5	6217833	N	METHOD	1613B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DX058 **Laboratory: LL**

EDD Filename: DX058_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **AQ**

Sample ID: **EB02-SA5A-022811** ***Collected:*** **2/28/2011 12:35:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	2.22	JBQ	0.130	MDL	10.6	PQL	pg/L	U	B
1,2,3,4,6,7,8-HPCDF	4.13	JB	0.0905	MDL	10.6	PQL	pg/L	U	B
1,2,3,4,7,8,9-HPCDF	0.509	JBQ	0.0995	MDL	10.6	PQL	pg/L	U	B
1,2,3,4,7,8-HxCDD	0.123	JBQ	0.0932	MDL	10.6	PQL	pg/L	U	B
1,2,3,4,7,8-HXCDF	0.597	JBQ	0.0984	MDL	10.6	PQL	pg/L	U	B
1,2,3,6,7,8-HXCDD	0.210	JBQ	0.0967	MDL	10.6	PQL	pg/L	U	B
1,2,3,6,7,8-HXCDF	0.522	JB	0.0932	MDL	10.6	PQL	pg/L	U	B
1,2,3,7,8,9-HXCDD	0.109	JBQ	0.0903	MDL	10.6	PQL	pg/L	U	B
1,2,3,7,8-PECDD	0.106	JBQ	0.105	MDL	10.6	PQL	pg/L	U	B
1,2,3,7,8-PECDF	0.167	JB	0.0624	MDL	10.6	PQL	pg/L	U	B
2,3,4,6,7,8-HXCDF	1.01	JBQ	0.0846	MDL	10.6	PQL	pg/L	U	B
2,3,4,7,8-PECDF	0.571	JBQ	0.0576	MDL	10.6	PQL	pg/L	U	B
2,3,7,8-TCDF	0.111	JBQ	0.0745	MDL	2.13	PQL	pg/L	U	B
OCDD	4.10	JB	0.190	MDL	21.3	PQL	pg/L	U	B
OCDF	2.20	JB	0.140	MDL	21.3	PQL	pg/L	U	B

Sample ID: **EB03-SA5A-022811** ***Collected:*** **2/28/2011 3:40:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	3.42	JBQ	0.159	MDL	9.53	PQL	pg/L	U	B
1,2,3,4,6,7,8-HPCDF	6.67	JB	0.106	MDL	9.53	PQL	pg/L	U	B
1,2,3,4,7,8,9-HPCDF	0.551	JB	0.118	MDL	9.53	PQL	pg/L	U	B
1,2,3,4,7,8-HxCDD	0.0996	JBQ	0.0988	MDL	9.53	PQL	pg/L	U	B
1,2,3,4,7,8-HXCDF	0.953	JB	0.139	MDL	9.53	PQL	pg/L	U	B
1,2,3,6,7,8-HXCDD	0.257	JB	0.102	MDL	9.53	PQL	pg/L	U	B
1,2,3,6,7,8-HXCDF	0.870	JB	0.133	MDL	9.53	PQL	pg/L	U	B
1,2,3,7,8,9-HXCDD	0.342	JB	0.0946	MDL	9.53	PQL	pg/L	U	B
1,2,3,7,8,9-HXCDF	0.522	JBQ	0.130	MDL	9.53	PQL	pg/L	U	B
1,2,3,7,8-PECDF	0.258	JBQ	0.0690	MDL	9.53	PQL	pg/L	U	B
2,3,4,6,7,8-HXCDF	1.39	JB	0.122	MDL	9.53	PQL	pg/L	U	B
2,3,4,7,8-PECDF	0.892	JB	0.0632	MDL	9.53	PQL	pg/L	U	B
OCDD	7.37	JB	0.182	MDL	19.1	PQL	pg/L	U	B
OCDF	3.29	JB	0.169	MDL	19.1	PQL	pg/L	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX058 **Laboratory: LL**

EDD Filename: DX058_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: **DUP-05-SA5A-QC-022811** ***Collected:*** **2/28/2011 12:05:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	2.02	JB	0.0346	MDL	5.95	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.195	JB	0.0545	MDL	5.95	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.232	J	0.0562	MDL	5.95	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.447	JB	0.0454	MDL	5.95	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.762	JB	0.0608	MDL	5.95	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.184	JB	0.0376	MDL	5.95	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.697	J	0.0610	MDL	5.95	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.187	JB	0.0509	MDL	5.95	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.169	J	0.0250	MDL	5.95	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.331	JB	0.0351	MDL	5.95	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.249	JB	0.0384	MDL	5.95	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.480	JB	0.0378	MDL	5.95	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0226	U	0.0226	MDL	1.19	PQL	ng/Kg	UJ	FD
2,3,7,8-TCDF	0.378	J	0.0488	MDL	1.19	PQL	ng/Kg	J	Z
OCDD	291	B	0.0836	MDL	11.9	PQL	ng/Kg	J	FD
OCDF	5.44	JB	0.0774	MDL	11.9	PQL	ng/Kg	J	Z

Sample ID: **SL-087-SA5A-SS-0.0-0.5** ***Collected:*** **2/28/2011 12:00:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	1.95	JB	0.0273	MDL	5.86	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.184	JB	0.0467	MDL	5.86	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.164	JQ	0.0489	MDL	5.86	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.420	JB	0.0428	MDL	5.86	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.591	JB	0.0510	MDL	5.86	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.192	JBQ	0.0362	MDL	5.86	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.596	J	0.0497	MDL	5.86	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.209	JBQ	0.0488	MDL	5.86	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.184	J	0.0292	MDL	5.86	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.383	JB	0.0314	MDL	5.86	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.191	JB	0.0383	MDL	5.86	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.422	JBQ	0.0325	MDL	5.86	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0510	JQ	0.0220	MDL	1.17	PQL	ng/Kg	J	Z, FD
2,3,7,8-TCDF	0.331	J	0.0513	MDL	1.17	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX058 **Laboratory: LL**

EDD Filename: DX058_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-087-SA5A-SS-0.0-0.5 **Collected:** 2/28/2011 12:00:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
OCDD	162	B	0.0811	MDL	11.7	PQL	ng/Kg	J	FD
OCDF	5.94	JB	0.0721	MDL	11.7	PQL	ng/Kg	J	Z

Sample ID: SL-105-SA5A-SS-0.0-0.5 **Collected:** 2/28/2011 2:22:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	0.864	JB	0.0552	MDL	5.89	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	3.14	J	0.0762	MDL	5.89	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	1.43	JB	0.0637	MDL	5.89	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.634	JB	0.0603	MDL	5.89	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.504	JB	0.0675	MDL	5.89	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	1.82	J	0.0710	MDL	5.89	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.536	JB	0.0516	MDL	5.89	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.888	JB	0.0595	MDL	5.89	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.897	JB	0.0545	MDL	5.89	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.203	J	0.0293	MDL	1.18	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.433	J	0.0938	MDL	1.18	PQL	ng/Kg	J	Z

Sample ID: SL-106-SA5A-SS-0.0-0.5 **Collected:** 2/28/2011 2:05:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	4.44	JB	0.0486	MDL	5.73	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.457	JB	0.0162	MDL	5.73	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.0975	JB	0.0261	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.120	J	0.0405	MDL	5.73	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.152	JBQ	0.0257	MDL	5.73	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.288	JB	0.0435	MDL	5.73	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.0961	JBQ	0.0216	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.340	J	0.0415	MDL	5.73	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.272	JBQ	0.0275	MDL	5.73	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.148	JQ	0.0305	MDL	5.73	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.153	JB	0.0225	MDL	5.73	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.0713	JBQ	0.0239	MDL	5.73	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.145	JBQ	0.0229	MDL	5.73	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0553	J	0.0298	MDL	1.15	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX058 **Laboratory: LL**

EDD Filename: DX058_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: **SL-106-SA5A-SS-0.0-0.5** ***Collected:*** **2/28/2011 2:05:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,3,7,8-TCDF	0.0642	JQ	0.0348	MDL	1.15	PQL	ng/Kg	J	Z
OCDF	1.37	JB	0.0527	MDL	11.5	PQL	ng/Kg	J	Z

Sample ID: **SL-107-SA5A-SS-0.0-0.5** ***Collected:*** **2/28/2011 2:40:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	1.75	JB	0.0623	MDL	5.97	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	3.06	JB	0.0662	MDL	5.97	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	1.71	JB	0.0623	MDL	5.97	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.854	JB	0.0675	MDL	5.97	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	4.04	J	0.0893	MDL	5.97	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	1.03	JB	0.0759	MDL	5.97	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	2.59	JB	0.0621	MDL	5.97	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	3.95	JB	0.0742	MDL	5.97	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.517	J	0.0413	MDL	1.19	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	1.04	J	0.139	MDL	1.19	PQL	ng/Kg	J	Z
OCDD	11000	EB	0.229	MDL	11.9	PQL	ng/Kg	J	*XI

Sample ID: **SL-108-SA5A-SS-0.0-0.5** ***Collected:*** **2/28/2011 2:56:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	0.567	JB	0.0448	MDL	6.05	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.509	J	0.0729	MDL	6.05	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	1.66	JB	0.0593	MDL	6.05	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	1.70	JB	0.0734	MDL	6.05	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.534	JB	0.0588	MDL	6.05	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.985	J	0.0748	MDL	6.05	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.228	JB	0.0666	MDL	6.05	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.272	J	0.0439	MDL	6.05	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.413	JB	0.0575	MDL	6.05	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.638	JB	0.0568	MDL	6.05	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	1.45	JB	0.0530	MDL	6.05	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0976	JQ	0.0286	MDL	1.21	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.689	J	0.0975	MDL	1.21	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX058 **Laboratory: LL**

EDD Filename: DX058_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-109-SA5A-SS-0.0-0.5 **Collected:** 2/28/2011 3:12:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	5.15	JB	0.0366	MDL	5.87	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.538	JB	0.0424	MDL	5.87	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.471	J	0.0617	MDL	5.87	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	1.11	JB	0.0599	MDL	5.87	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	1.25	JB	0.0624	MDL	5.87	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.418	JB	0.0511	MDL	5.87	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.802	J	0.0603	MDL	5.87	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.220	JB	0.0543	MDL	5.87	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.321	JQ	0.0426	MDL	5.87	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.299	JB	0.0466	MDL	5.87	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.653	JB	0.0498	MDL	5.87	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.999	JB	0.0460	MDL	5.87	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.169	JQ	0.0317	MDL	1.17	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.240	JQ	0.0689	MDL	1.17	PQL	ng/Kg	J	Z

Sample ID: SL-111-SA5A-SS-0.0-0.5 **Collected:** 2/28/2011 10:25:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	0.739	JB	0.0467	MDL	6.35	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.645	JQ	0.0802	MDL	6.35	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	1.07	JB	0.0652	MDL	6.35	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	1.86	JB	0.0811	MDL	6.35	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.532	JB	0.0570	MDL	6.35	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	1.39	J	0.0770	MDL	6.35	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.417	JB	0.0599	MDL	6.35	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.435	J	0.0418	MDL	6.35	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.331	JB	0.0379	MDL	6.35	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.725	JB	0.0523	MDL	6.35	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.714	JB	0.0398	MDL	6.35	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.222	J	0.0302	MDL	1.27	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.233	J	0.0674	MDL	1.27	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX058 **Laboratory: LL**

EDD Filename: DX058_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B ***Matrix:*** SO

Sample ID: SL-145-SA5A-SS-0.0-0.5 ***Collected:*** 2/28/2011 9:42:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	4.98	JB	0.0310	MDL	5.79	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.498	JB	0.0413	MDL	5.79	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.200	J	0.0541	MDL	5.79	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	1.59	JB	0.0649	MDL	5.79	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.747	JB	0.0549	MDL	5.79	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.324	JB	0.0551	MDL	5.79	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.463	J	0.0560	MDL	5.79	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.266	JB	0.0668	MDL	5.79	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.165	J	0.0289	MDL	5.79	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.193	JB	0.0382	MDL	5.79	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.464	JB	0.0547	MDL	5.79	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.482	JB	0.0388	MDL	5.79	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.0836	J	0.0484	MDL	1.16	PQL	ng/Kg	J	Z
OCDF	8.67	JB	0.0397	MDL	11.6	PQL	ng/Kg	J	Z

Sample ID: SL-237-SA5A-SB-4.0-5.0 ***Collected:*** 2/28/2011 3:35:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.410	JB	0.0284	MDL	5.55	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.232	JB	0.0140	MDL	5.55	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0834	JB	0.0225	MDL	5.55	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0295	JBQ	0.0221	MDL	5.55	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0632	JB	0.0170	MDL	5.55	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.163	JBQ	0.0224	MDL	5.55	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.0631	JB	0.0138	MDL	5.55	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.304	JB	0.0208	MDL	5.55	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.309	JB	0.0160	MDL	5.55	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.0396	JBQ	0.0181	MDL	5.55	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0750	JB	0.00821	MDL	5.55	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0868	JBQ	0.0135	MDL	5.55	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0812	JB	0.00810	MDL	5.55	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0193	JQ	0.0168	MDL	1.11	PQL	ng/Kg	J	Z
OCDD	1.80	JB	0.0251	MDL	11.1	PQL	ng/Kg	U	B
OCDF	0.288	JB	0.0316	MDL	11.1	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX058 **Laboratory: LL**

EDD Filename: DX058_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: **SL-237-SA5A-SB-9.0-10.0** ***Collected:*** **2/28/2011 3:40:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	1.01	JB	0.0256	MDL	5.53	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.186	JBQ	0.0233	MDL	5.53	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0746	JBQ	0.0258	MDL	5.53	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.105	JB	0.0227	MDL	5.53	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.271	JB	0.0259	MDL	5.53	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.108	JBQ	0.0202	MDL	5.53	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.186	JB	0.0243	MDL	5.53	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.122	JB	0.0177	MDL	5.53	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0819	JB	0.0142	MDL	5.53	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.0491	JB	0.00819	MDL	5.53	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.211	JB	0.0158	MDL	5.53	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.153	JB	0.00774	MDL	5.53	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0493	J	0.0102	MDL	1.11	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.0419	JBQ	0.0105	MDL	1.11	PQL	ng/Kg	U	B
OCDF	1.71	JB	0.0372	MDL	11.1	PQL	ng/Kg	J	Z

Sample ID: **SL-253-SA5A-SS-0.0-0.5** ***Collected:*** **2/28/2011 11:10:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	4.08	JB	0.0257	MDL	6.04	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.407	JB	0.0385	MDL	6.04	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.309	J	0.0626	MDL	6.04	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.898	JB	0.0607	MDL	6.04	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	1.11	JB	0.0643	MDL	6.04	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.358	JB	0.0475	MDL	6.04	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	1.05	J	0.0663	MDL	6.04	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.419	JB	0.0620	MDL	6.04	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.243	JQ	0.0396	MDL	6.04	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.388	JB	0.0446	MDL	6.04	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.478	JB	0.0500	MDL	6.04	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.996	JB	0.0470	MDL	6.04	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.136	J	0.0324	MDL	1.21	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.522	JQ	0.100	MDL	1.21	PQL	ng/Kg	J	Z
OCDF	9.27	JB	0.0581	MDL	12.1	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX058 **Laboratory: LL**

EDD Filename: DX058_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: **SL-255-SA5A-SS-0.0-0.5** ***Collected:*** **2/28/2011 3:58:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	2.40	JB	0.0412	MDL	5.41	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.819	JB	0.0175	MDL	5.41	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.100	JB	0.0258	MDL	5.41	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0537	JQ	0.0259	MDL	5.41	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.223	JB	0.0297	MDL	5.41	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.113	JBQ	0.0264	MDL	5.41	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.108	JBQ	0.0234	MDL	5.41	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0786	JQ	0.0247	MDL	5.41	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.0617	JB	0.0285	MDL	5.41	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0494	JQ	0.0228	MDL	5.41	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.0787	JBQ	0.0260	MDL	5.41	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.179	JBQ	0.0229	MDL	5.41	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.252	JB	0.0269	MDL	5.41	PQL	ng/Kg	U	B
OCDF	1.08	JB	0.0457	MDL	10.8	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DX058 **Laboratory: LL**

EDD Filename: DX058_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
	Sampling to Leaching Estimation
	Sampling to Leaching Rejection
*XI	Compound Quantitation and CRQL
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Continuing Calibration Verification Percent Recovery Lower Estimation
C	Continuing Calibration Verification Percent Recovery Lower Rejection
C	Continuing Calibration Verification Percent Recovery Upper Estimation
C	Continuing Calibration Verification Percent Recovery Upper Rejection
C	Continuing Calibration Verification Relative Response Factor
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Relative Response Factor
C	Initial Calibration Verification Correlation Coefficient

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DX058 **Laboratory: LL**

EDD Filename: DX058_v1 **eQAPP Name: CDM_SSFL_110509**

C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Verification Percent Recovery Lower Estimation
C	Initial Calibration Verification Percent Recovery Lower Rejection
C	Initial Calibration Verification Percent Recovery Upper Estimation
C	Initial Calibration Verification Percent Recovery Upper Rejection
C	Initial Calibration Verification Relative Response Factor
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Laboratory Triplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination
F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX058 **Laboratory: LL**

EDD Filename: DX058_v1 **eQAPP Name: CDM_SSFL_110509**

L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Laboratory Triplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Q	Matrix Spike Upper Rejection
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control Outlier Reports

DX058

Method Blank Outlier Report

Lab Reporting Batch ID: DX058 **Laboratory: LL**

EDD Filename: DX058_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **AQ**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLK0660B370849	3/11/2011 8:49:00 AM	1,2,3,4,6,7,8-HPCDD	3.30 pg/L	EB02-SA5A-022811
		1,2,3,4,6,7,8-HPCDF	6.54 pg/L	EB03-SA5A-022811
		1,2,3,4,7,8,9-HPCDF	1.19 pg/L	
		1,2,3,4,7,8-HxCDD	0.576 pg/L	
		1,2,3,4,7,8-HXCDF	1.04 pg/L	
		1,2,3,6,7,8-HXCDD	0.332 pg/L	
		1,2,3,6,7,8-HXCDF	1.11 pg/L	
		1,2,3,7,8,9-HXCDD	0.634 pg/L	
		1,2,3,7,8,9-HXCDF	1.20 pg/L	
		1,2,3,7,8-PECDD	0.374 pg/L	
		1,2,3,7,8-PECDF	0.528 pg/L	
		2,3,4,6,7,8-HXCDF	1.70 pg/L	
		2,3,4,7,8-PECDF	1.10 pg/L	
		2,3,7,8-TCDF	0.158 pg/L	
		OCDD	6.88 pg/L	
		OCDF	4.19 pg/L	

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
EB02-SA5A-022811(RES)	1,2,3,4,6,7,8-HPCDD	2.22 pg/L	2.22U pg/L
EB02-SA5A-022811(RES)	1,2,3,4,6,7,8-HPCDF	4.13 pg/L	4.13U pg/L
EB02-SA5A-022811(RES)	1,2,3,4,7,8,9-HPCDF	0.509 pg/L	0.509U pg/L
EB02-SA5A-022811(RES)	1,2,3,4,7,8-HxCDD	0.123 pg/L	0.123U pg/L
EB02-SA5A-022811(RES)	1,2,3,4,7,8-HXCDF	0.597 pg/L	0.597U pg/L
EB02-SA5A-022811(RES)	1,2,3,6,7,8-HXCDD	0.210 pg/L	0.210U pg/L
EB02-SA5A-022811(RES)	1,2,3,6,7,8-HXCDF	0.522 pg/L	0.522U pg/L
EB02-SA5A-022811(RES)	1,2,3,7,8,9-HXCDD	0.109 pg/L	0.109U pg/L
EB02-SA5A-022811(RES)	1,2,3,7,8-PECDD	0.106 pg/L	0.106U pg/L
EB02-SA5A-022811(RES)	1,2,3,7,8-PECDF	0.167 pg/L	0.167U pg/L
EB02-SA5A-022811(RES)	2,3,4,6,7,8-HXCDF	1.01 pg/L	1.01U pg/L
EB02-SA5A-022811(RES)	2,3,4,7,8-PECDF	0.571 pg/L	0.571U pg/L
EB02-SA5A-022811(RES)	2,3,7,8-TCDF	0.111 pg/L	0.111U pg/L
EB02-SA5A-022811(RES)	OCDD	4.10 pg/L	4.10U pg/L
EB02-SA5A-022811(RES)	OCDF	2.20 pg/L	2.20U pg/L
EB03-SA5A-022811(RES)	1,2,3,4,6,7,8-HPCDD	3.42 pg/L	3.42U pg/L
EB03-SA5A-022811(RES)	1,2,3,4,6,7,8-HPCDF	6.67 pg/L	6.67U pg/L
EB03-SA5A-022811(RES)	1,2,3,4,7,8,9-HPCDF	0.551 pg/L	0.551U pg/L
EB03-SA5A-022811(RES)	1,2,3,4,7,8-HxCDD	0.0996 pg/L	0.0996U pg/L
EB03-SA5A-022811(RES)	1,2,3,4,7,8-HXCDF	0.953 pg/L	0.953U pg/L
EB03-SA5A-022811(RES)	1,2,3,6,7,8-HXCDD	0.257 pg/L	0.257U pg/L
EB03-SA5A-022811(RES)	1,2,3,6,7,8-HXCDF	0.870 pg/L	0.870U pg/L
EB03-SA5A-022811(RES)	1,2,3,7,8,9-HXCDD	0.342 pg/L	0.342U pg/L
EB03-SA5A-022811(RES)	1,2,3,7,8,9-HXCDF	0.522 pg/L	0.522U pg/L
EB03-SA5A-022811(RES)	1,2,3,7,8-PECDF	0.258 pg/L	0.258U pg/L
EB03-SA5A-022811(RES)	2,3,4,6,7,8-HXCDF	1.39 pg/L	1.39U pg/L
EB03-SA5A-022811(RES)	2,3,4,7,8-PECDF	0.892 pg/L	0.892U pg/L
EB03-SA5A-022811(RES)	OCDD	7.37 pg/L	7.37U pg/L
EB03-SA5A-022811(RES)	OCDF	3.29 pg/L	3.29U pg/L

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Method Blank Outlier Report

Lab Reporting Batch ID: DX058 **Laboratory: LL**

EDD Filename: DX058_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLK0660B372029	3/9/2011 8:29:00 PM	1,2,3,4,6,7,8-HPCDD	0.120 ng/Kg	DUP-05-SA5A-QC-022811
		1,2,3,4,6,7,8-HPCDF	0.0665 ng/Kg	SL-087-SA5A-SS-0.0-0.5
		1,2,3,4,7,8,9-HPCDF	0.0298 ng/Kg	SL-105-SA5A-SS-0.0-0.5
		1,2,3,4,7,8-HXCDF	0.0168 ng/Kg	SL-106-SA5A-SS-0.0-0.5
		1,2,3,6,7,8-HXCDD	0.0262 ng/Kg	SL-107-SA5A-SS-0.0-0.5
		1,2,3,6,7,8-HXCDF	0.0321 ng/Kg	SL-108-SA5A-SS-0.0-0.5
		1,2,3,7,8,9-HXCDF	0.0403 ng/Kg	SL-109-SA5A-SS-0.0-0.5
		1,2,3,7,8-PECDF	0.0237 ng/Kg	SL-111-SA5A-SS-0.0-0.5
		2,3,4,6,7,8-HXCDF	0.0395 ng/Kg	SL-145-SA5A-SS-0.0-0.5
		2,3,4,7,8-PECDF	0.0628 ng/Kg	SL-253-SA5A-SS-0.0-0.5
		OCDD	0.362 ng/Kg	SL-255-SA5A-SS-0.0-0.5
		OCDF	0.191 ng/Kg	
BLK0730B371431	3/16/2011 2:31:00 PM	1,2,3,4,6,7,8-HPCDD	0.208 ng/Kg	SL-237-SA5A-SB-4.0-5.0
		1,2,3,4,6,7,8-HPCDF	0.181 ng/Kg	SL-237-SA5A-SB-9.0-10.0
		1,2,3,4,7,8,9-HPCDF	0.0599 ng/Kg	
		1,2,3,4,7,8-HxCDD	0.00942 ng/Kg	
		1,2,3,4,7,8-HXCDF	0.0547 ng/Kg	
		1,2,3,6,7,8-HXCDD	0.0267 ng/Kg	
		1,2,3,6,7,8-HXCDF	0.0394 ng/Kg	
		1,2,3,7,8,9-HXCDD	0.0153 ng/Kg	
		1,2,3,7,8,9-HXCDF	0.0578 ng/Kg	
		1,2,3,7,8-PECDD	0.0159 ng/Kg	
		1,2,3,7,8-PECDF	0.0184 ng/Kg	
		2,3,4,6,7,8-HXCDF	0.0651 ng/Kg	
		2,3,4,7,8-PECDF	0.0583 ng/Kg	
		2,3,7,8-TCDF	0.0133 ng/Kg	
		OCDD	0.397 ng/Kg	
		OCDF	0.242 ng/Kg	

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
DUP-05-SA5A-QC-022811(RES)	1,2,3,7,8,9-HXCDF	0.187 ng/Kg	0.187U ng/Kg
SL-087-SA5A-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.191 ng/Kg	0.191U ng/Kg
SL-106-SA5A-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.0975 ng/Kg	0.0975U ng/Kg
SL-106-SA5A-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.0961 ng/Kg	0.0961U ng/Kg
SL-106-SA5A-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.0713 ng/Kg	0.0713U ng/Kg
SL-106-SA5A-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.145 ng/Kg	0.145U ng/Kg
SL-237-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.410 ng/Kg	0.410U ng/Kg
SL-237-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.232 ng/Kg	0.232U ng/Kg
SL-237-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0834 ng/Kg	0.0834U ng/Kg
SL-237-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HxCDD	0.0295 ng/Kg	0.0295U ng/Kg
SL-237-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.0632 ng/Kg	0.0632U ng/Kg
SL-237-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.0631 ng/Kg	0.0631U ng/Kg
SL-237-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDD	0.0396 ng/Kg	0.0396U ng/Kg
SL-237-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.0750 ng/Kg	0.0750U ng/Kg
SL-237-SA5A-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.0868 ng/Kg	0.0868U ng/Kg
SL-237-SA5A-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.0812 ng/Kg	0.0812U ng/Kg
SL-237-SA5A-SB-4.0-5.0(RES)	OCDD	1.80 ng/Kg	1.80U ng/Kg
SL-237-SA5A-SB-4.0-5.0(RES)	OCDF	0.288 ng/Kg	0.288U ng/Kg
SL-237-SA5A-SB-9.0-10.0(RES)	1,2,3,4,7,8,9-HPCDF	0.186 ng/Kg	0.186U ng/Kg
SL-237-SA5A-SB-9.0-10.0(RES)	1,2,3,4,7,8-HXCDF	0.105 ng/Kg	0.105U ng/Kg
SL-237-SA5A-SB-9.0-10.0(RES)	1,2,3,6,7,8-HXCDF	0.108 ng/Kg	0.108U ng/Kg

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Method Blank Outlier Report

Lab Reporting Batch ID: DX058 **Laboratory: LL**

EDD Filename: DX058_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-237-SA5A-SB-9.0-10.0(RES)	1,2,3,7,8,9-HXCDF	0.122 ng/Kg	0.122U ng/Kg
SL-237-SA5A-SB-9.0-10.0(RES)	1,2,3,7,8-PECDF	0.0491 ng/Kg	0.0491U ng/Kg
SL-237-SA5A-SB-9.0-10.0(RES)	2,3,4,6,7,8-HXCDF	0.211 ng/Kg	0.211U ng/Kg
SL-237-SA5A-SB-9.0-10.0(RES)	2,3,4,7,8-PECDF	0.153 ng/Kg	0.153U ng/Kg
SL-237-SA5A-SB-9.0-10.0(RES)	2,3,7,8-TCDF	0.0419 ng/Kg	0.0419U ng/Kg
SL-255-SA5A-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.100 ng/Kg	0.100U ng/Kg
SL-255-SA5A-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDD	0.113 ng/Kg	0.113U ng/Kg
SL-255-SA5A-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.108 ng/Kg	0.108U ng/Kg
SL-255-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.0617 ng/Kg	0.0617U ng/Kg
SL-255-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.0787 ng/Kg	0.0787U ng/Kg
SL-255-SA5A-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.179 ng/Kg	0.179U ng/Kg
SL-255-SA5A-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.252 ng/Kg	0.252U ng/Kg

Field Duplicate RPD Report

Lab Reporting Batch ID: DX058 **Laboratory: LL**

EDD Filename: DX058_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 160.3M
Matrix: SO

Analyte	Concentration (%)		Sample RPD	eQAPP RPD	Flag
	SL-087-SA5A-SS-0.0-0.5	DUP-05-SA5A-QC-022811			
MOISTURE	14.7	15.9	8		No Qualifiers Applied

Method: 1613B
Matrix: SO

Analyte	Concentration (ng/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-087-SA5A-SS-0.0-0.5	DUP-05-SA5A-QC-022811			
1,2,3,4,6,7,8-HPCDD	11.6	15.8	31	50.00	No Qualifiers Applied
1,2,3,4,6,7,8-HPCDF	1.95	2.02	4	50.00	
1,2,3,4,7,8,9-HPCDF	0.184	0.195	6	50.00	
1,2,3,4,7,8-HxCDD	0.164	0.232	34	50.00	
1,2,3,4,7,8-HXCDF	0.420	0.447	6	50.00	
1,2,3,6,7,8-HXCDD	0.591	0.762	25	50.00	
1,2,3,6,7,8-HXCDF	0.192	0.184	4	50.00	
1,2,3,7,8,9-HXCDD	0.596	0.697	16	50.00	
1,2,3,7,8,9-HXCDF	0.209	0.187	11	50.00	
1,2,3,7,8-PECDD	0.184	0.169	8	50.00	
1,2,3,7,8-PECDF	0.383	0.331	15	50.00	
2,3,4,6,7,8-HXCDF	0.191	0.249	26	50.00	
2,3,4,7,8-PECDF	0.422	0.480	13	50.00	
2,3,7,8-TCDF	0.331	0.378	13	50.00	
OCDF	5.94	5.44	9	50.00	
2,3,7,8-TCDD	0.0510	1.19 U	200	50.00	J(all detects)
OCDD	162	291	57	50.00	UJ(all non-detects)

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Reporting Limit Outliers

Lab Reporting Batch ID: DX058 **Laboratory: LL**

EDD Filename: DX058_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1613B
Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB02-SA5A-022811	1,2,3,4,6,7,8-HPCDD	JBQ	2.22	10.6	PQL	pg/L	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	4.13	10.6	PQL	pg/L	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.509	10.6	PQL	pg/L	
	1,2,3,4,7,8-HxCDD	JBQ	0.123	10.6	PQL	pg/L	
	1,2,3,4,7,8-HXCDF	JBQ	0.597	10.6	PQL	pg/L	
	1,2,3,6,7,8-HXCDD	JBQ	0.210	10.6	PQL	pg/L	
	1,2,3,6,7,8-HXCDF	JB	0.522	10.6	PQL	pg/L	
	1,2,3,7,8,9-HXCDD	JBQ	0.109	10.6	PQL	pg/L	
	1,2,3,7,8-PECDD	JBQ	0.106	10.6	PQL	pg/L	
	1,2,3,7,8-PECDF	JB	0.167	10.6	PQL	pg/L	
	2,3,4,6,7,8-HXCDF	JBQ	1.01	10.6	PQL	pg/L	
	2,3,4,7,8-PECDF	JBQ	0.571	10.6	PQL	pg/L	
	2,3,7,8-TCDF	JBQ	0.111	2.13	PQL	pg/L	
	OCDD	JB	4.10	21.3	PQL	pg/L	
	OCDF	JB	2.20	21.3	PQL	pg/L	
EB03-SA5A-022811	1,2,3,4,6,7,8-HPCDD	JBQ	3.42	9.53	PQL	pg/L	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	6.67	9.53	PQL	pg/L	
	1,2,3,4,7,8,9-HPCDF	JB	0.551	9.53	PQL	pg/L	
	1,2,3,4,7,8-HxCDD	JBQ	0.0996	9.53	PQL	pg/L	
	1,2,3,4,7,8-HXCDF	JB	0.953	9.53	PQL	pg/L	
	1,2,3,6,7,8-HXCDD	JB	0.257	9.53	PQL	pg/L	
	1,2,3,6,7,8-HXCDF	JB	0.870	9.53	PQL	pg/L	
	1,2,3,7,8,9-HXCDD	JB	0.342	9.53	PQL	pg/L	
	1,2,3,7,8,9-HXCDF	JBQ	0.522	9.53	PQL	pg/L	
	1,2,3,7,8-PECDF	JBQ	0.258	9.53	PQL	pg/L	
	2,3,4,6,7,8-HXCDF	JB	1.39	9.53	PQL	pg/L	
	2,3,4,7,8-PECDF	JB	0.892	9.53	PQL	pg/L	
	OCDD	JB	7.37	19.1	PQL	pg/L	
	OCDF	JB	3.29	19.1	PQL	pg/L	

Method: 1613B
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-05-SA5A-QC-022811	1,2,3,4,6,7,8-HPCDF	JB	2.02	5.95	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JB	0.195	5.95	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	J	0.232	5.95	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.447	5.95	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.762	5.95	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.184	5.95	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	J	0.697	5.95	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.187	5.95	PQL	ng/Kg	
	1,2,3,7,8-PECDD	J	0.169	5.95	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.331	5.95	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.249	5.95	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.480	5.95	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.378	1.19	PQL	ng/Kg	
	OCDF	JB	5.44	11.9	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX058 **Laboratory: LL**

EDD Filename: DX058_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-087-SA5A-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	1.95	5.86	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.184	5.86	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JQ	0.164	5.86	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.420	5.86	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.591	5.86	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.192	5.86	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	J	0.596	5.86	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.209	5.86	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	J	0.184	5.86	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.383	5.86	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.191	5.86	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.422	5.86	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0510	1.17	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.331	1.17	PQL	ng/Kg	
	OCDF	JB	5.94	11.7	PQL	ng/Kg	
SL-105-SA5A-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	0.864	5.89	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	J	3.14	5.89	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	1.43	5.89	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.634	5.89	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.504	5.89	PQL	ng/Kg	
	1,2,3,7,8-PECDD	J	1.82	5.89	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDF	JB	0.536	5.89	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.888	5.89	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.897	5.89	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.203	1.18	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.433	1.18	PQL	ng/Kg	
SL-106-SA5A-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDD	JB	4.44	5.73	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.457	5.73	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.0975	5.73	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	J	0.120	5.73	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.152	5.73	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.288	5.73	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0961	5.73	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	J	0.340	5.73	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JBQ	0.272	5.73	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JQ	0.148	5.73	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.153	5.73	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0713	5.73	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.145	5.73	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.0553	1.15	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.0642	1.15	PQL	ng/Kg	
	OCDF	JB	1.37	11.5	PQL	ng/Kg	
SL-107-SA5A-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	1.75	5.97	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	3.06	5.97	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	1.71	5.97	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.854	5.97	PQL	ng/Kg	
	1,2,3,7,8-PECDD	J	4.04	5.97	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDF	JB	1.03	5.97	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	2.59	5.97	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	3.95	5.97	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.517	1.19	PQL	ng/Kg	
	2,3,7,8-TCDF	J	1.04	1.19	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX058 **Laboratory: LL**

EDD Filename: DX058_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-108-SA5A-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	0.567	6.05	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8-HxCDD	J	0.509	6.05	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	1.66	6.05	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	1.70	6.05	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.534	6.05	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	J	0.985	6.05	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.228	6.05	PQL	ng/Kg	
	1,2,3,7,8-PECDD	J	0.272	6.05	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.413	6.05	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.638	6.05	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	1.45	6.05	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0976	1.21	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.689	1.21	PQL	ng/Kg	
SL-109-SA5A-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	5.15	5.87	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JB	0.538	5.87	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	J	0.471	5.87	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	1.11	5.87	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	1.25	5.87	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.418	5.87	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	J	0.802	5.87	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.220	5.87	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JQ	0.321	5.87	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.299	5.87	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.653	5.87	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.999	5.87	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.169	1.17	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.240	1.17	PQL	ng/Kg	
SL-111-SA5A-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	0.739	6.35	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8-HxCDD	JQ	0.645	6.35	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	1.07	6.35	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	1.86	6.35	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.532	6.35	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	J	1.39	6.35	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.417	6.35	PQL	ng/Kg	
	1,2,3,7,8-PECDD	J	0.435	6.35	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.331	6.35	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.725	6.35	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.714	6.35	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.222	1.27	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.233	1.27	PQL	ng/Kg	
SL-145-SA5A-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	4.98	5.79	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JB	0.498	5.79	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	J	0.200	5.79	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	1.59	5.79	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.747	5.79	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.324	5.79	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	J	0.463	5.79	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.266	5.79	PQL	ng/Kg	
	1,2,3,7,8-PECDD	J	0.165	5.79	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.193	5.79	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.464	5.79	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.482	5.79	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.0836	1.16	PQL	ng/Kg	
	OCDF	JB	8.67	11.6	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX058 **Laboratory: LL**

EDD Filename: DX058_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-237-SA5A-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JB	0.410	5.55	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.232	5.55	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.0834	5.55	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0295	5.55	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.0632	5.55	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.163	5.55	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0631	5.55	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.304	5.55	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.309	5.55	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0396	5.55	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.0750	5.55	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0868	5.55	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.0812	5.55	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0193	1.11	PQL	ng/Kg	
	OCDD	JB	1.80	11.1	PQL	ng/Kg	
	OCDF	JB	0.288	11.1	PQL	ng/Kg	
SL-237-SA5A-SB-9.0-10.0	1,2,3,4,6,7,8-HPCDF	JB	1.01	5.53	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JBQ	0.186	5.53	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0746	5.53	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.105	5.53	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.271	5.53	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.108	5.53	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.186	5.53	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.122	5.53	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.0819	5.53	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.0491	5.53	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.211	5.53	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.153	5.53	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.0493	1.11	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.0419	1.11	PQL	ng/Kg	
	OCDF	JB	1.71	11.1	PQL	ng/Kg	
SL-253-SA5A-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	4.08	6.04	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JB	0.407	6.04	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	J	0.309	6.04	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.898	6.04	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	1.11	6.04	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.358	6.04	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	J	1.05	6.04	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.419	6.04	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JQ	0.243	6.04	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.388	6.04	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.478	6.04	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.996	6.04	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.136	1.21	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.522	1.21	PQL	ng/Kg	
	OCDF	JB	9.27	12.1	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX058 **Laboratory: LL**

EDD Filename: DX058_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	*Analyte*	*Lab Qual*	*Result*	*Reporting Limit*	*RL Type*	*Units*	*Flag*
SL-255-SA5A-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDD	JB	2.40	5.41	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.819	5.41	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.100	5.41	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JQ	0.0537	5.41	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.223	5.41	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.113	5.41	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.108	5.41	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JQ	0.0786	5.41	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.0617	5.41	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JQ	0.0494	5.41	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0787	5.41	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.179	5.41	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.252	5.41	PQL	ng/Kg	
	OCDF	JB	1.08	10.8	PQL	ng/Kg	

LDC #: 28907D

VALIDATION FINDINGS WORKSHEET

Compound Quantitation and Reported CRQLs

Reviewer: OR

2nd Reviewer: [illegible]

METHOD: HRGC/HRMS Dioxins/Dibenzofurans (EPA Method 1613B)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were the correct internal standard (IS), quantitation ions and relative response factors (RRF) used to quantitate the compound?

Y N N/A Compound quantitation and CRQLs were adjusted to reflect all sample dilutions and dry weight factors (if necessary).

#	Date	Sample ID	Finding	Associated Samples	Qualifications
		SL-107-SA5A-SS-0.0-0.5	OCDD	7 Cal. Range	Jdet/A

SAMPLE DELIVERY GROUP

DX059

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
01-Mar-2011	SL-256-SA5A-SS-0.0-0.5	6218925	N	METHOD	1613B	III
01-Mar-2011	SL-256-SA5A-SS-0.0-0.5MS	6218926	MS	METHOD	1613B	III
01-Mar-2011	SL-256-SA5A-SS-0.0-0.5MSD	6218927	MSD	METHOD	1613B	III
01-Mar-2011	DUP-06-SA5A-QC-030111	6218914	FD	METHOD	1613B	III
01-Mar-2011	SL-257-SA5A-SS-0.0-0.5	6218928	N	METHOD	1613B	III
01-Mar-2011	SL-072-SA5A-SS-0.0-0.5	6218916	N	METHOD	1613B	III
01-Mar-2011	SL-076-SA5A-SS-0.0-0.5	6218917	N	METHOD	1613B	III
01-Mar-2011	SL-244-SA5A-SB-4.0-5.0	6218930	N	METHOD	1613B	III
01-Mar-2011	SL-244-SA5A-SB-9.0-10.0	6218931	N	METHOD	1613B	III
01-Mar-2011	SL-077-SA5A-SS-0.0-0.5	6218918	N	METHOD	1613B	III
01-Mar-2011	SL-078-SA5A-SS-0.0-0.5	6218919	N	METHOD	1613B	III
01-Mar-2011	EB04-SA5A-030111	6218929	EB	METHOD	1613B	III
01-Mar-2011	SL-066-SA5A-SS-0.0-0.5	6218915	N	METHOD	1613B	III
01-Mar-2011	SL-103-SA5A-SS-0.0-0.5	6218920	N	METHOD	1613B	III
01-Mar-2011	SL-104-SA5A-SS-0.0-0.5	6218921	N	METHOD	1613B	III
01-Mar-2011	SL-191-SA5A-SS-0.0-0.5	6218922	N	METHOD	1613B	III
01-Mar-2011	SL-194-SA5A-SS-0.0-0.3	6218923	N	METHOD	1613B	III
01-Mar-2011	SL-195-SA5A-SS-0.0-0.2	6218924	N	METHOD	1613B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DX059 **Laboratory: LL**

EDD Filename: PrepDX059_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA
Method: 1613B **Matrix:** AQ

Sample ID: EB04-SA5A-030111 **Collected:** 3/1/2011 11:45:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	2.36	JB	0.115	MDL	10.4	PQL	pg/L	U	B
1,2,3,4,6,7,8-HPCDF	3.65	JB	0.116	MDL	10.4	PQL	pg/L	U	B
1,2,3,4,7,8,9-HPCDF	0.481	JB	0.0859	MDL	10.4	PQL	pg/L	U	B
1,2,3,4,7,8-HxCDD	0.123	JBQ	0.101	MDL	10.4	PQL	pg/L	U	B
1,2,3,4,7,8-HXCDF	0.648	JB	0.170	MDL	10.4	PQL	pg/L	U	B
1,2,3,6,7,8-HXCDD	0.218	JBQ	0.0946	MDL	10.4	PQL	pg/L	U	B
1,2,3,6,7,8-HXCDF	0.647	JB	0.124	MDL	10.4	PQL	pg/L	U	B
1,2,3,7,8,9-HXCDD	0.225	JBQ	0.0847	MDL	10.4	PQL	pg/L	U	B
1,2,3,7,8,9-HXCDF	0.384	JBQ	0.0786	MDL	10.4	PQL	pg/L	U	B
1,2,3,7,8-PECDD	0.142	JBQ	0.111	MDL	10.4	PQL	pg/L	U	B
1,2,3,7,8-PECDF	0.161	JBQ	0.0576	MDL	10.4	PQL	pg/L	U	B
2,3,4,6,7,8-HXCDF	0.810	JB	0.0805	MDL	10.4	PQL	pg/L	U	B
2,3,4,7,8-PECDF	0.577	JB	0.0550	MDL	10.4	PQL	pg/L	U	B
OCDD	6.31	JB	0.122	MDL	20.8	PQL	pg/L	U	B
OCDF	2.00	JB	0.113	MDL	20.8	PQL	pg/L	U	B

Method Category: SVOA
Method: 1613B **Matrix:** SO

Sample ID: DUP-06-SA5A-QC-030111 **Collected:** 3/1/2011 9:00:00 AM **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	3.68	JB	0.0205	MDL	5.64	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.769	JB	0.0111	MDL	5.64	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0832	JBQ	0.0117	MDL	5.64	PQL	ng/Kg	UJ	B, FD
1,2,3,4,7,8-HxCDD	0.0530	JBQ	0.0200	MDL	5.64	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.241	JBQ	0.0214	MDL	5.64	PQL	ng/Kg	UJ	B, FD
1,2,3,6,7,8-HXCDD	0.146	JB	0.0211	MDL	5.64	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.0873	JB	0.0195	MDL	5.64	PQL	ng/Kg	UJ	B, FD
1,2,3,7,8,9-HXCDD	0.148	JB	0.0194	MDL	5.64	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.0684	JB	0.0191	MDL	5.64	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0430	JQ	0.0144	MDL	5.64	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.129	JBQ	0.0324	MDL	5.64	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.134	JB	0.0193	MDL	5.64	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX059 **Laboratory: LL**

EDD Filename: PrepDX059_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: **DUP-06-SA5A-QC-030111** ***Collected:*** **3/1/2011 9:00:00 AM** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,3,4,7,8-PECDF	0.227	JB	0.0306	MDL	5.64	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0139	JQ	0.0109	MDL	1.13	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.0634	JBQ	0.0381	MDL	1.13	PQL	ng/Kg	J	Z, FD
OCDF	1.46	JB	0.0121	MDL	11.3	PQL	ng/Kg	J	Z

Sample ID: **SL-066-SA5A-SS-0.0-0.5** ***Collected:*** **3/1/2011 1:18:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	1.96	JB	0.0472	MDL	5.67	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	3.59	JB	0.0414	MDL	5.67	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	1.21	JB	0.0390	MDL	5.67	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.772	JB	0.0392	MDL	5.67	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	3.55	J	0.0580	MDL	5.67	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	1.30	JB	0.0383	MDL	5.67	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	1.66	JB	0.0393	MDL	5.67	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	1.61	JB	0.0372	MDL	5.67	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.407	J	0.0197	MDL	1.13	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.827	JB	0.0770	MDL	1.13	PQL	ng/Kg	J	Z
OCDD	24200	EB	0.199	MDL	11.3	PQL	ng/Kg	J	*XI

Sample ID: **SL-072-SA5A-SS-0.0-0.5** ***Collected:*** **3/1/2011 9:58:00 AM** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	2.35	JB	0.0202	MDL	5.61	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.208	JBQ	0.0233	MDL	5.61	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.431	JB	0.0256	MDL	5.61	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.287	JB	0.0244	MDL	5.61	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.983	JB	0.0259	MDL	5.61	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.173	JB	0.0205	MDL	5.61	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.995	JB	0.0249	MDL	5.61	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.132	JB	0.0196	MDL	5.61	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.288	J	0.0181	MDL	5.61	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.0670	JBQ	0.0109	MDL	5.61	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.326	JB	0.0193	MDL	5.61	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.237	JB	0.0108	MDL	5.61	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX059 **Laboratory: LL**

EDD Filename: PrepDX059_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-072-SA5A-SS-0.0-0.5 **Collected:** 3/1/2011 9:58:00 AM **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,3,7,8-TCDD	0.0589	J	0.00999	MDL	1.12	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.0627	JB	0.0157	MDL	1.12	PQL	ng/Kg	J	Z
OCDF	5.05	JB	0.0251	MDL	11.2	PQL	ng/Kg	J	Z

Sample ID: SL-076-SA5A-SS-0.0-0.5 **Collected:** 3/1/2011 10:17:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	1.08	JB	0.0324	MDL	5.41	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	2.03	JB	0.0392	MDL	5.41	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	1.01	JB	0.0435	MDL	5.41	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	4.52	JB	0.0385	MDL	5.41	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.730	JB	0.0333	MDL	5.41	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	4.17	JB	0.0330	MDL	5.41	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.342	JB	0.0241	MDL	5.41	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	1.11	J	0.0288	MDL	5.41	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.163	JB	0.0144	MDL	5.41	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.682	JB	0.0246	MDL	5.41	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.444	JB	0.0141	MDL	5.41	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.124	J	0.0118	MDL	1.08	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.114	JB	0.0213	MDL	1.08	PQL	ng/Kg	J	Z

Sample ID: SL-077-SA5A-SS-0.0-0.5 **Collected:** 3/1/2011 10:45:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	0.706	JB	0.0122	MDL	5.85	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0936	JB	0.0194	MDL	5.85	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.194	JB	0.0195	MDL	5.85	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.104	JB	0.0146	MDL	5.85	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	2.52	JB	0.0200	MDL	5.85	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.734	JB	0.0125	MDL	5.85	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	3.82	JB	0.0192	MDL	5.85	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.103	JBQ	0.0154	MDL	5.85	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.189	J	0.0170	MDL	5.85	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.0356	JBQ	0.00538	MDL	5.85	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.134	JBQ	0.0127	MDL	5.85	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX059 **Laboratory: LL**

EDD Filename: PrepDX059_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-077-SA5A-SS-0.0-0.5 **Collected:** 3/1/2011 10:45:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,3,4,7,8-PECDF	0.0828	JB	0.00561	MDL	5.85	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0286	JQ	0.00901	MDL	1.17	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.0121	JB	0.00772	MDL	1.17	PQL	ng/Kg	U	B
OCDF	1.17	JBQ	0.0199	MDL	11.7	PQL	ng/Kg	U	B

Sample ID: SL-078-SA5A-SS-0.0-0.5 **Collected:** 3/1/2011 11:05:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	0.603	JB	0.0354	MDL	5.59	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.972	JBQ	0.0400	MDL	5.59	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.557	JB	0.0370	MDL	5.59	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	2.03	JB	0.0410	MDL	5.59	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.389	JB	0.0302	MDL	5.59	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	2.06	JB	0.0377	MDL	5.59	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.206	JB	0.0266	MDL	5.59	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.594	JQ	0.0308	MDL	5.59	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.133	JB	0.0131	MDL	5.59	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.427	JB	0.0250	MDL	5.59	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.295	JB	0.0120	MDL	5.59	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0849	J	0.0134	MDL	1.12	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.0712	JB	0.0190	MDL	1.12	PQL	ng/Kg	J	Z

Sample ID: SL-103-SA5A-SS-0.0-0.5 **Collected:** 3/1/2011 1:35:00 PM **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	0.652	JB	0.0505	MDL	6.35	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	1.85	JB	0.0412	MDL	6.35	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	1.07	JB	0.0463	MDL	6.35	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	4.32	JB	0.0424	MDL	6.35	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.628	JB	0.0404	MDL	6.35	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	3.60	JB	0.0407	MDL	6.35	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.269	JB	0.0484	MDL	6.35	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	1.16	J	0.0473	MDL	6.35	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.714	JB	0.0359	MDL	6.35	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.722	JB	0.0426	MDL	6.35	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX059 **Laboratory: LL**

EDD Filename: PrepDX059_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: **SL-103-SA5A-SS-0.0-0.5** ***Collected:*** **3/1/2011 1:35:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,3,4,7,8-PECDF	0.921	JB	0.0365	MDL	6.35	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.176	J	0.0203	MDL	1.27	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.504	JB	0.0693	MDL	1.27	PQL	ng/Kg	J	Z

Sample ID: **SL-104-SA5A-SS-0.0-0.5** ***Collected:*** **3/1/2011 1:52:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	0.690	JB	0.0420	MDL	5.94	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	2.56	JB	0.0531	MDL	5.94	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	1.02	JB	0.0563	MDL	5.94	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	5.73	JB	0.0562	MDL	5.94	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.514	JB	0.0489	MDL	5.94	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	5.36	JB	0.0517	MDL	5.94	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.290	JBQ	0.0485	MDL	5.94	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	1.55	J	0.0525	MDL	5.94	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.348	JB	0.0352	MDL	5.94	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.699	JB	0.0462	MDL	5.94	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.777	JB	0.0335	MDL	5.94	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.239	J	0.0230	MDL	1.19	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.361	JB	0.0558	MDL	1.19	PQL	ng/Kg	J	Z

Sample ID: **SL-191-SA5A-SS-0.0-0.5** ***Collected:*** **3/1/2011 2:37:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,7,8,9-HXCDF	3.98	JB	0.423	MDL	6.34	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	4.38	J	0.304	MDL	6.34	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.655	JB	0.207	MDL	1.27	PQL	ng/Kg	J	Z
OCDD	16400	EB	2.52	MDL	12.7	PQL	ng/Kg	J	*XI

Sample ID: **SL-194-SA5A-SS-0.0-0.3** ***Collected:*** **3/1/2011 3:02:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	4.82	JB	0.124	MDL	5.97	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	5.85	J	0.0926	MDL	5.97	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX059 **Laboratory: LL**

EDD Filename: PrepDX059_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-194-SA5A-SS-0.0-0.3 **Collected:** 3/1/2011 3:02:00 PM **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,7,8-PECDF	4.72	JB	0.0490	MDL	5.97	PQL	ng/Kg	J	Z
OCDD	6000	EB	0.0491	MDL	11.9	PQL	ng/Kg	J	*XI

Sample ID: SL-195-SA5A-SS-0.0-0.2 **Collected:** 3/1/2011 3:20:00 PM **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	1.66	JB	0.115	MDL	7.00	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	2.67	JB	0.101	MDL	7.00	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	2.30	JB	0.121	MDL	7.00	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	6.92	JB	0.0895	MDL	7.00	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	1.38	JB	0.0889	MDL	7.00	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	5.34	JB	0.0790	MDL	7.00	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.816	JB	0.0564	MDL	7.00	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	2.22	J	0.0822	MDL	7.00	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.506	JB	0.0493	MDL	7.00	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	1.68	JB	0.0536	MDL	7.00	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	1.54	JB	0.0461	MDL	7.00	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.828	J	0.0388	MDL	1.40	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.333	JB	0.0636	MDL	1.40	PQL	ng/Kg	J	Z

Sample ID: SL-244-SA5A-SB-4.0-5.0 **Collected:** 3/1/2011 10:42:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.411	JBQ	0.0208	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.929	JB	0.0133	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.133	JB	0.0190	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0436	JB	0.0144	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.166	JB	0.0197	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0583	JB	0.0147	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.140	JB	0.0171	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0544	JBQ	0.0141	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.112	JB	0.0205	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0365	JQ	0.0125	MDL	5.73	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.0476	JBQ	0.00848	MDL	5.73	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX059 **Laboratory: LL**

EDD Filename: PrepDX059_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: **SL-244-SA5A-SB-4.0-5.0** ***Collected:*** **3/1/2011 10:42:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,3,4,6,7,8-HXCDF	0.254	JBQ	0.0165	MDL	5.73	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.142	JB	0.00836	MDL	5.73	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0196	JBQ	0.00997	MDL	1.15	PQL	ng/Kg	U	B
OCDD	1.28	JBQ	0.0282	MDL	11.5	PQL	ng/Kg	U	B
OCDF	0.627	JB	0.0324	MDL	11.5	PQL	ng/Kg	U	B

Sample ID: **SL-244-SA5A-SB-9.0-10.0** ***Collected:*** **3/1/2011 10:44:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.436	JBQ	0.0197	MDL	5.83	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.758	JB	0.0101	MDL	5.83	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.105	JBQ	0.0175	MDL	5.83	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0262	JBQ	0.0114	MDL	5.83	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.183	JB	0.0199	MDL	5.83	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0556	JBQ	0.0121	MDL	5.83	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.122	JB	0.0172	MDL	5.83	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0619	JB	0.0108	MDL	5.83	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0768	JB	0.0212	MDL	5.83	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0560	JQ	0.0103	MDL	5.83	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.0649	JBQ	0.00699	MDL	5.83	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.268	JB	0.0168	MDL	5.83	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.160	JB	0.00746	MDL	5.83	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0195	JQ	0.00979	MDL	1.17	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.0182	JBQ	0.00921	MDL	1.17	PQL	ng/Kg	U	B
OCDD	4.81	JB	0.0200	MDL	11.7	PQL	ng/Kg	J	Z
OCDF	0.734	JBQ	0.0225	MDL	11.7	PQL	ng/Kg	U	B

Sample ID: **SL-256-SA5A-SS-0.0-0.5** ***Collected:*** **3/1/2011 8:57:00 AM** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	4.44	JB	0.0191	MDL	5.65	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.966	JB	0.0180	MDL	5.65	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.165	JBQ	0.0223	MDL	5.65	PQL	ng/Kg	UJ	B, FD
1,2,3,4,7,8-HxCDD	0.0417	JB	0.0202	MDL	5.65	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.429	JB	0.0253	MDL	5.65	PQL	ng/Kg	J	Z, FD

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX059 **Laboratory: LL**

EDD Filename: PrepDX059_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: **SL-256-SA5A-SS-0.0-0.5** ***Collected:*** **3/1/2011 8:57:00 AM** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,6,7,8-HXCDD	0.162	JB	0.0205	MDL	5.65	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.173	JBQ	0.0211	MDL	5.65	PQL	ng/Kg	UJ	B, FD
1,2,3,7,8,9-HXCDD	0.142	JB	0.0192	MDL	5.65	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.0832	JB	0.0218	MDL	5.65	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0557	JQ	0.0127	MDL	5.65	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.137	JBQ	0.0250	MDL	5.65	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.164	JB	0.0200	MDL	5.65	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.291	JB	0.0241	MDL	5.65	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0156	JQ	0.00836	MDL	1.13	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.133	JB	0.0416	MDL	1.13	PQL	ng/Kg	J	Z, FD
OCDF	2.02	JB	0.0190	MDL	11.3	PQL	ng/Kg	J	Z

Sample ID: **SL-257-SA5A-SS-0.0-0.5** ***Collected:*** **3/1/2011 9:18:00 AM** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	1.76	JB	0.0691	MDL	5.62	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.282	JBQ	0.0722	MDL	5.62	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.186	JBQ	0.0613	MDL	5.62	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.414	JBQ	0.0757	MDL	5.62	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.483	JBQ	0.0628	MDL	5.62	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.387	JBQ	0.0702	MDL	5.62	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.307	JBQ	0.0560	MDL	5.62	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.341	JB	0.0666	MDL	5.62	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.200	J	0.0515	MDL	5.62	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.183	JBQ	0.0575	MDL	5.62	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.409	JB	0.0604	MDL	5.62	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.662	JB	0.0520	MDL	5.62	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.113	J	0.0354	MDL	1.12	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.0995	JBQ	0.0688	MDL	1.12	PQL	ng/Kg	J	Z
OCDF	3.28	JB	0.0722	MDL	11.2	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX059 **Laboratory: LL**

EDD Filename: PrepDX059_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
	Sampling to Leaching Estimation
	Sampling to Leaching Rejection
*XI	Compound Quantitation and CRQL
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Continuing Calibration Verification Percent Recovery Lower Estimation
C	Continuing Calibration Verification Percent Recovery Lower Rejection
C	Continuing Calibration Verification Percent Recovery Upper Estimation
C	Continuing Calibration Verification Percent Recovery Upper Rejection
C	Continuing Calibration Verification Relative Response Factor
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Relative Response Factor
C	Initial Calibration Verification Correlation Coefficient

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DX059 **Laboratory: LL**

EDD Filename: PrepDX059_v1 **eQAPP Name: CDM_SSFL_110509**

C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Verification Percent Recovery Lower Estimation
C	Initial Calibration Verification Percent Recovery Lower Rejection
C	Initial Calibration Verification Percent Recovery Upper Estimation
C	Initial Calibration Verification Percent Recovery Upper Rejection
C	Initial Calibration Verification Relative Response Factor
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Laboratory Triplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination
F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DX059 **Laboratory: LL**

EDD Filename: PrepDX059_v1 **eQAPP Name: CDM_SSFL_110509**

L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Laboratory Triplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Q	Matrix Spike Upper Rejection
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control Outlier Reports

DX059

Method Blank Outlier Report

Lab Reporting Batch ID: DX059 **Laboratory: LL**

EDD Filename: PrepDX059_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **AQ**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLK0660B370849	3/11/2011 8:49:00 AM	1,2,3,4,6,7,8-HPCDD	3.30 pg/L	EB04-SA5A-030111
		1,2,3,4,6,7,8-HPCDF	6.54 pg/L	
		1,2,3,4,7,8,9-HPCDF	1.19 pg/L	
		1,2,3,4,7,8-HxCDD	0.576 pg/L	
		1,2,3,4,7,8-HXCDF	1.04 pg/L	
		1,2,3,6,7,8-HXCDD	0.332 pg/L	
		1,2,3,6,7,8-HXCDF	1.11 pg/L	
		1,2,3,7,8,9-HXCDD	0.634 pg/L	
		1,2,3,7,8,9-HXCDF	1.20 pg/L	
		1,2,3,7,8-PECDD	0.374 pg/L	
		1,2,3,7,8-PECDF	0.528 pg/L	
		2,3,4,6,7,8-HXCDF	1.70 pg/L	
		2,3,4,7,8-PECDF	1.10 pg/L	
		2,3,7,8-TCDF	0.158 pg/L	
		OCDD	6.88 pg/L	
		OCDF	4.19 pg/L	

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
EB04-SA5A-030111(RES)	1,2,3,4,6,7,8-HPCDD	2.36 pg/L	2.36U pg/L
EB04-SA5A-030111(RES)	1,2,3,4,6,7,8-HPCDF	3.65 pg/L	3.65U pg/L
EB04-SA5A-030111(RES)	1,2,3,4,7,8,9-HPCDF	0.481 pg/L	0.481U pg/L
EB04-SA5A-030111(RES)	1,2,3,4,7,8-HxCDD	0.123 pg/L	0.123U pg/L
EB04-SA5A-030111(RES)	1,2,3,4,7,8-HXCDF	0.648 pg/L	0.648U pg/L
EB04-SA5A-030111(RES)	1,2,3,6,7,8-HXCDD	0.218 pg/L	0.218U pg/L
EB04-SA5A-030111(RES)	1,2,3,6,7,8-HXCDF	0.647 pg/L	0.647U pg/L
EB04-SA5A-030111(RES)	1,2,3,7,8,9-HXCDD	0.225 pg/L	0.225U pg/L
EB04-SA5A-030111(RES)	1,2,3,7,8,9-HXCDF	0.384 pg/L	0.384U pg/L
EB04-SA5A-030111(RES)	1,2,3,7,8-PECDD	0.142 pg/L	0.142U pg/L
EB04-SA5A-030111(RES)	1,2,3,7,8-PECDF	0.161 pg/L	0.161U pg/L
EB04-SA5A-030111(RES)	2,3,4,6,7,8-HXCDF	0.810 pg/L	0.810U pg/L
EB04-SA5A-030111(RES)	2,3,4,7,8-PECDF	0.577 pg/L	0.577U pg/L
EB04-SA5A-030111(RES)	OCDD	6.31 pg/L	6.31U pg/L
EB04-SA5A-030111(RES)	OCDF	2.00 pg/L	2.00U pg/L

Method Blank Outlier Report

Lab Reporting Batch ID: DX059 **Laboratory: LL**

EDD Filename: PrepDX059_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLK0690B371821	3/14/2011 6:21:00 PM	1,2,3,4,6,7,8-HPCDD	0.205 ng/Kg	DUP-06-SA5A-QC-030111
		1,2,3,4,6,7,8-HPCDF	0.317 ng/Kg	SL-066-SA5A-SS-0.0-0.5
		1,2,3,4,7,8,9-HPCDF	0.0553 ng/Kg	SL-072-SA5A-SS-0.0-0.5
		1,2,3,4,7,8-HxCDD	0.0195 ng/Kg	SL-076-SA5A-SS-0.0-0.5
		1,2,3,4,7,8-HXCDF	0.0629 ng/Kg	SL-077-SA5A-SS-0.0-0.5
		1,2,3,6,7,8-HXCDD	0.0216 ng/Kg	SL-078-SA5A-SS-0.0-0.5
		1,2,3,6,7,8-HXCDF	0.0492 ng/Kg	SL-103-SA5A-SS-0.0-0.5
		1,2,3,7,8,9-HXCDD	0.0205 ng/Kg	SL-104-SA5A-SS-0.0-0.5
		1,2,3,7,8,9-HXCDF	0.0452 ng/Kg	SL-194-SA5A-SS-0.0-0.3
		1,2,3,7,8-PECDF	0.0192 ng/Kg	SL-195-SA5A-SS-0.0-0.2
		2,3,4,6,7,8-HXCDF	0.102 ng/Kg	SL-244-SA5A-SB-4.0-5.0
		2,3,4,7,8-PECDF	0.0672 ng/Kg	SL-244-SA5A-SB-9.0-10.0
		2,3,7,8-TCDF	0.00943 ng/Kg	SL-256-SA5A-SS-0.0-0.5
		OCDD	0.465 ng/Kg	SL-257-SA5A-SS-0.0-0.5
		OCDF	0.286 ng/Kg	
BLK0690B372350	3/16/2011 11:50:00 PM	2,3,7,8-TCDF	0.0286 ng/Kg	DUP-06-SA5A-QC-030111
				SL-066-SA5A-SS-0.0-0.5
				SL-072-SA5A-SS-0.0-0.5
				SL-076-SA5A-SS-0.0-0.5
				SL-077-SA5A-SS-0.0-0.5
				SL-078-SA5A-SS-0.0-0.5
				SL-103-SA5A-SS-0.0-0.5
				SL-104-SA5A-SS-0.0-0.5
				SL-194-SA5A-SS-0.0-0.3
				SL-195-SA5A-SS-0.0-0.2
				SL-244-SA5A-SB-4.0-5.0
				SL-244-SA5A-SB-9.0-10.0
				SL-256-SA5A-SS-0.0-0.5
				SL-257-SA5A-SS-0.0-0.5
BLK0810B371805	3/23/2011 6:05:00 PM	1,2,3,4,6,7,8-HPCDD	0.175 ng/Kg	SL-191-SA5A-SS-0.0-0.5
		1,2,3,4,6,7,8-HPCDF	0.406 ng/Kg	
		1,2,3,4,7,8,9-HPCDF	0.0589 ng/Kg	
		1,2,3,4,7,8-HxCDD	0.0348 ng/Kg	
		1,2,3,4,7,8-HXCDF	0.110 ng/Kg	
		1,2,3,6,7,8-HXCDD	0.0288 ng/Kg	
		1,2,3,6,7,8-HXCDF	0.0861 ng/Kg	
		1,2,3,7,8,9-HXCDD	0.0417 ng/Kg	
		1,2,3,7,8,9-HXCDF	0.0340 ng/Kg	
		1,2,3,7,8-PECDF	0.0391 ng/Kg	
		2,3,4,6,7,8-HXCDF	0.0728 ng/Kg	
		2,3,4,7,8-PECDF	0.0620 ng/Kg	
		2,3,7,8-TCDD	0.0184 ng/Kg	
		OCDD	0.381 ng/Kg	
		OCDF	0.252 ng/Kg	
BLK0810B371929	3/28/2011 7:29:00 PM	2,3,7,8-TCDF	0.0404 ng/Kg	SL-191-SA5A-SS-0.0-0.5

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
DUP-06-SA5A-QC-030111(RES)	1,2,3,4,6,7,8-HPCDF	0.769 ng/Kg	0.769U ng/Kg
DUP-06-SA5A-QC-030111(RES)	1,2,3,4,7,8,9-HPCDF	0.0832 ng/Kg	0.0832U ng/Kg
DUP-06-SA5A-QC-030111(RES)	1,2,3,4,7,8-HxCDD	0.0530 ng/Kg	0.0530U ng/Kg
DUP-06-SA5A-QC-030111(RES)	1,2,3,4,7,8-HXCDF	0.241 ng/Kg	0.241U ng/Kg
DUP-06-SA5A-QC-030111(RES)	1,2,3,6,7,8-HXCDF	0.0873 ng/Kg	0.0873U ng/Kg
DUP-06-SA5A-QC-030111(RES)	1,2,3,7,8,9-HXCDF	0.0684 ng/Kg	0.0684U ng/Kg
DUP-06-SA5A-QC-030111(RES)	2,3,4,6,7,8-HXCDF	0.134 ng/Kg	0.134U ng/Kg

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Method Blank Outlier Report

Lab Reporting Batch ID: DX059 **Laboratory: LL**

EDD Filename: PrepDX059_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
DUP-06-SA5A-QC-030111(RES)	2,3,4,7,8-PECDF	0.227 ng/Kg	0.227U ng/Kg
SL-072-SA5A-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.208 ng/Kg	0.208U ng/Kg
SL-072-SA5A-SS-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.287 ng/Kg	0.287U ng/Kg
SL-072-SA5A-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.173 ng/Kg	0.173U ng/Kg
SL-072-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.132 ng/Kg	0.132U ng/Kg
SL-072-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.0670 ng/Kg	0.0670U ng/Kg
SL-072-SA5A-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.326 ng/Kg	0.326U ng/Kg
SL-072-SA5A-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.237 ng/Kg	0.237U ng/Kg
SL-077-SA5A-SS-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDF	0.706 ng/Kg	0.706U ng/Kg
SL-077-SA5A-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.0936 ng/Kg	0.0936U ng/Kg
SL-077-SA5A-SS-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.104 ng/Kg	0.104U ng/Kg
SL-077-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.103 ng/Kg	0.103U ng/Kg
SL-077-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.0356 ng/Kg	0.0356U ng/Kg
SL-077-SA5A-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.134 ng/Kg	0.134U ng/Kg
SL-077-SA5A-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.0828 ng/Kg	0.0828U ng/Kg
SL-077-SA5A-SS-0.0-0.5(RES)	2,3,7,8-TCDF	0.0121 ng/Kg	0.0121U ng/Kg
SL-077-SA5A-SS-0.0-0.5(RES)	OCDF	1.17 ng/Kg	1.17U ng/Kg
SL-078-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.206 ng/Kg	0.206U ng/Kg
SL-078-SA5A-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.427 ng/Kg	0.427U ng/Kg
SL-078-SA5A-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.295 ng/Kg	0.295U ng/Kg
SL-244-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.411 ng/Kg	0.411U ng/Kg
SL-244-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.929 ng/Kg	0.929U ng/Kg
SL-244-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.133 ng/Kg	0.133U ng/Kg
SL-244-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HxCDD	0.0436 ng/Kg	0.0436U ng/Kg
SL-244-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.166 ng/Kg	0.166U ng/Kg
SL-244-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDD	0.0583 ng/Kg	0.0583U ng/Kg
SL-244-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.140 ng/Kg	0.140U ng/Kg
SL-244-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDD	0.0544 ng/Kg	0.0544U ng/Kg
SL-244-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.112 ng/Kg	0.112U ng/Kg
SL-244-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.0476 ng/Kg	0.0476U ng/Kg
SL-244-SA5A-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.254 ng/Kg	0.254U ng/Kg
SL-244-SA5A-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.142 ng/Kg	0.142U ng/Kg
SL-244-SA5A-SB-4.0-5.0(RES)	2,3,7,8-TCDF	0.0196 ng/Kg	0.0196U ng/Kg
SL-244-SA5A-SB-4.0-5.0(RES)	OCDD	1.28 ng/Kg	1.28U ng/Kg
SL-244-SA5A-SB-4.0-5.0(RES)	OCDF	0.627 ng/Kg	0.627U ng/Kg
SL-244-SA5A-SB-9.0-10.0(RES)	1,2,3,4,6,7,8-HPCDD	0.436 ng/Kg	0.436U ng/Kg
SL-244-SA5A-SB-9.0-10.0(RES)	1,2,3,4,6,7,8-HPCDF	0.758 ng/Kg	0.758U ng/Kg

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Method Blank Outlier Report

Lab Reporting Batch ID: DX059 **Laboratory: LL**

EDD Filename: PrepDX059_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-244-SA5A-SB-9.0-10.0(RES)	1,2,3,4,7,8,9-HPCDF	0.105 ng/Kg	0.105U ng/Kg
SL-244-SA5A-SB-9.0-10.0(RES)	1,2,3,4,7,8-HxCDD	0.0262 ng/Kg	0.0262U ng/Kg
SL-244-SA5A-SB-9.0-10.0(RES)	1,2,3,4,7,8-HXCDF	0.183 ng/Kg	0.183U ng/Kg
SL-244-SA5A-SB-9.0-10.0(RES)	1,2,3,6,7,8-HXCDD	0.0556 ng/Kg	0.0556U ng/Kg
SL-244-SA5A-SB-9.0-10.0(RES)	1,2,3,6,7,8-HXCDF	0.122 ng/Kg	0.122U ng/Kg
SL-244-SA5A-SB-9.0-10.0(RES)	1,2,3,7,8,9-HXCDD	0.0619 ng/Kg	0.0619U ng/Kg
SL-244-SA5A-SB-9.0-10.0(RES)	1,2,3,7,8,9-HXCDF	0.0768 ng/Kg	0.0768U ng/Kg
SL-244-SA5A-SB-9.0-10.0(RES)	1,2,3,7,8-PECDF	0.0649 ng/Kg	0.0649U ng/Kg
SL-244-SA5A-SB-9.0-10.0(RES)	2,3,4,6,7,8-HXCDF	0.268 ng/Kg	0.268U ng/Kg
SL-244-SA5A-SB-9.0-10.0(RES)	2,3,4,7,8-PECDF	0.160 ng/Kg	0.160U ng/Kg
SL-244-SA5A-SB-9.0-10.0(RES)	2,3,7,8-TCDF	0.0182 ng/Kg	0.0182U ng/Kg
SL-244-SA5A-SB-9.0-10.0(RES)	OCDF	0.734 ng/Kg	0.734U ng/Kg
SL-256-SA5A-SS-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDF	0.966 ng/Kg	0.966U ng/Kg
SL-256-SA5A-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.165 ng/Kg	0.165U ng/Kg
SL-256-SA5A-SS-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.0417 ng/Kg	0.0417U ng/Kg
SL-256-SA5A-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.173 ng/Kg	0.173U ng/Kg
SL-256-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.0832 ng/Kg	0.0832U ng/Kg
SL-256-SA5A-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.164 ng/Kg	0.164U ng/Kg
SL-256-SA5A-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.291 ng/Kg	0.291U ng/Kg
SL-257-SA5A-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.409 ng/Kg	0.409U ng/Kg

Field Duplicate RPD Report

Lab Reporting Batch ID: DX059 **Laboratory: LL**

EDD Filename: PrepDX059_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 160.3M
Matrix: SO

Analyte	Concentration (%)		Sample RPD	eQAPP RPD	Flag
	SL-256-SA5A-SS-0.0-0.5	DUP-06-SA5A-QC-030111			
MOISTURE	11.5	11.4	1		No Qualifiers Applied

Method: 1613B
Matrix: SO

Analyte	Concentration (ng/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-256-SA5A-SS-0.0-0.5	DUP-06-SA5A-QC-030111			
1,2,3,4,6,7,8-HPCDD	4.44	3.68	19	50.00	No Qualifiers Applied
1,2,3,4,6,7,8-HPCDF	0.966	0.769	23	50.00	
1,2,3,4,7,8-HxCDD	0.0417	0.0530	24	50.00	
1,2,3,6,7,8-HXCDD	0.162	0.146	10	50.00	
1,2,3,7,8,9-HXCDD	0.142	0.148	4	50.00	
1,2,3,7,8,9-HXCDF	0.0832	0.0684	20	50.00	
1,2,3,7,8-PECDD	0.0557	0.0430	26	50.00	
1,2,3,7,8-PECDF	0.137	0.129	6	50.00	
2,3,4,6,7,8-HXCDF	0.164	0.134	20	50.00	
2,3,4,7,8-PECDF	0.291	0.227	25	50.00	
2,3,7,8-TCDD	0.0156	0.0139	12	50.00	
OCDD	55.2	42.9	25	50.00	
OCDF	2.02	1.46	32	50.00	
1,2,3,4,7,8,9-HPCDF	0.165	0.0832	66	50.00	J(all detects)
1,2,3,4,7,8-HXCDF	0.429	0.241	56	50.00	
1,2,3,6,7,8-HXCDF	0.173	0.0873	66	50.00	
2,3,7,8-TCDF	0.133	0.0634	71	50.00	

Reporting Limit Outliers

Lab Reporting Batch ID: DX059 **Laboratory: LL**

EDD Filename: DX059_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1613B
Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB04-SA5A-030111	1,2,3,4,6,7,8-HPCDD	JB	2.36	10.4	PQL	pg/L	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	3.65	10.4	PQL	pg/L	
	1,2,3,4,7,8,9-HPCDF	JB	0.481	10.4	PQL	pg/L	
	1,2,3,4,7,8-HxCDD	JBQ	0.123	10.4	PQL	pg/L	
	1,2,3,4,7,8-HXCDF	JB	0.648	10.4	PQL	pg/L	
	1,2,3,6,7,8-HXCDD	JBQ	0.218	10.4	PQL	pg/L	
	1,2,3,6,7,8-HXCDF	JB	0.647	10.4	PQL	pg/L	
	1,2,3,7,8,9-HXCDD	JBQ	0.225	10.4	PQL	pg/L	
	1,2,3,7,8,9-HXCDF	JBQ	0.384	10.4	PQL	pg/L	
	1,2,3,7,8-PECDD	JBQ	0.142	10.4	PQL	pg/L	
	1,2,3,7,8-PECDF	JBQ	0.161	10.4	PQL	pg/L	
	2,3,4,6,7,8-HXCDF	JB	0.810	10.4	PQL	pg/L	
	2,3,4,7,8-PECDF	JB	0.577	10.4	PQL	pg/L	
	OCDD	JB	6.31	20.8	PQL	pg/L	
	OCDF	JB	2.00	20.8	PQL	pg/L	

Method: 1613B
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-191-SA5A-SS-0.0-0.5	2,3,7,8-TCDF	B	10.4	1.27	PQL	ng/Kg	
SL-194-SA5A-SS-0.0-0.3	2,3,7,8-TCDF	B	1.43	1.19	PQL	ng/Kg	
DUP-06-SA5A-QC-030111	1,2,3,4,6,7,8-HPCDD	JB	3.68	5.64	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.769	5.64	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0832	5.64	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0530	5.64	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.241	5.64	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.146	5.64	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0873	5.64	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.148	5.64	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.0684	5.64	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JQ	0.0430	5.64	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.129	5.64	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.134	5.64	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.227	5.64	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0139	1.13	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.0634	1.13	PQL	ng/Kg	
	OCDF	JB	1.46	11.3	PQL	ng/Kg	
SL-066-SA5A-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	1.96	5.67	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8-HXCDF	JB	3.59	5.67	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	1.21	5.67	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.772	5.67	PQL	ng/Kg	
	1,2,3,7,8-PECDD	J	3.55	5.67	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	1.30	5.67	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	1.66	5.67	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	1.61	5.67	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.407	1.13	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.827	1.13	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX059 **Laboratory: LL**

EDD Filename: DX059_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-072-SA5A-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	2.35	5.61	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.208	5.61	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.431	5.61	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.287	5.61	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.983	5.61	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.173	5.61	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.995	5.61	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.132	5.61	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	J	0.288	5.61	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0670	5.61	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.326	5.61	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.237	5.61	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.0589	1.12	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.0627	1.12	PQL	ng/Kg	
	OCDF	JB	5.05	11.2	PQL	ng/Kg	
SL-076-SA5A-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	1.08	5.41	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	2.03	5.41	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	1.01	5.41	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	4.52	5.41	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.730	5.41	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	4.17	5.41	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.342	5.41	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	J	1.11	5.41	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.163	5.41	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.682	5.41	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.444	5.41	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.124	1.08	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.114	1.08	PQL	ng/Kg	
SL-077-SA5A-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	0.706	5.85	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.0936	5.85	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.194	5.85	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.104	5.85	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	2.52	5.85	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.734	5.85	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	3.82	5.85	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.103	5.85	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	J	0.189	5.85	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0356	5.85	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.134	5.85	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.0828	5.85	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0286	1.17	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.0121	1.17	PQL	ng/Kg	
	OCDF	JBQ	1.17	11.7	PQL	ng/Kg	
SL-078-SA5A-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	0.603	5.59	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.972	5.59	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.557	5.59	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	2.03	5.59	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.389	5.59	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	2.06	5.59	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.206	5.59	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JQ	0.594	5.59	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.133	5.59	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.427	5.59	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.295	5.59	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.0849	1.12	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.0712	1.12	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX059 **Laboratory: LL**

EDD Filename: DX059_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-103-SA5A-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	0.652	6.35	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	1.85	6.35	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	1.07	6.35	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	4.32	6.35	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.628	6.35	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	3.60	6.35	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.269	6.35	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	J	1.16	6.35	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.714	6.35	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.722	6.35	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.921	6.35	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.176	1.27	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.504	1.27	PQL	ng/Kg	
SL-104-SA5A-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	0.690	5.94	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	2.56	5.94	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	1.02	5.94	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	5.73	5.94	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.514	5.94	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	5.36	5.94	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.290	5.94	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	J	1.55	5.94	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.348	5.94	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.699	5.94	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.777	5.94	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.239	1.19	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.361	1.19	PQL	ng/Kg	
SL-191-SA5A-SS-0.0-0.5	1,2,3,7,8,9-HXCDF	JB	3.98	6.34	PQL	ng/Kg	
	1,2,3,7,8-PECDD	J	4.38	6.34	PQL	ng/Kg	J (all detects)
	2,3,7,8-TCDD	JB	0.655	1.27	PQL	ng/Kg	
SL-194-SA5A-SS-0.0-0.3	1,2,3,4,7,8,9-HPCDF	JB	4.82	5.97	PQL	ng/Kg	
	1,2,3,7,8-PECDD	J	5.85	5.97	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDF	JB	4.72	5.97	PQL	ng/Kg	
SL-195-SA5A-SS-0.0-0.2	1,2,3,4,7,8,9-HPCDF	JB	1.66	7.00	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	2.67	7.00	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	2.30	7.00	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	6.92	7.00	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	1.38	7.00	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	5.34	7.00	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.816	7.00	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	J	2.22	7.00	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.506	7.00	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	1.68	7.00	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	1.54	7.00	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.828	1.40	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.333	1.40	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX059 **Laboratory: LL**

EDD Filename: DX059_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-244-SA5A-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JBQ	0.411	5.73	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.929	5.73	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.133	5.73	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.0436	5.73	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.166	5.73	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.0583	5.73	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.140	5.73	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.0544	5.73	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.112	5.73	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JQ	0.0365	5.73	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0476	5.73	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.254	5.73	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.142	5.73	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.0196	1.15	PQL	ng/Kg	
	OCDD	JBQ	1.28	11.5	PQL	ng/Kg	
	OCDF	JB	0.627	11.5	PQL	ng/Kg	
SL-244-SA5A-SB-9.0-10.0	1,2,3,4,6,7,8-HPCDD	JBQ	0.436	5.83	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.758	5.83	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.105	5.83	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0262	5.83	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.183	5.83	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.0556	5.83	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.122	5.83	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.0619	5.83	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.0768	5.83	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JQ	0.0560	5.83	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0649	5.83	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.268	5.83	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.160	5.83	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0195	1.17	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.0182	1.17	PQL	ng/Kg	
	OCDD	JB	4.81	11.7	PQL	ng/Kg	
	OCDF	JBQ	0.734	11.7	PQL	ng/Kg	
SL-256-SA5A-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDD	JB	4.44	5.65	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.966	5.65	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.165	5.65	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.0417	5.65	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.429	5.65	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.162	5.65	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.173	5.65	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.142	5.65	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.0832	5.65	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JQ	0.0557	5.65	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.137	5.65	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.164	5.65	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.291	5.65	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0156	1.13	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.133	1.13	PQL	ng/Kg	
	OCDF	JB	2.02	11.3	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX059 **Laboratory: LL**

EDD Filename: DX059_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-257-SA5A-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	1.76	5.62	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.282	5.62	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.186	5.62	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.414	5.62	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.483	5.62	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.387	5.62	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.307	5.62	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.341	5.62	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	J	0.200	5.62	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.183	5.62	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.409	5.62	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.662	5.62	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.113	1.12	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.0995	1.12	PQL	ng/Kg	
	OCDF	JB	3.28	11.2	PQL	ng/Kg	

LDC #: 25907E

VALIDATION FINDINGS WORKSHEET

Compound Quantitation and Reported CRQLs

Reviewer: CR

2nd Reviewer: A

METHOD: HRGC/HRMS Dioxins/Dibenzofurans (EPA Method 1613B)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were the correct internal standard (IS), quantitation ions and relative response factors (RRF) used to quantitate the compound?

Y N N/A Compound quantitation and CRQLs were adjusted to reflect all sample dilutions and dry weight factors (if necessary).

#	Date	Sample ID	Finding	~~Associated Samples~~	Qualifications
		SL-066-SASA-SS-00.0-0.5	OCDD	>Cal Range	J/P
		SL-191-SASA-SS-0.0-0.5			
		SL-194-SASA-SS-0.0-0.3			

LDC #: 25907E

VALIDATION FINDINGS WORKSHEET
Overall Assessment of Data

Reviewer: OZ
2nd Reviewer: C

METHOD: HRGC/HRMS Dioxins/Dibenzofurans (EPA Method 1613B)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

All available information pertaining to the data were reviewed using professional judgement to compliment the determination of the overall quality of the data.

Y N N/A Was the overall quality and usability of the data acceptable?

#	Date	Sample ID	Finding	Associated Samples	Qualifications
		SL-191-SASA-SS-0.0-0.5	2,3,7,8-TCDF		R/A (from SP2331 (confirmation))
		SL-194-SASA-SS-0.0-0.3	↓		↓

Comments:

SAMPLE DELIVERY GROUP

DX060

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
02-Mar-2011	SL-048-SA5A-SS-0.0-0.5	6220810	N	METHOD	1613B	IV
02-Mar-2011	SL-048-SA5A-SS-0.0-0.5MS	6220811	MS	METHOD	1613B	IV
02-Mar-2011	SL-048-SA5A-SS-0.0-0.5MSD	6220812	MSD	METHOD	1613B	IV
02-Mar-2011	DUP-07-SA5A-QC-030211	6220806	FD	METHOD	1613B	IV
02-Mar-2011	SL-045-SA5A-SS-0.0-0.5	6220809	N	METHOD	1613B	IV
02-Mar-2011	SL-044-SA5A-SS-0.0-0.5	6220808	N	METHOD	1613B	IV
02-Mar-2011	SL-042-SA5A-SS-0.0-0.5	6220807	N	METHOD	1613B	IV
02-Mar-2011	SL-179-SA5A-SS-0.0-0.3	6220815	N	METHOD	1613B	IV
02-Mar-2011	SL-178-SA5A-SS-0.0-0.4	6220814	N	METHOD	1613B	IV
02-Mar-2011	SL-176-SA5A-SS-0.0-0.3	6220813	N	METHOD	1613B	IV
02-Mar-2011	EB05-SA5A-030211	6220820	EB	METHOD	1613B	IV
02-Mar-2011	SL-186-SA5A-SS-0.0-0.5	6220817	N	METHOD	1613B	IV
02-Mar-2011	SL-188-SA5A-SS-0.0-0.5	6220818	N	METHOD	1613B	IV
02-Mar-2011	SL-189-SA5A-SS-0.0-0.5	6220819	N	METHOD	1613B	IV
03-Mar-2011	SL-236-SA5A-SB-4.0-5.0	6222160	N	METHOD	1613B	IV
03-Mar-2011	SL-236-SA5A-SB-9.0-10.0	6222161	N	METHOD	1613B	IV
03-Mar-2011	SL-249-SA5A-SB-2.5-3.5	6222162	N	METHOD	1613B	IV
03-Mar-2011	SL-249-SA5A-SB-9.0-10.0	6222163	N	METHOD	1613B	IV
03-Mar-2011	SL-235-SA5A-SB-4.0-5.0	6222158	N	METHOD	1613B	IV
03-Mar-2011	SL-235-SA5A-SB-8.5-9.5	6222159	N	METHOD	1613B	IV
03-Mar-2011	SL-234-SA5A-SB-4.0-5.0	6222156	N	METHOD	1613B	IV
03-Mar-2011	SL-234-SA5A-SB-9.0-10.0	6222157	N	METHOD	1613B	IV
03-Mar-2011	EB06-SA5A-030311	6222164	EB	METHOD	1613B	IV

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DX060 **Laboratory: LL**

EDD Filename: DX060_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** AQ

Sample ID: EB05-SA5A-030211 **Collected:** 3/2/2011 12:15:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	3.44	JB	0.107	MDL	9.50	PQL	pg/L	U	B
1,2,3,4,6,7,8-HPCDF	3.03	JB	0.105	MDL	9.50	PQL	pg/L	U	B
1,2,3,4,7,8,9-HPCDF	0.329	JBQ	0.0701	MDL	9.50	PQL	pg/L	U	B
1,2,3,4,7,8-HxCDD	0.179	JBQ	0.0815	MDL	9.50	PQL	pg/L	U	B
1,2,3,4,7,8-HXCDF	0.536	JB	0.139	MDL	9.50	PQL	pg/L	U	B
1,2,3,6,7,8-HXCDD	0.122	JBQ	0.0742	MDL	9.50	PQL	pg/L	U	B
1,2,3,6,7,8-HXCDF	0.333	JB	0.105	MDL	9.50	PQL	pg/L	U	B
1,2,3,7,8,9-HXCDD	0.116	JBQ	0.0636	MDL	9.50	PQL	pg/L	U	B
1,2,3,7,8,9-HXCDF	0.227	JBQ	0.0617	MDL	9.50	PQL	pg/L	U	B
1,2,3,7,8-PECDD	0.144	JB	0.0836	MDL	9.50	PQL	pg/L	U	B
1,2,3,7,8-PECDF	0.170	JBQ	0.0481	MDL	9.50	PQL	pg/L	U	B
2,3,4,6,7,8-HXCDF	0.785	JB	0.0596	MDL	9.50	PQL	pg/L	U	B
2,3,4,7,8-PECDF	0.632	JB	0.0476	MDL	9.50	PQL	pg/L	U	B
2,3,7,8-TCDF	0.0806	JB	0.0611	MDL	1.90	PQL	pg/L	U	B
OCDD	6.44	JB	0.132	MDL	19.0	PQL	pg/L	U	B
OCDF	1.69	JB	0.0985	MDL	19.0	PQL	pg/L	U	B

Sample ID: EB06-SA5A-030311 **Collected:** 3/3/2011 4:20:00 PM **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	4.12	JB	0.201	MDL	9.97	PQL	pg/L	U	B
1,2,3,4,6,7,8-HPCDF	6.14	JB	0.169	MDL	9.97	PQL	pg/L	UJ	B, I
1,2,3,4,7,8,9-HPCDF	0.814	JBQ	0.172	MDL	9.97	PQL	pg/L	U	B
1,2,3,4,7,8-HxCDD	0.298	JBQ	0.140	MDL	9.97	PQL	pg/L	U	B
1,2,3,4,7,8-HXCDF	0.897	JB	0.206	MDL	9.97	PQL	pg/L	UJ	B, I
1,2,3,6,7,8-HXCDD	0.521	JBQ	0.140	MDL	9.97	PQL	pg/L	U	B
1,2,3,6,7,8-HXCDF	0.857	JB	0.163	MDL	9.97	PQL	pg/L	U	B
1,2,3,7,8,9-HXCDD	0.418	JB	0.132	MDL	9.97	PQL	pg/L	U	B
1,2,3,7,8,9-HXCDF	0.625	JBQ	0.141	MDL	9.97	PQL	pg/L	U	B
1,2,3,7,8-PECDD	0.583	JBQ	0.154	MDL	9.97	PQL	pg/L	U	B
1,2,3,7,8-PECDF	0.401	JB	0.0967	MDL	9.97	PQL	pg/L	U	B
2,3,4,6,7,8-HXCDF	1.77	JBQ	0.139	MDL	9.97	PQL	pg/L	U	B
2,3,4,7,8-PECDF	0.865	JBQ	0.0867	MDL	9.97	PQL	pg/L	U	B
2,3,7,8-TCDF	0.109	JBQ	0.0965	MDL	1.99	PQL	pg/L	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX060 **Laboratory: LL**

EDD Filename: DX060_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA
Method: 1613B **Matrix:** AQ

Sample ID: EB06-SA5A-030311 **Collected:** 3/3/2011 4:20:00 PM **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
OCDD	9.93	JB	0.333	MDL	19.9	PQL	pg/L	U	B
OCDF	4.34	JB	0.307	MDL	19.9	PQL	pg/L	U	B

Method Category: SVOA
Method: 1613B **Matrix:** SO

Sample ID: DUP-07-SA5A-QC-030211 **Collected:** 3/2/2011 8:58:00 AM **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	4.83	JB	0.0203	MDL	5.72	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.448	JB	0.0365	MDL	5.72	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.402	JBQ	0.0451	MDL	5.72	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.387	JB	0.0392	MDL	5.72	PQL	ng/Kg	J	Z, FD
1,2,3,6,7,8-HXCDD	1.10	JB	0.0457	MDL	5.72	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.275	JB	0.0327	MDL	5.72	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	1.02	JB	0.0439	MDL	5.72	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.309	JB	0.0458	MDL	5.72	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.295	JBQ	0.0335	MDL	5.72	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.322	JB	0.0199	MDL	5.72	PQL	ng/Kg	J	Z, FD
2,3,4,6,7,8-HXCDF	0.361	JB	0.0375	MDL	5.72	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.391	JB	0.0197	MDL	5.72	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0473	JB	0.0169	MDL	1.14	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.207	JB	0.0419	MDL	1.14	PQL	ng/Kg	J	Z

Sample ID: SL-042-SA5A-SS-0.0-0.5 **Collected:** 3/2/2011 10:11:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,7,8,9-HXCDF	4.26	JB	0.211	MDL	6.16	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	2.47	JB	0.110	MDL	6.16	PQL	ng/Kg	J	Z
OCDD	26400	EB	0.364	MDL	12.3	PQL	ng/Kg	J	*XI

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX060 **Laboratory: LL**

EDD Filename: DX060_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: **SL-044-SA5A-SS-0.0-0.5** ***Collected:*** **3/2/2011 9:58:00 AM** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8-HxCDD	5.56	JB	0.121	MDL	5.64	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	3.80	JB	0.0878	MDL	5.64	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	1.01	JB	0.0889	MDL	5.64	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	3.01	J	0.103	MDL	5.64	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.693	JB	0.0542	MDL	5.64	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	2.08	JB	0.0530	MDL	5.64	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.761	JB	0.0337	MDL	1.13	PQL	ng/Kg	J	Z
OCDD	7530	EB	0.164	MDL	11.3	PQL	ng/Kg	J	*XI

Sample ID: **SL-045-SA5A-SS-0.0-0.5** ***Collected:*** **3/2/2011 9:30:00 AM** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	2.45	JB	0.0198	MDL	5.97	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.258	JB	0.0243	MDL	5.97	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.210	JB	0.0435	MDL	5.97	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.406	JB	0.0362	MDL	5.97	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.774	JB	0.0438	MDL	5.97	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.238	JB	0.0294	MDL	5.97	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.773	JB	0.0403	MDL	5.97	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.368	JB	0.0266	MDL	5.97	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.196	J	0.0294	MDL	5.97	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.168	JBQ	0.0164	MDL	5.97	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.367	JB	0.0231	MDL	5.97	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.461	JB	0.0154	MDL	5.97	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0488	JBQ	0.0151	MDL	1.19	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.296	JB	0.0339	MDL	1.19	PQL	ng/Kg	J	Z
OCDF	6.90	JB	0.0203	MDL	11.9	PQL	ng/Kg	J	Z

Sample ID: **SL-048-SA5A-SS-0.0-0.5** ***Collected:*** **3/2/2011 8:55:00 AM** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	3.56	JB	0.0291	MDL	5.71	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.388	JB	0.0326	MDL	5.71	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.338	JB	0.0454	MDL	5.71	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX060 **Laboratory: LL**

EDD Filename: DX060_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-048-SA5A-SS-0.0-0.5 **Collected:** 3/2/2011 8:55:00 AM **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8-HXCDF	0.0392	U	0.0392	MDL	5.71	PQL	ng/Kg	UJ	FD
1,2,3,6,7,8-HXCDD	0.908	JB	0.0461	MDL	5.71	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.232	JB	0.0282	MDL	5.71	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	1.05	JB	0.0399	MDL	5.71	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.364	JB	0.0247	MDL	5.71	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.253	J	0.0247	MDL	5.71	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.140	JB	0.0146	MDL	5.71	PQL	ng/Kg	UJ	B, FD
2,3,4,6,7,8-HXCDF	0.397	JB	0.0223	MDL	5.71	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.389	JB	0.0152	MDL	5.71	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0419	JB	0.0134	MDL	1.14	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.199	JB	0.0255	MDL	1.14	PQL	ng/Kg	J	Z

Sample ID: SL-176-SA5A-SS-0.0-0.3 **Collected:** 3/2/2011 11:49:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	1.79	JB	0.0713	MDL	5.61	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	1.48	JB	0.0845	MDL	5.61	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	2.73	JB	0.114	MDL	5.61	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	5.39	JB	0.0858	MDL	5.61	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	1.34	JB	0.0927	MDL	5.61	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	3.42	JB	0.0797	MDL	5.61	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.699	JB	0.0623	MDL	5.61	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	1.02	J	0.0636	MDL	5.61	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.767	JB	0.0696	MDL	5.61	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	1.68	JB	0.0622	MDL	5.61	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	2.39	JB	0.0712	MDL	5.61	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.219	JB	0.0277	MDL	1.12	PQL	ng/Kg	J	Z

Sample ID: SL-178-SA5A-SS-0.0-0.4 **Collected:** 3/2/2011 11:17:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	2.66	JB	0.0633	MDL	5.29	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	2.01	JB	0.0625	MDL	5.29	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	2.77	JB	0.0713	MDL	5.29	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX060 **Laboratory: LL**

EDD Filename: DX060_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B *Matrix:* SO

Sample ID: SL-178-SA5A-SS-0.0-0.4 *Collected:* 3/2/2011 11:17:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,7,8,9-HXCDD	4.27	JB	0.0567	MDL	5.29	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.706	JB	0.0632	MDL	5.29	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	1.22	J	0.0673	MDL	5.29	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	2.11	JB	0.0562	MDL	5.29	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	2.82	JB	0.0576	MDL	5.29	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.168	JB	0.0221	MDL	1.06	PQL	ng/Kg	J	Z

Sample ID: SL-179-SA5A-SS-0.0-0.3 *Collected:* 3/2/2011 11:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	2.14	JB	0.0668	MDL	5.33	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	1.66	JB	0.0658	MDL	5.33	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	2.91	JB	0.0690	MDL	5.33	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	1.34	JB	0.0608	MDL	5.33	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	3.69	JB	0.0603	MDL	5.33	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.434	JB	0.0554	MDL	5.33	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	1.01	J	0.0507	MDL	5.33	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.627	JB	0.0398	MDL	5.33	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	1.39	JB	0.0486	MDL	5.33	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	1.47	JB	0.0398	MDL	5.33	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.146	JB	0.0304	MDL	1.07	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.994	JB	0.0623	MDL	1.07	PQL	ng/Kg	J	Z

Sample ID: SL-186-SA5A-SS-0.0-0.5 *Collected:* 3/2/2011 1:25:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	1.73	JB	0.178	MDL	5.95	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	1.29	JBQ	0.194	MDL	5.95	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	1.21	JB	0.146	MDL	5.95	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	5.71	JB	0.202	MDL	5.95	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.884	JB	0.118	MDL	5.95	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	2.64	JB	0.190	MDL	5.95	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.666	JB	0.107	MDL	5.95	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.805	JQ	0.103	MDL	5.95	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX060 **Laboratory: LL**

EDD Filename: DX060_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-186-SA5A-SS-0.0-0.5 **Collected:** 3/2/2011 1:25:00 PM **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,7,8-PECDF	0.316	JBQ	0.0958	MDL	5.95	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	1.22	JB	0.0987	MDL	5.95	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	1.41	JBQ	0.0952	MDL	5.95	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.175	JBQ	0.0943	MDL	1.19	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	1.08	JB	0.131	MDL	1.19	PQL	ng/Kg	J	Z

Sample ID: SL-188-SA5A-SS-0.0-0.5 **Collected:** 3/2/2011 2:01:00 PM **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	0.760	JB	0.0426	MDL	5.62	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.459	JB	0.0518	MDL	5.62	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.789	JB	0.0598	MDL	5.62	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	2.54	JB	0.0516	MDL	5.62	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.558	JB	0.0440	MDL	5.62	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	1.57	JB	0.0492	MDL	5.62	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.723	JB	0.0354	MDL	5.62	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.257	J	0.0278	MDL	5.62	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.307	JB	0.0282	MDL	5.62	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.710	JB	0.0362	MDL	5.62	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.883	JB	0.0283	MDL	5.62	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0360	JBQ	0.0121	MDL	1.12	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.621	JB	0.0531	MDL	1.12	PQL	ng/Kg	J	Z

Sample ID: SL-189-SA5A-SS-0.0-0.5 **Collected:** 3/2/2011 2:15:00 PM **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	2.84	JB	0.0270	MDL	5.92	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.274	JB	0.0336	MDL	5.92	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.192	JBQ	0.0506	MDL	5.92	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.302	JB	0.0325	MDL	5.92	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.904	JB	0.0520	MDL	5.92	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.182	JB	0.0294	MDL	5.92	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.569	JB	0.0496	MDL	5.92	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.134	JB	0.0312	MDL	5.92	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.158	J	0.0227	MDL	5.92	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX060 **Laboratory: LL**

EDD Filename: DX060_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B ***Matrix:*** SO

Sample ID: SL-189-SA5A-SS-0.0-0.5 ***Collected:*** 3/2/2011 2:15:00 PM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,7,8-PECDF	0.100	JBQ	0.0238	MDL	5.92	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.309	JB	0.0269	MDL	5.92	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.477	JB	0.0245	MDL	5.92	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0393	JBQ	0.0136	MDL	1.18	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.401	JB	0.0472	MDL	1.18	PQL	ng/Kg	J	Z
OCDF	6.64	JB	0.0487	MDL	11.8	PQL	ng/Kg	J	Z

Sample ID: SL-234-SA5A-SB-4.0-5.0 ***Collected:*** 3/3/2011 3:53:00 PM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.276	JB	0.0196	MDL	5.41	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.218	JB	0.0118	MDL	5.41	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0656	JBQ	0.0142	MDL	5.41	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0371	JBQ	0.0203	MDL	5.41	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.110	JBQ	0.0151	MDL	5.41	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.0600	JB	0.0134	MDL	5.41	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.288	JB	0.0138	MDL	5.41	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.193	JB	0.0120	MDL	5.41	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0281	JBQ	0.0107	MDL	5.41	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0629	JBQ	0.00530	MDL	5.41	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.114	JB	0.0101	MDL	5.41	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0686	JB	0.00584	MDL	5.41	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0117	JQ	0.00778	MDL	1.08	PQL	ng/Kg	J	Z
OCDD	1.09	JB	0.0285	MDL	10.8	PQL	ng/Kg	U	B
OCDF	0.332	JB	0.0297	MDL	10.8	PQL	ng/Kg	U	B

Sample ID: SL-234-SA5A-SB-9.0-10.0 ***Collected:*** 3/3/2011 3:55:00 PM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.273	JB	0.0196	MDL	5.61	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.261	JB	0.00930	MDL	5.61	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0136	JBQ	0.0113	MDL	5.61	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0596	JBQ	0.0122	MDL	5.61	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0181	JBQ	0.0117	MDL	5.61	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0370	JBQ	0.00942	MDL	5.61	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX060 **Laboratory: LL**

EDD Filename: DX060_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: **SL-234-SA5A-SB-9.0-10.0** ***Collected:*** **3/3/2011 3:55:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,7,8,9-HXCDD	0.0222	JBQ	0.0111	MDL	5.61	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0472	JBQ	0.0129	MDL	5.61	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0106	JBQ	0.0104	MDL	5.61	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0151	JBQ	0.00605	MDL	5.61	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.106	JB	0.00987	MDL	5.61	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0815	JBQ	0.00673	MDL	5.61	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0138	JBQ	0.0120	MDL	1.12	PQL	ng/Kg	U	B
OCDD	0.631	JB	0.0277	MDL	11.2	PQL	ng/Kg	U	B
OCDF	0.309	JB	0.0302	MDL	11.2	PQL	ng/Kg	U	B

Sample ID: **SL-235-SA5A-SB-4.0-5.0** ***Collected:*** **3/3/2011 2:33:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	2.89	JB	0.0312	MDL	5.65	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	1.26	JB	0.0160	MDL	5.65	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.126	JBQ	0.0240	MDL	5.65	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0258	JBQ	0.0235	MDL	5.65	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.108	JB	0.0272	MDL	5.65	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.166	JB	0.0240	MDL	5.65	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.130	JBQ	0.0221	MDL	5.65	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.206	JB	0.0219	MDL	5.65	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.197	JB	0.0269	MDL	5.65	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0239	JBQ	0.0130	MDL	5.65	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0414	JB	0.0123	MDL	5.65	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.179	JB	0.0228	MDL	5.65	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.171	JB	0.0139	MDL	5.65	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0173	J	0.0136	MDL	1.13	PQL	ng/Kg	J	Z
OCDF	2.09	JB	0.0336	MDL	11.3	PQL	ng/Kg	J	Z

Sample ID: **SL-235-SA5A-SB-8.5-9.5** ***Collected:*** **3/3/2011 2:38:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.267	JBQ	0.0168	MDL	5.68	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.192	JB	0.00953	MDL	5.68	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0738	JB	0.0125	MDL	5.68	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX060 **Laboratory: LL**

EDD Filename: DX060_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: **SL-235-SA5A-SB-8.5-9.5** ***Collected:*** **3/3/2011 2:38:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8-HXCDF	0.0371	JBQ	0.0173	MDL	5.68	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0193	JB	0.00942	MDL	5.68	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0338	JBQ	0.0116	MDL	5.68	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0197	JBQ	0.00874	MDL	5.68	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0407	JBQ	0.0102	MDL	5.68	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0128	JBQ	0.00976	MDL	5.68	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0208	JBQ	0.00556	MDL	5.68	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.127	JB	0.00795	MDL	5.68	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0841	JB	0.00636	MDL	5.68	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0146	JQ	0.00863	MDL	1.14	PQL	ng/Kg	J	Z
OCDD	0.767	JB	0.0233	MDL	11.4	PQL	ng/Kg	U	B
OCDF	0.362	JB	0.0224	MDL	11.4	PQL	ng/Kg	U	B

Sample ID: **SL-236-SA5A-SB-4.0-5.0** ***Collected:*** **3/3/2011 9:53:00 AM** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.426	JB	0.0197	MDL	5.54	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.182	JB	0.00831	MDL	5.54	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0750	JBQ	0.0132	MDL	5.54	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0486	JBQ	0.0177	MDL	5.54	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.117	JB	0.0152	MDL	5.54	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.0390	JBQ	0.0115	MDL	5.54	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.158	JB	0.0141	MDL	5.54	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.181	JBQ	0.0126	MDL	5.54	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0248	JBQ	0.0104	MDL	5.54	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0604	JB	0.00509	MDL	5.54	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.120	JB	0.00975	MDL	5.54	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0727	JBQ	0.00620	MDL	5.54	PQL	ng/Kg	U	B
OCDD	1.73	JB	0.0264	MDL	11.1	PQL	ng/Kg	U	B
OCDF	0.325	JB	0.0272	MDL	11.1	PQL	ng/Kg	U	B

Sample ID: **SL-236-SA5A-SB-9.0-10.0** ***Collected:*** **3/3/2011 9:58:00 AM** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.179	JB	0.0151	MDL	5.61	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX060 **Laboratory: LL**

EDD Filename: DX060_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: **SL-236-SA5A-SB-9.0-10.0** ***Collected:*** **3/3/2011 9:58:00 AM** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	0.142	JBQ	0.00930	MDL	5.61	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0572	JB	0.00975	MDL	5.61	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0301	JBQ	0.0151	MDL	5.61	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0188	JBQ	0.00908	MDL	5.61	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0235	JBQ	0.0105	MDL	5.61	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0275	JBQ	0.00785	MDL	5.61	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0491	JB	0.00695	MDL	5.61	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0117	JBQ	0.00527	MDL	5.61	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0907	JBQ	0.00594	MDL	5.61	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0636	JBQ	0.00561	MDL	5.61	PQL	ng/Kg	U	B
OCDD	0.637	JB	0.0207	MDL	11.2	PQL	ng/Kg	U	B
OCDF	0.238	JB	0.0243	MDL	11.2	PQL	ng/Kg	U	B

Sample ID: **SL-249-SA5A-SB-2.5-3.5** ***Collected:*** **3/3/2011 12:00:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.660	JB	0.0224	MDL	5.51	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.201	JB	0.00650	MDL	5.51	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0472	JBQ	0.0129	MDL	5.51	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0362	JB	0.0111	MDL	5.51	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0829	JBQ	0.0130	MDL	5.51	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0538	JBQ	0.00860	MDL	5.51	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.142	JB	0.0126	MDL	5.51	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.109	JBQ	0.0117	MDL	5.51	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0229	JBQ	0.0107	MDL	5.51	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0311	JBQ	0.00474	MDL	5.51	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0910	JB	0.00893	MDL	5.51	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0679	JBQ	0.00507	MDL	5.51	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0281	JQ	0.00860	MDL	1.10	PQL	ng/Kg	J	Z
OCDD	4.55	JB	0.0175	MDL	11.0	PQL	ng/Kg	J	Z
OCDF	0.379	JBQ	0.0228	MDL	11.0	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX060 **Laboratory: LL**

EDD Filename: DX060_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B *Matrix:* SO

Sample ID: SL-249-SA5A-SB-9.0-10.0 *Collected:* 3/3/2011 12:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.187	JBQ	0.0142	MDL	5.51	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.202	JB	0.00573	MDL	5.51	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0244	JBQ	0.0127	MDL	5.51	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0204	JBQ	0.00871	MDL	5.51	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0518	JB	0.00838	MDL	5.51	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0209	JBQ	0.00893	MDL	5.51	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0393	JB	0.00695	MDL	5.51	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0331	JBQ	0.00827	MDL	5.51	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0432	JBQ	0.00915	MDL	5.51	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0234	JBQ	0.00893	MDL	5.51	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0263	JBQ	0.00419	MDL	5.51	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0882	JBQ	0.00805	MDL	5.51	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0794	JBQ	0.00452	MDL	5.51	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0104	JBQ	0.00882	MDL	1.10	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0139	JQ	0.00717	MDL	1.10	PQL	ng/Kg	J	Z
OCDD	0.525	JB	0.0176	MDL	11.0	PQL	ng/Kg	U	B
OCDF	0.273	JB	0.0218	MDL	11.0	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX060 **Laboratory: LL**

EDD Filename: DX060_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
	Sampling to Leaching Estimation
	Sampling to Leaching Rejection
*XI	Compound Quantitation and CRQL
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Continuing Calibration Verification Percent Recovery Lower Estimation
C	Continuing Calibration Verification Percent Recovery Lower Rejection
C	Continuing Calibration Verification Percent Recovery Upper Estimation
C	Continuing Calibration Verification Percent Recovery Upper Rejection
C	Continuing Calibration Verification Relative Response Factor
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Relative Response Factor
C	Initial Calibration Verification Correlation Coefficient

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DX060 **Laboratory: LL**

EDD Filename: DX060_v1 **eQAPP Name: CDM_SSFL_110509**

C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Verification Percent Recovery Lower Estimation
C	Initial Calibration Verification Percent Recovery Lower Rejection
C	Initial Calibration Verification Percent Recovery Upper Estimation
C	Initial Calibration Verification Percent Recovery Upper Rejection
C	Initial Calibration Verification Relative Response Factor
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Laboratory Triplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination
F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DX060 **Laboratory: LL**

EDD Filename: DX060_v1 **eQAPP Name: CDM_SSFL_110509**

L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Laboratory Triplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Q	Matrix Spike Upper Rejection
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control Outlier Reports

DX060

Method Blank Outlier Report

Lab Reporting Batch ID: DX060 **Laboratory: LL**

EDD Filename: DX060_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **AQ**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLK0660B370849	3/11/2011 8:49:00 AM	1,2,3,4,6,7,8-HPCDD	3.30 pg/L	EB05-SA5A-030211
		1,2,3,4,6,7,8-HPCDF	6.54 pg/L	
		1,2,3,4,7,8,9-HPCDF	1.19 pg/L	
		1,2,3,4,7,8-HxCDD	0.576 pg/L	
		1,2,3,4,7,8-HXCDF	1.04 pg/L	
		1,2,3,6,7,8-HXCDD	0.332 pg/L	
		1,2,3,6,7,8-HXCDF	1.11 pg/L	
		1,2,3,7,8,9-HXCDD	0.634 pg/L	
		1,2,3,7,8,9-HXCDF	1.20 pg/L	
		1,2,3,7,8-PECDD	0.374 pg/L	
		1,2,3,7,8-PECDF	0.528 pg/L	
		2,3,4,6,7,8-HXCDF	1.70 pg/L	
		2,3,4,7,8-PECDF	1.10 pg/L	
		2,3,7,8-TCDF	0.158 pg/L	
		OCDD	6.88 pg/L	
		OCDF	4.19 pg/L	
BLK0680B370200	3/11/2011 2:00:00 AM	1,2,3,4,6,7,8-HPCDD	2.50 pg/L	EB06-SA5A-030311
		1,2,3,4,6,7,8-HPCDF	4.59 pg/L	
		1,2,3,4,7,8,9-HPCDF	0.734 pg/L	
		1,2,3,4,7,8-HxCDD	0.221 pg/L	
		1,2,3,4,7,8-HXCDF	0.713 pg/L	
		1,2,3,6,7,8-HXCDD	0.314 pg/L	
		1,2,3,6,7,8-HXCDF	0.790 pg/L	
		1,2,3,7,8,9-HXCDD	0.432 pg/L	
		1,2,3,7,8,9-HXCDF	0.756 pg/L	
		1,2,3,7,8-PECDD	0.322 pg/L	
		1,2,3,7,8-PECDF	0.379 pg/L	
		2,3,4,6,7,8-HXCDF	1.21 pg/L	
		2,3,4,7,8-PECDF	0.765 pg/L	
		2,3,7,8-TCDD	0.0984 pg/L	
		2,3,7,8-TCDF	0.209 pg/L	
		OCDD	4.99 pg/L	
		OCDF	2.42 pg/L	

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
EB05-SA5A-030211(RES)	1,2,3,4,6,7,8-HPCDD	3.44 pg/L	3.44U pg/L
EB05-SA5A-030211(RES)	1,2,3,4,6,7,8-HPCDF	3.03 pg/L	3.03U pg/L
EB05-SA5A-030211(RES)	1,2,3,4,7,8,9-HPCDF	0.329 pg/L	0.329U pg/L
EB05-SA5A-030211(RES)	1,2,3,4,7,8-HxCDD	0.179 pg/L	0.179U pg/L
EB05-SA5A-030211(RES)	1,2,3,4,7,8-HXCDF	0.536 pg/L	0.536U pg/L
EB05-SA5A-030211(RES)	1,2,3,6,7,8-HXCDD	0.122 pg/L	0.122U pg/L
EB05-SA5A-030211(RES)	1,2,3,6,7,8-HXCDF	0.333 pg/L	0.333U pg/L
EB05-SA5A-030211(RES)	1,2,3,7,8,9-HXCDD	0.116 pg/L	0.116U pg/L
EB05-SA5A-030211(RES)	1,2,3,7,8,9-HXCDF	0.227 pg/L	0.227U pg/L
EB05-SA5A-030211(RES)	1,2,3,7,8-PECDD	0.144 pg/L	0.144U pg/L
EB05-SA5A-030211(RES)	1,2,3,7,8-PECDF	0.170 pg/L	0.170U pg/L
EB05-SA5A-030211(RES)	2,3,4,6,7,8-HXCDF	0.785 pg/L	0.785U pg/L
EB05-SA5A-030211(RES)	2,3,4,7,8-PECDF	0.632 pg/L	0.632U pg/L
EB05-SA5A-030211(RES)	2,3,7,8-TCDF	0.0806 pg/L	0.0806U pg/L
EB05-SA5A-030211(RES)	OCDD	6.44 pg/L	6.44U pg/L
EB05-SA5A-030211(RES)	OCDF	1.69 pg/L	1.69U pg/L
EB06-SA5A-030311(RES)	1,2,3,4,6,7,8-HPCDD	4.12 pg/L	4.12U pg/L
EB06-SA5A-030311(RES)	1,2,3,4,6,7,8-HPCDF	6.14 pg/L	6.14U pg/L

Method Blank Outlier Report

Lab Reporting Batch ID: DX060 **Laboratory: LL**

EDD Filename: DX060_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **AQ**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
EB06-SA5A-030311(RES)	1,2,3,4,7,8,9-HPCDF	0.814 pg/L	0.814U pg/L
EB06-SA5A-030311(RES)	1,2,3,4,7,8-HxCDD	0.298 pg/L	0.298U pg/L
EB06-SA5A-030311(RES)	1,2,3,4,7,8-HXCDF	0.897 pg/L	0.897U pg/L
EB06-SA5A-030311(RES)	1,2,3,6,7,8-HXCDD	0.521 pg/L	0.521U pg/L
EB06-SA5A-030311(RES)	1,2,3,6,7,8-HXCDF	0.857 pg/L	0.857U pg/L
EB06-SA5A-030311(RES)	1,2,3,7,8,9-HXCDD	0.418 pg/L	0.418U pg/L
EB06-SA5A-030311(RES)	1,2,3,7,8,9-HXCDF	0.625 pg/L	0.625U pg/L
EB06-SA5A-030311(RES)	1,2,3,7,8-PECDD	0.583 pg/L	0.583U pg/L
EB06-SA5A-030311(RES)	1,2,3,7,8-PECDF	0.401 pg/L	0.401U pg/L
EB06-SA5A-030311(RES)	2,3,4,6,7,8-HXCDF	1.77 pg/L	1.77U pg/L
EB06-SA5A-030311(RES)	2,3,4,7,8-PECDF	0.865 pg/L	0.865U pg/L
EB06-SA5A-030311(RES)	2,3,7,8-TCDF	0.109 pg/L	0.109U pg/L
EB06-SA5A-030311(RES)	OCDD	9.93 pg/L	9.93U pg/L
EB06-SA5A-030311(RES)	OCDF	4.34 pg/L	4.34U pg/L

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLK0750B372102	3/18/2011 9:02:00 PM	1,2,3,4,6,7,8-HPCDD	0.256 ng/Kg	SL-042-SA5A-SS-0.0-0.5
		1,2,3,4,6,7,8-HPCDF	0.415 ng/Kg	SL-044-SA5A-SS-0.0-0.5
		1,2,3,4,7,8,9-HPCDF	0.0742 ng/Kg	SL-045-SA5A-SS-0.0-0.5
		1,2,3,4,7,8-HxCDD	0.0127 ng/Kg	SL-048-SA5A-SS-0.0-0.5
		1,2,3,4,7,8-HXCDF	0.0643 ng/Kg	SL-176-SA5A-SS-0.0-0.3
		1,2,3,6,7,8-HXCDD	0.0269 ng/Kg	SL-178-SA5A-SS-0.0-0.4
		1,2,3,6,7,8-HXCDF	0.0553 ng/Kg	SL-179-SA5A-SS-0.0-0.3
		1,2,3,7,8,9-HXCDD	0.0191 ng/Kg	SL-186-SA5A-SS-0.0-0.5
		1,2,3,7,8,9-HXCDF	0.0579 ng/Kg	SL-188-SA5A-SS-0.0-0.5
		1,2,3,7,8-PECDF	0.0410 ng/Kg	SL-189-SA5A-SS-0.0-0.5
		2,3,4,6,7,8-HXCDF	0.155 ng/Kg	
		2,3,4,7,8-PECDF	0.0905 ng/Kg	
		2,3,7,8-TCDD	0.0127 ng/Kg	
		2,3,7,8-TCDF	0.0185 ng/Kg	
		OCDD	0.493 ng/Kg	
		OCDF	0.337 ng/Kg	
BLK0760B371716	3/19/2011 5:16:00 PM	1,2,3,4,6,7,8-HPCDD	0.200 ng/Kg	SL-234-SA5A-SB-4.0-5.0
		1,2,3,4,6,7,8-HPCDF	0.221 ng/Kg	SL-234-SA5A-SB-9.0-10.0
		1,2,3,4,7,8,9-HPCDF	0.0584 ng/Kg	SL-235-SA5A-SB-4.0-5.0
		1,2,3,4,7,8-HxCDD	0.0153 ng/Kg	SL-235-SA5A-SB-8.5-9.5
		1,2,3,4,7,8-HXCDF	0.0401 ng/Kg	SL-236-SA5A-SB-4.0-5.0
		1,2,3,6,7,8-HXCDD	0.0167 ng/Kg	SL-236-SA5A-SB-9.0-10.0
		1,2,3,6,7,8-HXCDF	0.0403 ng/Kg	SL-249-SA5A-SB-2.5-3.5
		1,2,3,7,8,9-HXCDD	0.0207 ng/Kg	SL-249-SA5A-SB-9.0-10.0
		1,2,3,7,8,9-HXCDF	0.0536 ng/Kg	
		1,2,3,7,8-PECDD	0.0214 ng/Kg	
		1,2,3,7,8-PECDF	0.0234 ng/Kg	
		2,3,4,6,7,8-HXCDF	0.0969 ng/Kg	
		2,3,4,7,8-PECDF	0.0861 ng/Kg	
		2,3,7,8-TCDD	0.0119 ng/Kg	
		OCDD	0.355 ng/Kg	
		OCDF	0.291 ng/Kg	

Method Blank Outlier Report

Lab Reporting Batch ID: DX060 **Laboratory: LL**

EDD Filename: DX060_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLK0830B371829	3/25/2011 6:29:00 PM	1,2,3,4,6,7,8-HPCDD	0.202 ng/Kg	DUP-07-SA5A-QC-030211
		1,2,3,4,6,7,8-HPCDF	0.141 ng/Kg	
		1,2,3,4,7,8,9-HPCDF	0.0667 ng/Kg	
		1,2,3,4,7,8-HxCDD	0.0256 ng/Kg	
		1,2,3,4,7,8-HXCDF	0.0527 ng/Kg	
		1,2,3,6,7,8-HXCDD	0.0244 ng/Kg	
		1,2,3,6,7,8-HXCDF	0.0416 ng/Kg	
		1,2,3,7,8,9-HXCDD	0.0275 ng/Kg	
		1,2,3,7,8,9-HXCDF	0.0883 ng/Kg	
		1,2,3,7,8-PECDD	0.0317 ng/Kg	
		1,2,3,7,8-PECDF	0.0346 ng/Kg	
		2,3,4,6,7,8-HXCDF	0.0701 ng/Kg	
		2,3,4,7,8-PECDF	0.0885 ng/Kg	
		2,3,7,8-TCDD	0.0184 ng/Kg	
		2,3,7,8-TCDF	0.0219 ng/Kg	
		OCDD	0.392 ng/Kg	
		OCDF	0.221 ng/Kg	

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
DUP-07-SA5A-QC-030211(RES)	1,2,3,7,8,9-HXCDF	0.309 ng/Kg	0.309U ng/Kg
DUP-07-SA5A-QC-030211(RES)	2,3,4,7,8-PECDF	0.391 ng/Kg	0.391U ng/Kg
DUP-07-SA5A-QC-030211(RES)	2,3,7,8-TCDD	0.0473 ng/Kg	0.0473U ng/Kg
SL-045-SA5A-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.258 ng/Kg	0.258U ng/Kg
SL-045-SA5A-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.238 ng/Kg	0.238U ng/Kg
SL-045-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.168 ng/Kg	0.168U ng/Kg
SL-045-SA5A-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.367 ng/Kg	0.367U ng/Kg
SL-045-SA5A-SS-0.0-0.5(RES)	2,3,7,8-TCDD	0.0488 ng/Kg	0.0488U ng/Kg
SL-048-SA5A-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.232 ng/Kg	0.232U ng/Kg
SL-048-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.140 ng/Kg	0.140U ng/Kg
SL-048-SA5A-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.397 ng/Kg	0.397U ng/Kg
SL-048-SA5A-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.389 ng/Kg	0.389U ng/Kg
SL-048-SA5A-SS-0.0-0.5(RES)	2,3,7,8-TCDD	0.0419 ng/Kg	0.0419U ng/Kg
SL-188-SA5A-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.710 ng/Kg	0.710U ng/Kg
SL-188-SA5A-SS-0.0-0.5(RES)	2,3,7,8-TCDD	0.0360 ng/Kg	0.0360U ng/Kg
SL-189-SA5A-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.274 ng/Kg	0.274U ng/Kg
SL-189-SA5A-SS-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.302 ng/Kg	0.302U ng/Kg
SL-189-SA5A-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.182 ng/Kg	0.182U ng/Kg
SL-189-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.134 ng/Kg	0.134U ng/Kg
SL-189-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.100 ng/Kg	0.100U ng/Kg
SL-189-SA5A-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.309 ng/Kg	0.309U ng/Kg
SL-189-SA5A-SS-0.0-0.5(RES)	2,3,7,8-TCDD	0.0393 ng/Kg	0.0393U ng/Kg
SL-234-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.276 ng/Kg	0.276U ng/Kg
SL-234-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.218 ng/Kg	0.218U ng/Kg
SL-234-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0656 ng/Kg	0.0656U ng/Kg
SL-234-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.0371 ng/Kg	0.0371U ng/Kg
SL-234-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.0600 ng/Kg	0.0600U ng/Kg
SL-234-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.193 ng/Kg	0.193U ng/Kg
SL-234-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDD	0.0281 ng/Kg	0.0281U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX060 **Laboratory: LL**

EDD Filename: DX060_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-234-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.0629 ng/Kg	0.0629U ng/Kg
SL-234-SA5A-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.114 ng/Kg	0.114U ng/Kg
SL-234-SA5A-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.0686 ng/Kg	0.0686U ng/Kg
SL-234-SA5A-SB-4.0-5.0(RES)	OCDD	1.09 ng/Kg	1.09U ng/Kg
SL-234-SA5A-SB-4.0-5.0(RES)	OCDF	0.332 ng/Kg	0.332U ng/Kg
SL-234-SA5A-SB-9.0-10.0(RES)	1,2,3,4,6,7,8-HPCDD	0.273 ng/Kg	0.273U ng/Kg
SL-234-SA5A-SB-9.0-10.0(RES)	1,2,3,4,6,7,8-HPCDF	0.261 ng/Kg	0.261U ng/Kg
SL-234-SA5A-SB-9.0-10.0(RES)	1,2,3,4,7,8-HxCDD	0.0136 ng/Kg	0.0136U ng/Kg
SL-234-SA5A-SB-9.0-10.0(RES)	1,2,3,4,7,8-HXCDF	0.0596 ng/Kg	0.0596U ng/Kg
SL-234-SA5A-SB-9.0-10.0(RES)	1,2,3,6,7,8-HXCDD	0.0181 ng/Kg	0.0181U ng/Kg
SL-234-SA5A-SB-9.0-10.0(RES)	1,2,3,6,7,8-HXCDF	0.0370 ng/Kg	0.0370U ng/Kg
SL-234-SA5A-SB-9.0-10.0(RES)	1,2,3,7,8,9-HXCDD	0.0222 ng/Kg	0.0222U ng/Kg
SL-234-SA5A-SB-9.0-10.0(RES)	1,2,3,7,8,9-HXCDF	0.0472 ng/Kg	0.0472U ng/Kg
SL-234-SA5A-SB-9.0-10.0(RES)	1,2,3,7,8-PECDD	0.0106 ng/Kg	0.0106U ng/Kg
SL-234-SA5A-SB-9.0-10.0(RES)	1,2,3,7,8-PECDF	0.0151 ng/Kg	0.0151U ng/Kg
SL-234-SA5A-SB-9.0-10.0(RES)	2,3,4,6,7,8-HXCDF	0.106 ng/Kg	0.106U ng/Kg
SL-234-SA5A-SB-9.0-10.0(RES)	2,3,4,7,8-PECDF	0.0815 ng/Kg	0.0815U ng/Kg
SL-234-SA5A-SB-9.0-10.0(RES)	2,3,7,8-TCDD	0.0138 ng/Kg	0.0138U ng/Kg
SL-234-SA5A-SB-9.0-10.0(RES)	OCDD	0.631 ng/Kg	0.631U ng/Kg
SL-234-SA5A-SB-9.0-10.0(RES)	OCDF	0.309 ng/Kg	0.309U ng/Kg
SL-235-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.126 ng/Kg	0.126U ng/Kg
SL-235-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HxCDD	0.0258 ng/Kg	0.0258U ng/Kg
SL-235-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.108 ng/Kg	0.108U ng/Kg
SL-235-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.130 ng/Kg	0.130U ng/Kg
SL-235-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.197 ng/Kg	0.197U ng/Kg
SL-235-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDD	0.0239 ng/Kg	0.0239U ng/Kg
SL-235-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.0414 ng/Kg	0.0414U ng/Kg
SL-235-SA5A-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.179 ng/Kg	0.179U ng/Kg
SL-235-SA5A-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.171 ng/Kg	0.171U ng/Kg
SL-235-SA5A-SB-8.5-9.5(RES)	1,2,3,4,6,7,8-HPCDD	0.267 ng/Kg	0.267U ng/Kg
SL-235-SA5A-SB-8.5-9.5(RES)	1,2,3,4,6,7,8-HPCDF	0.192 ng/Kg	0.192U ng/Kg
SL-235-SA5A-SB-8.5-9.5(RES)	1,2,3,4,7,8,9-HPCDF	0.0738 ng/Kg	0.0738U ng/Kg
SL-235-SA5A-SB-8.5-9.5(RES)	1,2,3,4,7,8-HXCDF	0.0371 ng/Kg	0.0371U ng/Kg
SL-235-SA5A-SB-8.5-9.5(RES)	1,2,3,6,7,8-HXCDD	0.0193 ng/Kg	0.0193U ng/Kg
SL-235-SA5A-SB-8.5-9.5(RES)	1,2,3,6,7,8-HXCDF	0.0338 ng/Kg	0.0338U ng/Kg
SL-235-SA5A-SB-8.5-9.5(RES)	1,2,3,7,8,9-HXCDD	0.0197 ng/Kg	0.0197U ng/Kg
SL-235-SA5A-SB-8.5-9.5(RES)	1,2,3,7,8,9-HXCDF	0.0407 ng/Kg	0.0407U ng/Kg
SL-235-SA5A-SB-8.5-9.5(RES)	1,2,3,7,8-PECDD	0.0128 ng/Kg	0.0128U ng/Kg
SL-235-SA5A-SB-8.5-9.5(RES)	1,2,3,7,8-PECDF	0.0208 ng/Kg	0.0208U ng/Kg
SL-235-SA5A-SB-8.5-9.5(RES)	2,3,4,6,7,8-HXCDF	0.127 ng/Kg	0.127U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX060 **Laboratory: LL**

EDD Filename: DX060_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-235-SA5A-SB-8.5-9.5(RES)	2,3,4,7,8-PECDF	0.0841 ng/Kg	0.0841U ng/Kg
SL-235-SA5A-SB-8.5-9.5(RES)	OCDD	0.767 ng/Kg	0.767U ng/Kg
SL-235-SA5A-SB-8.5-9.5(RES)	OCDF	0.362 ng/Kg	0.362U ng/Kg
SL-236-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.426 ng/Kg	0.426U ng/Kg
SL-236-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.182 ng/Kg	0.182U ng/Kg
SL-236-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0750 ng/Kg	0.0750U ng/Kg
SL-236-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.0486 ng/Kg	0.0486U ng/Kg
SL-236-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.0390 ng/Kg	0.0390U ng/Kg
SL-236-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.181 ng/Kg	0.181U ng/Kg
SL-236-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDD	0.0248 ng/Kg	0.0248U ng/Kg
SL-236-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.0604 ng/Kg	0.0604U ng/Kg
SL-236-SA5A-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.120 ng/Kg	0.120U ng/Kg
SL-236-SA5A-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.0727 ng/Kg	0.0727U ng/Kg
SL-236-SA5A-SB-4.0-5.0(RES)	OCDD	1.73 ng/Kg	1.73U ng/Kg
SL-236-SA5A-SB-4.0-5.0(RES)	OCDF	0.325 ng/Kg	0.325U ng/Kg
SL-236-SA5A-SB-9.0-10.0(RES)	1,2,3,4,6,7,8-HPCDD	0.179 ng/Kg	0.179U ng/Kg
SL-236-SA5A-SB-9.0-10.0(RES)	1,2,3,4,6,7,8-HPCDF	0.142 ng/Kg	0.142U ng/Kg
SL-236-SA5A-SB-9.0-10.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0572 ng/Kg	0.0572U ng/Kg
SL-236-SA5A-SB-9.0-10.0(RES)	1,2,3,4,7,8-HXCDF	0.0301 ng/Kg	0.0301U ng/Kg
SL-236-SA5A-SB-9.0-10.0(RES)	1,2,3,6,7,8-HXCDD	0.0188 ng/Kg	0.0188U ng/Kg
SL-236-SA5A-SB-9.0-10.0(RES)	1,2,3,6,7,8-HXCDF	0.0235 ng/Kg	0.0235U ng/Kg
SL-236-SA5A-SB-9.0-10.0(RES)	1,2,3,7,8,9-HXCDD	0.0275 ng/Kg	0.0275U ng/Kg
SL-236-SA5A-SB-9.0-10.0(RES)	1,2,3,7,8,9-HXCDF	0.0491 ng/Kg	0.0491U ng/Kg
SL-236-SA5A-SB-9.0-10.0(RES)	1,2,3,7,8-PECDF	0.0117 ng/Kg	0.0117U ng/Kg
SL-236-SA5A-SB-9.0-10.0(RES)	2,3,4,6,7,8-HXCDF	0.0907 ng/Kg	0.0907U ng/Kg
SL-236-SA5A-SB-9.0-10.0(RES)	2,3,4,7,8-PECDF	0.0636 ng/Kg	0.0636U ng/Kg
SL-236-SA5A-SB-9.0-10.0(RES)	OCDD	0.637 ng/Kg	0.637U ng/Kg
SL-236-SA5A-SB-9.0-10.0(RES)	OCDF	0.238 ng/Kg	0.238U ng/Kg
SL-249-SA5A-SB-2.5-3.5(RES)	1,2,3,4,6,7,8-HPCDD	0.660 ng/Kg	0.660U ng/Kg
SL-249-SA5A-SB-2.5-3.5(RES)	1,2,3,4,6,7,8-HPCDF	0.201 ng/Kg	0.201U ng/Kg
SL-249-SA5A-SB-2.5-3.5(RES)	1,2,3,4,7,8,9-HPCDF	0.0472 ng/Kg	0.0472U ng/Kg
SL-249-SA5A-SB-2.5-3.5(RES)	1,2,3,4,7,8-HXCDF	0.0362 ng/Kg	0.0362U ng/Kg
SL-249-SA5A-SB-2.5-3.5(RES)	1,2,3,6,7,8-HXCDD	0.0829 ng/Kg	0.0829U ng/Kg
SL-249-SA5A-SB-2.5-3.5(RES)	1,2,3,6,7,8-HXCDF	0.0538 ng/Kg	0.0538U ng/Kg
SL-249-SA5A-SB-2.5-3.5(RES)	1,2,3,7,8,9-HXCDF	0.109 ng/Kg	0.109U ng/Kg
SL-249-SA5A-SB-2.5-3.5(RES)	1,2,3,7,8-PECDD	0.0229 ng/Kg	0.0229U ng/Kg
SL-249-SA5A-SB-2.5-3.5(RES)	1,2,3,7,8-PECDF	0.0311 ng/Kg	0.0311U ng/Kg
SL-249-SA5A-SB-2.5-3.5(RES)	2,3,4,6,7,8-HXCDF	0.0910 ng/Kg	0.0910U ng/Kg
SL-249-SA5A-SB-2.5-3.5(RES)	2,3,4,7,8-PECDF	0.0679 ng/Kg	0.0679U ng/Kg
SL-249-SA5A-SB-2.5-3.5(RES)	OCDF	0.379 ng/Kg	0.379U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX060 **Laboratory: LL**

EDD Filename: DX060_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-249-SA5A-SB-9.0-10.0(RES)	1,2,3,4,6,7,8-HPCDD	0.187 ng/Kg	0.187U ng/Kg
SL-249-SA5A-SB-9.0-10.0(RES)	1,2,3,4,6,7,8-HPCDF	0.202 ng/Kg	0.202U ng/Kg
SL-249-SA5A-SB-9.0-10.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0244 ng/Kg	0.0244U ng/Kg
SL-249-SA5A-SB-9.0-10.0(RES)	1,2,3,4,7,8-HxCDD	0.0204 ng/Kg	0.0204U ng/Kg
SL-249-SA5A-SB-9.0-10.0(RES)	1,2,3,4,7,8-HXCDF	0.0518 ng/Kg	0.0518U ng/Kg
SL-249-SA5A-SB-9.0-10.0(RES)	1,2,3,6,7,8-HXCDD	0.0209 ng/Kg	0.0209U ng/Kg
SL-249-SA5A-SB-9.0-10.0(RES)	1,2,3,6,7,8-HXCDF	0.0393 ng/Kg	0.0393U ng/Kg
SL-249-SA5A-SB-9.0-10.0(RES)	1,2,3,7,8,9-HXCDD	0.0331 ng/Kg	0.0331U ng/Kg
SL-249-SA5A-SB-9.0-10.0(RES)	1,2,3,7,8,9-HXCDF	0.0432 ng/Kg	0.0432U ng/Kg
SL-249-SA5A-SB-9.0-10.0(RES)	1,2,3,7,8-PECDD	0.0234 ng/Kg	0.0234U ng/Kg
SL-249-SA5A-SB-9.0-10.0(RES)	1,2,3,7,8-PECDF	0.0263 ng/Kg	0.0263U ng/Kg
SL-249-SA5A-SB-9.0-10.0(RES)	2,3,4,6,7,8-HXCDF	0.0882 ng/Kg	0.0882U ng/Kg
SL-249-SA5A-SB-9.0-10.0(RES)	2,3,4,7,8-PECDF	0.0794 ng/Kg	0.0794U ng/Kg
SL-249-SA5A-SB-9.0-10.0(RES)	2,3,7,8-TCDD	0.0104 ng/Kg	0.0104U ng/Kg
SL-249-SA5A-SB-9.0-10.0(RES)	OCDD	0.525 ng/Kg	0.525U ng/Kg
SL-249-SA5A-SB-9.0-10.0(RES)	OCDF	0.273 ng/Kg	0.273U ng/Kg

Internal Standard Outlier Report

Lab Reporting Batch ID: DX060 **Laboratory: LL**

EDD Filename: DX060_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **AQ**

Sample ID	*Surrogate*	*Sample % Recovery*	*% Recovery Limits*	*Affected Compounds*	*Flag*
EB06-SA5A-030311	13C-1,2,3,4,6,7,8-HpCDF	26	28.00-143.00	1,2,3,4,6,7,8-HpCDF	J (all detects)
	13C-1,2,3,4,7,8-HxCDF	23	26.00-152.00	1,2,3,4,7,8-HxCDF	UJ (all non-detects)

Field Duplicate RPD Report

Lab Reporting Batch ID: DX060 **Laboratory: LL**

EDD Filename: DX060_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 160.3M
Matrix: SO

Analyte	Concentration (%)		Sample RPD	eQAPP RPD	Flag
	SL-048-SA5A-SS-0.0-0.5	DUP-07-SA5A-QC-030211			
MOISTURE	12.5	12.6	1		No Qualifiers Applied

Method: 1613B
Matrix: SO

Analyte	Concentration (ng/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-048-SA5A-SS-0.0-0.5	DUP-07-SA5A-QC-030211			
1,2,3,4,6,7,8-HPCDD	21.2	26.0	20	50.00	No Qualifiers Applied
1,2,3,4,6,7,8-HPCDF	3.56	4.83	30	50.00	
1,2,3,4,7,8,9-HPCDF	0.388	0.448	14	50.00	
1,2,3,4,7,8-HxCDD	0.338	0.402	17	50.00	
1,2,3,6,7,8-HXCDD	0.908	1.10	19	50.00	
1,2,3,6,7,8-HXCDF	0.232	0.275	17	50.00	
1,2,3,7,8,9-HXCDD	1.05	1.02	3	50.00	
1,2,3,7,8,9-HXCDF	0.364	0.309	16	50.00	
1,2,3,7,8-PECDD	0.253	0.295	15	50.00	
2,3,4,6,7,8-HXCDF	0.397	0.361	9	50.00	
2,3,4,7,8-PECDF	0.389	0.391	1	50.00	
2,3,7,8-TCDD	0.0419	0.0473	12	50.00	
2,3,7,8-TCDF	0.199	0.207	4	50.00	
OCDD	314	429	31	50.00	
OCDF	11.5	16.2	34	50.00	
1,2,3,4,7,8-HXCDF	5.71 U	0.387	200	50.00	J(all detects)
1,2,3,7,8-PECDF	0.140	0.322	79	50.00	UJ(all non-detects)

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Reporting Limit Outliers

Lab Reporting Batch ID: DX060 **Laboratory: LL**

EDD Filename: DX060_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1613B
Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB05-SA5A-030211	1,2,3,4,6,7,8-HPCDD	JB	3.44	9.50	PQL	pg/L	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	3.03	9.50	PQL	pg/L	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.329	9.50	PQL	pg/L	
	1,2,3,4,7,8-HxCDD	JBQ	0.179	9.50	PQL	pg/L	
	1,2,3,4,7,8-HXCDF	JB	0.536	9.50	PQL	pg/L	
	1,2,3,6,7,8-HXCDD	JBQ	0.122	9.50	PQL	pg/L	
	1,2,3,6,7,8-HXCDF	JB	0.333	9.50	PQL	pg/L	
	1,2,3,7,8,9-HXCDD	JBQ	0.116	9.50	PQL	pg/L	
	1,2,3,7,8,9-HXCDF	JBQ	0.227	9.50	PQL	pg/L	
	1,2,3,7,8-PECDD	JB	0.144	9.50	PQL	pg/L	
	1,2,3,7,8-PECDF	JBQ	0.170	9.50	PQL	pg/L	
	2,3,4,6,7,8-HXCDF	JB	0.785	9.50	PQL	pg/L	
	2,3,4,7,8-PECDF	JB	0.632	9.50	PQL	pg/L	
	2,3,7,8-TCDF	JB	0.0806	1.90	PQL	pg/L	
	OCDD	JB	6.44	19.0	PQL	pg/L	
	OCDF	JB	1.69	19.0	PQL	pg/L	
EB06-SA5A-030311	1,2,3,4,6,7,8-HPCDD	JB	4.12	9.97	PQL	pg/L	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	6.14	9.97	PQL	pg/L	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.814	9.97	PQL	pg/L	
	1,2,3,4,7,8-HxCDD	JBQ	0.298	9.97	PQL	pg/L	
	1,2,3,4,7,8-HXCDF	JB	0.897	9.97	PQL	pg/L	
	1,2,3,6,7,8-HXCDD	JBQ	0.521	9.97	PQL	pg/L	
	1,2,3,6,7,8-HXCDF	JB	0.857	9.97	PQL	pg/L	
	1,2,3,7,8,9-HXCDD	JB	0.418	9.97	PQL	pg/L	
	1,2,3,7,8,9-HXCDF	JBQ	0.625	9.97	PQL	pg/L	
	1,2,3,7,8-PECDD	JBQ	0.583	9.97	PQL	pg/L	
	1,2,3,7,8-PECDF	JB	0.401	9.97	PQL	pg/L	
	2,3,4,6,7,8-HXCDF	JBQ	1.77	9.97	PQL	pg/L	
	2,3,4,7,8-PECDF	JBQ	0.865	9.97	PQL	pg/L	
	2,3,7,8-TCDF	JBQ	0.109	1.99	PQL	pg/L	
	OCDD	JB	9.93	19.9	PQL	pg/L	
	OCDF	JB	4.34	19.9	PQL	pg/L	

Method: 1613B
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-042-SA5A-SS-0.0-0.5	2,3,7,8-TCDF		5.92	1.23	PQL	ng/Kg	
SL-044-SA5A-SS-0.0-0.5	2,3,7,8-TCDF		1.38	1.13	PQL	ng/Kg	
SL-176-SA5A-SS-0.0-0.3	2,3,7,8-TCDF		2.32	1.12	PQL	ng/Kg	
SL-178-SA5A-SS-0.0-0.4	2,3,7,8-TCDF		6.38	1.06	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX060 **Laboratory: LL**

EDD Filename: DX060_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-07-SA5A-QC-030211	1,2,3,4,6,7,8-HPCDF	JB	4.83	5.72	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JB	0.448	5.72	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.402	5.72	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.387	5.72	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	1.10	5.72	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.275	5.72	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	1.02	5.72	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.309	5.72	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.295	5.72	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.322	5.72	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.361	5.72	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.391	5.72	PQL	ng/Kg	
	2,3,7,8-TCDD	JB	0.0473	1.14	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.207	1.14	PQL	ng/Kg	
SL-042-SA5A-SS-0.0-0.5	1,2,3,7,8,9-HXCDF	JB	4.26	6.16	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDF	JB	2.47	6.16	PQL	ng/Kg	
SL-044-SA5A-SS-0.0-0.5	1,2,3,4,7,8-HxCDD	JB	5.56	5.64	PQL	ng/Kg	J (all detects)
	1,2,3,6,7,8-HXCDF	JB	3.80	5.64	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	1.01	5.64	PQL	ng/Kg	
	1,2,3,7,8-PECDD	J	3.01	5.64	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.693	5.64	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	2.08	5.64	PQL	ng/Kg	
	2,3,7,8-TCDD	JB	0.761	1.13	PQL	ng/Kg	
SL-045-SA5A-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	2.45	5.97	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JB	0.258	5.97	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.210	5.97	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.406	5.97	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.774	5.97	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.238	5.97	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.773	5.97	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.368	5.97	PQL	ng/Kg	
	1,2,3,7,8-PECDD	J	0.196	5.97	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.168	5.97	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.367	5.97	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.461	5.97	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0488	1.19	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.296	1.19	PQL	ng/Kg	
	OCDF	JB	6.90	11.9	PQL	ng/Kg	
SL-048-SA5A-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	3.56	5.71	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JB	0.388	5.71	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.338	5.71	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.908	5.71	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.232	5.71	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	1.05	5.71	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.364	5.71	PQL	ng/Kg	
	1,2,3,7,8-PECDD	J	0.253	5.71	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.140	5.71	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.397	5.71	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.389	5.71	PQL	ng/Kg	
	2,3,7,8-TCDD	JB	0.0419	1.14	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.199	1.14	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX060 **Laboratory: LL**

EDD Filename: DX060_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-176-SA5A-SS-0.0-0.3	1,2,3,4,7,8,9-HPCDF	JB	1.79	5.61	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8-HxCDD	JB	1.48	5.61	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	2.73	5.61	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	5.39	5.61	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	1.34	5.61	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	3.42	5.61	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.699	5.61	PQL	ng/Kg	
	1,2,3,7,8-PECDD	J	1.02	5.61	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.767	5.61	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	1.68	5.61	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	2.39	5.61	PQL	ng/Kg	
	2,3,7,8-TCDD	JB	0.219	1.12	PQL	ng/Kg	
SL-178-SA5A-SS-0.0-0.4	1,2,3,4,7,8,9-HPCDF	JB	2.66	5.29	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8-HxCDD	JB	2.01	5.29	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	2.77	5.29	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	4.27	5.29	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.706	5.29	PQL	ng/Kg	
	1,2,3,7,8-PECDD	J	1.22	5.29	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	2.11	5.29	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	2.82	5.29	PQL	ng/Kg	
	2,3,7,8-TCDD	JB	0.168	1.06	PQL	ng/Kg	
SL-179-SA5A-SS-0.0-0.3	1,2,3,4,7,8,9-HPCDF	JB	2.14	5.33	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8-HxCDD	JB	1.66	5.33	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	2.91	5.33	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	1.34	5.33	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	3.69	5.33	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.434	5.33	PQL	ng/Kg	
	1,2,3,7,8-PECDD	J	1.01	5.33	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.627	5.33	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	1.39	5.33	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	1.47	5.33	PQL	ng/Kg	
	2,3,7,8-TCDD	JB	0.146	1.07	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.994	1.07	PQL	ng/Kg	
SL-186-SA5A-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	1.73	5.95	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8-HxCDD	JBQ	1.29	5.95	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	1.21	5.95	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	5.71	5.95	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.884	5.95	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	2.64	5.95	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.666	5.95	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JQ	0.805	5.95	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.316	5.95	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	1.22	5.95	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	1.41	5.95	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.175	1.19	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	1.08	1.19	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX060 **Laboratory: LL**

EDD Filename: DX060_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-188-SA5A-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	0.760	5.62	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.459	5.62	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.789	5.62	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	2.54	5.62	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.558	5.62	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	1.57	5.62	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.723	5.62	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	J	0.257	5.62	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.307	5.62	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.710	5.62	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.883	5.62	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0360	1.12	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.621	1.12	PQL	ng/Kg	
SL-189-SA5A-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	2.84	5.92	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.274	5.92	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.192	5.92	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.302	5.92	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.904	5.92	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.182	5.92	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.569	5.92	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.134	5.92	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	J	0.158	5.92	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.100	5.92	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.309	5.92	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.477	5.92	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0393	1.18	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.401	1.18	PQL	ng/Kg	
	OCDF	JB	6.64	11.8	PQL	ng/Kg	
SL-234-SA5A-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JB	0.276	5.41	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.218	5.41	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0656	5.41	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0371	5.41	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.110	5.41	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0600	5.41	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.288	5.41	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.193	5.41	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.0281	5.41	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0629	5.41	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.114	5.41	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.0686	5.41	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.0117	1.08	PQL	ng/Kg	
	OCDD	JB	1.09	10.8	PQL	ng/Kg	
	OCDF	JB	0.332	10.8	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX060 **Laboratory: LL**

EDD Filename: DX060_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-234-SA5A-SB-9.0-10.0	1,2,3,4,6,7,8-HPCDD	JB	0.273	5.61	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.261	5.61	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0136	5.61	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0596	5.61	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.0181	5.61	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0370	5.61	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.0222	5.61	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.0472	5.61	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.0106	5.61	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0151	5.61	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.106	5.61	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0815	5.61	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0138	1.12	PQL	ng/Kg	
	OCDD	JB	0.631	11.2	PQL	ng/Kg	
	OCDF	JB	0.309	11.2	PQL	ng/Kg	
SL-235-SA5A-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JB	2.89	5.65	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	1.26	5.65	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.126	5.65	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0258	5.65	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.108	5.65	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.166	5.65	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.130	5.65	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.206	5.65	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JB	0.197	5.65	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0239	5.65	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.0414	5.65	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.179	5.65	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.171	5.65	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.0173	1.13	PQL	ng/Kg	
	OCDF	JB	2.09	11.3	PQL	ng/Kg	
SL-235-SA5A-SB-8.5-9.5	1,2,3,4,6,7,8-HPCDD	JBQ	0.267	5.68	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.192	5.68	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.0738	5.68	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0371	5.68	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.0193	5.68	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0338	5.68	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.0197	5.68	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.0407	5.68	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.0128	5.68	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0208	5.68	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.127	5.68	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.0841	5.68	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.0146	1.14	PQL	ng/Kg	
	OCDD	JB	0.767	11.4	PQL	ng/Kg	
	OCDF	JB	0.362	11.4	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX060 **Laboratory: LL**

EDD Filename: DX060_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-236-SA5A-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JB	0.426	5.54	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.182	5.54	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0750	5.54	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0486	5.54	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.117	5.54	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0390	5.54	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.158	5.54	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.181	5.54	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0248	5.54	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.0604	5.54	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.120	5.54	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0727	5.54	PQL	ng/Kg	
	OCDD	JB	1.73	11.1	PQL	ng/Kg	
	OCDF	JB	0.325	11.1	PQL	ng/Kg	
SL-236-SA5A-SB-9.0-10.0	1,2,3,4,6,7,8-HPCDD	JB	0.179	5.61	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JBQ	0.142	5.61	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.0572	5.61	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0301	5.61	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.0188	5.61	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0235	5.61	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.0275	5.61	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.0491	5.61	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0117	5.61	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0907	5.61	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0636	5.61	PQL	ng/Kg	
	OCDD	JB	0.637	11.2	PQL	ng/Kg	
	OCDF	JB	0.238	11.2	PQL	ng/Kg	
SL-249-SA5A-SB-2.5-3.5	1,2,3,4,6,7,8-HPCDD	JB	0.660	5.51	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.201	5.51	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0472	5.51	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.0362	5.51	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.0829	5.51	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0538	5.51	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.142	5.51	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.109	5.51	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0229	5.51	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0311	5.51	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.0910	5.51	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0679	5.51	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.0281	1.10	PQL	ng/Kg	
	OCDD	JB	4.55	11.0	PQL	ng/Kg	
	OCDF	JBQ	0.379	11.0	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX060 **Laboratory: LL**

EDD Filename: DX060_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	*Analyte*	*Lab Qual*	*Result*	*Reporting Limit*	*RL Type*	*Units*	*Flag*
SL-249-SA5A-SB-9.0-10.0	1,2,3,4,6,7,8-HPCDD	JBQ	0.187	5.51	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.202	5.51	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0244	5.51	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0204	5.51	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.0518	5.51	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.0209	5.51	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0393	5.51	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.0331	5.51	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.0432	5.51	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.0234	5.51	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0263	5.51	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0882	5.51	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0794	5.51	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0104	1.10	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.0139	1.10	PQL	ng/Kg	
	OCDD	JB	0.525	11.0	PQL	ng/Kg	
	OCDF	JB	0.273	11.0	PQL	ng/Kg	

Enclosure II

EPA Level IV Validation Reports

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: March 2 through March 3, 2011

LDC Report Date: August 9, 2011

Matrix: Soil/Water

Parameters: Dioxins/Dibenzofurans

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DX060

Sample Identification

DUP-07-SA5A-QC-030211
SL-042-SA5A-SS-0.0-0.5
SL-044-SA5A-SS-0.0-0.5
SL-045-SA5A-SS-0.0-0.5
SL-048-SA5A-SS-0.0-0.5
SL-176-SA5A-SS-0.0-0.3
SL-178-SA5A-SS-0.0-0.4
SL-179-SA5A-SS-0.0-0.3
SL-186-SA5A-SS-0.0-0.5
SL-188-SA5A-SS-0.0-0.5
SL-189-SA5A-SS-0.0-0.5
EB05-SA5A-030211
SL-234-SA5A-SB-4.0-5.0
SL-234-SA5A-SB-9.0-10.0
SL-235-SA5A-SB-4.0-5.0
SL-235-SA5A-SB-8.5-9.5
SL-236-SA5A-SB-4.0-5.0
SL-236-SA5A-SB-9.0-10.0
SL-249-SA5A-SB-2.5-3.5
SL-249-SA5A-SB-9.0-10.0
EB06-SA5A-030311
SL-048-SA5A-SS-0.0-0.5MS
SL-048-SA5A-SS-0.0-0.5MSD

Introduction

This data review covers 21 soil samples and 2 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA Method 1613B for Polychlorinated Dioxins/Dibenzofurans.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and the USEPA Contract Laboratory Program National Functional Guidelines for Polychlorinated Dioxins/Dibenzofurans Data Review (September 2005).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. HRGC/HRMS Instrument Performance Check

Instrument performance was checked at the required daily frequency.

The chromatographic resolution between 2,3,7,8-TCDD and the peaks representing any other unlabeled TCDD isomers was resolved with a valley of less than or equal to 25%.

PFK and static resolving power were within validation criteria.

III. Initial Calibration

A five point initial calibration was performed as required by the method.

Percent relative standard deviations (%RSD) were less than or equal to 20.0% for unlabeled compounds and less than or equal to 35.0% for labeled compounds.

The ion abundance ratios for all PCDDs and PCDFs were within validation criteria.

The minimum S/N ratio was greater than or equal to 10 for each unlabeled compound and labeled compound.

IV. Routine Calibration (Continuing)

Routine calibration was performed at the required frequencies.

All of the routine calibration percent differences (%D) between the initial calibration RRF and the routine calibration RRF were within QC limits.

The ion abundance ratios for all PCDDs and PCDFs were within validation criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polychlorinated dioxin/dibenzofuran contaminants were found in the method blanks with the following exceptions:

Method Blank ID	Extraction Date	Compound	Concentration	Associated Samples
BLK066002	3/8/11	2,3,7,8-TCDF	0.158 pg/L	EB05-SA5A-030211
		1,2,3,7,8-PeCDF	0.528 pg/L	
		2,3,4,7,8-PeCDF	1.10 pg/L	
		1,2,3,7,8-PeCDD	0.374 pg/L	
		1,2,3,4,7,8-HxCDF	1.04 pg/L	
		1,2,3,6,7,8-HxCDF	1.11 pg/L	
		2,3,4,6,7,8-HxCDF	1.70 pg/L	
		1,2,3,4,7,8-HxCDD	0.576 pg/L	
		1,2,3,6,7,8-HxCDD	0.332 pg/L	
		1,2,3,7,8,9-HxCDD	0.634 pg/L	
		1,2,3,7,8,9-HxCDF	1.20 pg/L	
		1,2,3,4,6,7,8-HpCDF	6.54 pg/L	
		1,2,3,4,6,7,8-HpCDD	3.30 pg/L	
		1,2,3,4,7,8,9-HpCDF	1.19 pg/L	
		OCDD	6.88 pg/L	
		OCDF	4.19 pg/L	
BLK068002	3/9/11	2,3,7,8-TCDF	0.209 pg/L	EB06-SA5A-030311
		2,3,7,8-TCDD	0.0984 pg/L	
		1,2,3,7,8-PeCDF	0.379 pg/L	
		2,3,4,7,8-PeCDF	0.765 pg/L	
		1,2,3,7,8-PeCDD	0.322 pg/L	
		1,2,3,4,7,8-HxCDF	0.713 pg/L	
		1,2,3,6,7,8-HxCDF	0.790 pg/L	
		2,3,4,6,7,8-HxCDF	1.21 pg/L	
		1,2,3,4,7,8-HxCDD	0.221 pg/L	
		1,2,3,6,7,8-HxCDD	0.314 pg/L	
		1,2,3,7,8,9-HxCDD	0.432 pg/L	
		1,2,3,7,8,9-HxCDF	0.756 pg/L	
		1,2,3,4,6,7,8-HpCDF	4.59 pg/L	
		1,2,3,4,6,7,8-HpCDD	2.50 pg/L	
		1,2,3,4,7,8,9-HpCDF	0.734 pg/L	
		OCDD	4.99 pg/L	
		OCDF	2.42 pg/L	
BLK075001	3/16/11	2,3,7,8-TCDF	0.0185 ng/Kg	SL-042-SA5A-SS-0.0-0.5
		2,3,7,8-TCDD	0.0127 ng/Kg	SL-044-SA5A-SS-0.0-0.5
		1,2,3,7,8-PeCDF	0.0410 ng/Kg	SL-045-SA5A-SS-0.0-0.5
		2,3,4,7,8-PeCDF	0.0905 ng/Kg	SL-048-SA5A-SS-0.0-0.5
		1,2,3,4,7,8-HxCDF	0.0643 ng/Kg	SL-176-SA5A-SS-0.0-0.3
		1,2,3,6,7,8-HxCDF	0.0553 ng/Kg	SL-178-SA5A-SS-0.0-0.4
		2,3,4,6,7,8-HxCDF	0.155 ng/Kg	SL-179-SA5A-SS-0.0-0.3
		1,2,3,4,7,8-HxCDD	0.0127 ng/Kg	SL-186-SA5A-SS-0.0-0.5
		1,2,3,6,7,8-HxCDD	0.0269 ng/Kg	SL-188-SA5A-SS-0.0-0.5
		1,2,3,7,8,9-HxCDD	0.0191 ng/Kg	SL-189-SA5A-SS-0.0-0.5
		1,2,3,7,8,9-HxCDF	0.0579 ng/Kg	
		1,2,3,4,6,7,8-HpCDF	0.415 ng/Kg	
		1,2,3,4,6,7,8-HpCDD	0.256 ng/Kg	
		1,2,3,4,7,8,9-HpCDF	0.0742 ng/Kg	
		OCDD	0.493 ng/Kg	
		OCDF	0.337 ng/Kg	

Method Blank ID	Extraction Date	Compound	Concentration	Associated Samples
BLK076001	3/17/11	2,3,7,8-TCDD	0.0119 ng/Kg	SL-234-SA5A-SB-4.0-5.0
		1,2,3,7,8-PeCDF	0.0234 ng/Kg	SL-234-SA5A-SB-9.0-10.0
		2,3,4,7,8-PeCDF	0.0861 ng/Kg	SL-235-SA5A-SB-4.0-5.0
		1,2,3,7,8-PeCDD	0.0214 ng/Kg	SL-235-SA5A-SB-8.5-9.5
		1,2,3,4,7,8-HxCDF	0.0401 ng/Kg	SL-236-SA5A-SB-4.0-5.0
		1,2,3,6,7,8-HxCDF	0.0403 ng/Kg	SL-236-SA5A-SB-9.0-10.0
		2,3,4,6,7,8-HxCDF	0.0969 ng/Kg	SL-249-SA5A-SB-2.5-3.5
		1,2,3,4,7,8-HxCDD	0.0153 ng/Kg	SL-249-SA5A-SB-9.0-10.0
		1,2,3,6,7,8-HxCDD	0.0167 ng/Kg	
		1,2,3,7,8,9-HxCDD	0.0207 ng/Kg	
		1,2,3,7,8,9-HxCDF	0.0536 ng/Kg	
		1,2,3,4,6,7,8-HpCDF	0.221 ng/Kg	
		1,2,3,4,6,7,8-HpCDD	0.200 ng/Kg	
		1,2,3,4,7,8,9-HpCDF	0.0584 ng/Kg	
		OCDD	0.355 ng/Kg	
		OCDF	0.291 ng/Kg	
BLK083001	3/24/11	2,3,7,8-TCDF	0.0219 ng/Kg	DUP-07-SA5A-QC-030211
		2,3,7,8-TCDD	0.0184 ng/Kg	
		1,2,3,7,8-PeCDF	0.0346 ng/Kg	
		2,3,4,7,8-PeCDF	0.0885 ng/Kg	
		1,2,3,7,8-PeCDD	0.0317 ng/Kg	
		1,2,3,4,7,8-HxCDF	0.0527 ng/Kg	
		1,2,3,6,7,8-HxCDF	0.0416 ng/Kg	
		2,3,4,6,7,8-HxCDF	0.0701 ng/Kg	
		1,2,3,4,7,8-HxCDD	0.0256 ng/Kg	
		1,2,3,6,7,8-HxCDD	0.0244 ng/Kg	
		1,2,3,7,8,9-HxCDD	0.0275 ng/kg	
		1,2,3,7,8,9-HxCDF	0.0883 ng/Kg	
		1,2,3,4,6,7,8-HpCDF	0.141 ng/Kg	
		1,2,3,4,6,7,8-HpCDD	0.195 ng/Kg	
		1,2,3,4,7,8,9-HpCDF	0.0667 ng/Kg	
		OCDD	0.392 ng/Kg	
		OCDF	0.221 ng/Kg	

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated method blanks with the following exceptions:

Sample	Compound	Reported Concentration	Modified Final Concentration
EB05-SA5A-030211	2,3,7,8-TCDF	0.0806 pg/L	0.0806U pg/L
	1,2,3,7,8-PeCDF	0.170 pg/L	0.170U pg/L
	2,3,4,7,8-PeCDF	0.632 pg/L	0.632U pg/L
	1,2,3,7,8-PeCDD	0.144 pg/L	0.144U pg/L
	1,2,3,4,7,8-HxCDF	0.536 pg/L	0.536U pg/L
	1,2,3,6,7,8-HxCDF	0.333 pg/L	0.333U pg/L
	2,3,4,6,7,8-HxCDF	0.785 pg/L	0.785U pg/L
	1,2,3,4,7,8-HxCDD	0.179 pg/L	0.179U pg/L
	1,2,3,6,7,8-HxCDD	0.122 pg/L	0.122U pg/L
	1,2,3,7,8,9-HxCDD	0.116 pg/L	0.116U pg/L
	1,2,3,7,8,9-HxCDF	0.227 pg/L	0.227U pg/L
	1,2,3,4,6,7,8-HpCDF	3.03 pg/L	3.03U pg/L
	1,2,3,4,6,7,8-HpCDD	3.44 pg/L	3.44U pg/L
	1,2,3,4,7,8,9-HpCDF	0.329 pg/L	0.329U pg/L
	OCDD	6.44 pg/L	6.44U pg/L
	OCDF	1.69 pg/L	1.69U pg/L

Sample	Compound	Reported Concentration	Modified Final Concentration
EB06-SA5A-030311	2,3,7,8-TCDF	0.109 pg/L	0.109U pg/L
	1,2,3,7,8-PeCDF	0.401 pg/L	0.401U pg/L
	2,3,4,7,8-PeCDF	0.865 pg/L	0.865U pg/L
	1,2,3,7,8-PeCDD	0.583 pg/L	0.583U pg/L
	1,2,3,4,7,8-HxCDF	0.897 pg/L	0.897U pg/L
	1,2,3,6,7,8-HxCDF	0.857 pg/L	0.857U pg/L
	2,3,4,6,7,8-HxCDF	1.77 pg/L	1.77U pg/L
	1,2,3,4,7,8-HxCDD	0.298 pg/L	0.298U pg/L
	1,2,3,6,7,8-HxCDD	0.521 pg/L	0.521U pg/L
	1,2,3,7,8,9-HxCDD	0.418 pg/L	0.418U pg/L
	1,2,3,7,8,9-HxCDF	0.625 pg/L	0.625U pg/L
	1,2,3,4,6,7,8-HpCDF	6.14 pg/L	6.14U pg/L
	1,2,3,4,6,7,8-HpCDD	4.12 pg/L	4.12U pg/L
	1,2,3,4,7,8,9-HpCDF	0.814 pg/L	0.814U pg/L
	OCDD	9.93 pg/L	9.93U pg/L
	OCDF	4.34 pg/L	4.34U pg/L
SL-045-SA5A-SS-0.0-0.5	2,3,7,8-TCDD	0.0488 ng/Kg	0.0488U ng/Kg
	1,2,3,7,8-PeCDF	0.168 ng/Kg	0.168U ng/Kg
	1,2,3,6,7,8-HxCDF	0.238 ng/Kg	0.238U ng/Kg
	2,3,4,6,7,8-HxCDF	0.367 ng/Kg	0.367U ng/Kg
	1,2,3,4,7,8,9-HpCDF	0.258 ng/Kg	0.258U ng/Kg
SL-048-SA5A-SS-0.0-0.5	2,3,7,8-TCDD	0.0419 ng/Kg	0.0419U ng/Kg
	1,2,3,7,8-PeCDF	0.140 ng/Kg	0.140U ng/Kg
	2,3,4,7,8-PeCDF	0.389 ng/Kg	0.389U ng/Kg
	1,2,3,6,7,8-HxCDF	0.232 ng/Kg	0.232U ng/Kg
	2,3,4,6,7,8-HxCDF	0.397 ng/Kg	0.397U ng/Kg
SL-188-SA5A-SS-0.0-0.5	2,3,4,6,7,8-HxCDF	0.710 ng/Kg	0.710U ng/Kg
	2,3,7,8-TCDD	0.0360 ng/Kg	0.0360U ng/Kg
SL-189-SA5A-SS-0.0-0.5	2,3,7,8-TCDD	0.0393 ng/Kg	0.0393U ng/Kg
	1,2,3,7,8-PeCDF	0.100 ng/Kg	0.100U ng/Kg
	1,2,3,4,7,8-HxCDF	0.302 ng/Kg	0.302U ng/Kg
	1,2,3,6,7,8-HxCDF	0.182 ng/Kg	0.182U ng/Kg
	2,3,4,6,7,8-HxCDF	0.309 ng/Kg	0.309U ng/Kg
	1,2,3,7,8,9-HxCDF	0.134 ng/Kg	0.134U ng/Kg
	1,2,3,4,7,8,9-HpCDF	0.274 ng/Kg	0.274U ng/Kg
SL-234-SA5A-SB-4.0-5.0	1,2,3,7,8-PeCDF	0.0629 ng/Kg	0.0629U ng/Kg
	2,3,4,7,8-PeCDF	0.0686 ng/Kg	0.0686U ng/Kg
	1,2,3,7,8-PeCDD	0.0281 ng/Kg	0.0281U ng/Kg
	1,2,3,4,7,8-HxCDF	0.0371 ng/Kg	0.0371U ng/Kg
	1,2,3,6,7,8-HxCDF	0.0600 ng/Kg	0.0600U ng/Kg
	2,3,4,6,7,8-HxCDF	0.114 ng/Kg	0.114U ng/Kg
	1,2,3,7,8,9-HxCDF	0.193 ng/Kg	0.193U ng/Kg
	1,2,3,4,6,7,8-HpCDF	0.218 ng/Kg	0.218U ng/Kg
	1,2,3,4,6,7,8-HpCDD	0.276 ng/Kg	0.276U ng/Kg
	1,2,3,4,7,8,9-HpCDF	0.0656 ng/KG	0.0656U ng/Kg
	OCDD	1.09 ng/Kg	1.09U ng/Kg
	OCDF	0.332 ng/Kg	0.332U ng/Kg

Sample	Compound	Reported Concentration	Modified Final Concentration
SL-234-SA5A-SB-9.0-10.0	2,3,7,8-TCDD	0.0138 ng/Kg	0.0138U ng/Kg
	1,2,3,7,8-PeCDF	0.0151 ng/Kg	0.0151U ng/Kg
	2,3,4,7,8-PeCDF	0.0815 ng/Kg	0.0815U ng/Kg
	1,2,3,7,8-PeCDD	0.0106 ng/Kg	0.0106U ng/Kg
	1,2,3,4,7,8-HxCDF	0.0596 ng/Kg	0.0596U ng/Kg
	1,2,3,6,7,8-HxCDF	0.0370 ng/Kg	0.0370U ng/Kg
	2,3,4,6,7,8-HxCDF	0.106 ng/Kg	0.106U ng/Kg
	1,2,3,4,7,8-HxCDD	0.0136 ng/Kg	0.0136U ng/Kg
	1,2,3,6,7,8-HxCDD	0.0181 ng/Kg	0.0181U ng/Kg
	1,2,3,7,8,9-HxCDD	0.0222 ng/Kg	0.0222U ng/Kg
	1,2,3,7,8,9-HxCDF	0.0472 ng/Kg	0.0472U ng/Kg
	1,2,3,4,6,7,8-HpCDF	0.261 ng/Kg	0.261U ng/Kg
	1,2,3,4,6,7,8-HpCDD	0.273 ng/Kg	0.273U ng/Kg
	OCDD	0.631 ng/Kg	0.631U ng/Kg
	OCDF	0.309 ng/Kg	0.309U ng/Kg
SL-235-SA5A-SB-4.0-5.0	1,2,3,7,8-PeCDF	0.0414 ng/Kg	0.0414U ng/Kg
	2,3,4,7,8-PeCDF	0.171 ng/Kg	0.171U ng/Kg
	1,2,3,7,8-PeCDD	0.0239 ng/Kg	0.0239U ng/Kg
	1,2,3,4,7,8-HxCDF	0.108 ng/Kg	0.108U ng/Kg
	1,2,3,6,7,8-HxCDF	0.130 ng/Kg	0.130U ng/Kg
	2,3,4,6,7,8-HxCDF	0.179 ng/Kg	0.179U ng/Kg
	1,2,3,4,7,8-HxCDD	0.0258 ng/Kg	0.0258U ng/Kg
	1,2,3,7,8,9-HxCDF	0.197 ng/Kg	0.197U ng/Kg
	1,2,3,4,7,8,9-HpCDF	0.126 ng/Kg	0.126U ng/Kg
SL-235-SA5A-SB-8.5-9.5	1,2,3,7,8-PeCDF	0.0208 ng/Kg	0.0208U ng/Kg
	2,3,4,7,8-PeCDF	0.0841 ng/Kg	0.0841U ng/Kg
	1,2,3,7,8-PeCDD	0.0128 ng/Kg	0.0128U ng/Kg
	1,2,3,4,7,8-HxCDF	0.0371 ng/Kg	0.0371U ng/Kg
	1,2,3,6,7,8-HxCDF	0.0338 ng/Kg	0.0338U ng/Kg
	2,3,4,6,7,8-HxCDF	0.127 ng/Kg	0.127U ng/Kg
	1,2,3,6,7,8-HxCDD	0.0193 ng/Kg	0.0193U ng/Kg
	1,2,3,7,8,9-HxCDD	0.0197 ng/Kg	0.0197U ng/Kg
	1,2,3,7,8,9-HxCDF	0.0407 ng/Kg	0.0407U ng/Kg
	1,2,3,4,6,7,8-HpCDF	0.192 ng/Kg	0.192U ng/Kg
	1,2,3,4,6,7,8-HpCDD	0.267 ng/Kg	0.267U ng/Kg
	1,2,3,4,7,8,9-HpCDF	0.0738 ng/Kg	0.0738U ng/Kg
	OCDD	0.767 ng/Kg	0.767U ng/Kg
	OCDF	0.362 ng/Kg	0.362U ng/Kg
SL-236-SA5A-SB-4.0-5.0	1,2,3,7,8-PeCDF	0.0604 ng/Kg	0.0604U ng/Kg
	2,3,4,7,8-PeCDF	0.0727 ng/Kg	0.0727U ng/Kg
	1,2,3,7,8-PeCDD	0.0248 ng/Kg	0.0248U ng/Kg
	1,2,3,4,7,8-HxCDF	0.0486 ng/Kg	0.0486U ng/Kg
	1,2,3,6,7,8-HxCDF	0.0390 ng/Kg	0.0390U ng/Kg
	2,3,4,6,7,8-HxCDF	0.120 ng/Kg	0.120U ng/Kg
	1,2,3,7,8,9-HxCDF	0.181 ng/Kg	0.181U ng/Kg
	1,2,3,4,6,7,8-HpCDF	0.182 ng/Kg	0.182U ng/Kg
	1,2,3,4,6,7,8-HpCDD	0.426 ng/Kg	0.426U ng/Kg
	1,2,3,4,7,8,9-HpCDF	0.0750 ng/Kg	0.0750U ng/Kg
	OCDD	1.73 ng/Kg	1.73U ng/Kg
	OCDF	0.325 ng/Kg	0.325U ng/Kg

Sample	Compound	Reported Concentration	Modified Final Concentration
SL-236-SA5A-SB-9.0-10.0	1,2,3,7,8-PeCDF	0.0117 ng/Kg	0.0117U ng/Kg
	2,3,4,7,8-PeCDF	0.0636 ng/Kg	0.0636U ng/Kg
	1,2,3,4,7,8-HxCDF	0.0301 ng/Kg	0.0301U ng/Kg
	1,2,3,6,7,8-HxCDF	0.0235 ng/Kg	0.0235U ng/Kg
	2,3,4,6,7,8-HxCDF	0.0907 ng/Kg	0.0907U ng/Kg
	1,2,3,6,7,8-HxCDD	0.0188 ng/Kg	0.0188U ng/Kg
	1,2,3,7,8,9-HxCDD	0.0275 ng/Kg	0.0275U ng/Kg
	1,2,3,7,8,9-HxCDF	0.0491 ng/Kg	0.0491U ng/Kg
	1,2,3,4,6,7,8-HpCDF	0.142 ng/Kg	0.142U ng/Kg
	1,2,3,4,6,7,8-HpCDD	0.179 ng/Kg	0.179U ng/Kg
	1,2,3,4,7,8,9-HpCDF	0.0572 ng/Kg	0.0572U ng/Kg
	OCDD	0.637 ng/Kg	0.637U ng/Kg
	OCDF	0.238 ng/Kg	0.238U ng/Kg
SL-249-SA5A-SB-2.5-3.5	1,2,3,7,8-PeCDF	0.0311 ng/Kg	0.0311U ng/Kg
	2,3,4,7,8-PeCDF	0.0679 ng/Kg	0.0679U ng/Kg
	1,2,3,7,8-PeCDD	0.0229 ng/Kg	0.0229U ng/Kg
	1,2,3,4,7,8-HxCDF	0.0362 ng/Kg	0.0362U ng/Kg
	1,2,3,6,7,8-HxCDF	0.0538 ng/Kg	0.0538U ng/Kg
	2,3,4,6,7,8-HxCDF	0.0910 ng/Kg	0.0910U ng/Kg
	1,2,3,6,7,8-HxCDD	0.0829 ng/Kg	0.0829U ng/Kg
	1,2,3,7,8,9-HxCDF	0.109 ng/Kg	0.109U ng/Kg
	1,2,3,4,6,7,8-HpCDF	0.201 ng/Kg	0.201U ng/Kg
	1,2,3,4,6,7,8-HpCDD	0.660 ng/Kg	0.660U ng/Kg
	1,2,3,4,7,8,9-HpCDF	0.0472 ng/Kg	0.0472U ng/Kg
	OCDF	0.379 ng/Kg	0.379U ng/Kg
SL-249-SA5A-SB-9.0-10.0	2,3,7,8-TCDD	0.0104 ng/Kg	0.0104U ng/Kg
	1,2,3,7,8-PeCDF	0.0263 ng/Kg	0.0263U ng/Kg
	2,3,4,7,8-PeCDF	0.0794 ng/Kg	0.0794U ng/Kg
	1,2,3,7,8-PeCDD	0.0234 ng/Kg	0.0234U ng/Kg
	1,2,3,4,7,8-HxCDF	0.0518 ng/Kg	0.0518U ng/Kg
	1,2,3,6,7,8-HxCDF	0.0393 ng/Kg	0.0393U ng/Kg
	2,3,4,6,7,8-HxCDF	0.0882 ng/Kg	0.0882U ng/Kg
	1,2,3,4,7,8-HxCDD	0.0204 ng/Kg	0.0204U ng/Kg
	1,2,3,6,7,8-HxCDD	0.0209 ng/Kg	0.0209U ng/Kg
	1,2,3,7,8,9-HxCDD	0.0331 ng/Kg	0.0331U ng/Kg
	1,2,3,7,8,9-HxCDF	0.0432 ng/Kg	0.0432U ng/Kg
	1,2,3,4,6,7,8-HpCDF	0.202 ng/Kg	0.202U ng/Kg
	1,2,3,4,6,7,8-HpCDD	0.187 ng/Kg	0.187U ng/Kg
	1,2,3,4,7,8,9-HpCDF	0.0244 ng/Kg	0.0244U ng/Kg
	OCDD	0.525 ng/Kg	0.525U ng/Kg
	OCDF	0.273 ng/Kg	0.273U ng/Kg
DUP-07-SA5A-QC-030211	2,3,7,8-TCDD	0.0473 ng/Kg	0.0473U ng/Kg
	2,3,4,7,8-PeCDF	0.391 ng/Kg	0.391U ng/Kg
	1,2,3,7,8,9-HxCDF	0.309 ng/Kg	0.309U ng/Kg

Samples EB05-SA5A-030211 and EB06-SA5A-030311 were identified as equipment blanks. No polychlorinated dioxin/dibenzofuran contaminants were found with the following exceptions:

Equipment Blank ID	Sampling Date	Compound	Concentration	Associated Samples
EB05-SA5A-030211	3/2/11	2,3,7,8-TCDF	0.0806 pg/L	DUP-07-SA5A-QC-030211
		1,2,3,7,8-PeCDF	0.170 pg/L	SL-042-SA5A-SS-0.0-0.5
		2,3,4,7,8-PeCDF	0.632 pg/L	SL-044-SA5A-SS-0.0-0.5
		1,2,3,7,8-PeCDD	0.144 pg/L	SL-045-SA5A-SS-0.0-0.5
		1,2,3,4,7,8-HxCDF	0.536 pg/L	SL-048-SA5A-SS-0.0-0.5
		1,2,3,6,7,8-HxCDF	0.333 pg/L	SL-176-SA5A-SS-0.0-0.3
		2,3,4,6,7,8-HxCDF	0.785 pg/L	SL-178-SA5A-SS-0.0-0.4
		1,2,3,4,7,8-HxCDD	0.179 pg/L	SL-179-SA5A-SS-0.0-0.3
		1,2,3,6,7,8-HxCDD	0.122 pg/L	SL-186-SA5A-SS-0.0-0.5
		1,2,3,7,8,9-HxCDD	0.116 pg/L	SL-188-SA5A-SS-0.0-0.5
		1,2,3,7,8,9-HxCDF	0.227 pg/L	SL-189-SA5A-SS-0.0-0.5
		1,2,3,4,6,7,8-HpCDF	3.03 pg/L	
		1,2,3,4,6,7,8-HpCDD	3.44 pg/L	
		1,2,3,4,7,8,9-HpCDF	0.329 pg/L	
		OCDD	6.44 pg/L	
		OCDF	1.69 pg/L	
EB06-SA5A-030311	3/3/11	2,3,7,8-TCDF	0.109 pg/L	SL-234-SA5A-SB-4.0-5.0
		1,2,3,7,8-PeCDF	0.401 pg/L	SL-234-SA5A-SB-9.0-10.0
		2,3,4,7,8-PeCDF	0.865 pg/L	SL-235-SA5A-SB-4.0-5.0
		1,2,3,7,8-PeCDD	0.583 pg/L	SL-235-SA5A-SB-8.5-9.5
		1,2,3,4,7,8-HxCDF	0.897 pg/L	SL-236-SA5A-SB-4.0-5.0
		1,2,3,6,7,8-HxCDF	0.857 pg/L	SL-236-SA5A-SB-9.0-10.0
		2,3,4,6,7,8-HxCDF	1.77 pg/L	SL-249-SA5A-SB-2.5-3.5
		1,2,3,4,7,8-HxCDD	0.298 pg/L	SL-249-SA5A-SB-9.0-10.0
		1,2,3,6,7,8-HxCDD	0.521 pg/L	
		1,2,3,7,8,9-HxCDD	0.418 pg/L	
		1,2,3,7,8,9-HxCDF	0.625 pg/L	
		1,2,3,4,6,7,8-HpCDF	6.14 pg/L	
		1,2,3,4,6,7,8-HpCDD	4.12 pg/L	
		1,2,3,4,7,8,9-HpCDF	0.814 pg/L	
		OCDD	9.93 pg/L	
		OCDF	4.34 pg/L	

Sample concentrations were compared to concentrations detected in the field blanks. The sample concentrations were either not detected or were significantly greater (>5X for other contaminants) than the concentrations found in the associated field blanks.

VI. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. The percent recoveries (%R) were within the QC limits.

VIII. Regional Quality Assurance and Quality Control

Not applicable.

IX. Internal Standards

All internal standard recoveries were within QC limits with the following exceptions:

Sample	Internal Standards	%R (Limits)	Compound	Flag	A or P
EB06-SA5A-030311	^{13}C-1,2,3,4,7,8-HxCDF ^{13}C-1,2,3,4,6,7,8-HpCDF	23 (26-152) 26 (28-143)	1,2,3,4,7,8-HxCDF 1,2,3,4,6,7,8-HpCDF	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	P

X. Target Compound Identifications

All target compound identifications were within validation criteria.

XI. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria with the following exceptions:

Sample	Compound	Finding	Criteria	Flag	A or P
SL-042-SA5A-SS-0.0-0.5 SL-044-SA5A-SS-0.0-0.5	OCDD	Sample result exceeded calibration range.	Reported result should be within calibration range.	J (all detects)	P

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DX060	All compounds reported below the RL.	J (all detects)	A

XII. System Performance

The system performance was acceptable.

XIII. Overall Assessment of Data

The overall assessment of data was acceptable. In the case where more than one result was reported for an individual sample, the least technically acceptable results were rejected as follows:

Sample	Compound	Flag	A or P
SL-042-SA5A-SS-0.0-0.5 SL-044-SA5A-SS-0.0-0.5 SL-176-SA5A-SS-0.0-0.3 SL-178-SA5A-SS-0.0-0.4	2,3,7,8-TCDF from column SP2331	R	A

Data flags are summarized at the end of this report if data has been qualified.

XIV. Field Duplicates

Samples DUP-07-SA5A-QC-030211 and SL-048-SA5A-SS-0.0-0.5 were identified as field duplicates. No polychlorinated dioxins/dibenzofurans were detected in any of the samples with the following exceptions:

Compound	Concentration (ng/Kg)		RPD (Limits)	Flags	A or P
	DUP-07-SA5A-QC-030211	SL-048-SA5A-SS-0.0-0.5			
2,3,7,8-TCDD	0.0473	0.0419	12 (≤50)	-	-
1,2,3,7,8-PeCDD	0.295	0.253	15 (≤50)	-	-
1,2,3,4,7,8-HxCDD	0.402	0.338	17 (≤50)	-	-
1,2,3,6,7,8-HxCDD	1.10	0.908	19 (≤50)	-	-
1,2,3,7,8,9-HxCDD	1.02	1.05	3 (≤50)	-	-
1,2,3,4,6,7,8-HpCDD	26.0	21.2	20 (≤50)	-	-
OCDD	429	314	31 (≤50)	-	-
2,3,7,8-TCDF	0.207	0.199	4 (≤50)	-	-
1,2,3,7,8-PeCDF	0.322	0.140	79 (≤50)	J (all detects)	A
2,3,4,7,8-PeCDF	0.391	0.389	1 (≤50)	-	-
1,2,3,4,7,8-HxCDF	0.387	0.0392U	200 (≤50)	J (all detects) UJ (all non-detects)	A
1,2,3,6,7,8-HxCDF	0.275	0.232	17 (≤50)	-	-
1,2,3,7,8,9-HxCDF	0.309	0.364	16 (≤50)	-	-
2,3,4,6,7,8-HxCDF	0.361	0.397	9 (≤50)	-	-

Compound	Concentration (ng/Kg)		RPD (Limits)	Flags	A or P
	DUP-07-SA5A-QC-030211	SL-048-SA5A-SS-0.0-0.5			
1,2,3,4,6,7,8-HpCDF	4.83	3.56	30 (≤50)	-	-
1,2,3,4,7,8,9-HpCDF	0.448	0.388	14 (≤50)	-	-
OCDF	16.2	11.5	34 (≤50)	-	-

Santa Susana Field Laboratory
Dioxins/Dibenzofurans - Data Qualification Summary - SDG DX060

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DX060	EB06-SA5A-030311	1,2,3,4,7,8-HxCDF 1,2,3,4,6,7,8-HpCDF	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	P	Internal standards (%R) (I)
DX060	SL-042-SA5A-SS-0.0-0.5 SL-044-SA5A-SS-0.0-0.5	OCDD	J (all detects)	P	Compound quantitation and CRQLs (exceeded range) (*XI)
DX060	DUP-07-SA5A-QC-030211 SL-042-SA5A-SS-0.0-0.5 SL-044-SA5A-SS-0.0-0.5 SL-045-SA5A-SS-0.0-0.5 SL-048-SA5A-SS-0.0-0.5 SL-176-SA5A-SS-0.0-0.3 SL-178-SA5A-SS-0.0-0.4 SL-179-SA5A-SS-0.0-0.3 SL-186-SA5A-SS-0.0-0.5 SL-188-SA5A-SS-0.0-0.5 SL-189-SA5A-SS-0.0-0.5 EB05-SA5A-030211 SL-234-SA5A-SB-4.0-5.0 SL-234-SA5A-SB-9.0-10.0 SL-235-SA5A-SB-4.0-5.0 SL-235-SA5A-SB-8.5-9.5 SL-236-SA5A-SB-4.0-5.0 SL-236-SA5A-SB-9.0-10.0 SL-249-SA5A-SB-2.5-3.5 SL-249-SA5A-SB-9.0-10.0 EB06-SA5A-030311	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)
DX060	SL-042-SA5A-SS-0.0-0.5 SL-044-SA5A-SS-0.0-0.5 SL-176-SA5A-SS-0.0-0.3 SL-178-SA5A-SS-0.0-0.4	2,3,7,8-TCDF from column SP2331	R	A	Overall assessment of data (*XIII)
DX060	DUP-07-SA5A-QC-030211 SL-048-SA5A-SS-0.0-0.5	1,2,3,7,8-PeCDF	J (all detects)	A	Field duplicates (RPD) (FD)
DX060	DUP-07-SA5A-QC-030211 SL-048-SA5A-SS-0.0-0.5	1,2,3,4,7,8-HxCDF	J (all detects) UJ (all non-detects)	A	Field duplicates (RPD) (FD)

Santa Susana Field Laboratory
Dioxins/Dibenzofurans - Laboratory Blank Data Qualification Summary - SDG DX060

SDG	Sample	Compound	Modified Final Concentration	A or P	Code
DX060	EB05-SA5A-030211	2,3,7,8-TCDF	0.0806U pg/L	A	B
		1,2,3,7,8-PeCDF	0.170U pg/L		
		2,3,4,7,8-PeCDF	0.632U pg/L		
		1,2,3,7,8-PeCDD	0.144U pg/L		
		1,2,3,4,7,8-HxCDF	0.536U pg/L		
		1,2,3,6,7,8-HxCDF	0.333U pg/L		
		2,3,4,6,7,8-HxCDF	0.785U pg/L		
		1,2,3,4,7,8-HxCDD	0.179U pg/L		
		1,2,3,6,7,8-HxCDD	0.122U pg/L		
		1,2,3,7,8,9-HxCDD	0.116U pg/L		
		1,2,3,7,8,9-HxCDF	0.227U pg/L		
		1,2,3,4,6,7,8-HpCDF	3.03U pg/L		
		1,2,3,4,6,7,8-HpCDD	3.44U pg/L		
		1,2,3,4,7,8,9-HpCDF	0.329U pg/L		
		OCDD	6.44U pg/L		
		OCDF	1.69U pg/L		
DX060	EB06-SA5A-030311	2,3,7,8-TCDF	0.109U pg/L	A	B
		1,2,3,7,8-PeCDF	0.401U pg/L		
		2,3,4,7,8-PeCDF	0.865U pg/L		
		1,2,3,7,8-PeCDD	0.583U pg/L		
		1,2,3,4,7,8-HxCDF	0.897U pg/L		
		1,2,3,6,7,8-HxCDF	0.857U pg/L		
		2,3,4,6,7,8-HxCDF	1.77U pg/L		
		1,2,3,4,7,8-HxCDD	0.298U pg/L		
		1,2,3,6,7,8-HxCDD	0.521U pg/L		
		1,2,3,7,8,9-HxCDD	0.418U pg/L		
		1,2,3,7,8,9-HxCDF	0.625U pg/L		
		1,2,3,4,6,7,8-HpCDF	6.14U pg/L		
		1,2,3,4,6,7,8-HpCDD	4.12U pg/L		
		1,2,3,4,7,8,9-HpCDF	0.814U pg/L		
		OCDD	9.93U pg/L		
		OCDF	4.34U pg/L		
DX060	SL-045-SA5A-SS-0.0-0.5	2,3,7,8-TCDD	0.0488U ng/Kg	A	B
		1,2,3,7,8-PeCDF	0.168U ng/Kg		
		1,2,3,6,7,8-HxCDF	0.238U ng/Kg		
		2,3,4,6,7,8-HxCDF	0.367U ng/Kg		
		1,2,3,4,7,8,9-HpCDF	0.258U ng/Kg		
DX060	SL-048-SA5A-SS-0.0-0.5	2,3,7,8-TCDD	0.0419U ng/Kg	A	B
		1,2,3,7,8-PeCDF	0.140U ng/Kg		
		2,3,4,7,8-PeCDF	0.389U ng/Kg		
		1,2,3,6,7,8-HxCDF	0.232U ng/Kg		
		2,3,4,6,7,8-HxCDF	0.397U ng/Kg		
DX060	SL-188-SA5A-SS-0.0-0.5	2,3,4,6,7,8-HxCDF	0.710U ng/Kg	A	B
		2,3,7,8-TCDD	0.0360U ng/Kg		
DX060	SL-189-SA5A-SS-0.0-0.5	2,3,7,8-TCDD	0.0393U ng/Kg	A	B
		1,2,3,7,8-PeCDF	0.100U ng/Kg		
		1,2,3,4,7,8-HxCDF	0.302U ng/Kg		
		1,2,3,6,7,8-HxCDF	0.182U ng/Kg		
		2,3,4,6,7,8-HxCDF	0.309U ng/Kg		
		1,2,3,7,8,9-HxCDF	0.134U ng/Kg		
		1,2,3,4,7,8,9-HpCDF	0.274U ng/Kg		

SDG	Sample	Compound	Modified Final Concentration	A or P	Code
DX060	SL-234-SA5A-SB-4.0-5.0	1,2,3,7,8-PeCDF	0.0629U ng/Kg	A	B
		2,3,4,7,8-PeCDF	0.0686U ng/Kg		
		1,2,3,7,8-PeCDD	0.0281U ng/Kg		
		1,2,3,4,7,8-HxCDF	0.0371U ng/Kg		
		1,2,3,6,7,8-HxCDF	0.0600U ng/Kg		
		2,3,4,6,7,8-HxCDF	0.114U ng/Kg		
		1,2,3,7,8,9-HxCDF	0.193U ng/Kg		
		1,2,3,4,6,7,8-HpCDF	0.218U ng/Kg		
		1,2,3,4,6,7,8-HpCDD	0.276U ng/Kg		
		1,2,3,4,7,8,9-HpCDF	0.0656U ng/Kg		
		OCDD	1.09U ng/Kg		
		OCDF	0.332U ng/Kg		
DX060	SL-234-SA5A-SB-9.0-10.0	2,3,7,8-TCDD	0.0138U ng/Kg	A	B
		1,2,3,7,8-PeCDF	0.0151U ng/Kg		
		2,3,4,7,8-PeCDF	0.0815U ng/Kg		
		1,2,3,7,8-PeCDD	0.0106U ng/Kg		
		1,2,3,4,7,8-HxCDF	0.0596U ng/Kg		
		1,2,3,6,7,8-HxCDF	0.0370U ng/Kg		
		2,3,4,6,7,8-HxCDF	0.106U ng/Kg		
		1,2,3,4,7,8-HxCDD	0.0136U ng/Kg		
		1,2,3,6,7,8-HxCDD	0.0181U ng/Kg		
		1,2,3,7,8,9-HxCDD	0.0222U ng/Kg		
		1,2,3,7,8,9-HxCDF	0.0472U ng/Kg		
		1,2,3,4,6,7,8-HpCDF	0.261U ng/Kg		
		1,2,3,4,6,7,8-HpCDD	0.273U ng/Kg		
		OCDD	0.631U ng/Kg		
		OCDF	0.309U ng/Kg		
DX060	SL-235-SA5A-SB-4.0-5.0	1,2,3,7,8-PeCDF	0.0414U ng/Kg	A	B
		2,3,4,7,8-PeCDF	0.171U ng/Kg		
		1,2,3,7,8-PeCDD	0.0239U ng/Kg		
		1,2,3,4,7,8-HxCDF	0.108U ng/Kg		
		1,2,3,6,7,8-HxCDF	0.130U ng/Kg		
		2,3,4,6,7,8-HxCDF	0.179U ng/Kg		
		1,2,3,4,7,8-HxCDD	0.0258U ng/Kg		
		1,2,3,7,8,9-HxCDF	0.197U ng/Kg		
		1,2,3,4,7,8,9-HpCDF	0.126U ng/Kg		
DX060	SL-235-SA5A-SB-8.5-9.5	1,2,3,7,8-PeCDF	0.0208U ng/Kg	A	B
		2,3,4,7,8-PeCDF	0.0841U ng/Kg		
		1,2,3,7,8-PeCDD	0.0128U ng/Kg		
		1,2,3,4,7,8-HxCDF	0.0371U ng/Kg		
		1,2,3,6,7,8-HxCDF	0.0338U ng/Kg		
		2,3,4,6,7,8-HxCDF	0.127U ng/Kg		
		1,2,3,6,7,8-HxCDD	0.0193U ng/Kg		
		1,2,3,7,8,9-HxCDD	0.0197U ng/Kg		
		1,2,3,7,8,9-HxCDF	0.0407U ng/Kg		
		1,2,3,4,6,7,8-HpCDF	0.192U ng/Kg		
		1,2,3,4,6,7,8-HpCDD	0.267U ng/Kg		
		1,2,3,4,7,8,9-HpCDF	0.0738U ng/Kg		
		OCDD	0.767U ng/Kg		
		OCDF	0.362U ng/Kg		

SDG	Sample	Compound	Modified Final Concentration	A or P	Code
DX060	SL-236-SA5A-SB-4.0-5.0	1,2,3,7,8-PeCDF 2,3,4,7,8-PeCDF 1,2,3,7,8-PeCDD 1,2,3,4,7,8-HxCDF 1,2,3,6,7,8-HxCDF 2,3,4,6,7,8-HxCDF 1,2,3,7,8,9-HxCDF 1,2,3,4,6,7,8-HpCDF 1,2,3,4,6,7,8-HpCDD 1,2,3,4,7,8,9-HpCDF OCDD OCDF	0.0604U ng/Kg 0.0727U ng/Kg 0.0248U ng/Kg 0.0486U ng/Kg 0.0390U ng/Kg 0.120U ng/Kg 0.181U ng/Kg 0.182U ng/Kg 0.426U ng/Kg 0.0750U ng/Kg 1.73U ng/Kg 0.325U ng/Kg	A	B
DX060	SL-236-SA5A-SB-9.0-10.0	1,2,3,7,8-PeCDF 2,3,4,7,8-PeCDF 1,2,3,4,7,8-HxCDF 1,2,3,6,7,8-HxCDF 2,3,4,6,7,8-HxCDF 1,2,3,6,7,8-HxCDD 1,2,3,7,8,9-HxCDD 1,2,3,7,8,9-HxCDF 1,2,3,4,6,7,8-HpCDF 1,2,3,4,6,7,8-HpCDD 1,2,3,4,7,8,9-HpCDF OCDD OCDF	0.0117U ng/Kg 0.0636U ng/Kg 0.0301U ng/Kg 0.0235U ng/Kg 0.0907U ng/Kg 0.0188U ng/Kg 0.0275U ng/Kg 0.0491U ng/Kg 0.142U ng/Kg 0.179U ng/Kg 0.0572U ng/Kg 0.637U ng/Kg 0.238U ng/Kg	A	B
DX060	SL-249-SA5A-SB-2.5-3.5	1,2,3,7,8-PeCDF 2,3,4,7,8-PeCDF 1,2,3,7,8-PeCDD 1,2,3,4,7,8-HxCDF 1,2,3,6,7,8-HxCDF 2,3,4,6,7,8-HxCDF 1,2,3,6,7,8-HxCDD 1,2,3,7,8,9-HxCDF 1,2,3,4,6,7,8-HpCDF 1,2,3,4,6,7,8-HpCDD 1,2,3,4,7,8,9-HpCDF OCDF	0.0311U ng/Kg 0.0679U ng/Kg 0.0229U ng/Kg 0.0362U ng/Kg 0.0538U ng/Kg 0.0910U ng/Kg 0.0829U ng/Kg 0.109U ng/Kg 0.201U ng/Kg 0.660U ng/Kg 0.0472U ng/Kg 0.379U ng/Kg	A	B
DX060	SL-249-SA5A-SB-9.0-10.0	2,3,7,8-TCDD 1,2,3,7,8-PeCDF 2,3,4,7,8-PeCDF 1,2,3,7,8-PeCDD 1,2,3,4,7,8-HxCDF 1,2,3,6,7,8-HxCDF 2,3,4,6,7,8-HxCDF 1,2,3,4,7,8-HxCDD 1,2,3,6,7,8-HxCDD 1,2,3,7,8,9-HxCDD 1,2,3,7,8,9-HxCDF 1,2,3,4,6,7,8-HpCDF 1,2,3,4,6,7,8-HpCDD 1,2,3,4,7,8,9-HpCDF OCDD OCDF	0.0104U ng/Kg 0.0263U ng/Kg 0.0794U ng/Kg 0.0234U ng/Kg 0.0518U ng/Kg 0.0393U ng/Kg 0.0882U ng/Kg 0.0204U ng/Kg 0.0209U ng/Kg 0.0331U ng/Kg 0.0432U ng/Kg 0.202U ng/Kg 0.187U ng/Kg 0.0244U ng/Kg 0.525U ng/Kg 0.273U ng/Kg	A	B
DX060	DUP-07-SA5A-QC-030211	2,3,7,8-TCDD 2,3,4,7,8-PeCDF 1,2,3,7,8,9-HxCDF	0.0473U ng/Kg 0.391U ng/Kg 0.309U ng/Kg	A	B

Santa Susana Field Laboratory
Dioxins/Dibenzofurans - Field Blank Data Qualification Summary - SDG DX060

No Sample Data Qualified in this SDG

LDC #: 25907F21

VALIDATION COMPLETENESS WORKSHEET

Level IV

Date: 8/5/11

SDG #: DX060

Page: 1 of 1

Laboratory: Lancaster Laboratories

Reviewer: SC

2nd Reviewer: C

METHOD: HRGC/HRMS Dioxins/Dibenzofurans (EPA Method 1613B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 3/2 - 3/3/11
II.	HRGC/HRMS Instrument performance check	A	
III.	Initial calibration	A	20% / 35%
IV.	Routine calibration/~~ICV~~	A	QC limits
V.	Blanks	SW	
VI.	Matrix spike/Matrix spike duplicates	A	
VII.	Laboratory control samples	A	LCS
VIII.	Regional quality assurance and quality control	N	
IX.	Internal standards	SW	
X.	Target compound identifications	A	
XI.	Compound quantitation and CRQLs	SW	
XII.	System performance	A	
XIII.	Overall assessment of data	SW	
XIV.	Field duplicates	SW	D = 1 + 5
XV.	Field blanks	SW	~~FB~~ EB = 12, 21

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: Soil & Water

1 5	DUP-07-SA5A-QC-030211	11 3	SL-189-SA5A-SS-0.0-0.5	21 2	EB06-SA5A-030311 W	31 1	BLK066002
2 3	SL-042-SA5A-SS-0.0-0.5	12 1	EB05-SA5A-030211 W	22 3	SL-048-SA5A-SS-0.0-0.5MS	32 2	BLK068002
3 3	SL-044-SA5A-SS-0.0-0.5	13 4	SL-234-SA5A-SB-4.0-5.0	23 3	SL-048-SA5A-SS-0.0-0.5MSD	33 3	BLK075001
4 3	SL-045-SA5A-SS-0.0-0.5	14 4	SL-234-SA5A-SB-9.0-10.0	24		34 4	BLK076001
5 3	SL-048-SA5A-SS-0.0-0.5	15 4	SL-235-SA5A-SB-4.0-5.0	25		35 5	BLK083001
6 3	SL-176-SA5A-SS-0.0-0.3	16 4	SL-235-SA5A-SB-8.5-9.5	26		36	
7 3	SL-178-SA5A-SS-0.0-0.4	17 4	SL-236-SA5A-SB-4.0-5.0	27		37	
8 3	SL-179-SA5A-SS-0.0-0.3	18 4	SL-236-SA5A-SB-9.0-10.0	28		38	
9 3	SL-186-SA5A-SS-0.0-0.5	19 4	SL-249-SA5A-SB-2.5-3.5	29		39	
10 3	SL-188-SA5A-SS-0.0-0.5	20 4	SL-249-SA5A-SB-9.0-10.0	30		40	

Notes:

LDC #: 25907F21

VALIDATION FINDINGS CHECKLIST

Reviewer: M
2nd Reviewer: C

Method: Dioxins/Dibenzofurans (EPA SW 846 Method 1613B)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. GC/MS Instrument performance check				
Was PFK exact mass 380.9760 verified?	✓			
Were the retention time windows established for all homologues?	✓			
Was the chromatographic resolution between 2,3,7,8-TCDD and peaks representing any other unlabeled TCDD isomers ≤ 25% ?	✓			
Is the static resolving power at least 10,000 (10% valley definition)?	✓			
Was the mass resolution adequately check with PFK?	✓			
Was the presence of 1,2,8,9-TCDD and 1,3,4,6,8-PeCDF verified?	✓			
III. Initial calibration				
Was the initial calibration performed at 5 concentration levels?	✓			
Were all percent relative standard deviations (%RSD) ≤ 20% for unlabeled compounds and ≤ 35% for labeled compounds ?	✓			
Did all calibration standards meet the Ion Abundance Ratio criteria?	✓			
Was the signal to noise ratio for each target compound ≥ 2.5 and for each recovery and internal standard ≥ 10?	✓			
IV. Continuing calibration				
Was a routine calibration performed at the beginning and end of each 12 hour period?	✓			
Were all the concentrations for the unlabeled compounds and labeled compounds within the QC limits (Method 1613B, Table 6)?	✓			
Did all routine calibration standards meet the Ion Abundance Ratio criteria?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank performed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet?	✓			
VI. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?	✓			
VII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			

LDC #: 25907F21

VALIDATION FINDINGS CHECKLIST

Reviewer: [illegible]
2nd Reviewer: [illegible]

Validation Area	Yes	No	NA	Findings/Comments
VIII. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
IX. Internal standards				
Were internal standard recoveries within the ~~25-150% criteria~~ QC limits?		✓		
Was the minimum S/N ratio of all internal standard peaks ≥ 10?	✓			
X. Target compound identification				
For 2,3,7,8 substituted congeners with associated labeled standards, were the retention times of the two quantitation peaks within -1 to 3 sec. of the RT of the labeled standard?	✓			
For 2,3,7,8 substituted congeners without associated labeled standards, were the relative retention times of the two quantitation peaks within 0.005 time units of the RRT measured in the routine calibration?	✓			
For non-2,3,7,8 substituted congeners, were the retention times of the two quantitation peaks within RT established in the performance check solution?	✓			
Did compound spectra contain all characteristic ions listed in the table attached?	✓			
Was the Ion Abundance Ratio for the two quantitation ions within criteria?	~~✓~~	✓		EMPC
Was the signal to noise ratio for each target compound and labeled standard ≥ 2.5?	✓			
Does the maximum intensity of each specified characteristic ion coincide within ± 2 seconds (includes labeled standards)?	✓			
For PCDF identification, was any signal (S/N ≥ 2.5, at ± seconds RT) detected in the corresponding PCDPE channel?	~~✓~~	✓		
Was an acceptable lock mass recorded and monitored?	✓			
XI. Compound quantitation/CRQLs				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	✓			
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.	✓			
Target compounds were detected in the field duplicates.	✓			
XV. Field blanks				
Field blanks were identified in this SDG.	✓			
Target compounds were detected in the field blanks.	✓			

VALIDATION FINDINGS WORKSHEET

METHOD: HRGC/HRMS Dioxins/Dibenzofurans (EPA Method 1613B)

A. 2,3,7,8-TCDD	F. 1,2,3,4,6,7,8-HpCDD	K. 1,2,3,4,7,8-HxCDF	P. 1,2,3,4,7,8,9-HpCDF	U. Total HpCDD
B. 1,2,3,7,8-PeCDD	G. OCDD	L. 1,2,3,6,7,8-HxCDF	Q. OCDF	V. Total TCDF
C. 1,2,3,4,7,8-HxCDD	H. 2,3,7,8-TCDF	M. 2,3,4,6,7,8-HxCDF	R. Total TCDD	W. Total PeCDF
D. 1,2,3,6,7,8-HxCDD	I. 1,2,3,7,8-PeCDF	N. 1,2,3,7,8,9-HxCDF	S. Total PeCDD	X. Total HxCDF
E. 1,2,3,7,8,9-HxCDD	J. 2,3,4,7,8-PeCDF	O. 1,2,3,4,6,7,8-HpCDF	T. Total HxCDD	Y. Total HpCDF

Notes:

LDC #: 25907F21

VALIDATION FINDINGS WORKSHEET
Blanks

Reviewer: A
2nd Reviewer: C

METHOD: HRGC/HRMS Dioxins/Dibenzofurans (EPA Method 1613B)
Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were all samples associated with a method blank?
Y N N/A Was a method blank performed for each matrix and whenever a sample extraction was performed?
Y N N/A Was the method blank contaminated?

Blank extraction date: 3/8/11 **Blank analysis date:** 3/11/11
Conc. units: pg/L **Associated samples:** 12 (UB)

Compound	Blank ID	Sample Identification								
	BLK066002	12								
H	0.158*	0.0806								
I	0.528	0.170*								
J	1.10*	0.632								
B	0.374*	0.144								
K	1.04*	0.536								
L	1.11	0.333								
M	1.70	0.785								
C	0.576	0.179*								
D	0.332*	0.122*								
E	0.634*	0.116*								
N	1.20	0.227*								
O	6.54	3.03								
F	3.30	3.44								
P	1.19*	0.329*								
G	6.88	6.44								
Q	4.19	1.69								

*EMPC

LDC #: 25907F21

VALIDATION FINDINGS WORKSHEET
Blanks

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: HRGC/HRMS Dioxins/Dibenzofurans (EPA Method 1613B)

Blank extraction date: 3/9/11 **Blank analysis date:** 3/11/11
Conc. units: pg/L Associated Samples: 21 (UB)

Compound	Blank ID	Sample Identification								
	BLK068002	21								
H	0.209	0.109*								
A	0.0984									
I	0.379	0.401								
J	0.765	0.865*								
B	0.322	0.583*								
K	0.713	0.897								
L	0.790	0.857								
M	1.21	1.77*								
C	0.221	0.298*								
D	0.314	0.521*								
E	0.432	0.418								
N	0.756	0.625*								
O	4.59	6.14								
F	2.50	4.12								
P	0.734	0.814*								
G	4.99	9.93								
Q	2.42	4.34								

LDC #: 25907F21

VALIDATION FINDINGS WORKSHEET
Blanks

Reviewer: R
2nd Reviewer: C

METHOD: HRGC/HRMS Dioxins/Dibenzofurans (EPA Method 1613B)

Blank extraction date: 3/16/11 **Blank analysis date:** 3/18/11
Conc. units: ng/Kg Associated Samples: 2-11 (UB)

Compound	Blank ID	Sample Identification								
	BLK075001	5x	4	5	10	11				
H	0.0185*	0.0925								
A	0.0127*	0.0635	0.0488*	0.0419	0.0360*	0.0393*				
I	0.0410	0.205	0.168*	0.140		0.100*				
J	0.0905	0.4525		0.389						
K	0.0643	0.3215				0.302				
L	0.0553	0.2765	0.238	0.232		0.182				
M	0.155	0.775	0.367	0.397	0.710	0.309				
C	0.0127	0.0635								
D	0.0269*	0.1345								
E	0.0191*	0.0955								
N	0.0579*	0.2895				0.134				
O	0.415	2.075								
F	0.256	1.28								
P	0.0742	0.371	0.258			0.274				
G	0.493	2.465								
Q	0.337	1.685								

others >5x or ND

LDC #: 25907F21

VALIDATION FINDINGS WORKSHEET
Blanks

Reviewer: R
2nd Reviewer: C

METHOD: HRGC/HRMS Dioxins/Dibenzofurans (EPA Method 1613B)

Blank extraction date: 3/17/11 **Blank analysis date:** 3/19/11
Conc. units: ng/Kg Associated Samples: 13-20 (UB)

Compound	Blank ID	Sample Identification								
	BLK076001	5x	13	14	15	16	17	18	19	20
A	0.0119*	0.0595		0.0138*						0.0104*
I	0.0234	0.117	0.0629*	0.0151*	0.0414	0.0208*	0.0604	0.0117*	0.0311*	0.0263*
J	0.0861	0.4305	0.0686	0.0815*	0.171	0.0841	0.0727*	0.0636*	0.0679*	0.0794*
B	0.0214*	0.107	0.0281*	0.0106*	0.0239*	0.0128*	0.0248*		0.0229*	0.0234*
K	0.0401*	0.2005	0.0371*	0.0596*	0.108	0.0371*	0.0486*	0.0301*	0.0362	0.0518
L	0.0403	0.2015	0.0600	0.0370*	0.130*	0.0338*	0.0390*	0.0235*	0.0538*	0.0393
M	0.0969*	0.4845	0.114	0.106	0.179	0.127	0.120	0.0907*	0.0910	0.0882*
C	0.0153*	0.0765		0.0136*	0.0258*					0.0204*
D	0.0167	0.0835		0.0181*		0.0193		0.0188*	0.0829*	0.0209*
E	0.0207*	0.1035		0.0222*		0.0197*		0.0275*		0.0331*
N	0.0536	0.268	0.193	0.0472*	0.197	0.0407*	0.181*	0.0491	0.109*	0.0432*
O	0.221	1.105	0.218	0.261		0.192	0.182	0.142*	0.201	0.202
F	0.200	1	0.276	0.273		0.267*	0.426	0.179	0.660	0.187*
P	0.0584	0.292	0.0656*		0.126*	0.0738	0.0750*	0.0572	0.0472*	0.0244*
G	0.355	1.775	1.09	0.631		0.767	1.73	0.637		0.525
Q	0.291	1.455	0.332	0.309		0.362	0.325	0.238	0.379*	0.273

LDC #: 25907F21

VALIDATION FINDINGS WORKSHEET
Blanks

Reviewer: K
2nd Reviewer: C

METHOD: HRGC/HRMS Dioxins/Dibenzofurans (EPA Method 1613B)

Blank extraction date: 3/24/11 **Blank analysis date:** 3/25/11
Conc. units: ng/Kg Associated Samples: 1 (UB)

Compound	Blank ID	Sample Identification								
	BLK083001	5x	1							
H	0.0219*	0.1095								
A	0.0184*	0.092	0.0473							
I	0.0346	0.173								
J	0.0885	0.4425	0.391							
B	0.0317	0.1585								
K	0.0527	0.2635								
L	0.0416*	0.208								
M	0.0701*	0.3505								
C	0.0256*	0.128								
D	0.0244	0.122								
E	0.0275*	0.1375								
N	0.0883*	0.4415	0.309							
O	0.141	0.705								
F	0.195*	0.975								
P	0.0667*	0.3335								
G	0.392	1.96								
Q	0.221*	1.105								

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
All contaminants within five times the method blank concentration were qualified as not detected, "U".

LDC #: 25907F21

VALIDATION FINDINGS WORKSHEET
Field Blanks

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC/MS Dioxins/Dibenzofurans (Method 1613B)

Y N N/A Were field blanks identified in this SDG?

Blank units: pg/L **Associated sample units:** ng/Kg
Sampling date: 3/2/11
Field blank type: (circle one) Field Blank / Rinsate / Other: EB Associated Samples: 1-11 >5X

Compound	Blank ID	Sample Identification								
	12									
H	0.0806									
I	0.170*									
J	0.632									
B	0.144									
K	0.536									
L	0.333									
M	0.785									
C	0.179*									
D	0.122*									
E	0.116*									
N	0.227*									
O	3.03									
F	3.44									
P	0.329*									
G	6.44									
Q	1.69									

*EMPC

LDC #: 25907F21

VALIDATION FINDINGS WORKSHEET
Field Blanks

Reviewer: A
2nd Reviewer: C

METHOD: GC/MS Dioxins/Dibenzofurans (Method 1613B)

Blank units: pg/L **Associated sample units:** ng/Kg
Sampling date: 3/3/11
Field blank type: (circle one) Field Blank / Rinsate / Other: EB Associated Samples: 13-20 >5x

Compound	Blank ID	Sample Identification								
	21									
H	0.109*									
I	0.401									
J	0.865*									
B	0.583*									
K	0.897									
L	0.857									
M	1.77*									
C	0.298*									
D	0.521*									
E	0.418									
N	0.625*									
O	6.14									
F	4.12									
P	0.814*									
G	9.93									
Q	4.34									

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
Samples with compound concentrations within five times the associated field blank concentration are listed above, these sample results were qualified as not detected, "U".

LDC #: 25907F21

VALIDATION FINDINGS WORKSHEET
Internal Standards

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: HRGC/HRMS Dioxins/Dibenzofurans (EPA Method 1613B)
Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".
Y (N) N/A Are all internal standard recoveries were within the QC criteria?
(Y) N N/A Was the S/N ratio all internal standard peaks ≥ 10?

#	Date	Lab ID/Reference	Internal Standard	% Recovery (Limit)	Qualifications
		21	13C-K	23 (26-152)	J/UJ/P (I)
			13C-O	26 (28-143)	↓
				( )	
				( )	
				( )	qual K, O
				( )	
				( )	
				( )	
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LDC #: 25907F21

VALIDATION FINDINGS WORKSHEET
Compound Quantitation and Reported CRQLs

Reviewer: R
2nd Reviewer: C

METHOD: HRGC/HRMS Dioxins/Dibenzofurans (EPA Method 1613B)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were the correct internal standard (IS), quantitation ions and relative response factors (RRF) used to quantitate the compound?
Y N N/A Compound quantitation and CRQLs were adjusted to reflect all sample dilutions and dry weight factors (if necessary).

#	Date	Sample ID	Finding	Associated Samples	Qualifications
		2,3	G > calib range		Jdetn/P (*X1)

LDC #: 25907F21

VALIDATION FINDINGS WORKSHEET
Overall Assessment of Data

Reviewer: SC
2nd Reviewer: [illegible]

METHOD: GC/MS Dioxins/Dibenzofurans (Method 1613B)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

All available information pertaining to the data were reviewed using professional judgement to compliment the determination of the overall quality of the data.

Y N N/A Was the overall quality and usability of the data acceptable?

#	Date	Sample ID	Finding	Associated Samples	Qualifications
		2,3,6,7	H (SP2331)		R/A

Comments:

LDC:25907F21

VALIDATION FINDINGS WORKSHEET
Field Duplicates

Reviewer:
2nd Reviewer:

METHOD: HRGC/MS Dioxins/dibenzofurans EPA Method 1613B

Y N NA Were field duplicate pairs identified in this SDG?
Y N NA Were target analytes detected in the field duplicate pairs?

Analyte	Concentration (ng/Kg)		RPD ≤50		Qual Parent only
	1	5			
A	0.0473	0.0419	12		
B	0.295	0.253	15		
C	0.402	0.338	17		
D	1.10	0.908	19		
E	1.02	1.05	3		
F	26.0	21.2	20		
G	429	314	31		
H	0.207	0.199	4		
I	0.322	0.140	79		Jdets/A (FD)
J	0.391	0.389	1		
K	0.387	0.0392U	200		J/UJ/A (FD)
L	0.275	0.232	17		
N	0.309	0.364	16		
M	0.361	0.397	9		
O	4.83	3.56	30		
P	0.448	0.388	14		
Q	16.2	11.5	34		

LDC #: 25907F21

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: 8
2nd Reviewer: C

METHOD: HRGC/HRMS Dioxins/Dibenzofurans (EPA Method 1613B)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

RRF = $(A_x)(C_{is})/(A_{is})(C_x)$ — A_x = Area of compound, A_{is} = Area of associated internal standard
average RRF = sum of the RRFs/number of standards — C_x = Concentration of compound, C_{is} = Concentration of internal standard
%RSD = 100 * (S/X) — S = Standard deviation of the RRFs, X = Mean of the RRFs

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Reported Average RRF (initial)	Recalculated Average RRF (initial)	Reported RRF (CS3 std)	Recalculated RRF (CS3 std)	Reported %RSD	Recalculated %RSD
1	ICAL	3/7/11	2,3,7,8-TCDF (^{13}C-2,3,7,8-TCDF)	0.946	0.946	0.957	0.957	3.75	3.74
			2,3,7,8-TCDD (^{13}C-2,3,7,8-TCDD)	1.107	1.107	1.123	1.123	4.18	4.21
			1,2,3,6,7,8-HxCDD (^{13}C-1,2,3,6,7,8-HxCDD)	0.923	0.923	0.954	0.954	5.82	5.81
			1,2,3,4,6,7,8-HpCDD (^{13}C-1,2,4,6,7,8,-HpCDD)	1.020	1.020	1.036	1.036	3.09	3.10
			OCDF (^{13}C-OCDF)	0.956	0.956	0.968	0.968	5.74	5.73
2	ICAL	3/14/11	2,3,7,8-TCDF (^{13}C-2,3,7,8-TCDF)	0.901	0.901	0.907	0.907	3.87	3.87
			2,3,7,8-TCDD (^{13}C-2,3,7,8-TCDD)						
			1,2,3,6,7,8-HxCDD (^{13}C-1,2,3,6,7,8-HxCDD)						
			1,2,3,4,6,7,8-HpCDD (^{13}C-1,2,4,6,7,8,-HpCDD)						
			OCDF (^{13}C-OCDF)						
3			2,3,7,8-TCDF (^{13}C-2,3,7,8-TCDF)						
			2,3,7,8-TCDD (^{13}C-2,3,7,8-TCDD)						
			1,2,3,6,7,8-HxCDD (^{13}C-1,2,3,6,7,8-HxCDD)						
			1,2,3,4,6,7,8-HpCDD (^{13}C-1,2,4,6,7,8,-HpCDD)						
			OCDF (^{13}C-OCDF)						

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25907F21

VALIDATION FINDINGS WORKSHEET
Routine Calibration Results Verification

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: HRGC/HRMS Dioxins/Dibenzofurans (EPA Method 1613B)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
RRF = $(A_x)(C_{is})/(A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Average RRF (initial)	Reported ~~RRF~~ Conc (CC)	Recalculated ~~RRF~~ Conc (CC)	Reported %R	Recalculated %R
1	CS3CC02	3/10/11	2,3,7,8-TCDF (^{13}C-2,3,7,8-TCDF)	0.946	10.20	10.19	102	102
			2,3,7,8-TCDD (^{13}C-2,3,7,8-TCDD)	1.107	10.03	10.03	100	100
			1,2,3,6,7,8-HxCDD (^{13}C-1,2,3,6,7,8-HxCDD)	0.923	50.74	50.76	101	101
			1,2,3,4,6,7,8-HpCDD (^{13}C-1,2,4,6,7,8,-HpCDD)	1.020	50.18	50.17	100	100
			OCDF (^{13}C-OCDF)	0.956	99.16	99.16	99	99
2	CS3CC03	3/11/11	2,3,7,8-TCDF (^{13}C-2,3,7,8-TCDF)	0.946	9.38	9.38	94	94
			2,3,7,8-TCDD (^{13}C-2,3,7,8-TCDD)	1.107	9.38	9.38	94	94
			1,2,3,6,7,8-HxCDD (^{13}C-1,2,3,6,7,8-HxCDD)	0.923	48.12	48.13	96	96
			1,2,3,4,6,7,8-HpCDD (^{13}C-1,2,4,6,7,8,-HpCDD)	1.020	47.87	47.86	96	96
			OCDF (^{13}C-OCDF)	0.956	95.43	95.43	95	95
3	CS3CC04	3/11/11	2,3,7,8-TCDF (^{13}C-2,3,7,8-TCDF)	0.946	9.34	9.34	93	93
			2,3,7,8-TCDD (^{13}C-2,3,7,8-TCDD)	1.107	9.46	9.46	95	95
			1,2,3,6,7,8-HxCDD (^{13}C-1,2,3,6,7,8-HxCDD)	0.923	48.55	48.56	97	97
			1,2,3,4,6,7,8-HpCDD (^{13}C-1,2,4,6,7,8,-HpCDD)	1.020	48.19	48.18	96	96
			OCDF (^{13}C-OCDF)	0.956	96.34	96.34	96	96

Comments: Refer to Routine Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25907F21

VALIDATION FINDINGS WORKSHEET
Routine Calibration Results Verification

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: HRGC/HRMS Dioxins/Dibenzofurans (EPA Method 1613B)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
RRF = $(A_x)(C_{is})/(A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Average RRF (initial)	Reported ~~RRF~~ Conc (CC)	Recalculated ~~RRF~~ Conc (CC)	Reported %R	Recalculated %R
1	CS3C002	3/18/11	2,3,7,8-TCDF (^{13}C-2,3,7,8-TCDF)	0.946	10.50	10.49	105	105
			2,3,7,8-TCDD (^{13}C-2,3,7,8-TCDD)	1.107	10.66	10.65	107	107
			1,2,3,6,7,8-HxCDD (^{13}C-1,2,3,6,7,8-HxCDD)	0.923	52.80	52.81	106	106
			1,2,3,4,6,7,8-HpCDD (^{13}C-1,2,4,6,7,8,-HpCDD)	1.020	51.47	51.46	103	103
			OCDF (^{13}C-OCDF)	0.956	101.34	101.35	101	101
2	CS3C003	3/19/11	2,3,7,8-TCDF (^{13}C-2,3,7,8-TCDF)	0.946	10.12	10.12	101	101
			2,3,7,8-TCDD (^{13}C-2,3,7,8-TCDD)	1.107	10.31	10.31	103	103
			1,2,3,6,7,8-HxCDD (^{13}C-1,2,3,6,7,8-HxCDD)	0.923	52.15	52.17	104	104
			1,2,3,4,6,7,8-HpCDD (^{13}C-1,2,4,6,7,8,-HpCDD)	1.020	51.08	51.07	102	102
			OCDF (^{13}C-OCDF)	0.956	100.09	100.09	100	100
3	CS3C004	3/19/11	2,3,7,8-TCDF (^{13}C-2,3,7,8-TCDF)	0.946	9.93	9.93	99	99
			2,3,7,8-TCDD (^{13}C-2,3,7,8-TCDD)	1.107	10.16	10.16	102	100
			1,2,3,6,7,8-HxCDD (^{13}C-1,2,3,6,7,8-HxCDD)	0.923	50.91	50.92	102	102
			1,2,3,4,6,7,8-HpCDD (^{13}C-1,2,4,6,7,8,-HpCDD)	1.020	50.19	50.18	100	100
			OCDF (^{13}C-OCDF)	0.956	98.13	98.13	98	98

Comments: Refer to Routine Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25907F21

VALIDATION FINDINGS WORKSHEET
Routine Calibration Results Verification

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: HRGC/HRMS Dioxins/Dibenzofurans (EPA Method 1613B)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
RRF = $(A_x)(C_{is})/(A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Average RRF (initial)	Reported Conc ~~RRF~~ (CC)	Recalculated Conc ~~RRF~~ (CC)	Reported %R	Recalculated %R
1	CS3CC02	3/23/11	2,3,7,8-TCDF (^{13}C-2,3,7,8-TCDF)	0.946	10.77	10.77	108	108
			2,3,7,8-TCDD (^{13}C-2,3,7,8-TCDD)	1.107	10.75	10.75	108	108
			1,2,3,6,7,8-HxCDD (^{13}C-1,2,3,6,7,8-HxCDD)	0.923	54.21	54.22	108	108
			1,2,3,4,6,7,8-HpCDD (^{13}C-1,2,4,6,7,8,-HpCDD)	1.020	52.56	52.55	105	105
			OCDF (^{13}C-OCDF)	0.956	102.18	102.18	102	102
2	CS3CC02	3/25/11	2,3,7,8-TCDF (^{13}C-2,3,7,8-TCDF)	0.946	10.09	10.09	101	101
			2,3,7,8-TCDD (^{13}C-2,3,7,8-TCDD)	1.107	10.33	10.33	103	103
			1,2,3,6,7,8-HxCDD (^{13}C-1,2,3,6,7,8-HxCDD)	0.923	51.90	51.91	104	104
			1,2,3,4,6,7,8-HpCDD (^{13}C-1,2,4,6,7,8,-HpCDD)	1.020	50.36	50.35	101	101
			OCDF (^{13}C-OCDF)	0.956	97.79	97.79	98	98
3	CS3CC03	3/25/11	2,3,7,8-TCDF (^{13}C-2,3,7,8-TCDF)	~~0.946~~ 0.901	10.50	10.50	105	105
			2,3,7,8-TCDD (^{13}C-2,3,7,8-TCDD)	1.107				
			1,2,3,6,7,8-HxCDD (^{13}C-1,2,3,6,7,8-HxCDD)	0.923				
			1,2,3,4,6,7,8-HpCDD (^{13}C-1,2,4,6,7,8,-HpCDD)	1.020				
			OCDF (^{13}C-OCDF)	~~0.956~~				

Comments: Refer to Routine Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25907F21

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: HRGC/HRMS Dioxins/Dibenzofurans (EPA Method 1613B)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SSR - SR)/SA Where: SSR = Spiked sample result, SR = Sample result
SA = Spike added

RPD = I MSR - MSDR I * 2/(MSR + MSDR) MSR = Matrix spike percent recovery MSDR = Matrix spike duplicate percent recovery

MS/MSD samples: 22/23

Compound	Spike Added (ng/kg)		Sample Concentration (ng/kg)	Spiked Sample Concentration (ng/kg)		Matrix Spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		Reported RPD	Recalculated RPD
	MS	MSD	------	MS	MSD	Reported	Recalc.	Reported	Recalc.	----	----
2,3,7,8-TCDD	22.9	22.9	0.0419	24.8	25.0	108	108	109	109	1	1
1,2,3,7,8-PeCDD	114	114	0.253	128	127	112	112	111	111	1	1
1,2,3,4,7,8-HxCDD	↓	↓	0.338	127	125	111	111	110	109	1	2
1,2,3,4,7,8,9-HpCDF			0.388	120	120	105	105	105	105	0	0
OCDF	229	229	11.5	253	252	105	105	105	105	0	0

Comments: Refer to Matrix Spike/Matrix Spike Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25907F21

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample Results Verification

Reviewer: R
2nd Reviewer: C

METHOD: GC/MS Dioxins/Dibenzofurans (EPA Method 1613B)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratoy control sample and laboratory control sample duplicate (if applicable) were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * SSC/SA Where: SSC = Spiked sample concentration
SA = Spike added

RPD = I LCS - LCSD I * 2/(LCS + LCSD) LCS = Laboraotry control sample percent recovery LCSD = Laboratory control sample duplicate percent recovery

LCS ID: 0PR0760001

Compound	Spike Added (ng/kg)		Spiked Sample Concentration (ng/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
2,3,7,8-TCDD	20		17.7		88	88				
1,2,3,7,8-PeCDD	100		89.8		90	90				
1,2,3,4,7,8-HxCDD	↓		88.1		88	88				
1,2,3,4,7,8,9-HpCDF			85.5		86	86				
OCDF	200		170		85	85				

Comments: Refer to Laboratory Control Sample findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25967F21

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer:
2nd reviewer:

METHOD: HRGC/HRMS Dioxins/Dibenzofurans (EPA Method 1613B)

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(DF)}{(A_{is})(RRF)(V_o)(\%S)}$

A_x	=	Area of the characteristic ion (EICP) for the compound to be measured
A_{is}	=	Area of the characteristic ion (EICP) for the specific internal standard
I_s	=	Amount of internal standard added in nanograms (ng)
V_o	=	Volume or weight of sample extract in milliliters (ml) or grams (g).
RRF	=	Relative Response Factor (average) from the initial calibration
Df	=	Dilution Factor.
%S	=	Percent solids, applicable to soil and solid matrices only.

Example:

Sample I.D. 1, G:

Conc. = $\frac{(174390)(4000)(1)}{(851766)(1.005)(10)(0.874)}$

= 429 ng/kg

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification

SAMPLE DELIVERY GROUP

DX061

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
02-Mar-2011	SL-245-SA5A-SB-4.0-5.0	6220848	N	METHOD	1613B	III
02-Mar-2011	SL-245-SA5A-SB-4.0-5.0MS	6220849	MS	METHOD	1613B	III
02-Mar-2011	SL-245-SA5A-SB-4.0-5.0MSD	6220850	MSD	METHOD	1613B	III
02-Mar-2011	DUP08-SA5A-QC-030211	6220847	FD	METHOD	1613B	III
02-Mar-2011	SL-245-SA5A-SB-9.0-10.0	6220851	N	METHOD	1613B	III
02-Mar-2011	SL-245-SA5A-SB-29.0-30.0	6220852	N	METHOD	1613B	III
02-Mar-2011	SL-246-SA5A-SB-4.0-5.0	6220853	N	METHOD	1613B	III
02-Mar-2011	SL-246-SA5A-SB-9.0-10.0	6220854	N	METHOD	1613B	III
02-Mar-2011	SL-247-SA5A-SB-4.0-5.0	6220855	N	METHOD	1613B	III
02-Mar-2011	SL-247-SA5A-SB-9.0-10.0	6220856	N	METHOD	1613B	III
04-Mar-2011	SL-015-SA5A-SB-3.0-4.0	6223285	N	METHOD	1613B	III
04-Mar-2011	SL-233-SA5A-SB-4.0-5.0	6223286	N	METHOD	1613B	III
04-Mar-2011	SL-233-SA5A-SB-9.0-10.0	6223287	N	METHOD	1613B	III
07-Mar-2011	SL-007-SA5A-SB-4.0-5.0	6224312	N	METHOD	1613B	III
07-Mar-2011	SL-007-SA5A-SB-9.0-10.0	6224313	N	METHOD	1613B	III
07-Mar-2011	SL-013-SA5A-SB-2.5-3.5	6224314	N	METHOD	1613B	III
07-Mar-2011	SL-012-SA5A-SB-2.0-3.0	6224315	N	METHOD	1613B	III
08-Mar-2011	SL-006-SA5A-SB-2.0-3.0	6225087	N	METHOD	1613B	III
09-Mar-2011	SL-225-SA5B-SB-2.0-3.0	6226879	N	METHOD	1613B	III
09-Mar-2011	SL-304-SA5B-SB-3.0-4.0	6226878	N	METHOD	1613B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DX061 **Laboratory: LL**

EDD Filename: DX061_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: DUP08-SA5A-QC-030211 ***Collected:*** 3/2/2011 9:08:00 AM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.307	JB	0.0189	MDL	5.51	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.130	JB	0.00750	MDL	5.51	PQL	ng/Kg	UJ	B, FD
1,2,3,4,7,8,9-HPCDF	0.0407	JBQ	0.0112	MDL	5.51	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0316	JBQ	0.0101	MDL	5.51	PQL	ng/Kg	UJ	B, FD
1,2,3,6,7,8-HXCDD	0.0223	JQ	0.0111	MDL	5.51	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.0282	JB	0.00728	MDL	5.51	PQL	ng/Kg	UJ	B, FD
1,2,3,7,8,9-HXCDD	0.0562	JB	0.0108	MDL	5.51	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0552	JQ	0.00761	MDL	5.51	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.0154	JBQ	0.0120	MDL	5.51	PQL	ng/Kg	UJ	B, FD
1,2,3,7,8-PECDF	0.0196	JB	0.00628	MDL	5.51	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0601	JB	0.00639	MDL	5.51	PQL	ng/Kg	UJ	B, FD
2,3,4,7,8-PECDF	0.0720	JB	0.00650	MDL	5.51	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0106	U	0.0106	MDL	1.10	PQL	ng/Kg	UJ	FD
OCDD	2.53	JB	0.0187	MDL	11.0	PQL	ng/Kg	J	Z, FD
OCDF	0.188	JB	0.0191	MDL	11.0	PQL	ng/Kg	UJ	B, FD

Sample ID: SL-006-SA5A-SB-2.0-3.0 ***Collected:*** 3/8/2011 9:56:00 AM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.227	JB	0.0158	MDL	5.48	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.181	JB	0.00745	MDL	5.48	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0388	JB	0.0137	MDL	5.48	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0185	JBQ	0.0122	MDL	5.48	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0381	JBQ	0.0103	MDL	5.48	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0422	JB	0.0126	MDL	5.48	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0338	JBQ	0.00865	MDL	5.48	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0297	JBQ	0.0124	MDL	5.48	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0546	JB	0.0125	MDL	5.48	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0203	JBQ	0.00679	MDL	5.48	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0683	JBQ	0.0101	MDL	5.48	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0588	JB	0.00690	MDL	5.48	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0170	JBQ	0.0153	MDL	1.10	PQL	ng/Kg	U	B
OCDD	0.424	JB	0.0242	MDL	11.0	PQL	ng/Kg	U	B
OCDF	0.232	JB	0.0263	MDL	11.0	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX061 **Laboratory: LL**

EDD Filename: DX061_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: **SL-007-SA5A-SB-4.0-5.0** ***Collected:*** **3/7/2011 10:56:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.212	JB	0.0155	MDL	5.69	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.151	JBQ	0.00796	MDL	5.69	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0573	JBQ	0.0122	MDL	5.69	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0377	JB	0.0179	MDL	5.69	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0677	J	0.0113	MDL	5.69	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.0191	JBQ	0.0108	MDL	5.69	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.114	JB	0.0107	MDL	5.69	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.0981	JQ	0.0117	MDL	5.69	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.0189	JB	0.00501	MDL	5.69	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0940	JB	0.00830	MDL	5.69	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0499	JB	0.00546	MDL	5.69	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.00904	JQ	0.00899	MDL	1.14	PQL	ng/Kg	J	Z
OCDD	0.890	JB	0.0208	MDL	11.4	PQL	ng/Kg	U	B
OCDF	0.260	JB	0.0306	MDL	11.4	PQL	ng/Kg	U	B

Sample ID: **SL-007-SA5A-SB-9.0-10.0** ***Collected:*** **3/7/2011 11:04:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.328	JB	0.0228	MDL	6.06	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.242	JB	0.0112	MDL	6.06	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0714	JB	0.0131	MDL	6.06	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0394	JBQ	0.0205	MDL	6.06	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0268	JQ	0.0124	MDL	6.06	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.0416	JB	0.0125	MDL	6.06	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0300	JB	0.0113	MDL	6.06	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0535	JQ	0.0105	MDL	6.06	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.0114	JBQ	0.00570	MDL	6.06	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.116	JB	0.00812	MDL	6.06	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0794	JBQ	0.00606	MDL	6.06	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0155	J	0.0114	MDL	1.21	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.0174	JQ	0.00933	MDL	1.21	PQL	ng/Kg	J	Z
OCDD	1.51	JB	0.0153	MDL	12.1	PQL	ng/Kg	U	B
OCDF	0.266	JB	0.0217	MDL	12.1	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX061 **Laboratory: LL**

EDD Filename: DX061_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: **SL-012-SA5A-SB-2.0-3.0** ***Collected:*** **3/7/2011 4:09:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.562	JB	0.0194	MDL	5.81	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.169	JBQ	0.00849	MDL	5.81	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0782	JBQ	0.0100	MDL	5.81	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0423	JQ	0.0109	MDL	5.81	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.140	JB	0.0184	MDL	5.81	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.0280	JQ	0.0106	MDL	5.81	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.0558	JB	0.0112	MDL	5.81	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0448	JB	0.00942	MDL	5.81	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0799	J	0.00988	MDL	5.81	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.0517	JB	0.0115	MDL	5.81	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0847	JB	0.00558	MDL	5.81	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0828	JB	0.00744	MDL	5.81	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.110	JB	0.00593	MDL	5.81	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0470	J	0.0126	MDL	1.16	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.0277	J	0.00965	MDL	1.16	PQL	ng/Kg	J	Z
OCDD	2.02	JB	0.0181	MDL	11.6	PQL	ng/Kg	J	Z
OCDF	0.243	JB	0.0224	MDL	11.6	PQL	ng/Kg	U	B

Sample ID: **SL-013-SA5A-SB-2.5-3.5** ***Collected:*** **3/7/2011 3:24:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.225	JB	0.0180	MDL	5.78	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.110	JB	0.00855	MDL	5.78	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0289	JBQ	0.0148	MDL	5.78	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0368	JBQ	0.00809	MDL	5.78	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0282	JB	0.0123	MDL	5.78	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0221	JB	0.00705	MDL	5.78	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0454	JBQ	0.0120	MDL	5.78	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0603	JB	0.00925	MDL	5.78	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0274	JBQ	0.00682	MDL	5.78	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0461	JBQ	0.00809	MDL	5.78	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0689	JB	0.00671	MDL	5.78	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0244	JBQ	0.0133	MDL	1.16	PQL	ng/Kg	U	B
OCDD	0.632	JB	0.0289	MDL	11.6	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX061 **Laboratory: LL**

EDD Filename: DX061_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: **SL-013-SA5A-SB-2.5-3.5** ***Collected:*** **3/7/2011 3:24:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
OCDF	0.169	JBQ	0.0218	MDL	11.6	PQL	ng/Kg	U	B

Sample ID: **SL-015-SA5A-SB-3.0-4.0** ***Collected:*** **3/4/2011 9:16:00 AM** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.230	JB	0.0156	MDL	5.92	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.202	JBQ	0.0107	MDL	5.92	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0421	JB	0.0133	MDL	5.92	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0441	JBQ	0.0148	MDL	5.92	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0298	JB	0.00923	MDL	5.92	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0256	JBQ	0.00959	MDL	5.92	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0482	JQ	0.00876	MDL	5.92	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.0204	JBQ	0.0107	MDL	5.92	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0365	JBQ	0.00438	MDL	5.92	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0852	JB	0.00663	MDL	5.92	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0722	JB	0.00509	MDL	5.92	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0198	JQ	0.0107	MDL	1.18	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.0184	JQ	0.00828	MDL	1.18	PQL	ng/Kg	J	Z
OCDD	0.718	JB	0.0221	MDL	11.8	PQL	ng/Kg	U	B
OCDF	0.262	JB	0.0279	MDL	11.8	PQL	ng/Kg	U	B

Sample ID: **SL-225-SA5B-SB-2.0-3.0** ***Collected:*** **3/9/2011 9:20:00 AM** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	1.48	JB	0.0201	MDL	5.79	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.219	JB	0.0362	MDL	5.79	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0826	JB	0.0823	MDL	5.79	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0856	JB	0.0431	MDL	5.79	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	1.01	JB	0.0836	MDL	5.79	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.114	JB	0.0356	MDL	5.79	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.736	JB	0.0824	MDL	5.79	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.258	JB	0.0483	MDL	5.79	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.120	JB	0.0118	MDL	5.79	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.116	JB	0.0399	MDL	5.79	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0754	JBQ	0.0119	MDL	5.79	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX061 **Laboratory: LL**

EDD Filename: DX061_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: **SL-225-SA5B-SB-2.0-3.0** ***Collected:*** **3/9/2011 9:20:00 AM** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,3,7,8-TCDD	0.129	JB	0.0324	MDL	1.16	PQL	ng/Kg	J	Z
OCDF	4.31	JB	0.0252	MDL	11.6	PQL	ng/Kg	J	Z

Sample ID: **SL-233-SA5A-SB-4.0-5.0** ***Collected:*** **3/4/2011 11:05:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.211	JB	0.0169	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.175	JB	0.00860	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0337	JBQ	0.0122	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0438	JB	0.0135	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0181	JQ	0.0115	MDL	5.66	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.0210	JBQ	0.00962	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0195	JBQ	0.00916	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0226	J	0.00894	MDL	5.66	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.0133	JBQ	0.00520	MDL	5.66	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0704	JBQ	0.00735	MDL	5.66	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0592	JBQ	0.00577	MDL	5.66	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0175	JQ	0.00871	MDL	1.13	PQL	ng/Kg	J	Z
OCDD	0.597	JB	0.0208	MDL	11.3	PQL	ng/Kg	U	B
OCDF	0.240	JBQ	0.0269	MDL	11.3	PQL	ng/Kg	U	B

Sample ID: **SL-233-SA5A-SB-9.0-10.0** ***Collected:*** **3/4/2011 11:08:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.423	JB	0.0177	MDL	5.83	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.366	JB	0.00979	MDL	5.83	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.249	JBQ	0.0181	MDL	5.83	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.165	J	0.0163	MDL	5.83	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.140	JB	0.0248	MDL	5.83	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.145	J	0.0163	MDL	5.83	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.189	JB	0.0155	MDL	5.83	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.195	JB	0.0154	MDL	5.83	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.226	J	0.0207	MDL	5.83	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.122	JBQ	0.0127	MDL	5.83	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.126	JBQ	0.00583	MDL	5.83	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX061 **Laboratory: LL**

EDD Filename: DX061_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: **SL-233-SA5A-SB-9.0-10.0** ***Collected:*** **3/4/2011 11:08:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,3,4,6,7,8-HXCDF	0.246	JB	0.0145	MDL	5.83	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.154	JBQ	0.00664	MDL	5.83	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0244	JQ	0.0113	MDL	1.17	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.0205	JQ	0.00921	MDL	1.17	PQL	ng/Kg	J	Z
OCDD	1.13	JB	0.0277	MDL	11.7	PQL	ng/Kg	U	B
OCDF	0.699	JB	0.0366	MDL	11.7	PQL	ng/Kg	U	B

Sample ID: **SL-245-SA5A-SB-29.0-30.0** ***Collected:*** **3/2/2011 9:22:00 AM** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.388	JB	0.0263	MDL	5.68	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.439	JB	0.0146	MDL	5.68	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0842	JBQ	0.0225	MDL	5.68	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.105	JB	0.0227	MDL	5.68	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0586	JBQ	0.0152	MDL	5.68	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0251	JBQ	0.0153	MDL	5.68	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0769	J	0.0176	MDL	5.68	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.0143	JBQ	0.0119	MDL	5.68	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0219	JBQ	0.00579	MDL	5.68	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.159	JB	0.0137	MDL	5.68	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0910	JB	0.00647	MDL	5.68	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0177	JQ	0.0104	MDL	1.14	PQL	ng/Kg	J	Z
OCDD	1.20	JB	0.0275	MDL	11.4	PQL	ng/Kg	U	B
OCDF	0.424	JB	0.0303	MDL	11.4	PQL	ng/Kg	U	B

Sample ID: **SL-245-SA5A-SB-4.0-5.0** ***Collected:*** **3/2/2011 8:52:00 AM** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.422	JB	0.0230	MDL	5.45	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.576	JB	0.0153	MDL	5.45	PQL	ng/Kg	J	Z, FD
1,2,3,4,7,8,9-HPCDF	0.0522	JB	0.0162	MDL	5.45	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.151	JB	0.0336	MDL	5.45	PQL	ng/Kg	J	Z, FD
1,2,3,6,7,8-HXCDD	0.0295	J	0.0111	MDL	5.45	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.0852	JBQ	0.0186	MDL	5.45	PQL	ng/Kg	UJ	B, FD
1,2,3,7,8,9-HXCDD	0.0416	JB	0.0102	MDL	5.45	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX061 **Laboratory: LL**

EDD Filename: DX061_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: **SL-245-SA5A-SB-4.0-5.0** ***Collected:*** **3/2/2011 8:52:00 AM** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,7,8,9-HXCDF	0.0594	J	0.0146	MDL	5.45	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.0121	U	0.0121	MDL	5.45	PQL	ng/Kg	UJ	FD
1,2,3,7,8-PECDF	0.0167	JBQ	0.00632	MDL	5.45	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.131	JB	0.0112	MDL	5.45	PQL	ng/Kg	UJ	B, FD
2,3,4,7,8-PECDF	0.0891	JB	0.00664	MDL	5.45	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0255	JQ	0.00937	MDL	1.09	PQL	ng/Kg	J	Z, FD
OCDD	4.87	JB	0.0195	MDL	10.9	PQL	ng/Kg	J	Z, FD
OCDF	0.388	JBQ	0.0242	MDL	10.9	PQL	ng/Kg	UJ	B, FD

Sample ID: **SL-245-SA5A-SB-9.0-10.0** ***Collected:*** **3/2/2011 9:12:00 AM** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	1.44	JB	0.0504	MDL	5.52	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.312	JBQ	0.0193	MDL	5.52	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0789	JBQ	0.0286	MDL	5.52	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0598	JBQ	0.0169	MDL	5.52	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0939	J	0.0221	MDL	5.52	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.0481	JB	0.0136	MDL	5.52	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0949	JBQ	0.0212	MDL	5.52	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.0960	JQ	0.0167	MDL	5.52	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.0232	JBQ	0.0137	MDL	5.52	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0384	JBQ	0.00663	MDL	5.52	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0849	JBQ	0.0131	MDL	5.52	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0810	JB	0.00707	MDL	5.52	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0162	JQ	0.0141	MDL	1.10	PQL	ng/Kg	J	Z
OCDF	0.487	JBQ	0.0315	MDL	11.0	PQL	ng/Kg	U	B

Sample ID: **SL-246-SA5A-SB-4.0-5.0** ***Collected:*** **3/2/2011 11:45:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.151	JB	0.0195	MDL	5.42	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.0992	JB	0.00759	MDL	5.42	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0173	JBQ	0.0118	MDL	5.42	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0222	JBQ	0.0106	MDL	5.42	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0231	JQ	0.0113	MDL	5.42	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX061 **Laboratory: LL**

EDD Filename: DX061_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: **SL-246-SA5A-SB-4.0-5.0** ***Collected:*** **3/2/2011 11:45:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,6,7,8-HXCDF	0.0180	JBQ	0.00770	MDL	5.42	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0202	JB	0.0107	MDL	5.42	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0327	JQ	0.00922	MDL	5.42	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.0102	JBQ	0.00531	MDL	5.42	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0412	JBQ	0.00748	MDL	5.42	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0553	JBQ	0.00531	MDL	5.42	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0123	JQ	0.00889	MDL	1.08	PQL	ng/Kg	J	Z
OCDD	0.471	JB	0.0203	MDL	10.8	PQL	ng/Kg	U	B
OCDF	0.185	JBQ	0.0232	MDL	10.8	PQL	ng/Kg	U	B

Sample ID: **SL-246-SA5A-SB-9.0-10.0** ***Collected:*** **3/2/2011 12:20:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.255	JB	0.0165	MDL	5.54	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.222	JB	0.00654	MDL	5.54	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0688	JBQ	0.0112	MDL	5.54	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0400	JQ	0.0160	MDL	5.54	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.0884	JB	0.0160	MDL	5.54	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.130	J	0.0164	MDL	5.54	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.0775	JBQ	0.0115	MDL	5.54	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.326	JB	0.0156	MDL	5.54	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.250	J	0.0151	MDL	5.54	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.0829	JB	0.0105	MDL	5.54	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.116	JB	0.00554	MDL	5.54	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.127	JB	0.0119	MDL	5.54	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.133	JB	0.00610	MDL	5.54	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0303	J	0.00876	MDL	1.11	PQL	ng/Kg	J	Z
OCDD	0.893	JB	0.0217	MDL	11.1	PQL	ng/Kg	U	B
OCDF	0.246	JBQ	0.0215	MDL	11.1	PQL	ng/Kg	U	B

Sample ID: **SL-247-SA5A-SB-4.0-5.0** ***Collected:*** **3/2/2011 3:45:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.223	JB	0.0184	MDL	5.64	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.191	JB	0.00722	MDL	5.64	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX061 **Laboratory: LL**

EDD Filename: DX061_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: **SL-247-SA5A-SB-4.0-5.0** ***Collected:*** **3/2/2011 3:45:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	0.0552	JB	0.0139	MDL	5.64	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0338	JQ	0.0144	MDL	5.64	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.0805	JB	0.0154	MDL	5.64	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0764	JQ	0.0147	MDL	5.64	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.0724	JB	0.0112	MDL	5.64	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.163	JB	0.0139	MDL	5.64	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.166	J	0.0136	MDL	5.64	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.0924	JBQ	0.0147	MDL	5.64	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.129	JB	0.00710	MDL	5.64	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.0976	JB	0.0112	MDL	5.64	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.120	JB	0.00767	MDL	5.64	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0291	J	0.0120	MDL	1.13	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.0303	JQ	0.0105	MDL	1.13	PQL	ng/Kg	J	Z
OCDD	1.24	JB	0.0290	MDL	11.3	PQL	ng/Kg	U	B
OCDF	0.222	JB	0.0290	MDL	11.3	PQL	ng/Kg	U	B

Sample ID: **SL-247-SA5A-SB-9.0-10.0** ***Collected:*** **3/2/2011 3:50:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	1.61	JB	0.0255	MDL	5.57	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.716	JB	0.0154	MDL	5.57	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.224	JBQ	0.0195	MDL	5.57	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.288	J	0.0252	MDL	5.57	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.279	JB	0.0212	MDL	5.57	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.507	J	0.0260	MDL	5.57	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.300	JB	0.0179	MDL	5.57	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.661	JB	0.0244	MDL	5.57	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.491	J	0.0202	MDL	5.57	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.311	JBQ	0.0148	MDL	5.57	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.312	JB	0.00725	MDL	5.57	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.319	JB	0.0176	MDL	5.57	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.283	JB	0.00702	MDL	5.57	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0530	JQ	0.0113	MDL	1.11	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.0625	JQ	0.00803	MDL	1.11	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX061 | Laboratory: LL

EDD Filename: DX061_v1 | eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-247-SA5A-SB-9.0-10.0 *Collected:* 3/2/2011 3:50:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
OCDD	8.65	JB	0.0247	MDL	11.1	PQL	ng/Kg	J	Z
OCDF	0.846	JB	0.0227	MDL	11.1	PQL	ng/Kg	J	Z

Sample ID: SL-304-SA5B-SB-3.0-4.0 *Collected:* 3/9/2011 12:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.262	JBQ	0.0152	MDL	5.77	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.196	JBQ	0.00900	MDL	5.77	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0713	JB	0.00888	MDL	5.77	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0241	J	0.0145	MDL	5.77	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.0501	JBQ	0.0141	MDL	5.77	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0551	JQ	0.0140	MDL	5.77	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.0522	JBQ	0.00957	MDL	5.77	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0817	JB	0.0123	MDL	5.77	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.0805	J	0.00750	MDL	5.77	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.0441	JBQ	0.0114	MDL	5.77	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0451	JB	0.00484	MDL	5.77	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0726	JBQ	0.00681	MDL	5.77	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0761	JB	0.00496	MDL	5.77	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0286	JQ	0.0110	MDL	1.15	PQL	ng/Kg	J	Z
OCDD	0.639	JB	0.0151	MDL	11.5	PQL	ng/Kg	U	B
OCDF	0.326	JB	0.0155	MDL	11.5	PQL	ng/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DX061 **Laboratory: LL**

EDD Filename: DX061_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
*#	Professional Judgment
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Verification Correlation Coefficient
C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DX061 **Laboratory: LL**

EDD Filename: DX061_v1 **eQAPP Name: CDM_SSFL_110509**

F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation
L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery Lower Estimation

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DX061 **Laboratory: LL**

EDD Filename: DX061_v1 **eQAPP Name: CDM_SSFL_110509**

R	Continuing Calibration Verification Percent Recovery Lower Rejection
R	Continuing Calibration Verification Percent Recovery Upper Estimation
R	Continuing Calibration Verification Percent Recovery Upper Rejection
R	Continuing Calibration Verification Relative Response Factor
R	Initial Calibration Relative Response Factor
R	Initial Calibration Verification Percent Recovery Lower Estimation
R	Initial Calibration Verification Percent Recovery Lower Rejection
R	Initial Calibration Verification Percent Recovery Upper Estimation
R	Initial Calibration Verification Percent Recovery Upper Rejection
R	Initial Calibration Verification Relative Response Factor
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control Outlier Reports

DX061

Method Blank Outlier Report

Lab Reporting Batch ID: DX061 **Laboratory: LL**

EDD Filename: DX061_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLK0770B371649	3/21/2011 4:49:00 PM	1,2,3,4,6,7,8-HPCDD	0.130 ng/Kg	DUP08-SA5A-QC-030211
		1,2,3,4,6,7,8-HPCDF	0.0994 ng/Kg	SL-007-SA5A-SB-4.0-5.0
		1,2,3,4,7,8,9-HPCDF	0.0344 ng/Kg	SL-007-SA5A-SB-9.0-10.0
		1,2,3,4,7,8-HXCDF	0.0221 ng/Kg	SL-012-SA5A-SB-2.0-3.0
		1,2,3,6,7,8-HXCDF	0.0193 ng/Kg	SL-015-SA5A-SB-3.0-4.0
		1,2,3,7,8,9-HXCDD	0.0135 ng/Kg	SL-233-SA5A-SB-4.0-5.0
		1,2,3,7,8-PECDD	0.0179 ng/Kg	SL-233-SA5A-SB-9.0-10.0
		1,2,3,7,8-PECDF	0.0209 ng/Kg	SL-245-SA5A-SB-29.0-30.0
		2,3,4,6,7,8-HXCDF	0.0455 ng/Kg	SL-245-SA5A-SB-4.0-5.0
		2,3,4,7,8-PECDF	0.0470 ng/Kg	SL-245-SA5A-SB-9.0-10.0
		OCDD	0.336 ng/Kg	SL-246-SA5A-SB-4.0-5.0
		OCDF	0.169 ng/Kg	SL-246-SA5A-SB-9.0-10.0
				SL-247-SA5A-SB-4.0-5.0
				SL-247-SA5A-SB-9.0-10.0
				SL-304-SA5B-SB-3.0-4.0
BLK0830B371829	3/25/2011 6:29:00 PM	1,2,3,4,6,7,8-HPCDD	0.202 ng/Kg	SL-006-SA5A-SB-2.0-3.0
		1,2,3,4,6,7,8-HPCDF	0.141 ng/Kg	SL-013-SA5A-SB-2.5-3.5
		1,2,3,4,7,8,9-HPCDF	0.0667 ng/Kg	SL-225-SA5B-SB-2.0-3.0
		1,2,3,4,7,8-HxCDD	0.0256 ng/Kg	
		1,2,3,4,7,8-HXCDF	0.0527 ng/Kg	
		1,2,3,6,7,8-HXCDD	0.0244 ng/Kg	
		1,2,3,6,7,8-HXCDF	0.0416 ng/Kg	
		1,2,3,7,8,9-HXCDD	0.0275 ng/Kg	
		1,2,3,7,8,9-HXCDF	0.0883 ng/Kg	
		1,2,3,7,8-PECDD	0.0317 ng/Kg	
		1,2,3,7,8-PECDF	0.0346 ng/Kg	
		2,3,4,6,7,8-HXCDF	0.0701 ng/Kg	
		2,3,4,7,8-PECDF	0.0885 ng/Kg	
		2,3,7,8-TCDD	0.0184 ng/Kg	
		2,3,7,8-TCDF	0.0219 ng/Kg	
		OCDD	0.392 ng/Kg	
		OCDF	0.221 ng/Kg	

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
DUP08-SA5A-QC-030211(RES)	1,2,3,4,6,7,8-HPCDD	0.307 ng/Kg	0.307U ng/Kg
DUP08-SA5A-QC-030211(RES)	1,2,3,4,6,7,8-HPCDF	0.130 ng/Kg	0.130U ng/Kg
DUP08-SA5A-QC-030211(RES)	1,2,3,4,7,8,9-HPCDF	0.0407 ng/Kg	0.0407U ng/Kg
DUP08-SA5A-QC-030211(RES)	1,2,3,4,7,8-HXCDF	0.0316 ng/Kg	0.0316U ng/Kg
DUP08-SA5A-QC-030211(RES)	1,2,3,6,7,8-HXCDF	0.0282 ng/Kg	0.0282U ng/Kg
DUP08-SA5A-QC-030211(RES)	1,2,3,7,8,9-HXCDD	0.0562 ng/Kg	0.0562U ng/Kg
DUP08-SA5A-QC-030211(RES)	1,2,3,7,8-PECDD	0.0154 ng/Kg	0.0154U ng/Kg
DUP08-SA5A-QC-030211(RES)	1,2,3,7,8-PECDF	0.0196 ng/Kg	0.0196U ng/Kg
DUP08-SA5A-QC-030211(RES)	2,3,4,6,7,8-HXCDF	0.0601 ng/Kg	0.0601U ng/Kg
DUP08-SA5A-QC-030211(RES)	2,3,4,7,8-PECDF	0.0720 ng/Kg	0.0720U ng/Kg
DUP08-SA5A-QC-030211(RES)	OCDF	0.188 ng/Kg	0.188U ng/Kg
SL-006-SA5A-SB-2.0-3.0(RES)	1,2,3,4,6,7,8-HPCDD	0.227 ng/Kg	0.227U ng/Kg
SL-006-SA5A-SB-2.0-3.0(RES)	1,2,3,4,6,7,8-HPCDF	0.181 ng/Kg	0.181U ng/Kg
SL-006-SA5A-SB-2.0-3.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0388 ng/Kg	0.0388U ng/Kg
SL-006-SA5A-SB-2.0-3.0(RES)	1,2,3,4,7,8-HxCDD	0.0185 ng/Kg	0.0185U ng/Kg
SL-006-SA5A-SB-2.0-3.0(RES)	1,2,3,4,7,8-HXCDF	0.0381 ng/Kg	0.0381U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX061 | Laboratory: LL

EDD Filename: DX061_v1 | eQAPP Name: CDM_SSFL_110509

Method: 1613B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-006-SA5A-SB-2.0-3.0(RES)	1,2,3,6,7,8-HXCDD	0.0422 ng/Kg	0.0422U ng/Kg
SL-006-SA5A-SB-2.0-3.0(RES)	1,2,3,6,7,8-HXCDF	0.0338 ng/Kg	0.0338U ng/Kg
SL-006-SA5A-SB-2.0-3.0(RES)	1,2,3,7,8,9-HXCDD	0.0297 ng/Kg	0.0297U ng/Kg
SL-006-SA5A-SB-2.0-3.0(RES)	1,2,3,7,8,9-HXCDF	0.0546 ng/Kg	0.0546U ng/Kg
SL-006-SA5A-SB-2.0-3.0(RES)	1,2,3,7,8-PECDF	0.0203 ng/Kg	0.0203U ng/Kg
SL-006-SA5A-SB-2.0-3.0(RES)	2,3,4,6,7,8-HXCDF	0.0683 ng/Kg	0.0683U ng/Kg
SL-006-SA5A-SB-2.0-3.0(RES)	2,3,4,7,8-PECDF	0.0588 ng/Kg	0.0588U ng/Kg
SL-006-SA5A-SB-2.0-3.0(RES)	2,3,7,8-TCDD	0.0170 ng/Kg	0.0170U ng/Kg
SL-006-SA5A-SB-2.0-3.0(RES)	OCDD	0.424 ng/Kg	0.424U ng/Kg
SL-006-SA5A-SB-2.0-3.0(RES)	OCDF	0.232 ng/Kg	0.232U ng/Kg
SL-007-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.212 ng/Kg	0.212U ng/Kg
SL-007-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.151 ng/Kg	0.151U ng/Kg
SL-007-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0573 ng/Kg	0.0573U ng/Kg
SL-007-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.0377 ng/Kg	0.0377U ng/Kg
SL-007-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.0191 ng/Kg	0.0191U ng/Kg
SL-007-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.0189 ng/Kg	0.0189U ng/Kg
SL-007-SA5A-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.0940 ng/Kg	0.0940U ng/Kg
SL-007-SA5A-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.0499 ng/Kg	0.0499U ng/Kg
SL-007-SA5A-SB-4.0-5.0(RES)	OCDD	0.890 ng/Kg	0.890U ng/Kg
SL-007-SA5A-SB-4.0-5.0(RES)	OCDF	0.260 ng/Kg	0.260U ng/Kg
SL-007-SA5A-SB-9.0-10.0(RES)	1,2,3,4,6,7,8-HPCDD	0.328 ng/Kg	0.328U ng/Kg
SL-007-SA5A-SB-9.0-10.0(RES)	1,2,3,4,6,7,8-HPCDF	0.242 ng/Kg	0.242U ng/Kg
SL-007-SA5A-SB-9.0-10.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0714 ng/Kg	0.0714U ng/Kg
SL-007-SA5A-SB-9.0-10.0(RES)	1,2,3,4,7,8-HXCDF	0.0394 ng/Kg	0.0394U ng/Kg
SL-007-SA5A-SB-9.0-10.0(RES)	1,2,3,6,7,8-HXCDF	0.0416 ng/Kg	0.0416U ng/Kg
SL-007-SA5A-SB-9.0-10.0(RES)	1,2,3,7,8,9-HXCDD	0.0300 ng/Kg	0.0300U ng/Kg
SL-007-SA5A-SB-9.0-10.0(RES)	1,2,3,7,8-PECDF	0.0114 ng/Kg	0.0114U ng/Kg
SL-007-SA5A-SB-9.0-10.0(RES)	2,3,4,6,7,8-HXCDF	0.116 ng/Kg	0.116U ng/Kg
SL-007-SA5A-SB-9.0-10.0(RES)	2,3,4,7,8-PECDF	0.0794 ng/Kg	0.0794U ng/Kg
SL-007-SA5A-SB-9.0-10.0(RES)	OCDD	1.51 ng/Kg	1.51U ng/Kg
SL-007-SA5A-SB-9.0-10.0(RES)	OCDF	0.266 ng/Kg	0.266U ng/Kg
SL-012-SA5A-SB-2.0-3.0(RES)	1,2,3,4,6,7,8-HPCDD	0.562 ng/Kg	0.562U ng/Kg
SL-012-SA5A-SB-2.0-3.0(RES)	1,2,3,4,6,7,8-HPCDF	0.169 ng/Kg	0.169U ng/Kg
SL-012-SA5A-SB-2.0-3.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0782 ng/Kg	0.0782U ng/Kg
SL-012-SA5A-SB-2.0-3.0(RES)	1,2,3,6,7,8-HXCDF	0.0558 ng/Kg	0.0558U ng/Kg
SL-012-SA5A-SB-2.0-3.0(RES)	1,2,3,7,8,9-HXCDD	0.0448 ng/Kg	0.0448U ng/Kg
SL-012-SA5A-SB-2.0-3.0(RES)	1,2,3,7,8-PECDD	0.0517 ng/Kg	0.0517U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX061 **Laboratory: LL**

EDD Filename: DX061_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-012-SA5A-SB-2.0-3.0(RES)	1,2,3,7,8-PECDF	0.0847 ng/Kg	0.0847U ng/Kg
SL-012-SA5A-SB-2.0-3.0(RES)	2,3,4,6,7,8-HXCDF	0.0828 ng/Kg	0.0828U ng/Kg
SL-012-SA5A-SB-2.0-3.0(RES)	2,3,4,7,8-PECDF	0.110 ng/Kg	0.110U ng/Kg
SL-012-SA5A-SB-2.0-3.0(RES)	OCDF	0.243 ng/Kg	0.243U ng/Kg
SL-013-SA5A-SB-2.5-3.5(RES)	1,2,3,4,6,7,8-HPCDD	0.225 ng/Kg	0.225U ng/Kg
SL-013-SA5A-SB-2.5-3.5(RES)	1,2,3,4,6,7,8-HPCDF	0.110 ng/Kg	0.110U ng/Kg
SL-013-SA5A-SB-2.5-3.5(RES)	1,2,3,4,7,8,9-HPCDF	0.0289 ng/Kg	0.0289U ng/Kg
SL-013-SA5A-SB-2.5-3.5(RES)	1,2,3,4,7,8-HXCDF	0.0368 ng/Kg	0.0368U ng/Kg
SL-013-SA5A-SB-2.5-3.5(RES)	1,2,3,6,7,8-HXCDD	0.0282 ng/Kg	0.0282U ng/Kg
SL-013-SA5A-SB-2.5-3.5(RES)	1,2,3,6,7,8-HXCDF	0.0221 ng/Kg	0.0221U ng/Kg
SL-013-SA5A-SB-2.5-3.5(RES)	1,2,3,7,8,9-HXCDD	0.0454 ng/Kg	0.0454U ng/Kg
SL-013-SA5A-SB-2.5-3.5(RES)	1,2,3,7,8,9-HXCDF	0.0603 ng/Kg	0.0603U ng/Kg
SL-013-SA5A-SB-2.5-3.5(RES)	1,2,3,7,8-PECDF	0.0274 ng/Kg	0.0274U ng/Kg
SL-013-SA5A-SB-2.5-3.5(RES)	2,3,4,6,7,8-HXCDF	0.0461 ng/Kg	0.0461U ng/Kg
SL-013-SA5A-SB-2.5-3.5(RES)	2,3,4,7,8-PECDF	0.0689 ng/Kg	0.0689U ng/Kg
SL-013-SA5A-SB-2.5-3.5(RES)	2,3,7,8-TCDD	0.0244 ng/Kg	0.0244U ng/Kg
SL-013-SA5A-SB-2.5-3.5(RES)	OCDD	0.632 ng/Kg	0.632U ng/Kg
SL-013-SA5A-SB-2.5-3.5(RES)	OCDF	0.169 ng/Kg	0.169U ng/Kg
SL-015-SA5A-SB-3.0-4.0(RES)	1,2,3,4,6,7,8-HPCDD	0.230 ng/Kg	0.230U ng/Kg
SL-015-SA5A-SB-3.0-4.0(RES)	1,2,3,4,6,7,8-HPCDF	0.202 ng/Kg	0.202U ng/Kg
SL-015-SA5A-SB-3.0-4.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0421 ng/Kg	0.0421U ng/Kg
SL-015-SA5A-SB-3.0-4.0(RES)	1,2,3,4,7,8-HXCDF	0.0441 ng/Kg	0.0441U ng/Kg
SL-015-SA5A-SB-3.0-4.0(RES)	1,2,3,6,7,8-HXCDF	0.0298 ng/Kg	0.0298U ng/Kg
SL-015-SA5A-SB-3.0-4.0(RES)	1,2,3,7,8,9-HXCDD	0.0258 ng/Kg	0.0256U ng/Kg
SL-015-SA5A-SB-3.0-4.0(RES)	1,2,3,7,8-PECDD	0.0204 ng/Kg	0.0204U ng/Kg
SL-015-SA5A-SB-3.0-4.0(RES)	1,2,3,7,8-PECDF	0.0365 ng/Kg	0.0365U ng/Kg
SL-015-SA5A-SB-3.0-4.0(RES)	2,3,4,6,7,8-HXCDF	0.0852 ng/Kg	0.0852U ng/Kg
SL-015-SA5A-SB-3.0-4.0(RES)	2,3,4,7,8-PECDF	0.0722 ng/Kg	0.0722U ng/Kg
SL-015-SA5A-SB-3.0-4.0(RES)	OCDD	0.718 ng/Kg	0.718U ng/Kg
SL-015-SA5A-SB-3.0-4.0(RES)	OCDF	0.262 ng/Kg	0.262U ng/Kg
SL-225-SA5B-SB-2.0-3.0(RES)	1,2,3,4,7,8,9-HPCDF	0.219 ng/Kg	0.219U ng/Kg
SL-225-SA5B-SB-2.0-3.0(RES)	1,2,3,4,7,8-HxCDD	0.0826 ng/Kg	0.0826U ng/Kg
SL-225-SA5B-SB-2.0-3.0(RES)	1,2,3,4,7,8-HXCDF	0.0856 ng/Kg	0.0856U ng/Kg
SL-225-SA5B-SB-2.0-3.0(RES)	1,2,3,6,7,8-HXCDF	0.114 ng/Kg	0.114U ng/Kg
SL-225-SA5B-SB-2.0-3.0(RES)	1,2,3,7,8,9-HXCDF	0.258 ng/Kg	0.258U ng/Kg
SL-225-SA5B-SB-2.0-3.0(RES)	1,2,3,7,8-PECDF	0.120 ng/Kg	0.120U ng/Kg
SL-225-SA5B-SB-2.0-3.0(RES)	2,3,4,6,7,8-HXCDF	0.116 ng/Kg	0.116U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX061 **Laboratory: LL**

EDD Filename: DX061_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-225-SA5B-SB-2.0-3.0(RES)	2,3,4,7,8-PECDF	0.0754 ng/Kg	0.0754U ng/Kg
SL-233-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.211 ng/Kg	0.211U ng/Kg
SL-233-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.175 ng/Kg	0.175U ng/Kg
SL-233-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0337 ng/Kg	0.0337U ng/Kg
SL-233-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.0438 ng/Kg	0.0438U ng/Kg
SL-233-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.0210 ng/Kg	0.0210U ng/Kg
SL-233-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDD	0.0195 ng/Kg	0.0195U ng/Kg
SL-233-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.0133 ng/Kg	0.0133U ng/Kg
SL-233-SA5A-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.0704 ng/Kg	0.0704U ng/Kg
SL-233-SA5A-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.0592 ng/Kg	0.0592U ng/Kg
SL-233-SA5A-SB-4.0-5.0(RES)	OCDD	0.597 ng/Kg	0.597U ng/Kg
SL-233-SA5A-SB-4.0-5.0(RES)	OCDF	0.240 ng/Kg	0.240U ng/Kg
SL-233-SA5A-SB-9.0-10.0(RES)	1,2,3,4,6,7,8-HPCDD	0.423 ng/Kg	0.423U ng/Kg
SL-233-SA5A-SB-9.0-10.0(RES)	1,2,3,4,6,7,8-HPCDF	0.366 ng/Kg	0.366U ng/Kg
SL-233-SA5A-SB-9.0-10.0(RES)	2,3,4,7,8-PECDF	0.154 ng/Kg	0.154U ng/Kg
SL-233-SA5A-SB-9.0-10.0(RES)	OCDD	1.13 ng/Kg	1.13U ng/Kg
SL-233-SA5A-SB-9.0-10.0(RES)	OCDF	0.699 ng/Kg	0.699U ng/Kg
SL-245-SA5A-SB-29.0-30.0(RES)	1,2,3,4,6,7,8-HPCDD	0.388 ng/Kg	0.388U ng/Kg
SL-245-SA5A-SB-29.0-30.0(RES)	1,2,3,4,6,7,8-HPCDF	0.439 ng/Kg	0.439U ng/Kg
SL-245-SA5A-SB-29.0-30.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0842 ng/Kg	0.0842U ng/Kg
SL-245-SA5A-SB-29.0-30.0(RES)	1,2,3,4,7,8-HXCDF	0.105 ng/Kg	0.105U ng/Kg
SL-245-SA5A-SB-29.0-30.0(RES)	1,2,3,6,7,8-HXCDF	0.0586 ng/Kg	0.0586U ng/Kg
SL-245-SA5A-SB-29.0-30.0(RES)	1,2,3,7,8,9-HXCDD	0.0251 ng/Kg	0.0251U ng/Kg
SL-245-SA5A-SB-29.0-30.0(RES)	1,2,3,7,8-PECDD	0.0143 ng/Kg	0.0143U ng/Kg
SL-245-SA5A-SB-29.0-30.0(RES)	1,2,3,7,8-PECDF	0.0219 ng/Kg	0.0219U ng/Kg
SL-245-SA5A-SB-29.0-30.0(RES)	2,3,4,6,7,8-HXCDF	0.159 ng/Kg	0.159U ng/Kg
SL-245-SA5A-SB-29.0-30.0(RES)	2,3,4,7,8-PECDF	0.0910 ng/Kg	0.0910U ng/Kg
SL-245-SA5A-SB-29.0-30.0(RES)	OCDD	1.20 ng/Kg	1.20U ng/Kg
SL-245-SA5A-SB-29.0-30.0(RES)	OCDF	0.424 ng/Kg	0.424U ng/Kg
SL-245-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.422 ng/Kg	0.422U ng/Kg
SL-245-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0522 ng/Kg	0.0522U ng/Kg
SL-245-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.0852 ng/Kg	0.0852U ng/Kg
SL-245-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDD	0.0416 ng/Kg	0.0416U ng/Kg
SL-245-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.0167 ng/Kg	0.0167U ng/Kg
SL-245-SA5A-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.131 ng/Kg	0.131U ng/Kg
SL-245-SA5A-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.0891 ng/Kg	0.0891U ng/Kg
SL-245-SA5A-SB-4.0-5.0(RES)	OCDF	0.388 ng/Kg	0.388U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX061 | Laboratory: LL

EDD Filename: DX061_v1 | eQAPP Name: CDM_SSFL_110509

Method: 1613B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-245-SA5A-SB-9.0-10.0(RES)	1,2,3,4,6,7,8-HPCDF	0.312 ng/Kg	0.312U ng/Kg
SL-245-SA5A-SB-9.0-10.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0789 ng/Kg	0.0789U ng/Kg
SL-245-SA5A-SB-9.0-10.0(RES)	1,2,3,4,7,8-HXCDF	0.0598 ng/Kg	0.0598U ng/Kg
SL-245-SA5A-SB-9.0-10.0(RES)	1,2,3,6,7,8-HXCDF	0.0481 ng/Kg	0.0481U ng/Kg
SL-245-SA5A-SB-9.0-10.0(RES)	1,2,3,7,8-PECDD	0.0232 ng/Kg	0.0232U ng/Kg
SL-245-SA5A-SB-9.0-10.0(RES)	1,2,3,7,8-PECDF	0.0384 ng/Kg	0.0384U ng/Kg
SL-245-SA5A-SB-9.0-10.0(RES)	2,3,4,6,7,8-HXCDF	0.0849 ng/Kg	0.0849U ng/Kg
SL-245-SA5A-SB-9.0-10.0(RES)	2,3,4,7,8-PECDF	0.0810 ng/Kg	0.0810U ng/Kg
SL-245-SA5A-SB-9.0-10.0(RES)	OCDF	0.487 ng/Kg	0.487U ng/Kg
SL-246-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.151 ng/Kg	0.151U ng/Kg
SL-246-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.0992 ng/Kg	0.0992U ng/Kg
SL-246-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0173 ng/Kg	0.0173U ng/Kg
SL-246-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.0222 ng/Kg	0.0222U ng/Kg
SL-246-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.0180 ng/Kg	0.0180U ng/Kg
SL-246-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDD	0.0202 ng/Kg	0.0202U ng/Kg
SL-246-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.0102 ng/Kg	0.0102U ng/Kg
SL-246-SA5A-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.0412 ng/Kg	0.0412U ng/Kg
SL-246-SA5A-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.0553 ng/Kg	0.0553U ng/Kg
SL-246-SA5A-SB-4.0-5.0(RES)	OCDD	0.471 ng/Kg	0.471U ng/Kg
SL-246-SA5A-SB-4.0-5.0(RES)	OCDF	0.185 ng/Kg	0.185U ng/Kg
SL-246-SA5A-SB-9.0-10.0(RES)	1,2,3,4,6,7,8-HPCDD	0.255 ng/Kg	0.255U ng/Kg
SL-246-SA5A-SB-9.0-10.0(RES)	1,2,3,4,6,7,8-HPCDF	0.222 ng/Kg	0.222U ng/Kg
SL-246-SA5A-SB-9.0-10.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0688 ng/Kg	0.0688U ng/Kg
SL-246-SA5A-SB-9.0-10.0(RES)	1,2,3,4,7,8-HXCDF	0.0884 ng/Kg	0.0884U ng/Kg
SL-246-SA5A-SB-9.0-10.0(RES)	1,2,3,6,7,8-HXCDF	0.0775 ng/Kg	0.0775U ng/Kg
SL-246-SA5A-SB-9.0-10.0(RES)	1,2,3,7,8-PECDD	0.0829 ng/Kg	0.0829U ng/Kg
SL-246-SA5A-SB-9.0-10.0(RES)	2,3,4,6,7,8-HXCDF	0.127 ng/Kg	0.127U ng/Kg
SL-246-SA5A-SB-9.0-10.0(RES)	2,3,4,7,8-PECDF	0.133 ng/Kg	0.133U ng/Kg
SL-246-SA5A-SB-9.0-10.0(RES)	OCDD	0.893 ng/Kg	0.893U ng/Kg
SL-246-SA5A-SB-9.0-10.0(RES)	OCDF	0.246 ng/Kg	0.246U ng/Kg
SL-247-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.223 ng/Kg	0.223U ng/Kg
SL-247-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.191 ng/Kg	0.191U ng/Kg
SL-247-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0552 ng/Kg	0.0552U ng/Kg
SL-247-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.0805 ng/Kg	0.0805U ng/Kg
SL-247-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.0724 ng/Kg	0.0724U ng/Kg
SL-247-SA5A-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.0976 ng/Kg	0.0976U ng/Kg
SL-247-SA5A-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.120 ng/Kg	0.120U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX061 | Laboratory: LL

EDD Filename: DX061_v1 | eQAPP Name: CDM_SSFL_110509

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-247-SA5A-SB-4.0-5.0(RES)	OCDD	1.24 ng/Kg	1.24U ng/Kg
SL-247-SA5A-SB-4.0-5.0(RES)	OCDF	0.222 ng/Kg	0.222U ng/Kg
SL-304-SA5B-SB-3.0-4.0(RES)	1,2,3,4,6,7,8-HPCDD	0.262 ng/Kg	0.262U ng/Kg
SL-304-SA5B-SB-3.0-4.0(RES)	1,2,3,4,6,7,8-HPCDF	0.196 ng/Kg	0.196U ng/Kg
SL-304-SA5B-SB-3.0-4.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0713 ng/Kg	0.0713U ng/Kg
SL-304-SA5B-SB-3.0-4.0(RES)	1,2,3,4,7,8-HXCDF	0.0501 ng/Kg	0.0501U ng/Kg
SL-304-SA5B-SB-3.0-4.0(RES)	1,2,3,6,7,8-HXCDF	0.0522 ng/Kg	0.0522U ng/Kg
SL-304-SA5B-SB-3.0-4.0(RES)	1,2,3,7,8-PECDD	0.0441 ng/Kg	0.0441U ng/Kg
SL-304-SA5B-SB-3.0-4.0(RES)	1,2,3,7,8-PECDF	0.0451 ng/Kg	0.0451U ng/Kg
SL-304-SA5B-SB-3.0-4.0(RES)	2,3,4,6,7,8-HXCDF	0.0726 ng/Kg	0.0726U ng/Kg
SL-304-SA5B-SB-3.0-4.0(RES)	2,3,4,7,8-PECDF	0.0761 ng/Kg	0.0761U ng/Kg
SL-304-SA5B-SB-3.0-4.0(RES)	OCDD	0.639 ng/Kg	0.639U ng/Kg
SL-304-SA5B-SB-3.0-4.0(RES)	OCDF	0.326 ng/Kg	0.326U ng/Kg

Field Duplicate RPD Report

Lab Reporting Batch ID: DX061 **Laboratory: LL**

EDD Filename: DX061_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 160.3M
Matrix: SO

Analyte	Concentration (%)		Sample RPD	eQAPP RPD	Flag
	SL-245-SA5A-SB-4.0-5.0	DUP08-SA5A-QC-030211			
MOISTURE	8.2	9.3	13		No Qualifiers Applied

Method: 1613B
Matrix: SO

Analyte	Concentration (ng/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-245-SA5A-SB-4.0-5.0	DUP08-SA5A-QC-030211			
1,2,3,4,6,7,8-HPCDD	0.422	0.307	32	50.00	No Qualifiers Applied
1,2,3,4,7,8,9-HPCDF	0.0522	0.0407	25	50.00	
1,2,3,6,7,8-HXCDD	0.0295	0.0223	28	50.00	
1,2,3,7,8,9-HXCDD	0.0416	0.0562	30	50.00	
1,2,3,7,8,9-HXCDF	0.0594	0.0552	7	50.00	
1,2,3,7,8-PECDF	0.0167	0.0196	16	50.00	
2,3,4,7,8-PECDF	0.0891	0.0720	21	50.00	
1,2,3,4,6,7,8-HPCDF	0.576	0.130	126	50.00	J(all detects) UJ(all non-detects)
1,2,3,4,7,8-HXCDF	0.151	0.0316	131	50.00	
1,2,3,6,7,8-HXCDF	0.0852	0.0282	101	50.00	
1,2,3,7,8-PECDD	5.45 U	0.0154	200	50.00	
2,3,4,6,7,8-HXCDF	0.131	0.0601	74	50.00	
2,3,7,8-TCDF	0.0255	1.10 U	200	50.00	
OCDD	4.87	2.53	63	50.00	
OCDF	0.388	0.188	69	50.00	

Reporting Limit Outliers

Lab Reporting Batch ID: DX061 **Laboratory: LL**

EDD Filename: DX061_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP08-SA5A-QC-030211	1,2,3,4,6,7,8-HPCDD	JB	0.307	5.51	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.130	5.51	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0407	5.51	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0316	5.51	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JQ	0.0223	5.51	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0282	5.51	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.0562	5.51	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JQ	0.0552	5.51	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0154	5.51	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.0196	5.51	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.0601	5.51	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.0720	5.51	PQL	ng/Kg	
	OCDD	JB	2.53	11.0	PQL	ng/Kg	
	OCDF	JB	0.188	11.0	PQL	ng/Kg	
SL-006-SA5A-SB-2.0-3.0	1,2,3,4,6,7,8-HPCDD	JB	0.227	5.48	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.181	5.48	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.0388	5.48	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0185	5.48	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0381	5.48	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.0422	5.48	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0338	5.48	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.0297	5.48	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.0546	5.48	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0203	5.48	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0683	5.48	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.0588	5.48	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0170	1.10	PQL	ng/Kg	
	OCDD	JB	0.424	11.0	PQL	ng/Kg	
	OCDF	JB	0.232	11.0	PQL	ng/Kg	
SL-007-SA5A-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JB	0.212	5.69	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JBQ	0.151	5.69	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0573	5.69	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.0377	5.69	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	J	0.0677	5.69	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0191	5.69	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.114	5.69	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JQ	0.0981	5.69	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.0189	5.69	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.0940	5.69	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.0499	5.69	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.00904	1.14	PQL	ng/Kg	
	OCDD	JB	0.890	11.4	PQL	ng/Kg	
	OCDF	JB	0.260	11.4	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX061 **Laboratory: LL**

EDD Filename: DX061_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-007-SA5A-SB-9.0-10.0	1,2,3,4,6,7,8-HPCDD	JB	0.328	6.06	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.242	6.06	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.0714	6.06	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0394	6.06	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JQ	0.0268	6.06	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0416	6.06	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.0300	6.06	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JQ	0.0535	6.06	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0114	6.06	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.116	6.06	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0794	6.06	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.0155	1.21	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.0174	1.21	PQL	ng/Kg	
	OCDD	JB	1.51	12.1	PQL	ng/Kg	
	OCDF	JB	0.266	12.1	PQL	ng/Kg	
SL-012-SA5A-SB-2.0-3.0	1,2,3,4,6,7,8-HPCDD	JB	0.562	5.81	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JBQ	0.169	5.81	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0782	5.81	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JQ	0.0423	5.81	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.140	5.81	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JQ	0.0280	5.81	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0558	5.81	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.0448	5.81	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	J	0.0799	5.81	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.0517	5.81	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.0847	5.81	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.0828	5.81	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.110	5.81	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.0470	1.16	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.0277	1.16	PQL	ng/Kg	
	OCDD	JB	2.02	11.6	PQL	ng/Kg	
	OCDF	JB	0.243	11.6	PQL	ng/Kg	
SL-013-SA5A-SB-2.5-3.5	1,2,3,4,6,7,8-HPCDD	JB	0.225	5.78	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.110	5.78	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0289	5.78	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0368	5.78	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.0282	5.78	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0221	5.78	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.0454	5.78	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.0603	5.78	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0274	5.78	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0461	5.78	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.0689	5.78	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0244	1.16	PQL	ng/Kg	
	OCDD	JB	0.632	11.6	PQL	ng/Kg	
	OCDF	JBQ	0.169	11.6	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX061 **Laboratory: LL**

EDD Filename: DX061_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-015-SA5A-SB-3.0-4.0	1,2,3,4,6,7,8-HPCDD	JB	0.230	5.92	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JBQ	0.202	5.92	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.0421	5.92	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0441	5.92	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0298	5.92	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.0256	5.92	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JQ	0.0482	5.92	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0204	5.92	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0365	5.92	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.0852	5.92	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.0722	5.92	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0198	1.18	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.0184	1.18	PQL	ng/Kg	
	OCDD	JB	0.718	11.8	PQL	ng/Kg	
	OCDF	JB	0.262	11.8	PQL	ng/Kg	
SL-225-SA5B-SB-2.0-3.0	1,2,3,4,6,7,8-HPCDF	JB	1.48	5.79	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JB	0.219	5.79	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.0826	5.79	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.0856	5.79	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	1.01	5.79	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.114	5.79	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.736	5.79	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.258	5.79	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.120	5.79	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.116	5.79	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0754	5.79	PQL	ng/Kg	
	2,3,7,8-TCDD	JB	0.129	1.16	PQL	ng/Kg	
	OCDF	JB	4.31	11.6	PQL	ng/Kg	
SL-233-SA5A-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JB	0.211	5.66	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.175	5.66	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0337	5.66	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.0438	5.66	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JQ	0.0181	5.66	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0210	5.66	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.0195	5.66	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	J	0.0226	5.66	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0133	5.66	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0704	5.66	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0592	5.66	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.0175	1.13	PQL	ng/Kg	
	OCDD	JB	0.597	11.3	PQL	ng/Kg	
	OCDF	JBQ	0.240	11.3	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX061 **Laboratory: LL**

EDD Filename: DX061_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-233-SA5A-SB-9.0-10.0	1,2,3,4,6,7,8-HPCDD	JB	0.423	5.83	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.366	5.83	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.249	5.83	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	J	0.165	5.83	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.140	5.83	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	J	0.145	5.83	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.189	5.83	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.195	5.83	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	J	0.226	5.83	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.122	5.83	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.126	5.83	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.246	5.83	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.154	5.83	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0244	1.17	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.0205	1.17	PQL	ng/Kg	
	OCDD	JB	1.13	11.7	PQL	ng/Kg	
	OCDF	JB	0.699	11.7	PQL	ng/Kg	
SL-245-SA5A-SB-29.0-30.0	1,2,3,4,6,7,8-HPCDD	JB	0.388	5.68	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.439	5.68	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0842	5.68	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.105	5.68	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0586	5.68	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.0251	5.68	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	J	0.0769	5.68	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0143	5.68	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0219	5.68	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.159	5.68	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.0910	5.68	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.0177	1.14	PQL	ng/Kg	
	OCDD	JB	1.20	11.4	PQL	ng/Kg	
	OCDF	JB	0.424	11.4	PQL	ng/Kg	
SL-245-SA5A-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JB	0.422	5.45	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.576	5.45	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.0522	5.45	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.151	5.45	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	J	0.0295	5.45	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0852	5.45	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.0416	5.45	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	J	0.0594	5.45	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0167	5.45	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.131	5.45	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.0891	5.45	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.0255	1.09	PQL	ng/Kg	
	OCDD	JB	4.87	10.9	PQL	ng/Kg	
	OCDF	JBQ	0.388	10.9	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX061 **Laboratory: LL**

EDD Filename: DX061_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-245-SA5A-SB-9.0-10.0	1,2,3,4,6,7,8-HPCDD	JB	1.44	5.52	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JBQ	0.312	5.52	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0789	5.52	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0598	5.52	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	J	0.0939	5.52	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0481	5.52	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.0949	5.52	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JQ	0.0960	5.52	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0232	5.52	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0384	5.52	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0849	5.52	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.0810	5.52	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0162	1.10	PQL	ng/Kg	
	OCDF	JBQ	0.487	11.0	PQL	ng/Kg	
SL-246-SA5A-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JB	0.151	5.42	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.0992	5.42	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0173	5.42	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0222	5.42	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JQ	0.0231	5.42	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0180	5.42	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.0202	5.42	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JQ	0.0327	5.42	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0102	5.42	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0412	5.42	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0553	5.42	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.0123	1.08	PQL	ng/Kg	
	OCDD	JB	0.471	10.8	PQL	ng/Kg	
	OCDF	JBQ	0.185	10.8	PQL	ng/Kg	
SL-246-SA5A-SB-9.0-10.0	1,2,3,4,6,7,8-HPCDD	JB	0.255	5.54	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.222	5.54	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0688	5.54	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JQ	0.0400	5.54	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.0884	5.54	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	J	0.130	5.54	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0775	5.54	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.326	5.54	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	J	0.250	5.54	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.0829	5.54	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.116	5.54	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.127	5.54	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.133	5.54	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.0303	1.11	PQL	ng/Kg	
	OCDD	JB	0.893	11.1	PQL	ng/Kg	
	OCDF	JBQ	0.246	11.1	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX061 **Laboratory: LL**

EDD Filename: DX061_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-247-SA5A-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JB	0.223	5.64	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.191	5.64	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.0552	5.64	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JQ	0.0338	5.64	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.0805	5.64	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JQ	0.0764	5.64	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0724	5.64	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.163	5.64	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	J	0.166	5.64	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.0924	5.64	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.129	5.64	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.0976	5.64	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.120	5.64	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.0291	1.13	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.0303	1.13	PQL	ng/Kg	
	OCDD	JB	1.24	11.3	PQL	ng/Kg	
	OCDF	JB	0.222	11.3	PQL	ng/Kg	
SL-247-SA5A-SB-9.0-10.0	1,2,3,4,6,7,8-HPCDD	JB	1.61	5.57	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.716	5.57	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.224	5.57	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	J	0.288	5.57	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.279	5.57	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	J	0.507	5.57	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.300	5.57	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.661	5.57	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	J	0.491	5.57	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.311	5.57	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.312	5.57	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.319	5.57	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.283	5.57	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0530	1.11	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.0625	1.11	PQL	ng/Kg	
	OCDD	JB	8.65	11.1	PQL	ng/Kg	
	OCDF	JB	0.846	11.1	PQL	ng/Kg	
SL-304-SA5B-SB-3.0-4.0	1,2,3,4,6,7,8-HPCDD	JBQ	0.262	5.77	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JBQ	0.196	5.77	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.0713	5.77	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	J	0.0241	5.77	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0501	5.77	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JQ	0.0551	5.77	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0522	5.77	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.0817	5.77	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	J	0.0805	5.77	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.0441	5.77	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.0451	5.77	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0726	5.77	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.0761	5.77	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0286	1.15	PQL	ng/Kg	
	OCDD	JB	0.639	11.5	PQL	ng/Kg	
	OCDF	JB	0.326	11.5	PQL	ng/Kg	

SAMPLE DELIVERY GROUP

DX062

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
10-Mar-2011	SL-115-SA5A-SB-6.5-7.5	6229295	N	METHOD	1613B	III
10-Mar-2011	SL-115-SA5A-SB-13.0-14.0	6229296	N	METHOD	1613B	III
10-Mar-2011	SL-116-SA5A-SB-6.0-7.0	6229297	N	METHOD	1613B	III
10-Mar-2011	SL-116-SA5A-SB-14.0-15.0	6229298	N	METHOD	1613B	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0	6228990	N	METHOD	1613B	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0MS	6228991	MS	METHOD	1613B	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0MSD	6228992	MSD	METHOD	1613B	III
11-Mar-2011	SL-114-SA5A-SB-9.0-10.0	6228993	N	METHOD	1613B	III
11-Mar-2011	DUP09-SA5A-QC-031111	6228987	FD	METHOD	1613B	III
11-Mar-2011	SL-112-SA5A-SB-8.5-9.5	6228988	N	METHOD	1613B	III
11-Mar-2011	SL-112-SA5A-SB-14.0-15.0	6228989	N	METHOD	1613B	III
11-Mar-2011	SL-227-SA5B-SB-2.5-3.5	6228996	N	METHOD	1613B	III
11-Mar-2011	SL-113-SA5A-SB-9.0-10.0	6228994	N	METHOD	1613B	III
11-Mar-2011	SL-113-SA5A-SB-14.0-15.0	6228995	N	METHOD	1613B	III
14-Mar-2011	SL-117-SA5A-SB-5.0-6.0	6230068	N	METHOD	1613B	III
14-Mar-2011	SL-118-SA5A-SB-2.5-3.5	6230067	N	METHOD	1613B	III
14-Mar-2011	SL-121-SA5A-SB-2.0-3.0	6230066	N	METHOD	1613B	III
14-Mar-2011	SL-001-SA5A-SB-4.0-5.0	6230069	N	METHOD	1613B	III
15-Mar-2011	EB07-SA5A-031511	6230979	EB	METHOD	1613B	III
15-Mar-2011	SL-137-SA5A-SB-4.0-5.0	6230976	N	METHOD	1613B	III
15-Mar-2011	SL-138-SA5A-SB-4.0-5.0	6230978	N	METHOD	1613B	III
15-Mar-2011	SL-132-SA5A-SB-2.0-3.0	6230977	N	METHOD	1613B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DX062 **Laboratory: LL**

EDD Filename: DX062_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** AQ

Sample ID: EB07-SA5A-031511 *Collected:* 3/15/2011 10:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	3.67	JBQ	0.486	MDL	10.1	PQL	pg/L	U	B
1,2,3,4,6,7,8-HPCDF	7.92	JB	0.397	MDL	10.1	PQL	pg/L	UJ	B, I
1,2,3,4,7,8,9-HPCDF	0.809	JBQ	0.297	MDL	10.1	PQL	pg/L	U	B
1,2,3,4,7,8-HXCDF	1.52	JB	0.531	MDL	10.1	PQL	pg/L	UJ	B, I
1,2,3,6,7,8-HXCDD	0.373	JBQ	0.338	MDL	10.1	PQL	pg/L	U	B
1,2,3,6,7,8-HXCDF	0.793	JB	0.390	MDL	10.1	PQL	pg/L	U	B
1,2,3,7,8,9-HXCDD	0.788	JBQ	0.298	MDL	10.1	PQL	pg/L	U	B
1,2,3,7,8-PECDF	0.457	JB	0.204	MDL	10.1	PQL	pg/L	U	B
2,3,4,6,7,8-HXCDF	1.49	JB	0.228	MDL	10.1	PQL	pg/L	U	B
2,3,4,7,8-PECDF	0.923	JBQ	0.198	MDL	10.1	PQL	pg/L	U	B
2,3,7,8-TCDD	0.439	JQ	0.396	MDL	2.03	PQL	pg/L	J	Z
OCDD	6.72	JB	0.548	MDL	20.3	PQL	pg/L	U	B
OCDF	4.26	JB	0.825	MDL	20.3	PQL	pg/L	U	B

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: DUP09-SA5A-QC-031111 *Collected:* 3/11/2011 8:58:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.701	JB	0.0289	MDL	6.08	PQL	ng/Kg	UJ	B, FD
1,2,3,4,6,7,8-HPCDF	0.857	JB	0.0169	MDL	6.08	PQL	ng/Kg	UJ	B, FD
1,2,3,4,7,8,9-HPCDF	0.134	JB	0.0213	MDL	6.08	PQL	ng/Kg	UJ	B, FD
1,2,3,4,7,8-HxCDD	0.0675	JQ	0.0247	MDL	6.08	PQL	ng/Kg	J	Z, FD
1,2,3,4,7,8-HXCDF	0.158	JB	0.0271	MDL	6.08	PQL	ng/Kg	UJ	B, FD
1,2,3,6,7,8-HXCDD	0.0969	JB	0.0259	MDL	6.08	PQL	ng/Kg	UJ	B, FD
1,2,3,6,7,8-HXCDF	0.171	JBQ	0.0239	MDL	6.08	PQL	ng/Kg	UJ	B, FD
1,2,3,7,8,9-HXCDD	0.151	JB	0.0261	MDL	6.08	PQL	ng/Kg	UJ	B, FD
1,2,3,7,8,9-HXCDF	0.160	JBQ	0.0258	MDL	6.08	PQL	ng/Kg	UJ	B, FD
1,2,3,7,8-PECDD	0.0703	JBQ	0.0236	MDL	6.08	PQL	ng/Kg	UJ	B, FD
1,2,3,7,8-PECDF	0.116	JBQ	0.0146	MDL	6.08	PQL	ng/Kg	UJ	B, FD
2,3,4,6,7,8-HXCDF	0.291	JB	0.0244	MDL	6.08	PQL	ng/Kg	UJ	B, FD
2,3,4,7,8-PECDF	0.190	JBQ	0.0142	MDL	6.08	PQL	ng/Kg	UJ	B, FD
2,3,7,8-TCDD	0.0380	JQ	0.0255	MDL	1.22	PQL	ng/Kg	J	Z, FD

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX062 **Laboratory: LL**

EDD Filename: DX062_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: **DUP09-SA5A-QC-031111** ***Collected:*** **3/11/2011 8:58:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,3,7,8-TCDF	0.0354	JBQ	0.0237	MDL	1.22	PQL	ng/Kg	UJ	B, FD
OCDD	2.68	JB	0.0294	MDL	12.2	PQL	ng/Kg	U	B
OCDF	0.592	JB	0.0299	MDL	12.2	PQL	ng/Kg	UJ	B, FD

Sample ID: **SL-001-SA5A-SB-4.0-5.0** ***Collected:*** **3/14/2011 2:57:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.424	JB	0.0362	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.330	JB	0.0256	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0604	JB	0.0268	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0350	J	0.0233	MDL	5.66	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.0464	JB	0.0308	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0644	JBQ	0.0222	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0644	JBQ	0.0219	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0499	JBQ	0.0224	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0901	JBQ	0.0203	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0378	JBQ	0.0265	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0246	JBQ	0.0147	MDL	5.66	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.122	JB	0.0166	MDL	5.66	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.115	JB	0.0157	MDL	5.66	PQL	ng/Kg	U	B
OCDD	3.10	JB	0.0481	MDL	11.3	PQL	ng/Kg	U	B
OCDF	0.429	JB	0.0472	MDL	11.3	PQL	ng/Kg	U	B

Sample ID: **SL-112-SA5A-SB-14.0-15.0** ***Collected:*** **3/11/2011 12:16:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.871	JB	0.0337	MDL	5.64	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.647	JB	0.0185	MDL	5.64	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0946	JB	0.0183	MDL	5.64	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.121	JB	0.0271	MDL	5.64	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0957	JBQ	0.0247	MDL	5.64	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0824	JB	0.0238	MDL	5.64	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0720	JBQ	0.0207	MDL	5.64	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0371	JB	0.0241	MDL	5.64	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0711	JBQ	0.0140	MDL	5.64	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX062 **Laboratory: LL**

EDD Filename: DX062_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: **SL-112-SA5A-SB-14.0-15.0** ***Collected:*** **3/11/2011 12:16:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,3,4,6,7,8-HXCDF	0.172	JBQ	0.0202	MDL	5.64	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.125	JBQ	0.0158	MDL	5.64	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0288	J	0.0237	MDL	1.13	PQL	ng/Kg	J	Z
OCDD	7.18	JB	0.0312	MDL	11.3	PQL	ng/Kg	J	Z
OCDF	0.500	JB	0.0301	MDL	11.3	PQL	ng/Kg	U	B

Sample ID: **SL-112-SA5A-SB-8.5-9.5** ***Collected:*** **3/11/2011 12:06:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	3.96	JB	0.0360	MDL	5.54	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.927	JB	0.0174	MDL	5.54	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.109	JB	0.0202	MDL	5.54	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0592	JQ	0.0303	MDL	5.54	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.178	JBQ	0.0274	MDL	5.54	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.145	JBQ	0.0314	MDL	5.54	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.137	JB	0.0254	MDL	5.54	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.164	JBQ	0.0313	MDL	5.54	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.112	JB	0.0282	MDL	5.54	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.182	JBQ	0.0198	MDL	5.54	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.261	JB	0.0262	MDL	5.54	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.261	JB	0.0186	MDL	5.54	PQL	ng/Kg	U	B
OCDF	1.19	JB	0.0277	MDL	11.1	PQL	ng/Kg	U	B

Sample ID: **SL-113-SA5A-SB-14.0-15.0** ***Collected:*** **3/11/2011 3:39:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.669	JB	0.0430	MDL	5.45	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	1.15	JB	0.0291	MDL	5.45	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.163	JB	0.0288	MDL	5.45	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.194	JB	0.0486	MDL	5.45	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0653	JBQ	0.0336	MDL	5.45	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.170	JBQ	0.0383	MDL	5.45	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0558	JBQ	0.0324	MDL	5.45	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0927	JB	0.0364	MDL	5.45	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0616	JBQ	0.0252	MDL	5.45	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX062 **Laboratory: LL**

EDD Filename: DX062_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: **SL-113-SA5A-SB-14.0-15.0** ***Collected:*** **3/11/2011 3:39:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,3,4,6,7,8-HXCDF	0.315	JB	0.0329	MDL	5.45	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.206	JB	0.0244	MDL	5.45	PQL	ng/Kg	U	B
OCDD	4.07	JB	0.0397	MDL	10.9	PQL	ng/Kg	J	Z
OCDF	0.643	JBQ	0.0490	MDL	10.9	PQL	ng/Kg	U	B

Sample ID: **SL-113-SA5A-SB-9.0-10.0** ***Collected:*** **3/11/2011 3:29:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	4.47	JB	0.0534	MDL	5.64	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	1.20	JB	0.0272	MDL	5.64	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.160	JB	0.0311	MDL	5.64	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0976	JQ	0.0365	MDL	5.64	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.302	JB	0.0478	MDL	5.64	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.158	JB	0.0368	MDL	5.64	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.133	JBQ	0.0355	MDL	5.64	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.147	JBQ	0.0366	MDL	5.64	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0616	JBQ	0.0392	MDL	5.64	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.171	JBQ	0.0249	MDL	5.64	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.332	JBQ	0.0310	MDL	5.64	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.255	JB	0.0268	MDL	5.64	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0596	JQ	0.0440	MDL	1.13	PQL	ng/Kg	J	Z
OCDF	2.09	JB	0.0496	MDL	11.3	PQL	ng/Kg	U	B

Sample ID: **SL-114-SA5A-SB-4.0-5.0** ***Collected:*** **3/11/2011 8:34:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.375	JB	0.0245	MDL	6.48	PQL	ng/Kg	UJ	B, FD
1,2,3,4,6,7,8-HPCDF	0.0700	JB	0.0142	MDL	6.48	PQL	ng/Kg	UJ	B, FD
1,2,3,4,7,8,9-HPCDF	0.0217	JBQ	0.00984	MDL	6.48	PQL	ng/Kg	UJ	B, FD
1,2,3,4,7,8-HxCDD	0.0155	U	0.0155	MDL	6.48	PQL	ng/Kg	UJ	FD
1,2,3,4,7,8-HXCDF	0.0190	U	0.0190	MDL	6.48	PQL	ng/Kg	UJ	FD
1,2,3,6,7,8-HXCDD	0.0149	U	0.0149	MDL	6.48	PQL	ng/Kg	UJ	FD
1,2,3,6,7,8-HXCDF	0.0192	JBQ	0.0132	MDL	6.48	PQL	ng/Kg	UJ	B, FD
1,2,3,7,8,9-HXCDD	0.0505	JBQ	0.0115	MDL	6.48	PQL	ng/Kg	UJ	B, FD
1,2,3,7,8,9-HXCDF	0.00777	U	0.00777	MDL	6.48	PQL	ng/Kg	UJ	FD

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX062 | Laboratory: LL

EDD Filename: DX062_v1 | eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-114-SA5A-SB-4.0-5.0 *Collected:* 3/11/2011 8:34:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,7,8-PECDD	0.0233	JQ	0.0183	MDL	6.48	PQL	ng/Kg	J	Z, FD
1,2,3,7,8-PECDF	0.0216	JB	0.00764	MDL	6.48	PQL	ng/Kg	UJ	B, FD
2,3,4,6,7,8-HXCDF	0.0249	JB	0.00738	MDL	6.48	PQL	ng/Kg	UJ	B, FD
2,3,4,7,8-PECDF	0.0453	JB	0.00751	MDL	6.48	PQL	ng/Kg	UJ	B, FD
2,3,7,8-TCDD	0.0178	JQ	0.0154	MDL	1.30	PQL	ng/Kg	J	Z, FD
2,3,7,8-TCDF	0.0124	U	0.0124	MDL	1.30	PQL	ng/Kg	UJ	FD
OCDD	2.23	JB	0.0304	MDL	13.0	PQL	ng/Kg	J	Z
OCDF	0.134	JB	0.0215	MDL	13.0	PQL	ng/Kg	UJ	B, FD

Sample ID: SL-114-SA5A-SB-9.0-10.0 *Collected:* 3/11/2011 8:43:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	5.09	JB	0.0376	MDL	6.31	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	1.04	JB	0.0170	MDL	6.31	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.134	JB	0.0230	MDL	6.31	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0294	J	0.0288	MDL	6.31	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.176	JB	0.0290	MDL	6.31	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.101	JB	0.0290	MDL	6.31	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.138	JB	0.0251	MDL	6.31	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0795	JB	0.0299	MDL	6.31	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0974	JB	0.0303	MDL	6.31	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0431	JBQ	0.0163	MDL	6.31	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.349	JB	0.0256	MDL	6.31	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.192	JB	0.0173	MDL	6.31	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0420	JQ	0.0298	MDL	1.26	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.0413	JB	0.0287	MDL	1.26	PQL	ng/Kg	U	B
OCDF	0.840	JB	0.0360	MDL	12.6	PQL	ng/Kg	U	B

Sample ID: SL-115-SA5A-SB-13.0-14.0 *Collected:* 3/10/2011 10:44:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	1.74	JB	0.0298	MDL	5.58	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.265	JB	0.0346	MDL	5.58	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.133	JQ	0.0470	MDL	5.58	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.277	JB	0.0402	MDL	5.58	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX062 **Laboratory: LL**

EDD Filename: DX062_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: **SL-115-SA5A-SB-13.0-14.0** ***Collected:*** **3/10/2011 10:44:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,6,7,8-HXCDD	0.337	JB	0.0471	MDL	5.58	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.182	JB	0.0317	MDL	5.58	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.238	JBQ	0.0462	MDL	5.58	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.172	JB	0.0354	MDL	5.58	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.119	JBQ	0.0278	MDL	5.58	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.399	JB	0.0218	MDL	5.58	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.262	JB	0.0302	MDL	5.58	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.357	JB	0.0224	MDL	5.58	PQL	ng/Kg	U	B
OCDF	3.61	JB	0.0334	MDL	11.2	PQL	ng/Kg	J	Z

Sample ID: **SL-115-SA5A-SB-6.5-7.5** ***Collected:*** **3/10/2011 10:22:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	2.97	JB	0.0356	MDL	5.52	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.397	JB	0.0335	MDL	5.52	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.130	J	0.0551	MDL	5.52	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.584	JBQ	0.0502	MDL	5.52	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.592	JB	0.0544	MDL	5.52	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.300	JB	0.0390	MDL	5.52	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.305	JB	0.0466	MDL	5.52	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.118	JB	0.0324	MDL	5.52	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0747	JB	0.0330	MDL	5.52	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.611	JB	0.0316	MDL	5.52	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.441	JB	0.0330	MDL	5.52	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.586	JB	0.0310	MDL	5.52	PQL	ng/Kg	U	B
OCDF	5.62	JB	0.0354	MDL	11.0	PQL	ng/Kg	J	Z

Sample ID: **SL-116-SA5A-SB-14.0-15.0** ***Collected:*** **3/10/2011 2:10:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	0.877	JB	0.0400	MDL	5.71	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.442	J	0.0490	MDL	5.71	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.569	JB	0.0394	MDL	5.71	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	1.67	JB	0.0527	MDL	5.71	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.707	JB	0.0359	MDL	5.71	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX062 | Laboratory: LL

EDD Filename: DX062_v1 | eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-116-SA5A-SB-14.0-15.0 *Collected:* 3/10/2011 2:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,7,8,9-HXCDD	0.953	JB	0.0502	MDL	5.71	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.274	JB	0.0371	MDL	5.71	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.314	JB	0.0397	MDL	5.71	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.283	JBQ	0.0258	MDL	5.71	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	1.18	JB	0.0322	MDL	5.71	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	1.14	JB	0.0240	MDL	5.71	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.127	JB	0.0419	MDL	1.14	PQL	ng/Kg	U	B

Sample ID: SL-116-SA5A-SB-6.0-7.0 *Collected:* 3/10/2011 1:57:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	1.62	JB	0.0288	MDL	5.59	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.184	JB	0.0249	MDL	5.59	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.104	J	0.0315	MDL	5.59	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.432	JB	0.0448	MDL	5.59	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.203	JB	0.0303	MDL	5.59	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.235	JB	0.0354	MDL	5.59	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.159	JB	0.0291	MDL	5.59	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.160	JBQ	0.0302	MDL	5.59	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.123	JB	0.0259	MDL	5.59	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.279	JB	0.0163	MDL	5.59	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.334	JB	0.0294	MDL	5.59	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.327	JB	0.0164	MDL	5.59	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0527	JQ	0.0246	MDL	1.12	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.0529	JBQ	0.0228	MDL	1.12	PQL	ng/Kg	U	B
OCDF	2.09	JB	0.0279	MDL	11.2	PQL	ng/Kg	U	B

Sample ID: SL-117-SA5A-SB-5.0-6.0 *Collected:* 3/14/2011 9:14:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.479	JB	0.0360	MDL	5.62	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.363	JB	0.0193	MDL	5.62	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0819	JB	0.0238	MDL	5.62	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.132	JBQ	0.0220	MDL	5.62	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0664	JB	0.0283	MDL	5.62	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX062 **Laboratory: LL**

EDD Filename: DX062_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-117-SA5A-SB-5.0-6.0 *Collected:* 3/14/2011 9:14:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,6,7,8-HXCDF	0.0692	JB	0.0194	MDL	5.62	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.103	JB	0.0270	MDL	5.62	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0953	JBQ	0.0217	MDL	5.62	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0501	JBQ	0.0275	MDL	5.62	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0908	JB	0.0142	MDL	5.62	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.120	JBQ	0.0193	MDL	5.62	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.133	JB	0.0139	MDL	5.62	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0321	J	0.0274	MDL	1.12	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.0402	JB	0.0213	MDL	1.12	PQL	ng/Kg	U	B
OCDD	2.99	JB	0.0407	MDL	11.2	PQL	ng/Kg	U	B
OCDF	0.326	JB	0.0406	MDL	11.2	PQL	ng/Kg	U	B

Sample ID: SL-118-SA5A-SB-2.5-3.5 *Collected:* 3/14/2011 10:33:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	1.55	JB	0.0387	MDL	5.51	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.502	JB	0.0286	MDL	5.51	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0852	JB	0.0283	MDL	5.51	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0438	JQ	0.0280	MDL	5.51	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.125	JB	0.0298	MDL	5.51	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.128	JB	0.0288	MDL	5.51	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0974	JB	0.0236	MDL	5.51	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.181	JB	0.0281	MDL	5.51	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.115	JB	0.0218	MDL	5.51	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0681	JBQ	0.0235	MDL	5.51	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0891	JB	0.0151	MDL	5.51	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.131	JB	0.0198	MDL	5.51	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.119	JB	0.0144	MDL	5.51	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0265	JBQ	0.0243	MDL	1.10	PQL	ng/Kg	U	B
OCDF	0.639	JB	0.0421	MDL	11.0	PQL	ng/Kg	U	B

Sample ID: SL-121-SA5A-SB-2.0-3.0 *Collected:* 3/14/2011 12:02:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	4.44	JB	0.0550	MDL	5.40	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX062 **Laboratory: LL**

EDD Filename: DX062_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: **SL-121-SA5A-SB-2.0-3.0** ***Collected:*** **3/14/2011 12:02:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	0.848	JB	0.0443	MDL	5.40	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.186	JB	0.0464	MDL	5.40	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0853	J	0.0428	MDL	5.40	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.236	JB	0.0488	MDL	5.40	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.112	JB	0.0419	MDL	5.40	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.155	JB	0.0379	MDL	5.40	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.103	JBQ	0.0386	MDL	5.40	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.134	JB	0.0362	MDL	5.40	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0530	JBQ	0.0406	MDL	5.40	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.257	JBQ	0.0287	MDL	5.40	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.243	JB	0.0296	MDL	5.40	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.162	JB	0.0276	MDL	5.40	PQL	ng/Kg	U	B
OCDF	1.17	JBQ	0.0653	MDL	10.8	PQL	ng/Kg	U	B

Sample ID: **SL-132-SA5A-SB-2.0-3.0** ***Collected:*** **3/15/2011 3:37:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	1.66	JB	0.0318	MDL	5.56	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.665	JBQ	0.0219	MDL	5.56	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.109	JB	0.0251	MDL	5.56	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0281	J	0.0268	MDL	5.56	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.135	JB	0.0289	MDL	5.56	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.117	JB	0.0264	MDL	5.56	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.122	JBQ	0.0229	MDL	5.56	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.109	JBQ	0.0248	MDL	5.56	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.111	JBQ	0.0238	MDL	5.56	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0418	JBQ	0.0244	MDL	5.56	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0658	JB	0.0162	MDL	5.56	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.194	JB	0.0204	MDL	5.56	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.145	JB	0.0165	MDL	5.56	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0325	JQ	0.0307	MDL	1.11	PQL	ng/Kg	J	Z
OCDF	0.652	JB	0.0380	MDL	11.1	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX062 **Laboratory: LL**

EDD Filename: DX062_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: SL-137-SA5A-SB-4.0-5.0 ***Collected:*** 3/15/2011 10:19:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.632	JB	0.0318	MDL	5.78	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.514	JB	0.0179	MDL	5.78	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0633	JB	0.0201	MDL	5.78	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0220	J	0.0216	MDL	5.78	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.216	JB	0.0262	MDL	5.78	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0501	JBQ	0.0214	MDL	5.78	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0732	JBQ	0.0209	MDL	5.78	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0555	JBQ	0.0222	MDL	5.78	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0529	JBQ	0.0215	MDL	5.78	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0466	JBQ	0.0124	MDL	5.78	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.138	JB	0.0182	MDL	5.78	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.117	JBQ	0.0128	MDL	5.78	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0273	J	0.0249	MDL	1.16	PQL	ng/Kg	J	Z
OCDD	5.19	JB	0.0346	MDL	11.6	PQL	ng/Kg	J	Z
OCDF	0.451	JB	0.0314	MDL	11.6	PQL	ng/Kg	U	B

Sample ID: SL-138-SA5A-SB-4.0-5.0 ***Collected:*** 3/15/2011 2:36:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	1.18	JB	0.0231	MDL	5.62	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	1.30	JB	0.0279	MDL	5.62	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.124	JB	0.0179	MDL	5.62	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0492	JQ	0.0258	MDL	5.62	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.268	JB	0.0458	MDL	5.62	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0634	JBQ	0.0232	MDL	5.62	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.173	JB	0.0326	MDL	5.62	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0604	JB	0.0164	MDL	5.62	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0885	JBQ	0.0173	MDL	5.62	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0375	JBQ	0.0193	MDL	5.62	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0639	JBQ	0.0114	MDL	5.62	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.301	JBQ	0.0171	MDL	5.62	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.171	JB	0.0137	MDL	5.62	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0226	JQ	0.0172	MDL	1.12	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.0277	JB	0.0163	MDL	1.12	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX062 **Laboratory: LL**

EDD Filename: DX062_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: **SL-138-SA5A-SB-4.0-5.0** ***Collected:*** **3/15/2011 2:36:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
OCDF	0.891	JB	0.0349	MDL	11.2	PQL	ng/Kg	U	B

Sample ID: **SL-227-SA5B-SB-2.5-3.5** ***Collected:*** **3/11/2011 2:10:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	4.73	JB	0.0470	MDL	5.70	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.482	JB	0.0295	MDL	5.70	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.0917	JB	0.0194	MDL	5.70	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.309	J	0.0496	MDL	5.70	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.360	JB	0.0468	MDL	5.70	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.122	JB	0.0334	MDL	5.70	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.427	JB	0.0360	MDL	5.70	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.257	JB	0.0176	MDL	5.70	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.114	JQ	0.0450	MDL	5.70	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.151	JB	0.0130	MDL	5.70	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.0841	JB	0.0161	MDL	5.70	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.220	JB	0.0137	MDL	5.70	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0380	J	0.0210	MDL	1.14	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.0970	J	0.0217	MDL	1.14	PQL	ng/Kg	J	Z
OCDF	1.12	JB	0.0277	MDL	11.4	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DX062 **Laboratory: LL**

EDD Filename: DX062_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
*#	Professional Judgment
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Verification Correlation Coefficient
C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DX062 **Laboratory: LL**

EDD Filename: DX062_v1 **eQAPP Name: CDM_SSFL_110509**

F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation
L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery Lower Estimation

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DX062 **Laboratory: LL**

EDD Filename: DX062_v1 **eQAPP Name: CDM_SSFL_110509**

R	Continuing Calibration Verification Percent Recovery Lower Rejection
R	Continuing Calibration Verification Percent Recovery Upper Estimation
R	Continuing Calibration Verification Percent Recovery Upper Rejection
R	Continuing Calibration Verification Relative Response Factor
R	Initial Calibration Relative Response Factor
R	Initial Calibration Verification Percent Recovery Lower Estimation
R	Initial Calibration Verification Percent Recovery Lower Rejection
R	Initial Calibration Verification Percent Recovery Upper Estimation
R	Initial Calibration Verification Percent Recovery Upper Rejection
R	Initial Calibration Verification Relative Response Factor
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control Outlier Reports

DX062

Method Blank Outlier Report

Lab Reporting Batch ID: DX062 **Laboratory: LL**

EDD Filename: DX062_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **AQ**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLK0770B371957	3/22/2011 7:57:00 PM	1,2,3,4,6,7,8-HPCDD	2.65 pg/L	EB07-SA5A-031511
		1,2,3,4,6,7,8-HPCDF	11.0 pg/L	
		1,2,3,4,7,8,9-HPCDF	1.20 pg/L	
		1,2,3,4,7,8-HxCDD	0.907 pg/L	
		1,2,3,4,7,8-HXCDF	2.83 pg/L	
		1,2,3,6,7,8-HXCDD	0.786 pg/L	
		1,2,3,6,7,8-HXCDF	1.96 pg/L	
		1,2,3,7,8,9-HXCDD	0.545 pg/L	
		1,2,3,7,8,9-HXCDF	0.986 pg/L	
		1,2,3,7,8-PECDD	0.676 pg/L	
		1,2,3,7,8-PECDF	0.499 pg/L	
		2,3,4,6,7,8-HXCDF	1.32 pg/L	
		2,3,4,7,8-PECDF	1.33 pg/L	
		2,3,7,8-TCDF	0.214 pg/L	
		OCDD	5.10 pg/L	
		OCDF	4.29 pg/L	

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
EB07-SA5A-031511(RES)	1,2,3,4,6,7,8-HPCDD	3.67 pg/L	3.67U pg/L
EB07-SA5A-031511(RES)	1,2,3,4,6,7,8-HPCDF	7.92 pg/L	7.92U pg/L
EB07-SA5A-031511(RES)	1,2,3,4,7,8,9-HPCDF	0.809 pg/L	0.809U pg/L
EB07-SA5A-031511(RES)	1,2,3,4,7,8-HXCDF	1.52 pg/L	1.52U pg/L
EB07-SA5A-031511(RES)	1,2,3,6,7,8-HXCDD	0.373 pg/L	0.373U pg/L
EB07-SA5A-031511(RES)	1,2,3,6,7,8-HXCDF	0.793 pg/L	0.793U pg/L
EB07-SA5A-031511(RES)	1,2,3,7,8,9-HXCDD	0.788 pg/L	0.788U pg/L
EB07-SA5A-031511(RES)	1,2,3,7,8-PECDF	0.457 pg/L	0.457U pg/L
EB07-SA5A-031511(RES)	2,3,4,6,7,8-HXCDF	1.49 pg/L	1.49U pg/L
EB07-SA5A-031511(RES)	2,3,4,7,8-PECDF	0.923 pg/L	0.923U pg/L
EB07-SA5A-031511(RES)	OCDD	6.72 pg/L	6.72U pg/L
EB07-SA5A-031511(RES)	OCDF	4.26 pg/L	4.26U pg/L

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLK0800B372149	3/23/2011 9:49:00 PM	1,2,3,4,6,7,8-HPCDD	0.177 ng/Kg	SL-114-SA5A-SB-4.0-5.0
		1,2,3,4,6,7,8-HPCDF	0.0538 ng/Kg	SL-227-SA5B-SB-2.5-3.5
		1,2,3,4,7,8,9-HPCDF	0.0217 ng/Kg	
		1,2,3,6,7,8-HXCDD	0.0113 ng/Kg	
		1,2,3,6,7,8-HXCDF	0.0248 ng/Kg	
		1,2,3,7,8,9-HXCDD	0.0158 ng/Kg	
		1,2,3,7,8,9-HXCDF	0.0173 ng/Kg	
		1,2,3,7,8-PECDF	0.0215 ng/Kg	
		2,3,4,6,7,8-HXCDF	0.0230 ng/Kg	
		2,3,4,7,8-PECDF	0.0446 ng/Kg	
		OCDD	0.337 ng/Kg	
		OCDF	0.0956 ng/Kg	

Method Blank Outlier Report

Lab Reporting Batch ID: DX062 **Laboratory: LL**

EDD Filename: DX062_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLK0900B372031	4/1/2011 8:31:00 PM	1,2,3,4,6,7,8-HPCDD	0.351 ng/Kg	DUP09-SA5A-QC-031111
		1,2,3,4,6,7,8-HPCDF	0.742 ng/Kg	SL-001-SA5A-SB-4.0-5.0
		1,2,3,4,7,8,9-HPCDF	0.112 ng/Kg	SL-112-SA5A-SB-14.0-15.0
		1,2,3,4,7,8-HXCDF	0.135 ng/Kg	SL-112-SA5A-SB-8.5-9.5
		1,2,3,6,7,8-HXCDD	0.0329 ng/Kg	SL-113-SA5A-SB-14.0-15.0
		1,2,3,6,7,8-HXCDF	0.119 ng/Kg	SL-113-SA5A-SB-9.0-10.0
		1,2,3,7,8,9-HXCDD	0.0392 ng/Kg	SL-114-SA5A-SB-9.0-10.0
		1,2,3,7,8,9-HXCDF	0.116 ng/Kg	SL-115-SA5A-SB-13.0-14.0
		1,2,3,7,8-PECDD	0.0588 ng/Kg	SL-115-SA5A-SB-6.5-7.5
		1,2,3,7,8-PECDF	0.0506 ng/Kg	SL-116-SA5A-SB-14.0-15.0
		2,3,4,6,7,8-HXCDF	0.255 ng/Kg	SL-116-SA5A-SB-6.0-7.0
		2,3,4,7,8-PECDF	0.169 ng/Kg	SL-117-SA5A-SB-5.0-6.0
		2,3,7,8-TCDF	0.0440 ng/Kg	SL-118-SA5A-SB-2.5-3.5
		OCDD	0.634 ng/Kg	SL-121-SA5A-SB-2.0-3.0
		OCDF	0.496 ng/Kg	SL-132-SA5A-SB-2.0-3.0
				SL-137-SA5A-SB-4.0-5.0
				SL-138-SA5A-SB-4.0-5.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
DUP09-SA5A-QC-031111(RES)	1,2,3,4,6,7,8-HPCDD	0.701 ng/Kg	0.701U ng/Kg
DUP09-SA5A-QC-031111(RES)	1,2,3,4,6,7,8-HPCDF	0.857 ng/Kg	0.857U ng/Kg
DUP09-SA5A-QC-031111(RES)	1,2,3,4,7,8,9-HPCDF	0.134 ng/Kg	0.134U ng/Kg
DUP09-SA5A-QC-031111(RES)	1,2,3,4,7,8-HXCDF	0.158 ng/Kg	0.158U ng/Kg
DUP09-SA5A-QC-031111(RES)	1,2,3,6,7,8-HXCDD	0.0969 ng/Kg	0.0969U ng/Kg
DUP09-SA5A-QC-031111(RES)	1,2,3,6,7,8-HXCDF	0.171 ng/Kg	0.171U ng/Kg
DUP09-SA5A-QC-031111(RES)	1,2,3,7,8,9-HXCDD	0.151 ng/Kg	0.151U ng/Kg
DUP09-SA5A-QC-031111(RES)	1,2,3,7,8,9-HXCDF	0.160 ng/Kg	0.160U ng/Kg
DUP09-SA5A-QC-031111(RES)	1,2,3,7,8-PECDD	0.0703 ng/Kg	0.0703U ng/Kg
DUP09-SA5A-QC-031111(RES)	1,2,3,7,8-PECDF	0.116 ng/Kg	0.116U ng/Kg
DUP09-SA5A-QC-031111(RES)	2,3,4,6,7,8-HXCDF	0.291 ng/Kg	0.291U ng/Kg
DUP09-SA5A-QC-031111(RES)	2,3,4,7,8-PECDF	0.190 ng/Kg	0.190U ng/Kg
DUP09-SA5A-QC-031111(RES)	2,3,7,8-TCDF	0.0354 ng/Kg	0.0354U ng/Kg
DUP09-SA5A-QC-031111(RES)	OCDD	2.68 ng/Kg	2.68U ng/Kg
DUP09-SA5A-QC-031111(RES)	OCDF	0.592 ng/Kg	0.592U ng/Kg
SL-001-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.424 ng/Kg	0.424U ng/Kg
SL-001-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.330 ng/Kg	0.330U ng/Kg
SL-001-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0604 ng/Kg	0.0604U ng/Kg
SL-001-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.0464 ng/Kg	0.0464U ng/Kg
SL-001-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDD	0.0644 ng/Kg	0.0644U ng/Kg
SL-001-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.0644 ng/Kg	0.0644U ng/Kg
SL-001-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDD	0.0499 ng/Kg	0.0499U ng/Kg
SL-001-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.0901 ng/Kg	0.0901U ng/Kg
SL-001-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDD	0.0378 ng/Kg	0.0378U ng/Kg
SL-001-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.0246 ng/Kg	0.0246U ng/Kg
SL-001-SA5A-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.122 ng/Kg	0.122U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX062 **Laboratory: LL**

EDD Filename: DX062_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-001-SA5A-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.115 ng/Kg	0.115U ng/Kg
SL-001-SA5A-SB-4.0-5.0(RES)	OCDD	3.10 ng/Kg	3.10U ng/Kg
SL-001-SA5A-SB-4.0-5.0(RES)	OCDF	0.429 ng/Kg	0.429U ng/Kg
SL-112-SA5A-SB-14.0-15.0(RES)	1,2,3,4,6,7,8-HPCDD	0.871 ng/Kg	0.871U ng/Kg
SL-112-SA5A-SB-14.0-15.0(RES)	1,2,3,4,6,7,8-HPCDF	0.647 ng/Kg	0.647U ng/Kg
SL-112-SA5A-SB-14.0-15.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0946 ng/Kg	0.0946U ng/Kg
SL-112-SA5A-SB-14.0-15.0(RES)	1,2,3,4,7,8-HXCDF	0.121 ng/Kg	0.121U ng/Kg
SL-112-SA5A-SB-14.0-15.0(RES)	1,2,3,6,7,8-HXCDD	0.0957 ng/Kg	0.0957U ng/Kg
SL-112-SA5A-SB-14.0-15.0(RES)	1,2,3,6,7,8-HXCDF	0.0824 ng/Kg	0.0824U ng/Kg
SL-112-SA5A-SB-14.0-15.0(RES)	1,2,3,7,8,9-HXCDD	0.0720 ng/Kg	0.0720U ng/Kg
SL-112-SA5A-SB-14.0-15.0(RES)	1,2,3,7,8-PECDD	0.0371 ng/Kg	0.0371U ng/Kg
SL-112-SA5A-SB-14.0-15.0(RES)	1,2,3,7,8-PECDF	0.0711 ng/Kg	0.0711U ng/Kg
SL-112-SA5A-SB-14.0-15.0(RES)	2,3,4,6,7,8-HXCDF	0.172 ng/Kg	0.172U ng/Kg
SL-112-SA5A-SB-14.0-15.0(RES)	2,3,4,7,8-PECDF	0.125 ng/Kg	0.125U ng/Kg
SL-112-SA5A-SB-14.0-15.0(RES)	OCDF	0.500 ng/Kg	0.500U ng/Kg
SL-112-SA5A-SB-8.5-9.5(RES)	1,2,3,4,6,7,8-HPCDF	0.927 ng/Kg	0.927U ng/Kg
SL-112-SA5A-SB-8.5-9.5(RES)	1,2,3,4,7,8,9-HPCDF	0.109 ng/Kg	0.109U ng/Kg
SL-112-SA5A-SB-8.5-9.5(RES)	1,2,3,4,7,8-HXCDF	0.178 ng/Kg	0.178U ng/Kg
SL-112-SA5A-SB-8.5-9.5(RES)	1,2,3,6,7,8-HXCDD	0.145 ng/Kg	0.145U ng/Kg
SL-112-SA5A-SB-8.5-9.5(RES)	1,2,3,6,7,8-HXCDF	0.137 ng/Kg	0.137U ng/Kg
SL-112-SA5A-SB-8.5-9.5(RES)	1,2,3,7,8,9-HXCDD	0.164 ng/Kg	0.164U ng/Kg
SL-112-SA5A-SB-8.5-9.5(RES)	1,2,3,7,8,9-HXCDF	0.112 ng/Kg	0.112U ng/Kg
SL-112-SA5A-SB-8.5-9.5(RES)	1,2,3,7,8-PECDF	0.182 ng/Kg	0.182U ng/Kg
SL-112-SA5A-SB-8.5-9.5(RES)	2,3,4,6,7,8-HXCDF	0.261 ng/Kg	0.261U ng/Kg
SL-112-SA5A-SB-8.5-9.5(RES)	2,3,4,7,8-PECDF	0.261 ng/Kg	0.261U ng/Kg
SL-112-SA5A-SB-8.5-9.5(RES)	OCDF	1.19 ng/Kg	1.19U ng/Kg
SL-113-SA5A-SB-14.0-15.0(RES)	1,2,3,4,6,7,8-HPCDD	0.669 ng/Kg	0.669U ng/Kg
SL-113-SA5A-SB-14.0-15.0(RES)	1,2,3,4,6,7,8-HPCDF	1.15 ng/Kg	1.15U ng/Kg
SL-113-SA5A-SB-14.0-15.0(RES)	1,2,3,4,7,8,9-HPCDF	0.163 ng/Kg	0.163U ng/Kg
SL-113-SA5A-SB-14.0-15.0(RES)	1,2,3,4,7,8-HXCDF	0.194 ng/Kg	0.194U ng/Kg
SL-113-SA5A-SB-14.0-15.0(RES)	1,2,3,6,7,8-HXCDD	0.0653 ng/Kg	0.0653U ng/Kg
SL-113-SA5A-SB-14.0-15.0(RES)	1,2,3,6,7,8-HXCDF	0.170 ng/Kg	0.170U ng/Kg
SL-113-SA5A-SB-14.0-15.0(RES)	1,2,3,7,8,9-HXCDD	0.0558 ng/Kg	0.0558U ng/Kg
SL-113-SA5A-SB-14.0-15.0(RES)	1,2,3,7,8,9-HXCDF	0.0927 ng/Kg	0.0927U ng/Kg
SL-113-SA5A-SB-14.0-15.0(RES)	1,2,3,7,8-PECDF	0.0616 ng/Kg	0.0616U ng/Kg
SL-113-SA5A-SB-14.0-15.0(RES)	2,3,4,6,7,8-HXCDF	0.315 ng/Kg	0.315U ng/Kg
SL-113-SA5A-SB-14.0-15.0(RES)	2,3,4,7,8-PECDF	0.206 ng/Kg	0.206U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX062 **Laboratory: LL**

EDD Filename: DX062_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-113-SA5A-SB-14.0-15.0(RES)	OCDF	0.643 ng/Kg	0.643U ng/Kg
SL-113-SA5A-SB-9.0-10.0(RES)	1,2,3,4,6,7,8-HPCDF	1.20 ng/Kg	1.20U ng/Kg
SL-113-SA5A-SB-9.0-10.0(RES)	1,2,3,4,7,8,9-HPCDF	0.160 ng/Kg	0.160U ng/Kg
SL-113-SA5A-SB-9.0-10.0(RES)	1,2,3,4,7,8-HXCDF	0.302 ng/Kg	0.302U ng/Kg
SL-113-SA5A-SB-9.0-10.0(RES)	1,2,3,6,7,8-HXCDF	0.158 ng/Kg	0.158U ng/Kg
SL-113-SA5A-SB-9.0-10.0(RES)	1,2,3,7,8,9-HXCDD	0.133 ng/Kg	0.133U ng/Kg
SL-113-SA5A-SB-9.0-10.0(RES)	1,2,3,7,8,9-HXCDF	0.147 ng/Kg	0.147U ng/Kg
SL-113-SA5A-SB-9.0-10.0(RES)	1,2,3,7,8-PECDD	0.0616 ng/Kg	0.0616U ng/Kg
SL-113-SA5A-SB-9.0-10.0(RES)	1,2,3,7,8-PECDF	0.171 ng/Kg	0.171U ng/Kg
SL-113-SA5A-SB-9.0-10.0(RES)	2,3,4,6,7,8-HXCDF	0.332 ng/Kg	0.332U ng/Kg
SL-113-SA5A-SB-9.0-10.0(RES)	2,3,4,7,8-PECDF	0.255 ng/Kg	0.255U ng/Kg
SL-113-SA5A-SB-9.0-10.0(RES)	OCDF	2.09 ng/Kg	2.09U ng/Kg
SL-114-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.375 ng/Kg	0.375U ng/Kg
SL-114-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.0700 ng/Kg	0.0700U ng/Kg
SL-114-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0217 ng/Kg	0.0217U ng/Kg
SL-114-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.0192 ng/Kg	0.0192U ng/Kg
SL-114-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDD	0.0505 ng/Kg	0.0505U ng/Kg
SL-114-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.0216 ng/Kg	0.0216U ng/Kg
SL-114-SA5A-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.0249 ng/Kg	0.0249U ng/Kg
SL-114-SA5A-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.0453 ng/Kg	0.0453U ng/Kg
SL-114-SA5A-SB-4.0-5.0(RES)	OCDF	0.134 ng/Kg	0.134U ng/Kg
SL-114-SA5A-SB-9.0-10.0(RES)	1,2,3,4,6,7,8-HPCDF	1.04 ng/Kg	1.04U ng/Kg
SL-114-SA5A-SB-9.0-10.0(RES)	1,2,3,4,7,8,9-HPCDF	0.134 ng/Kg	0.134U ng/Kg
SL-114-SA5A-SB-9.0-10.0(RES)	1,2,3,4,7,8-HXCDF	0.176 ng/Kg	0.176U ng/Kg
SL-114-SA5A-SB-9.0-10.0(RES)	1,2,3,6,7,8-HXCDD	0.101 ng/Kg	0.101U ng/Kg
SL-114-SA5A-SB-9.0-10.0(RES)	1,2,3,6,7,8-HXCDF	0.138 ng/Kg	0.138U ng/Kg
SL-114-SA5A-SB-9.0-10.0(RES)	1,2,3,7,8,9-HXCDD	0.0795 ng/Kg	0.0795U ng/Kg
SL-114-SA5A-SB-9.0-10.0(RES)	1,2,3,7,8,9-HXCDF	0.0974 ng/Kg	0.0974U ng/Kg
SL-114-SA5A-SB-9.0-10.0(RES)	1,2,3,7,8-PECDF	0.0431 ng/Kg	0.0431U ng/Kg
SL-114-SA5A-SB-9.0-10.0(RES)	2,3,4,6,7,8-HXCDF	0.349 ng/Kg	0.349U ng/Kg
SL-114-SA5A-SB-9.0-10.0(RES)	2,3,4,7,8-PECDF	0.192 ng/Kg	0.192U ng/Kg
SL-114-SA5A-SB-9.0-10.0(RES)	2,3,7,8-TCDF	0.0413 ng/Kg	0.0413U ng/Kg
SL-114-SA5A-SB-9.0-10.0(RES)	OCDF	0.840 ng/Kg	0.840U ng/Kg
SL-115-SA5A-SB-13.0-14.0(RES)	1,2,3,4,6,7,8-HPCDF	1.74 ng/Kg	1.74U ng/Kg
SL-115-SA5A-SB-13.0-14.0(RES)	1,2,3,4,7,8,9-HPCDF	0.265 ng/Kg	0.265U ng/Kg
SL-115-SA5A-SB-13.0-14.0(RES)	1,2,3,4,7,8-HXCDF	0.277 ng/Kg	0.277U ng/Kg
SL-115-SA5A-SB-13.0-14.0(RES)	1,2,3,6,7,8-HXCDF	0.182 ng/Kg	0.182U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX062 | Laboratory: LL

EDD Filename: DX062_v1 | eQAPP Name: CDM_SSFL_110509

Method: 1613B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-115-SA5A-SB-13.0-14.0(RES)	1,2,3,7,8,9-HXCDF	0.172 ng/Kg	0.172U ng/Kg
SL-115-SA5A-SB-13.0-14.0(RES)	1,2,3,7,8-PECDD	0.119 ng/Kg	0.119U ng/Kg
SL-115-SA5A-SB-13.0-14.0(RES)	2,3,4,6,7,8-HXCDF	0.262 ng/Kg	0.262U ng/Kg
SL-115-SA5A-SB-13.0-14.0(RES)	2,3,4,7,8-PECDF	0.357 ng/Kg	0.357U ng/Kg
SL-115-SA5A-SB-6.5-7.5(RES)	1,2,3,4,6,7,8-HPCDF	2.97 ng/Kg	2.97U ng/Kg
SL-115-SA5A-SB-6.5-7.5(RES)	1,2,3,4,7,8,9-HPCDF	0.397 ng/Kg	0.397U ng/Kg
SL-115-SA5A-SB-6.5-7.5(RES)	1,2,3,4,7,8-HXCDF	0.584 ng/Kg	0.584U ng/Kg
SL-115-SA5A-SB-6.5-7.5(RES)	1,2,3,6,7,8-HXCDF	0.300 ng/Kg	0.300U ng/Kg
SL-115-SA5A-SB-6.5-7.5(RES)	1,2,3,7,8,9-HXCDF	0.118 ng/Kg	0.118U ng/Kg
SL-115-SA5A-SB-6.5-7.5(RES)	1,2,3,7,8-PECDD	0.0747 ng/Kg	0.0747U ng/Kg
SL-115-SA5A-SB-6.5-7.5(RES)	2,3,4,6,7,8-HXCDF	0.441 ng/Kg	0.441U ng/Kg
SL-115-SA5A-SB-6.5-7.5(RES)	2,3,4,7,8-PECDF	0.586 ng/Kg	0.586U ng/Kg
SL-116-SA5A-SB-14.0-15.0(RES)	1,2,3,4,7,8-HXCDF	0.569 ng/Kg	0.569U ng/Kg
SL-116-SA5A-SB-14.0-15.0(RES)	1,2,3,7,8,9-HXCDF	0.274 ng/Kg	0.274U ng/Kg
SL-116-SA5A-SB-14.0-15.0(RES)	2,3,4,6,7,8-HXCDF	1.18 ng/Kg	1.18U ng/Kg
SL-116-SA5A-SB-14.0-15.0(RES)	2,3,7,8-TCDF	0.127 ng/Kg	0.127U ng/Kg
SL-116-SA5A-SB-6.0-7.0(RES)	1,2,3,4,6,7,8-HPCDF	1.62 ng/Kg	1.62U ng/Kg
SL-116-SA5A-SB-6.0-7.0(RES)	1,2,3,4,7,8,9-HPCDF	0.184 ng/Kg	0.184U ng/Kg
SL-116-SA5A-SB-6.0-7.0(RES)	1,2,3,4,7,8-HXCDF	0.432 ng/Kg	0.432U ng/Kg
SL-116-SA5A-SB-6.0-7.0(RES)	1,2,3,6,7,8-HXCDF	0.235 ng/Kg	0.235U ng/Kg
SL-116-SA5A-SB-6.0-7.0(RES)	1,2,3,7,8,9-HXCDD	0.159 ng/Kg	0.159U ng/Kg
SL-116-SA5A-SB-6.0-7.0(RES)	1,2,3,7,8,9-HXCDF	0.160 ng/Kg	0.160U ng/Kg
SL-116-SA5A-SB-6.0-7.0(RES)	1,2,3,7,8-PECDD	0.123 ng/Kg	0.123U ng/Kg
SL-116-SA5A-SB-6.0-7.0(RES)	2,3,4,6,7,8-HXCDF	0.334 ng/Kg	0.334U ng/Kg
SL-116-SA5A-SB-6.0-7.0(RES)	2,3,4,7,8-PECDF	0.327 ng/Kg	0.327U ng/Kg
SL-116-SA5A-SB-6.0-7.0(RES)	2,3,7,8-TCDF	0.0529 ng/Kg	0.0529U ng/Kg
SL-116-SA5A-SB-6.0-7.0(RES)	OCDF	2.09 ng/Kg	2.09U ng/Kg
SL-117-SA5A-SB-5.0-6.0(RES)	1,2,3,4,6,7,8-HPCDD	0.479 ng/Kg	0.479U ng/Kg
SL-117-SA5A-SB-5.0-6.0(RES)	1,2,3,4,6,7,8-HPCDF	0.363 ng/Kg	0.363U ng/Kg
SL-117-SA5A-SB-5.0-6.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0819 ng/Kg	0.0819U ng/Kg
SL-117-SA5A-SB-5.0-6.0(RES)	1,2,3,4,7,8-HXCDF	0.132 ng/Kg	0.132U ng/Kg
SL-117-SA5A-SB-5.0-6.0(RES)	1,2,3,6,7,8-HXCDD	0.0664 ng/Kg	0.0664U ng/Kg
SL-117-SA5A-SB-5.0-6.0(RES)	1,2,3,6,7,8-HXCDF	0.0692 ng/Kg	0.0692U ng/Kg
SL-117-SA5A-SB-5.0-6.0(RES)	1,2,3,7,8,9-HXCDD	0.103 ng/Kg	0.103U ng/Kg
SL-117-SA5A-SB-5.0-6.0(RES)	1,2,3,7,8,9-HXCDF	0.0953 ng/Kg	0.0953U ng/Kg
SL-117-SA5A-SB-5.0-6.0(RES)	1,2,3,7,8-PECDD	0.0501 ng/Kg	0.0501U ng/Kg
SL-117-SA5A-SB-5.0-6.0(RES)	1,2,3,7,8-PECDF	0.0908 ng/Kg	0.0908U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX062 **Laboratory: LL**

EDD Filename: DX062_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-117-SA5A-SB-5.0-6.0(RES)	2,3,4,6,7,8-HXCDF	0.120 ng/Kg	0.120U ng/Kg
SL-117-SA5A-SB-5.0-6.0(RES)	2,3,4,7,8-PECDF	0.133 ng/Kg	0.133U ng/Kg
SL-117-SA5A-SB-5.0-6.0(RES)	2,3,7,8-TCDF	0.0402 ng/Kg	0.0402U ng/Kg
SL-117-SA5A-SB-5.0-6.0(RES)	OCDD	2.99 ng/Kg	2.99U ng/Kg
SL-117-SA5A-SB-5.0-6.0(RES)	OCDF	0.326 ng/Kg	0.326U ng/Kg
SL-118-SA5A-SB-2.5-3.5(RES)	1,2,3,4,6,7,8-HPCDD	1.55 ng/Kg	1.55U ng/Kg
SL-118-SA5A-SB-2.5-3.5(RES)	1,2,3,4,6,7,8-HPCDF	0.502 ng/Kg	0.502U ng/Kg
SL-118-SA5A-SB-2.5-3.5(RES)	1,2,3,4,7,8,9-HPCDF	0.0852 ng/Kg	0.0852U ng/Kg
SL-118-SA5A-SB-2.5-3.5(RES)	1,2,3,4,7,8-HXCDF	0.125 ng/Kg	0.125U ng/Kg
SL-118-SA5A-SB-2.5-3.5(RES)	1,2,3,6,7,8-HXCDD	0.128 ng/Kg	0.128U ng/Kg
SL-118-SA5A-SB-2.5-3.5(RES)	1,2,3,6,7,8-HXCDF	0.0974 ng/Kg	0.0974U ng/Kg
SL-118-SA5A-SB-2.5-3.5(RES)	1,2,3,7,8,9-HXCDD	0.181 ng/Kg	0.181U ng/Kg
SL-118-SA5A-SB-2.5-3.5(RES)	1,2,3,7,8,9-HXCDF	0.115 ng/Kg	0.115U ng/Kg
SL-118-SA5A-SB-2.5-3.5(RES)	1,2,3,7,8-PECDD	0.0681 ng/Kg	0.0681U ng/Kg
SL-118-SA5A-SB-2.5-3.5(RES)	1,2,3,7,8-PECDF	0.0891 ng/Kg	0.0891U ng/Kg
SL-118-SA5A-SB-2.5-3.5(RES)	2,3,4,6,7,8-HXCDF	0.131 ng/Kg	0.131U ng/Kg
SL-118-SA5A-SB-2.5-3.5(RES)	2,3,4,7,8-PECDF	0.119 ng/Kg	0.119U ng/Kg
SL-118-SA5A-SB-2.5-3.5(RES)	2,3,7,8-TCDF	0.0265 ng/Kg	0.0265U ng/Kg
SL-118-SA5A-SB-2.5-3.5(RES)	OCDF	0.639 ng/Kg	0.639U ng/Kg
SL-121-SA5A-SB-2.0-3.0(RES)	1,2,3,4,6,7,8-HPCDF	0.848 ng/Kg	0.848U ng/Kg
SL-121-SA5A-SB-2.0-3.0(RES)	1,2,3,4,7,8,9-HPCDF	0.186 ng/Kg	0.186U ng/Kg
SL-121-SA5A-SB-2.0-3.0(RES)	1,2,3,4,7,8-HXCDF	0.236 ng/Kg	0.236U ng/Kg
SL-121-SA5A-SB-2.0-3.0(RES)	1,2,3,6,7,8-HXCDD	0.112 ng/Kg	0.112U ng/Kg
SL-121-SA5A-SB-2.0-3.0(RES)	1,2,3,6,7,8-HXCDF	0.155 ng/Kg	0.155U ng/Kg
SL-121-SA5A-SB-2.0-3.0(RES)	1,2,3,7,8,9-HXCDD	0.103 ng/Kg	0.103U ng/Kg
SL-121-SA5A-SB-2.0-3.0(RES)	1,2,3,7,8,9-HXCDF	0.134 ng/Kg	0.134U ng/Kg
SL-121-SA5A-SB-2.0-3.0(RES)	1,2,3,7,8-PECDD	0.0530 ng/Kg	0.0530U ng/Kg
SL-121-SA5A-SB-2.0-3.0(RES)	2,3,4,6,7,8-HXCDF	0.243 ng/Kg	0.243U ng/Kg
SL-121-SA5A-SB-2.0-3.0(RES)	2,3,4,7,8-PECDF	0.162 ng/Kg	0.162U ng/Kg
SL-121-SA5A-SB-2.0-3.0(RES)	OCDF	1.17 ng/Kg	1.17U ng/Kg
SL-132-SA5A-SB-2.0-3.0(RES)	1,2,3,4,6,7,8-HPCDD	1.66 ng/Kg	1.66U ng/Kg
SL-132-SA5A-SB-2.0-3.0(RES)	1,2,3,4,6,7,8-HPCDF	0.665 ng/Kg	0.665U ng/Kg
SL-132-SA5A-SB-2.0-3.0(RES)	1,2,3,4,7,8,9-HPCDF	0.109 ng/Kg	0.109U ng/Kg
SL-132-SA5A-SB-2.0-3.0(RES)	1,2,3,4,7,8-HXCDF	0.135 ng/Kg	0.135U ng/Kg
SL-132-SA5A-SB-2.0-3.0(RES)	1,2,3,6,7,8-HXCDD	0.117 ng/Kg	0.117U ng/Kg
SL-132-SA5A-SB-2.0-3.0(RES)	1,2,3,6,7,8-HXCDF	0.122 ng/Kg	0.122U ng/Kg
SL-132-SA5A-SB-2.0-3.0(RES)	1,2,3,7,8,9-HXCDD	0.109 ng/Kg	0.109U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX062 | Laboratory: LL

EDD Filename: DX062_v1 | eQAPP Name: CDM_SSFL_110509

Method: 1613B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-132-SA5A-SB-2.0-3.0(RES)	1,2,3,7,8,9-HXCDF	0.111 ng/Kg	0.111U ng/Kg
SL-132-SA5A-SB-2.0-3.0(RES)	1,2,3,7,8-PECDD	0.0418 ng/Kg	0.0418U ng/Kg
SL-132-SA5A-SB-2.0-3.0(RES)	1,2,3,7,8-PECDF	0.0658 ng/Kg	0.0658U ng/Kg
SL-132-SA5A-SB-2.0-3.0(RES)	2,3,4,6,7,8-HXCDF	0.194 ng/Kg	0.194U ng/Kg
SL-132-SA5A-SB-2.0-3.0(RES)	2,3,4,7,8-PECDF	0.145 ng/Kg	0.145U ng/Kg
SL-132-SA5A-SB-2.0-3.0(RES)	OCDF	0.652 ng/Kg	0.652U ng/Kg
SL-137-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.632 ng/Kg	0.632U ng/Kg
SL-137-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.514 ng/Kg	0.514U ng/Kg
SL-137-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0633 ng/Kg	0.0633U ng/Kg
SL-137-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.216 ng/Kg	0.216U ng/Kg
SL-137-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDD	0.0501 ng/Kg	0.0501U ng/Kg
SL-137-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.0732 ng/Kg	0.0732U ng/Kg
SL-137-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDD	0.0555 ng/Kg	0.0555U ng/Kg
SL-137-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.0529 ng/Kg	0.0529U ng/Kg
SL-137-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.0466 ng/Kg	0.0466U ng/Kg
SL-137-SA5A-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.138 ng/Kg	0.138U ng/Kg
SL-137-SA5A-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.117 ng/Kg	0.117U ng/Kg
SL-137-SA5A-SB-4.0-5.0(RES)	OCDF	0.451 ng/Kg	0.451U ng/Kg
SL-138-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	1.18 ng/Kg	1.18U ng/Kg
SL-138-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	1.30 ng/Kg	1.30U ng/Kg
SL-138-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.124 ng/Kg	0.124U ng/Kg
SL-138-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.268 ng/Kg	0.268U ng/Kg
SL-138-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDD	0.0634 ng/Kg	0.0634U ng/Kg
SL-138-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.173 ng/Kg	0.173U ng/Kg
SL-138-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDD	0.0604 ng/Kg	0.0604U ng/Kg
SL-138-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.0885 ng/Kg	0.0885U ng/Kg
SL-138-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDD	0.0375 ng/Kg	0.0375U ng/Kg
SL-138-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.0639 ng/Kg	0.0639U ng/Kg
SL-138-SA5A-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.301 ng/Kg	0.301U ng/Kg
SL-138-SA5A-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.171 ng/Kg	0.171U ng/Kg
SL-138-SA5A-SB-4.0-5.0(RES)	2,3,7,8-TCDF	0.0277 ng/Kg	0.0277U ng/Kg
SL-138-SA5A-SB-4.0-5.0(RES)	OCDF	0.891 ng/Kg	0.891U ng/Kg
SL-227-SA5B-SB-2.5-3.5(RES)	1,2,3,4,7,8,9-HPCDF	0.0917 ng/Kg	0.0917U ng/Kg
SL-227-SA5B-SB-2.5-3.5(RES)	1,2,3,6,7,8-HXCDF	0.122 ng/Kg	0.122U ng/Kg
SL-227-SA5B-SB-2.5-3.5(RES)	2,3,4,6,7,8-HXCDF	0.0841 ng/Kg	0.0841U ng/Kg
SL-227-SA5B-SB-2.5-3.5(RES)	2,3,4,7,8-PECDF	0.220 ng/Kg	0.220U ng/Kg

Internal Standard Outlier Report

Lab Reporting Batch ID: DX062 | Laboratory: LL

EDD Filename: DX062_v1 | eQAPP Name: CDM_SSFL_110509

Method: 1613B
Matrix: AQ

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
EB07-SA5A-031511	13C-1,2,3,4,6,7,8-HpCDF 13C-1,2,3,4,7,8-HxCDF	20 20	28.00-143.00 26.00-152.00	1,2,3,4,6,7,8-HpCDF 1,2,3,4,7,8-HxCDF	J (all detects) UJ (all non-detects)

Field Duplicate RPD Report

Lab Reporting Batch ID: DX062 **Laboratory: LL**

EDD Filename: DX062_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 160.3M
Matrix: SO

Analyte	Concentration (%)		Sample RPD	eQAPP RPD	Flag
	SL-114-SA5A-SB-4.0-5.0	DUP09-SA5A-QC-031111			
MOISTURE	22.8	17.7	25		No Qualifiers Applied

Method: 1613B
Matrix: SO

Analyte	Concentration (ng/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-114-SA5A-SB-4.0-5.0	DUP09-SA5A-QC-031111			
OCDD	2.23	2.68	18	50.00	No Qualifiers Applied
1,2,3,4,6,7,8-HPCDD	0.375	0.701	61	50.00	J(all detects) UJ(all non-detects)
1,2,3,4,6,7,8-HPCDF	0.0700	0.857	170	50.00	
1,2,3,4,7,8,9-HPCDF	0.0217	0.134	144	50.00	
1,2,3,4,7,8-HxCDD	6.48 U	0.0675	200	50.00	
1,2,3,4,7,8-HXCDF	6.48 U	0.158	200	50.00	
1,2,3,6,7,8-HXCDD	6.48 U	0.0969	200	50.00	
1,2,3,6,7,8-HXCDF	0.0192	0.171	160	50.00	
1,2,3,7,8,9-HXCDD	0.0505	0.151	100	50.00	
1,2,3,7,8,9-HXCDF	6.48 U	0.160	200	50.00	
1,2,3,7,8-PECDD	0.0233	0.0703	100	50.00	
1,2,3,7,8-PECDF	0.0216	0.116	137	50.00	
2,3,4,6,7,8-HXCDF	0.0249	0.291	168	50.00	
2,3,4,7,8-PECDF	0.0453	0.190	123	50.00	
2,3,7,8-TCDD	0.0178	0.0380	72	50.00	
2,3,7,8-TCDF	1.30 U	0.0354	200	50.00	
OCDF	0.134	0.592	126	50.00	

Reporting Limit Outliers

Lab Reporting Batch ID: DX062 | Laboratory: LL

EDD Filename: DX062_v1 | eQAPP Name: CDM_SSFL_110509

Method: 1613B

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB07-SA5A-031511	1,2,3,4,6,7,8-HPCDD	JBQ	3.67	10.1	PQL	pg/L	
	1,2,3,4,6,7,8-HPCDF	JB	7.92	10.1	PQL	pg/L	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.809	10.1	PQL	pg/L	
	1,2,3,4,7,8-HXCDF	JB	1.52	10.1	PQL	pg/L	
	1,2,3,6,7,8-HXCDD	JBQ	0.373	10.1	PQL	pg/L	
	1,2,3,6,7,8-HXCDF	JB	0.793	10.1	PQL	pg/L	
	1,2,3,7,8,9-HXCDD	JBQ	0.788	10.1	PQL	pg/L	J (all detects)
	1,2,3,7,8-PECDF	JB	0.457	10.1	PQL	pg/L	
	2,3,4,6,7,8-HXCDF	JB	1.49	10.1	PQL	pg/L	
	2,3,4,7,8-PECDF	JBQ	0.923	10.1	PQL	pg/L	
	2,3,7,8-TCDD	JQ	0.439	2.03	PQL	pg/L	
	OCDD	JB	6.72	20.3	PQL	pg/L	
	OCDF	JB	4.26	20.3	PQL	pg/L	

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP09-SA5A-QC-031111	1,2,3,4,6,7,8-HPCDD	JB	0.701	6.08	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.857	6.08	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.134	6.08	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JQ	0.0675	6.08	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.158	6.08	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.0969	6.08	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.171	6.08	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.151	6.08	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.160	6.08	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.0703	6.08	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.116	6.08	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.291	6.08	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.190	6.08	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0380	1.22	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.0354	1.22	PQL	ng/Kg	
	OCDD	JB	2.68	12.2	PQL	ng/Kg	
	OCDF	JB	0.592	12.2	PQL	ng/Kg	
SL-001-SA5A-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JB	0.424	5.66	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.330	5.66	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.0604	5.66	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	J	0.0350	5.66	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.0464	5.66	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.0644	5.66	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0644	5.66	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.0499	5.66	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JBQ	0.0901	5.66	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0378	5.66	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0246	5.66	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.122	5.66	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.115	5.66	PQL	ng/Kg	
	OCDD	JB	3.10	11.3	PQL	ng/Kg	
	OCDF	JB	0.429	11.3	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX062 **Laboratory: LL**

EDD Filename: DX062_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-112-SA5A-SB-14.0-15.0	1,2,3,4,6,7,8-HPCDD	JB	0.871	5.64	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.647	5.64	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.0946	5.64	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.121	5.64	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.0957	5.64	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0824	5.64	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.0720	5.64	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.0371	5.64	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0711	5.64	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.172	5.64	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.125	5.64	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.0288	1.13	PQL	ng/Kg	
	OCDD	JB	7.18	11.3	PQL	ng/Kg	
	OCDF	JB	0.500	11.3	PQL	ng/Kg	
SL-112-SA5A-SB-8.5-9.5	1,2,3,4,6,7,8-HPCDD	JB	3.96	5.54	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.927	5.54	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.109	5.54	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JQ	0.0592	5.54	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.178	5.54	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.145	5.54	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.137	5.54	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.164	5.54	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.112	5.54	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.182	5.54	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.261	5.54	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.261	5.54	PQL	ng/Kg	
	OCDF	JB	1.19	11.1	PQL	ng/Kg	
SL-113-SA5A-SB-14.0-15.0	1,2,3,4,6,7,8-HPCDD	JB	0.669	5.45	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	1.15	5.45	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.163	5.45	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.194	5.45	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.0653	5.45	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.170	5.45	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.0558	5.45	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.0927	5.45	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0616	5.45	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.315	5.45	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.206	5.45	PQL	ng/Kg	
	OCDD	JB	4.07	10.9	PQL	ng/Kg	
	OCDF	JBQ	0.643	10.9	PQL	ng/Kg	
SL-113-SA5A-SB-9.0-10.0	1,2,3,4,6,7,8-HPCDD	JB	4.47	5.64	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	1.20	5.64	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.160	5.64	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JQ	0.0976	5.64	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.302	5.64	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.158	5.64	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.133	5.64	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.147	5.64	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0616	5.64	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.171	5.64	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.332	5.64	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.255	5.64	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0596	1.13	PQL	ng/Kg	
	OCDF	JB	2.09	11.3	PQL	ng/Kg	

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Reporting Limit Outliers

Lab Reporting Batch ID: DX062 **Laboratory: LL**

EDD Filename: DX062_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-114-SA5A-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JB	0.375	6.48	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.0700	6.48	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0217	6.48	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0192	6.48	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.0505	6.48	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JQ	0.0233	6.48	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.0216	6.48	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.0249	6.48	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.0453	6.48	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0178	1.30	PQL	ng/Kg	
	OCDD	JB	2.23	13.0	PQL	ng/Kg	
	OCDF	JB	0.134	13.0	PQL	ng/Kg	
SL-114-SA5A-SB-9.0-10.0	1,2,3,4,6,7,8-HPCDD	JB	5.09	6.31	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	1.04	6.31	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.134	6.31	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	J	0.0294	6.31	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.176	6.31	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.101	6.31	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.138	6.31	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.0795	6.31	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.0974	6.31	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0431	6.31	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.349	6.31	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.192	6.31	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0420	1.26	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.0413	1.26	PQL	ng/Kg	
	OCDF	JB	0.840	12.6	PQL	ng/Kg	
SL-115-SA5A-SB-13.0-14.0	1,2,3,4,6,7,8-HPCDF	JB	1.74	5.58	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JB	0.265	5.58	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JQ	0.133	5.58	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.277	5.58	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.337	5.58	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.182	5.58	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.238	5.58	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.172	5.58	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.119	5.58	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.399	5.58	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.262	5.58	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.357	5.58	PQL	ng/Kg	
	OCDF	JB	3.61	11.2	PQL	ng/Kg	
SL-115-SA5A-SB-6.5-7.5	1,2,3,4,6,7,8-HPCDF	JB	2.97	5.52	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JB	0.397	5.52	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	J	0.130	5.52	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.584	5.52	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.592	5.52	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.300	5.52	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.305	5.52	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.118	5.52	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.0747	5.52	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.611	5.52	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.441	5.52	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.586	5.52	PQL	ng/Kg	
	OCDF	JB	5.62	11.0	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX062 **Laboratory: LL**

EDD Filename: DX062_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-116-SA5A-SB-14.0-15.0	1,2,3,4,7,8,9-HPCDF	JB	0.877	5.71	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8-HxCDD	J	0.442	5.71	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.569	5.71	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	1.67	5.71	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.707	5.71	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.953	5.71	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.274	5.71	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.314	5.71	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.283	5.71	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	1.18	5.71	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	1.14	5.71	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.127	1.14	PQL	ng/Kg	
SL-116-SA5A-SB-6.0-7.0	1,2,3,4,6,7,8-HPCDF	JB	1.62	5.59	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JB	0.184	5.59	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	J	0.104	5.59	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.432	5.59	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.203	5.59	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.235	5.59	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.159	5.59	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.160	5.59	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.123	5.59	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.279	5.59	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.334	5.59	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.327	5.59	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0527	1.12	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.0529	1.12	PQL	ng/Kg	
	OCDF	JB	2.09	11.2	PQL	ng/Kg	
SL-117-SA5A-SB-5.0-6.0	1,2,3,4,6,7,8-HPCDD	JB	0.479	5.62	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.363	5.62	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.0819	5.62	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.132	5.62	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.0664	5.62	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0692	5.62	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.103	5.62	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.0953	5.62	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0501	5.62	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.0908	5.62	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.120	5.62	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.133	5.62	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.0321	1.12	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.0402	1.12	PQL	ng/Kg	
	OCDD	JB	2.99	11.2	PQL	ng/Kg	
	OCDF	JB	0.326	11.2	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX062 **Laboratory: LL**

EDD Filename: DX062_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-118-SA5A-SB-2.5-3.5	1,2,3,4,6,7,8-HPCDD	JB	1.55	5.51	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.502	5.51	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.0852	5.51	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JQ	0.0438	5.51	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.125	5.51	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.128	5.51	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0974	5.51	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.181	5.51	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.115	5.51	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0681	5.51	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.0891	5.51	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.131	5.51	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.119	5.51	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.0265	1.10	PQL	ng/Kg	
	OCDF	JB	0.639	11.0	PQL	ng/Kg	
SL-121-SA5A-SB-2.0-3.0	1,2,3,4,6,7,8-HPCDD	JB	4.44	5.40	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.848	5.40	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.186	5.40	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	J	0.0853	5.40	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.236	5.40	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.112	5.40	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.155	5.40	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.103	5.40	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.134	5.40	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0530	5.40	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.257	5.40	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.243	5.40	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.162	5.40	PQL	ng/Kg	
	OCDF	JBQ	1.17	10.8	PQL	ng/Kg	
SL-132-SA5A-SB-2.0-3.0	1,2,3,4,6,7,8-HPCDD	JB	1.66	5.56	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JBQ	0.665	5.56	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.109	5.56	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	J	0.0281	5.56	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.135	5.56	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.117	5.56	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.122	5.56	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.109	5.56	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.111	5.56	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0418	5.56	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.0658	5.56	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.194	5.56	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.145	5.56	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0325	1.11	PQL	ng/Kg	
	OCDF	JB	0.652	11.1	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX062 **Laboratory: LL**

EDD Filename: DX062_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-137-SA5A-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JB	0.632	5.78	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.514	5.78	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.0633	5.78	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	J	0.0220	5.78	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.216	5.78	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.0501	5.78	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0732	5.78	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.0555	5.78	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.0529	5.78	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0466	5.78	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.138	5.78	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.117	5.78	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.0273	1.16	PQL	ng/Kg	
	OCDD	JB	5.19	11.6	PQL	ng/Kg	
	OCDF	JB	0.451	11.6	PQL	ng/Kg	
SL-138-SA5A-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JB	1.18	5.62	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	1.30	5.62	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.124	5.62	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JQ	0.0492	5.62	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.268	5.62	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.0634	5.62	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.173	5.62	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.0604	5.62	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.0885	5.62	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0375	5.62	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0639	5.62	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.301	5.62	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.171	5.62	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0226	1.12	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.0277	1.12	PQL	ng/Kg	
	OCDF	JB	0.891	11.2	PQL	ng/Kg	
SL-227-SA5B-SB-2.5-3.5	1,2,3,4,6,7,8-HPCDD	JB	4.73	5.70	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.482	5.70	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.0917	5.70	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	J	0.309	5.70	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.360	5.70	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.122	5.70	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.427	5.70	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.257	5.70	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JQ	0.114	5.70	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.151	5.70	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.0841	5.70	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.220	5.70	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.0380	1.14	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.0970	1.14	PQL	ng/Kg	
	OCDF	JB	1.12	11.4	PQL	ng/Kg	

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
16-Mar-2011	SL-146-SA5A-SB-3.0-4.0	6232233	N	METHOD	1613B	III
16-Mar-2011	SL-128-SA5A-SB-4.0-5.0	6232234	N	METHOD	1613B	III
16-Mar-2011	SL-128-SA5A-SB-9.0-10.0	6232235	N	METHOD	1613B	III
16-Mar-2011	SL-133-SA5A-SB-4.0-5.0	6232236	N	METHOD	1613B	III
17-Mar-2011	SL-139-SA5A-SB-2.5-3.5	6233382	N	METHOD	1613B	III
17-Mar-2011	SL-136-SA5A-SB-4.0-5.0	6233381	N	METHOD	1613B	III
17-Mar-2011	SL-158-SA5A-SB-4.0-5.0	6233383	N	METHOD	1613B	III
18-Mar-2011	SL-159-SA5A-SB-4.0-5.0	6234526	N	METHOD	1613B	III
18-Mar-2011	SL-169-SA5A-SB-4.0-5.0	6234527	N	METHOD	1613B	III
18-Mar-2011	SL-168-SA5A-SB-4.0-5.0	6234528	N	METHOD	1613B	III
18-Mar-2011	SL-160-SA5A-SB-4.0-5.0	6234529	N	METHOD	1613B	III
18-Mar-2011	SL-160-SA5A-SB-9.0-10.0	6234530	N	METHOD	1613B	III
21-Mar-2011	SL-161-SA5A-SB-4.0-5.0	6235707	N	METHOD	1613B	III
21-Mar-2011	SL-161-SA5A-SB-7.5-8.5	6235708	N	METHOD	1613B	III
21-Mar-2011	SL-163-SA5A-SB-4.0-5.0	6235709	N	METHOD	1613B	III
21-Mar-2011	SL-252-SA5A-SB-4.0-5.0	6235710	N	METHOD	1613B	III
22-Mar-2011	SL-231-SA5A-SB-2.0-3.0	6236858	N	METHOD	1613B	III
22-Mar-2011	SL-180-SA5A-SB-4.0-5.0	6236860	N	METHOD	1613B	III
22-Mar-2011	SL-181-SA5A-SB-4.0-5.0	6236859	N	METHOD	1613B	III
22-Mar-2011	EB08-SA5A-032211	6236861	EB	METHOD	1613B	III

III = EPA Level 3 Data Review
IV = EPA Level 4 Data Validation
N = Normal Sample
FD = Field Duplicate
TB = Trip Blank
FB = Field Blank
MS = Matrix Spike
MSD = Matrix Spike Duplicate

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DX063 **Laboratory: LL**

EDD Filename: DX063_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** AQ

Sample ID: EB08-SA5A-032211 *Collected:* 3/22/2011 3:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	3.09	JB	0.349	MDL	10.1	PQL	pg/L	U	B
1,2,3,4,6,7,8-HPCDF	1.93	JB	0.213	MDL	10.1	PQL	pg/L	U	B
1,2,3,4,7,8,9-HPCDF	0.978	JB	0.195	MDL	10.1	PQL	pg/L	U	B
1,2,3,4,7,8-HxCDD	0.850	JBQ	0.295	MDL	10.1	PQL	pg/L	U	B
1,2,3,4,7,8-HXCDF	1.05	JBQ	0.290	MDL	10.1	PQL	pg/L	U	B
1,2,3,6,7,8-HXCDD	0.635	JBQ	0.292	MDL	10.1	PQL	pg/L	U	B
1,2,3,6,7,8-HXCDF	0.766	JBQ	0.218	MDL	10.1	PQL	pg/L	U	B
1,2,3,7,8,9-HXCDD	0.793	JB	0.278	MDL	10.1	PQL	pg/L	U	B
1,2,3,7,8,9-HXCDF	1.07	JBQ	0.147	MDL	10.1	PQL	pg/L	U	B
1,2,3,7,8-PECDD	0.945	JBQ	0.299	MDL	10.1	PQL	pg/L	U	B
1,2,3,7,8-PECDF	0.643	JBQ	0.129	MDL	10.1	PQL	pg/L	U	B
2,3,4,6,7,8-HXCDF	0.933	JB	0.156	MDL	10.1	PQL	pg/L	U	B
2,3,4,7,8-PECDF	0.902	JBQ	0.119	MDL	10.1	PQL	pg/L	U	B
2,3,7,8-TCDD	0.238	JQ	0.229	MDL	2.01	PQL	pg/L	J	Z
OCDD	5.66	JBQ	0.352	MDL	20.1	PQL	pg/L	U	B
OCDF	2.54	JBQ	0.395	MDL	20.1	PQL	pg/L	U	B

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-128-SA5A-SB-4.0-5.0 *Collected:* 3/16/2011 12:49:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	2.60	JB	0.0194	MDL	5.62	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.192	JB	0.0213	MDL	5.62	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0500	JBQ	0.0312	MDL	5.62	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.267	JB	0.0266	MDL	5.62	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.352	JB	0.0327	MDL	5.62	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.171	JB	0.0254	MDL	5.62	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.239	JB	0.0299	MDL	5.62	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.179	JB	0.0260	MDL	5.62	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.137	JB	0.0222	MDL	5.62	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.543	JB	0.0191	MDL	5.62	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.232	JB	0.0237	MDL	5.62	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX063 **Laboratory: LL**

EDD Filename: DX063_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: **SL-128-SA5A-SB-4.0-5.0** ***Collected:*** **3/16/2011 12:49:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,3,4,7,8-PECDF	0.246	JB	0.0173	MDL	5.62	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0258	JBQ	0.0115	MDL	1.12	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0569	JB	0.0292	MDL	1.12	PQL	ng/Kg	U	B
OCDF	5.87	JB	0.0243	MDL	11.2	PQL	ng/Kg	J	Z

Sample ID: **SL-128-SA5A-SB-9.0-10.0** ***Collected:*** **3/16/2011 12:58:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	3.12	JB	0.0374	MDL	5.29	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	1.11	JB	0.0210	MDL	5.29	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.100	JBQ	0.0253	MDL	5.29	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0276	JBQ	0.0249	MDL	5.29	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.179	JB	0.0236	MDL	5.29	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.153	JB	0.0258	MDL	5.29	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.139	JB	0.0221	MDL	5.29	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.163	JBQ	0.0248	MDL	5.29	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.138	JBQ	0.0255	MDL	5.29	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0726	JBQ	0.0196	MDL	5.29	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.736	JB	0.0183	MDL	5.29	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.177	JB	0.0225	MDL	5.29	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.287	JB	0.0171	MDL	5.29	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0299	JB	0.0243	MDL	1.06	PQL	ng/Kg	U	B
OCDF	2.24	JB	0.0309	MDL	10.6	PQL	ng/Kg	J	Z

Sample ID: **SL-133-SA5A-SB-4.0-5.0** ***Collected:*** **3/16/2011 3:18:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	1.37	JB	0.0206	MDL	5.63	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.103	JB	0.0239	MDL	5.63	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0438	JBQ	0.0270	MDL	5.63	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.151	JB	0.0241	MDL	5.63	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.196	JB	0.0280	MDL	5.63	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.119	JB	0.0224	MDL	5.63	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.259	JB	0.0275	MDL	5.63	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.148	JBQ	0.0252	MDL	5.63	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX063 **Laboratory: LL**

EDD Filename: DX063_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: **SL-133-SA5A-SB-4.0-5.0** ***Collected:*** **3/16/2011 3:18:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,7,8-PECDD	0.0800	JB	0.0194	MDL	5.63	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.208	JB	0.0117	MDL	5.63	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.208	JBQ	0.0235	MDL	5.63	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.312	JB	0.0109	MDL	5.63	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0182	JBQ	0.0133	MDL	1.13	PQL	ng/Kg	U	B
OCDF	3.34	JB	0.0242	MDL	11.3	PQL	ng/Kg	J	Z

Sample ID: **SL-136-SA5A-SB-4.0-5.0** ***Collected:*** **3/17/2011 11:35:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.389	JB	0.0258	MDL	5.31	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.373	JBQ	0.0157	MDL	5.31	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0585	JB	0.0203	MDL	5.31	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0154	JB	0.0153	MDL	5.31	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0496	JBQ	0.0127	MDL	5.31	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0286	JB	0.0156	MDL	5.31	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0608	JB	0.0113	MDL	5.31	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0280	JBQ	0.0142	MDL	5.31	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0595	JBQ	0.0116	MDL	5.31	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0193	JB	0.0141	MDL	5.31	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0135	JB	0.00764	MDL	5.31	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.129	JB	0.00998	MDL	5.31	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0830	JBQ	0.00711	MDL	5.31	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0109	JB	0.0109	MDL	1.06	PQL	ng/Kg	U	B
OCDD	2.57	JB	0.0354	MDL	10.6	PQL	ng/Kg	J	Z
OCDF	0.305	JB	0.0309	MDL	10.6	PQL	ng/Kg	U	B

Sample ID: **SL-139-SA5A-SB-2.5-3.5** ***Collected:*** **3/17/2011 8:58:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.691	JB	0.0319	MDL	5.46	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.424	JB	0.0144	MDL	5.46	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0743	JBQ	0.0220	MDL	5.46	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0654	JBQ	0.0150	MDL	5.46	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0627	JB	0.0121	MDL	5.46	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX063 **Laboratory: LL**

EDD Filename: DX063_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: **SL-139-SA5A-SB-2.5-3.5** ***Collected:*** **3/17/2011 8:58:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,7,8,9-HXCDD	0.0594	JBQ	0.0141	MDL	5.46	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0467	JBQ	0.0150	MDL	5.46	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0243	JBQ	0.0195	MDL	5.46	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0219	JBQ	0.00852	MDL	5.46	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.141	JB	0.0122	MDL	5.46	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0774	JBQ	0.00809	MDL	5.46	PQL	ng/Kg	U	B
OCDD	5.32	JB	0.0450	MDL	10.9	PQL	ng/Kg	J	Z
OCDF	0.367	JB	0.0303	MDL	10.9	PQL	ng/Kg	U	B

Sample ID: **SL-146-SA5A-SB-3.0-4.0** ***Collected:*** **3/16/2011 10:16:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	4.97	JB	0.0245	MDL	5.75	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.424	JB	0.0354	MDL	5.75	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.192	JB	0.0510	MDL	5.75	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.386	JB	0.0384	MDL	5.75	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.564	JB	0.0521	MDL	5.75	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.224	JB	0.0360	MDL	5.75	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.321	JB	0.0483	MDL	5.75	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.217	JB	0.0409	MDL	5.75	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.108	JB	0.0190	MDL	5.75	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0718	JB	0.00909	MDL	5.75	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.364	JB	0.0361	MDL	5.75	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.184	JB	0.00875	MDL	5.75	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0409	JBQ	0.0160	MDL	1.15	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0194	JB	0.0128	MDL	1.15	PQL	ng/Kg	U	B
OCDF	8.66	JB	0.0358	MDL	11.5	PQL	ng/Kg	J	Z

Sample ID: **SL-158-SA5A-SB-4.0-5.0** ***Collected:*** **3/17/2011 3:40:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	2.96	JB	0.0305	MDL	5.61	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.702	JB	0.0137	MDL	5.61	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0718	JBQ	0.0184	MDL	5.61	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0700	JB	0.0125	MDL	5.61	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX063 **Laboratory: LL**

EDD Filename: DX063_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: **SL-158-SA5A-SB-4.0-5.0** ***Collected:*** **3/17/2011 3:40:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,6,7,8-HXCDD	0.0745	JB	0.0158	MDL	5.61	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0705	JB	0.0116	MDL	5.61	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0522	JB	0.0148	MDL	5.61	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0457	JB	0.0134	MDL	5.61	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0158	JBQ	0.0108	MDL	5.61	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0206	JB	0.00561	MDL	5.61	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.143	JB	0.0114	MDL	5.61	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0914	JB	0.00527	MDL	5.61	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0185	JB	0.00797	MDL	1.12	PQL	ng/Kg	U	B
OCDF	1.58	JB	0.0192	MDL	11.2	PQL	ng/Kg	U	B

Sample ID: **SL-159-SA5A-SB-4.0-5.0** ***Collected:*** **3/18/2011 9:24:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.289	JB	0.0134	MDL	5.45	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.419	JB	0.00926	MDL	5.45	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0525	JB	0.0133	MDL	5.45	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0282	JBQ	0.0105	MDL	5.45	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0841	JB	0.0125	MDL	5.45	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0514	JB	0.0108	MDL	5.45	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0856	JB	0.0109	MDL	5.45	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0624	JBQ	0.0101	MDL	5.45	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0670	JB	0.0123	MDL	5.45	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0482	JBQ	0.0114	MDL	5.45	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0766	JB	0.00577	MDL	5.45	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.147	JB	0.0110	MDL	5.45	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.115	JB	0.00556	MDL	5.45	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0157	JBQ	0.0121	MDL	1.09	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0271	JB	0.00828	MDL	1.09	PQL	ng/Kg	U	B
OCDD	0.725	JB	0.0244	MDL	10.9	PQL	ng/Kg	U	B
OCDF	0.289	JB	0.0179	MDL	10.9	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX063 **Laboratory: LL**

EDD Filename: DX063_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: **SL-160-SA5A-SB-4.0-5.0** ***Collected:*** **3/18/2011 3:14:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.188	JB	0.0170	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.128	JB	0.0105	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0344	JBQ	0.0171	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0249	JBQ	0.00872	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0332	JBQ	0.0147	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0214	JBQ	0.00781	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0912	JBQ	0.0139	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0622	JBQ	0.00974	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0178	JBQ	0.00680	MDL	5.66	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0514	JB	0.00804	MDL	5.66	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0467	JBQ	0.00668	MDL	5.66	PQL	ng/Kg	U	B
OCDD	0.565	JB	0.0250	MDL	11.3	PQL	ng/Kg	U	B
OCDF	0.111	JBQ	0.0227	MDL	11.3	PQL	ng/Kg	U	B

Sample ID: **SL-160-SA5A-SB-9.0-10.0** ***Collected:*** **3/18/2011 3:24:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.416	JB	0.0224	MDL	5.38	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.188	JB	0.00903	MDL	5.38	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0260	JBQ	0.0120	MDL	5.38	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0233	JBQ	0.00925	MDL	5.38	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0303	JBQ	0.0131	MDL	5.38	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0252	JBQ	0.00753	MDL	5.38	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0301	JBQ	0.0127	MDL	5.38	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0309	JBQ	0.00871	MDL	5.38	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.00982	JBQ	0.00613	MDL	5.38	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0408	JBQ	0.00742	MDL	5.38	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0568	JBQ	0.00591	MDL	5.38	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0292	JBQ	0.0149	MDL	1.08	PQL	ng/Kg	U	B
OCDD	3.22	JB	0.0310	MDL	10.8	PQL	ng/Kg	J	Z
OCDF	0.262	JB	0.0199	MDL	10.8	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX063 **Laboratory: LL**

EDD Filename: DX063_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: **SL-161-SA5A-SB-4.0-5.0** ***Collected:*** **3/21/2011 8:54:00** ***Analysis Type:*** **RES** ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.174	JB	0.0161	MDL	5.56	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.0864	JB	0.00857	MDL	5.56	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0491	JBQ	0.0139	MDL	5.56	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0183	JB	0.00745	MDL	5.56	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.140	JB	0.0132	MDL	5.56	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0787	JB	0.00901	MDL	5.56	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0179	JBQ	0.0145	MDL	5.56	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0190	JB	0.00667	MDL	5.56	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0351	JB	0.00756	MDL	5.56	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0476	JBQ	0.00656	MDL	5.56	PQL	ng/Kg	U	B
OCDD	0.612	JB	0.0249	MDL	11.1	PQL	ng/Kg	U	B
OCDF	0.116	JBQ	0.0206	MDL	11.1	PQL	ng/Kg	U	B

Sample ID: **SL-161-SA5A-SB-7.5-8.5** ***Collected:*** **3/21/2011 9:03:00** ***Analysis Type:*** **RES** ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.170	JB	0.0124	MDL	5.38	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.111	JB	0.00732	MDL	5.38	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0461	JBQ	0.0118	MDL	5.38	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0101	JBQ	0.00926	MDL	5.38	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0222	JBQ	0.00710	MDL	5.38	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0169	JB	0.00947	MDL	5.38	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0192	JB	0.00614	MDL	5.38	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0159	JBQ	0.00904	MDL	5.38	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0225	JBQ	0.00829	MDL	5.38	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.00950	JB	0.00517	MDL	5.38	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0429	JBQ	0.00646	MDL	5.38	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0469	JBQ	0.00506	MDL	5.38	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0125	JBQ	0.00926	MDL	1.08	PQL	ng/Kg	U	B
OCDD	0.459	JB	0.0220	MDL	10.8	PQL	ng/Kg	U	B
OCDF	0.140	JBQ	0.0191	MDL	10.8	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX063 **Laboratory: LL**

EDD Filename: DX063_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: **SL-163-SA5A-SB-4.0-5.0** ***Collected:*** **3/21/2011 11:49:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.184	JB	0.0188	MDL	5.79	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.0906	JBQ	0.00800	MDL	5.79	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0260	JB	0.0115	MDL	5.79	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0315	JBQ	0.0107	MDL	5.79	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0215	JBQ	0.0122	MDL	5.79	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0231	JB	0.00857	MDL	5.79	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0411	JBQ	0.0112	MDL	5.79	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0230	JBQ	0.0153	MDL	5.79	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0446	JB	0.00776	MDL	5.79	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0468	JBQ	0.00695	MDL	5.79	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0137	JB	0.0103	MDL	1.16	PQL	ng/Kg	U	B
OCDD	0.515	JB	0.0341	MDL	11.6	PQL	ng/Kg	U	B
OCDF	0.104	JBQ	0.0256	MDL	11.6	PQL	ng/Kg	U	B

Sample ID: **SL-168-SA5A-SB-4.0-5.0** ***Collected:*** **3/18/2011 12:49:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	0.546	JB	0.0239	MDL	5.61	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.102	JBQ	0.0329	MDL	5.61	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0639	JB	0.0143	MDL	5.61	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0811	JBQ	0.0210	MDL	5.61	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0653	JBQ	0.0138	MDL	5.61	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0593	JBQ	0.0198	MDL	5.61	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0611	JBQ	0.0152	MDL	5.61	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.144	JB	0.0137	MDL	5.61	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0885	JBQ	0.00606	MDL	5.61	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0103	JB	0.00875	MDL	1.12	PQL	ng/Kg	U	B
OCDF	0.542	JB	0.0205	MDL	11.2	PQL	ng/Kg	U	B

Sample ID: **SL-169-SA5A-SB-4.0-5.0** ***Collected:*** **3/18/2011 10:47:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.359	JB	0.0224	MDL	5.80	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.404	JB	0.0125	MDL	5.80	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0968	JBQ	0.0182	MDL	5.80	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX063 **Laboratory: LL**

EDD Filename: DX063_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: **SL-169-SA5A-SB-4.0-5.0** ***Collected:*** **3/18/2011 10:47:00** ***Analysis Type:*** **RES** ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8-HxCDD	0.0828	JB	0.0183	MDL	5.80	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.130	JB	0.0167	MDL	5.80	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.114	JB	0.0191	MDL	5.80	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.136	JB	0.0144	MDL	5.80	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.122	JB	0.0184	MDL	5.80	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.112	JB	0.0177	MDL	5.80	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.158	JB	0.0136	MDL	5.80	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.137	JB	0.00650	MDL	5.80	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.190	JB	0.0153	MDL	5.80	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.193	JB	0.00673	MDL	5.80	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0369	JBQ	0.0108	MDL	1.16	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0353	JBQ	0.00916	MDL	1.16	PQL	ng/Kg	U	B
OCDD	1.18	JB	0.0205	MDL	11.6	PQL	ng/Kg	U	B
OCDF	0.357	JB	0.0232	MDL	11.6	PQL	ng/Kg	U	B

Sample ID: **SL-180-SA5A-SB-4.0-5.0** ***Collected:*** **3/22/2011 1:49:00** ***Analysis Type:*** **RES** ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.470	JB	0.0228	MDL	5.81	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.375	JB	0.0115	MDL	5.81	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0692	JB	0.0200	MDL	5.81	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0805	JB	0.0185	MDL	5.81	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.116	JBQ	0.0186	MDL	5.81	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0603	JBQ	0.0169	MDL	5.81	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.384	JB	0.0173	MDL	5.81	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.434	JB	0.0209	MDL	5.81	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.0311	JB	0.0155	MDL	5.81	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0627	JB	0.00814	MDL	5.81	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.150	JB	0.0173	MDL	5.81	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0903	JBQ	0.00791	MDL	5.81	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0158	JBQ	0.0126	MDL	1.16	PQL	ng/Kg	U	B
OCDD	1.60	JB	0.0299	MDL	11.6	PQL	ng/Kg	U	B
OCDF	0.352	JB	0.0299	MDL	11.6	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX063 **Laboratory: LL**

EDD Filename: DX063_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: **SL-181-SA5A-SB-4.0-5.0** ***Collected:*** **3/22/2011 3:13:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	1.52	JB	0.0410	MDL	6.12	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.189	JB	0.0279	MDL	6.12	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.125	JBQ	0.0618	MDL	6.12	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.527	JB	0.0520	MDL	6.12	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.217	JB	0.0491	MDL	6.12	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.573	JB	0.0367	MDL	6.12	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.469	JB	0.0280	MDL	6.12	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.156	JBQ	0.0269	MDL	6.12	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.220	JB	0.0251	MDL	6.12	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.340	JB	0.0229	MDL	6.12	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.182	JB	0.0388	MDL	1.22	PQL	ng/Kg	J	Z
OCDF	6.36	JB	0.0459	MDL	12.2	PQL	ng/Kg	J	Z

Sample ID: **SL-231-SA5A-SB-2.0-3.0** ***Collected:*** **3/22/2011 11:03:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	1.60	JB	0.0320	MDL	5.66	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.450	JB	0.0168	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0591	JB	0.0251	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0526	JBQ	0.0210	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.241	JB	0.0216	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.125	JB	0.0217	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.105	JB	0.0183	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.130	JBQ	0.0203	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0770	JB	0.0213	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0826	JBQ	0.0179	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.461	JB	0.0169	MDL	5.66	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.162	JB	0.0174	MDL	5.66	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.201	JB	0.0163	MDL	5.66	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0150	JBQ	0.0145	MDL	1.13	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0525	JBQ	0.0223	MDL	1.13	PQL	ng/Kg	U	B
OCDF	0.552	JB	0.0302	MDL	11.3	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX063 **Laboratory: LL**

EDD Filename: DX063_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: **SL-252-SA5A-SB-4.0-5.0** ***Collected:*** **3/21/2011 3:35:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.127	JBQ	0.0152	MDL	5.71	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.0468	JB	0.00868	MDL	5.71	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0202	JBQ	0.0100	MDL	5.71	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0249	JBQ	0.0146	MDL	5.71	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0474	JBQ	0.0124	MDL	5.71	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0233	JBQ	0.00970	MDL	5.71	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0937	JBQ	0.0115	MDL	5.71	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0692	JBQ	0.00913	MDL	5.71	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0301	JB	0.0152	MDL	5.71	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0336	JBQ	0.00639	MDL	5.71	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0394	JBQ	0.00753	MDL	5.71	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0484	JB	0.00662	MDL	5.71	PQL	ng/Kg	U	B
OCDD	0.311	JBQ	0.0220	MDL	11.4	PQL	ng/Kg	U	B
OCDF	0.131	JBQ	0.0196	MDL	11.4	PQL	ng/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DX063 **Laboratory: LL**

EDD Filename: DX063_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
*#	Professional Judgment
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Verification Correlation Coefficient
C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DX063 **Laboratory: LL**

EDD Filename: DX063_v1 **eQAPP Name: CDM_SSFL_110509**

F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation
L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery Lower Estimation

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DX063 **Laboratory: LL**

EDD Filename: DX063_v1 **eQAPP Name: CDM_SSFL_110509**

R	Continuing Calibration Verification Percent Recovery Lower Rejection
R	Continuing Calibration Verification Percent Recovery Upper Estimation
R	Continuing Calibration Verification Percent Recovery Upper Rejection
R	Continuing Calibration Verification Relative Response Factor
R	Initial Calibration Relative Response Factor
R	Initial Calibration Verification Percent Recovery Lower Estimation
R	Initial Calibration Verification Percent Recovery Lower Rejection
R	Initial Calibration Verification Percent Recovery Upper Estimation
R	Initial Calibration Verification Percent Recovery Upper Rejection
R	Initial Calibration Verification Relative Response Factor
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control Outlier Reports

DX063

Method Blank Outlier Report

Lab Reporting Batch ID: DX063 **Laboratory: LL**

EDD Filename: DX063_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **AQ**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLK0960B372048	4/7/2011 8:48:00 PM	1,2,3,4,6,7,8-HPCDD	2.46 pg/L	EB08-SA5A-032211
		1,2,3,4,6,7,8-HPCDF	1.36 pg/L	
		1,2,3,4,7,8,9-HPCDF	1.23 pg/L	
		1,2,3,4,7,8-HxCDD	0.912 pg/L	
		1,2,3,4,7,8-HXCDF	0.954 pg/L	
		1,2,3,6,7,8-HXCDD	1.14 pg/L	
		1,2,3,6,7,8-HXCDF	0.764 pg/L	
		1,2,3,7,8,9-HXCDD	0.734 pg/L	
		1,2,3,7,8,9-HXCDF	0.993 pg/L	
		1,2,3,7,8-PECDD	1.24 pg/L	
		1,2,3,7,8-PECDF	0.902 pg/L	
		2,3,4,6,7,8-HXCDF	0.783 pg/L	
		2,3,4,7,8-PECDF	1.07 pg/L	
		2,3,7,8-TCDF	0.281 pg/L	
		OCDD	5.27 pg/L	
		OCDF	2.34 pg/L	

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
EB08-SA5A-032211(RES)	1,2,3,4,6,7,8-HPCDD	3.09 pg/L	3.09U pg/L
EB08-SA5A-032211(RES)	1,2,3,4,6,7,8-HPCDF	1.93 pg/L	1.93U pg/L
EB08-SA5A-032211(RES)	1,2,3,4,7,8,9-HPCDF	0.978 pg/L	0.978U pg/L
EB08-SA5A-032211(RES)	1,2,3,4,7,8-HxCDD	0.850 pg/L	0.850U pg/L
EB08-SA5A-032211(RES)	1,2,3,4,7,8-HXCDF	1.05 pg/L	1.05U pg/L
EB08-SA5A-032211(RES)	1,2,3,6,7,8-HXCDD	0.635 pg/L	0.635U pg/L
EB08-SA5A-032211(RES)	1,2,3,6,7,8-HXCDF	0.766 pg/L	0.766U pg/L
EB08-SA5A-032211(RES)	1,2,3,7,8,9-HXCDD	0.793 pg/L	0.793U pg/L
EB08-SA5A-032211(RES)	1,2,3,7,8,9-HXCDF	1.07 pg/L	1.07U pg/L
EB08-SA5A-032211(RES)	1,2,3,7,8-PECDD	0.945 pg/L	0.945U pg/L
EB08-SA5A-032211(RES)	1,2,3,7,8-PECDF	0.643 pg/L	0.643U pg/L
EB08-SA5A-032211(RES)	2,3,4,6,7,8-HXCDF	0.933 pg/L	0.933U pg/L
EB08-SA5A-032211(RES)	2,3,4,7,8-PECDF	0.902 pg/L	0.902U pg/L
EB08-SA5A-032211(RES)	OCDD	5.66 pg/L	5.66U pg/L
EB08-SA5A-032211(RES)	OCDF	2.54 pg/L	2.54U pg/L

Method Blank Outlier Report

Lab Reporting Batch ID: DX063 **Laboratory: LL**

EDD Filename: DX063_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLK0910B371752	4/5/2011 5:52:00 PM	1,2,3,4,6,7,8-HPCDD	0.310 ng/Kg	SL-128-SA5A-SB-4.0-5.0
		1,2,3,4,6,7,8-HPCDF	0.442 ng/Kg	SL-128-SA5A-SB-9.0-10.0
		1,2,3,4,7,8,9-HPCDF	0.0789 ng/Kg	SL-133-SA5A-SB-4.0-5.0
		1,2,3,4,7,8-HxCDD	0.0182 ng/Kg	SL-136-SA5A-SB-4.0-5.0
		1,2,3,4,7,8-HXCDF	0.0878 ng/Kg	SL-139-SA5A-SB-2.5-3.5
		1,2,3,6,7,8-HXCDD	0.0403 ng/Kg	SL-146-SA5A-SB-3.0-4.0
		1,2,3,6,7,8-HXCDF	0.0723 ng/Kg	SL-158-SA5A-SB-4.0-5.0
		1,2,3,7,8,9-HXCDD	0.0388 ng/Kg	SL-159-SA5A-SB-4.0-5.0
		1,2,3,7,8,9-HXCDF	0.0760 ng/Kg	SL-160-SA5A-SB-4.0-5.0
		1,2,3,7,8-PECDD	0.0298 ng/Kg	SL-160-SA5A-SB-9.0-10.0
		1,2,3,7,8-PECDF	0.0287 ng/Kg	SL-161-SA5A-SB-4.0-5.0
		2,3,4,6,7,8-HXCDF	0.170 ng/Kg	SL-161-SA5A-SB-7.5-8.5
		2,3,4,7,8-PECDF	0.0800 ng/Kg	SL-163-SA5A-SB-4.0-5.0
		2,3,7,8-TCDD	0.0208 ng/Kg	SL-168-SA5A-SB-4.0-5.0
		2,3,7,8-TCDF	0.0115 ng/Kg	SL-169-SA5A-SB-4.0-5.0
		OCDD	0.510 ng/Kg	SL-180-SA5A-SB-4.0-5.0
		OCDF	0.345 ng/Kg	SL-181-SA5A-SB-4.0-5.0
				SL-231-SA5A-SB-2.0-3.0
				SL-252-SA5A-SB-4.0-5.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-128-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.192 ng/Kg	0.192U ng/Kg
SL-128-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HxCDD	0.0500 ng/Kg	0.0500U ng/Kg
SL-128-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.267 ng/Kg	0.267U ng/Kg
SL-128-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.171 ng/Kg	0.171U ng/Kg
SL-128-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.179 ng/Kg	0.179U ng/Kg
SL-128-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDD	0.137 ng/Kg	0.137U ng/Kg
SL-128-SA5A-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.232 ng/Kg	0.232U ng/Kg
SL-128-SA5A-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.246 ng/Kg	0.246U ng/Kg
SL-128-SA5A-SB-4.0-5.0(RES)	2,3,7,8-TCDD	0.0258 ng/Kg	0.0258U ng/Kg
SL-128-SA5A-SB-4.0-5.0(RES)	2,3,7,8-TCDF	0.0569 ng/Kg	0.0569U ng/Kg
SL-128-SA5A-SB-9.0-10.0(RES)	1,2,3,4,6,7,8-HPCDF	1.11 ng/Kg	1.11U ng/Kg
SL-128-SA5A-SB-9.0-10.0(RES)	1,2,3,4,7,8,9-HPCDF	0.100 ng/Kg	0.100U ng/Kg
SL-128-SA5A-SB-9.0-10.0(RES)	1,2,3,4,7,8-HxCDD	0.0276 ng/Kg	0.0276U ng/Kg
SL-128-SA5A-SB-9.0-10.0(RES)	1,2,3,4,7,8-HXCDF	0.179 ng/Kg	0.179U ng/Kg
SL-128-SA5A-SB-9.0-10.0(RES)	1,2,3,6,7,8-HXCDD	0.153 ng/Kg	0.153U ng/Kg
SL-128-SA5A-SB-9.0-10.0(RES)	1,2,3,6,7,8-HXCDF	0.139 ng/Kg	0.139U ng/Kg
SL-128-SA5A-SB-9.0-10.0(RES)	1,2,3,7,8,9-HXCDD	0.163 ng/Kg	0.163U ng/Kg
SL-128-SA5A-SB-9.0-10.0(RES)	1,2,3,7,8,9-HXCDF	0.138 ng/Kg	0.138U ng/Kg
SL-128-SA5A-SB-9.0-10.0(RES)	1,2,3,7,8-PECDD	0.0726 ng/Kg	0.0726U ng/Kg
SL-128-SA5A-SB-9.0-10.0(RES)	2,3,4,6,7,8-HXCDF	0.177 ng/Kg	0.177U ng/Kg
SL-128-SA5A-SB-9.0-10.0(RES)	2,3,4,7,8-PECDF	0.287 ng/Kg	0.287U ng/Kg
SL-128-SA5A-SB-9.0-10.0(RES)	2,3,7,8-TCDF	0.0299 ng/Kg	0.0299U ng/Kg
SL-133-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	1.37 ng/Kg	1.37U ng/Kg
SL-133-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.103 ng/Kg	0.103U ng/Kg
SL-133-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HxCDD	0.0438 ng/Kg	0.0438U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX063 **Laboratory: LL**

EDD Filename: DX063_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-133-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.151 ng/Kg	0.151U ng/Kg
SL-133-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDD	0.196 ng/Kg	0.196U ng/Kg
SL-133-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.119 ng/Kg	0.119U ng/Kg
SL-133-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.148 ng/Kg	0.148U ng/Kg
SL-133-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDD	0.0800 ng/Kg	0.0800U ng/Kg
SL-133-SA5A-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.208 ng/Kg	0.208U ng/Kg
SL-133-SA5A-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.312 ng/Kg	0.312U ng/Kg
SL-133-SA5A-SB-4.0-5.0(RES)	2,3,7,8-TCDD	0.0182 ng/Kg	0.0182U ng/Kg
SL-136-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.389 ng/Kg	0.389U ng/Kg
SL-136-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.373 ng/Kg	0.373U ng/Kg
SL-136-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0585 ng/Kg	0.0585U ng/Kg
SL-136-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HxCDD	0.0154 ng/Kg	0.0154U ng/Kg
SL-136-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.0496 ng/Kg	0.0496U ng/Kg
SL-136-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDD	0.0286 ng/Kg	0.0286U ng/Kg
SL-136-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.0608 ng/Kg	0.0608U ng/Kg
SL-136-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDD	0.0280 ng/Kg	0.0280U ng/Kg
SL-136-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.0595 ng/Kg	0.0595U ng/Kg
SL-136-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDD	0.0193 ng/Kg	0.0193U ng/Kg
SL-136-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.0135 ng/Kg	0.0135U ng/Kg
SL-136-SA5A-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.129 ng/Kg	0.129U ng/Kg
SL-136-SA5A-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.0830 ng/Kg	0.0830U ng/Kg
SL-136-SA5A-SB-4.0-5.0(RES)	2,3,7,8-TCDF	0.0109 ng/Kg	0.0109U ng/Kg
SL-136-SA5A-SB-4.0-5.0(RES)	OCDF	0.305 ng/Kg	0.305U ng/Kg
SL-139-SA5A-SB-2.5-3.5(RES)	1,2,3,4,6,7,8-HPCDD	0.691 ng/Kg	0.691U ng/Kg
SL-139-SA5A-SB-2.5-3.5(RES)	1,2,3,4,6,7,8-HPCDF	0.424 ng/Kg	0.424U ng/Kg
SL-139-SA5A-SB-2.5-3.5(RES)	1,2,3,4,7,8,9-HPCDF	0.0743 ng/Kg	0.0743U ng/Kg
SL-139-SA5A-SB-2.5-3.5(RES)	1,2,3,6,7,8-HXCDD	0.0654 ng/Kg	0.0654U ng/Kg
SL-139-SA5A-SB-2.5-3.5(RES)	1,2,3,6,7,8-HXCDF	0.0627 ng/Kg	0.0627U ng/Kg
SL-139-SA5A-SB-2.5-3.5(RES)	1,2,3,7,8,9-HXCDD	0.0594 ng/Kg	0.0594U ng/Kg
SL-139-SA5A-SB-2.5-3.5(RES)	1,2,3,7,8,9-HXCDF	0.0467 ng/Kg	0.0467U ng/Kg
SL-139-SA5A-SB-2.5-3.5(RES)	1,2,3,7,8-PECDD	0.0243 ng/Kg	0.0243U ng/Kg
SL-139-SA5A-SB-2.5-3.5(RES)	1,2,3,7,8-PECDF	0.0219 ng/Kg	0.0219U ng/Kg
SL-139-SA5A-SB-2.5-3.5(RES)	2,3,4,6,7,8-HXCDF	0.141 ng/Kg	0.141U ng/Kg
SL-139-SA5A-SB-2.5-3.5(RES)	2,3,4,7,8-PECDF	0.0774 ng/Kg	0.0774U ng/Kg
SL-139-SA5A-SB-2.5-3.5(RES)	OCDF	0.367 ng/Kg	0.367U ng/Kg
SL-146-SA5A-SB-3.0-4.0(RES)	1,2,3,4,7,8-HXCDF	0.386 ng/Kg	0.386U ng/Kg
SL-146-SA5A-SB-3.0-4.0(RES)	1,2,3,6,7,8-HXCDF	0.224 ng/Kg	0.224U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX063 **Laboratory: LL**

EDD Filename: DX063_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-146-SA5A-SB-3.0-4.0(RES)	1,2,3,7,8,9-HXCDF	0.217 ng/Kg	0.217U ng/Kg
SL-146-SA5A-SB-3.0-4.0(RES)	1,2,3,7,8-PECDD	0.108 ng/Kg	0.108U ng/Kg
SL-146-SA5A-SB-3.0-4.0(RES)	1,2,3,7,8-PECDF	0.0718 ng/Kg	0.0718U ng/Kg
SL-146-SA5A-SB-3.0-4.0(RES)	2,3,4,6,7,8-HXCDF	0.364 ng/Kg	0.364U ng/Kg
SL-146-SA5A-SB-3.0-4.0(RES)	2,3,4,7,8-PECDF	0.184 ng/Kg	0.184U ng/Kg
SL-146-SA5A-SB-3.0-4.0(RES)	2,3,7,8-TCDD	0.0409 ng/Kg	0.0409U ng/Kg
SL-146-SA5A-SB-3.0-4.0(RES)	2,3,7,8-TCDF	0.0194 ng/Kg	0.0194U ng/Kg
SL-158-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.702 ng/Kg	0.702U ng/Kg
SL-158-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0718 ng/Kg	0.0718U ng/Kg
SL-158-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.0700 ng/Kg	0.0700U ng/Kg
SL-158-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDD	0.0745 ng/Kg	0.0745U ng/Kg
SL-158-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.0705 ng/Kg	0.0705U ng/Kg
SL-158-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDD	0.0522 ng/Kg	0.0522U ng/Kg
SL-158-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.0457 ng/Kg	0.0457U ng/Kg
SL-158-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDD	0.0158 ng/Kg	0.0158U ng/Kg
SL-158-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.0206 ng/Kg	0.0206U ng/Kg
SL-158-SA5A-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.143 ng/Kg	0.143U ng/Kg
SL-158-SA5A-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.0914 ng/Kg	0.0914U ng/Kg
SL-158-SA5A-SB-4.0-5.0(RES)	2,3,7,8-TCDF	0.0185 ng/Kg	0.0185U ng/Kg
SL-158-SA5A-SB-4.0-5.0(RES)	OCDF	1.58 ng/Kg	1.58U ng/Kg
SL-159-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.289 ng/Kg	0.289U ng/Kg
SL-159-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.419 ng/Kg	0.419U ng/Kg
SL-159-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0525 ng/Kg	0.0525U ng/Kg
SL-159-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HxCDD	0.0282 ng/Kg	0.0282U ng/Kg
SL-159-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.0841 ng/Kg	0.0841U ng/Kg
SL-159-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDD	0.0514 ng/Kg	0.0514U ng/Kg
SL-159-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.0856 ng/Kg	0.0856U ng/Kg
SL-159-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDD	0.0624 ng/Kg	0.0624U ng/Kg
SL-159-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.0670 ng/Kg	0.0670U ng/Kg
SL-159-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDD	0.0482 ng/Kg	0.0482U ng/Kg
SL-159-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.0766 ng/Kg	0.0766U ng/Kg
SL-159-SA5A-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.147 ng/Kg	0.147U ng/Kg
SL-159-SA5A-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.115 ng/Kg	0.115U ng/Kg
SL-159-SA5A-SB-4.0-5.0(RES)	2,3,7,8-TCDD	0.0157 ng/Kg	0.0157U ng/Kg
SL-159-SA5A-SB-4.0-5.0(RES)	2,3,7,8-TCDF	0.0271 ng/Kg	0.0271U ng/Kg
SL-159-SA5A-SB-4.0-5.0(RES)	OCDD	0.725 ng/Kg	0.725U ng/Kg
SL-159-SA5A-SB-4.0-5.0(RES)	OCDF	0.289 ng/Kg	0.289U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX063 **Laboratory: LL**

EDD Filename: DX063_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-160-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.188 ng/Kg	0.188U ng/Kg
SL-160-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.128 ng/Kg	0.128U ng/Kg
SL-160-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0344 ng/Kg	0.0344U ng/Kg
SL-160-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.0249 ng/Kg	0.0249U ng/Kg
SL-160-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDD	0.0332 ng/Kg	0.0332U ng/Kg
SL-160-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.0214 ng/Kg	0.0214U ng/Kg
SL-160-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDD	0.0912 ng/Kg	0.0912U ng/Kg
SL-160-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.0622 ng/Kg	0.0622U ng/Kg
SL-160-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.0178 ng/Kg	0.0178U ng/Kg
SL-160-SA5A-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.0514 ng/Kg	0.0514U ng/Kg
SL-160-SA5A-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.0467 ng/Kg	0.0467U ng/Kg
SL-160-SA5A-SB-4.0-5.0(RES)	OCDD	0.565 ng/Kg	0.565U ng/Kg
SL-160-SA5A-SB-4.0-5.0(RES)	OCDF	0.111 ng/Kg	0.111U ng/Kg
SL-160-SA5A-SB-9.0-10.0(RES)	1,2,3,4,6,7,8-HPCDD	0.416 ng/Kg	0.416U ng/Kg
SL-160-SA5A-SB-9.0-10.0(RES)	1,2,3,4,6,7,8-HPCDF	0.188 ng/Kg	0.188U ng/Kg
SL-160-SA5A-SB-9.0-10.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0260 ng/Kg	0.0260U ng/Kg
SL-160-SA5A-SB-9.0-10.0(RES)	1,2,3,4,7,8-HXCDF	0.0233 ng/Kg	0.0233U ng/Kg
SL-160-SA5A-SB-9.0-10.0(RES)	1,2,3,6,7,8-HXCDD	0.0303 ng/Kg	0.0303U ng/Kg
SL-160-SA5A-SB-9.0-10.0(RES)	1,2,3,6,7,8-HXCDF	0.0252 ng/Kg	0.0252U ng/Kg
SL-160-SA5A-SB-9.0-10.0(RES)	1,2,3,7,8,9-HXCDD	0.0301 ng/Kg	0.0301U ng/Kg
SL-160-SA5A-SB-9.0-10.0(RES)	1,2,3,7,8,9-HXCDF	0.0309 ng/Kg	0.0309U ng/Kg
SL-160-SA5A-SB-9.0-10.0(RES)	1,2,3,7,8-PECDF	0.00982 ng/Kg	0.00982U ng/Kg
SL-160-SA5A-SB-9.0-10.0(RES)	2,3,4,6,7,8-HXCDF	0.0408 ng/Kg	0.0408U ng/Kg
SL-160-SA5A-SB-9.0-10.0(RES)	2,3,4,7,8-PECDF	0.0568 ng/Kg	0.0568U ng/Kg
SL-160-SA5A-SB-9.0-10.0(RES)	2,3,7,8-TCDD	0.0292 ng/Kg	0.0292U ng/Kg
SL-160-SA5A-SB-9.0-10.0(RES)	OCDF	0.262 ng/Kg	0.262U ng/Kg
SL-161-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.174 ng/Kg	0.174U ng/Kg
SL-161-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.0864 ng/Kg	0.0864U ng/Kg
SL-161-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDD	0.0491 ng/Kg	0.0491U ng/Kg
SL-161-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.0183 ng/Kg	0.0183U ng/Kg
SL-161-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDD	0.140 ng/Kg	0.140U ng/Kg
SL-161-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.0787 ng/Kg	0.0787U ng/Kg
SL-161-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDD	0.0179 ng/Kg	0.0179U ng/Kg
SL-161-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.0190 ng/Kg	0.0190U ng/Kg
SL-161-SA5A-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.0351 ng/Kg	0.0351U ng/Kg
SL-161-SA5A-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.0476 ng/Kg	0.0476U ng/Kg
SL-161-SA5A-SB-4.0-5.0(RES)	OCDD	0.612 ng/Kg	0.612U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX063 **Laboratory: LL**

EDD Filename: DX063_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-161-SA5A-SB-4.0-5.0(RES)	OCDF	0.116 ng/Kg	0.116U ng/Kg
SL-161-SA5A-SB-7.5-8.5(RES)	1,2,3,4,6,7,8-HPCDD	0.170 ng/Kg	0.170U ng/Kg
SL-161-SA5A-SB-7.5-8.5(RES)	1,2,3,4,6,7,8-HPCDF	0.111 ng/Kg	0.111U ng/Kg
SL-161-SA5A-SB-7.5-8.5(RES)	1,2,3,4,7,8,9-HPCDF	0.0461 ng/Kg	0.0461U ng/Kg
SL-161-SA5A-SB-7.5-8.5(RES)	1,2,3,4,7,8-HxCDD	0.0101 ng/Kg	0.0101U ng/Kg
SL-161-SA5A-SB-7.5-8.5(RES)	1,2,3,4,7,8-HXCDF	0.0222 ng/Kg	0.0222U ng/Kg
SL-161-SA5A-SB-7.5-8.5(RES)	1,2,3,6,7,8-HXCDD	0.0169 ng/Kg	0.0169U ng/Kg
SL-161-SA5A-SB-7.5-8.5(RES)	1,2,3,6,7,8-HXCDF	0.0192 ng/Kg	0.0192U ng/Kg
SL-161-SA5A-SB-7.5-8.5(RES)	1,2,3,7,8,9-HXCDD	0.0159 ng/Kg	0.0159U ng/Kg
SL-161-SA5A-SB-7.5-8.5(RES)	1,2,3,7,8,9-HXCDF	0.0225 ng/Kg	0.0225U ng/Kg
SL-161-SA5A-SB-7.5-8.5(RES)	1,2,3,7,8-PECDF	0.00950 ng/Kg	0.00950U ng/Kg
SL-161-SA5A-SB-7.5-8.5(RES)	2,3,4,6,7,8-HXCDF	0.0429 ng/Kg	0.0429U ng/Kg
SL-161-SA5A-SB-7.5-8.5(RES)	2,3,4,7,8-PECDF	0.0469 ng/Kg	0.0469U ng/Kg
SL-161-SA5A-SB-7.5-8.5(RES)	2,3,7,8-TCDF	0.0125 ng/Kg	0.0125U ng/Kg
SL-161-SA5A-SB-7.5-8.5(RES)	OCDD	0.459 ng/Kg	0.459U ng/Kg
SL-161-SA5A-SB-7.5-8.5(RES)	OCDF	0.140 ng/Kg	0.140U ng/Kg
SL-163-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.184 ng/Kg	0.184U ng/Kg
SL-163-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.0906 ng/Kg	0.0906U ng/Kg
SL-163-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0260 ng/Kg	0.0260U ng/Kg
SL-163-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.0315 ng/Kg	0.0315U ng/Kg
SL-163-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDD	0.0215 ng/Kg	0.0215U ng/Kg
SL-163-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.0231 ng/Kg	0.0231U ng/Kg
SL-163-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDD	0.0411 ng/Kg	0.0411U ng/Kg
SL-163-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDD	0.0230 ng/Kg	0.0230U ng/Kg
SL-163-SA5A-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.0446 ng/Kg	0.0446U ng/Kg
SL-163-SA5A-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.0468 ng/Kg	0.0468U ng/Kg
SL-163-SA5A-SB-4.0-5.0(RES)	2,3,7,8-TCDF	0.0137 ng/Kg	0.0137U ng/Kg
SL-163-SA5A-SB-4.0-5.0(RES)	OCDD	0.515 ng/Kg	0.515U ng/Kg
SL-163-SA5A-SB-4.0-5.0(RES)	OCDF	0.104 ng/Kg	0.104U ng/Kg
SL-168-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.546 ng/Kg	0.546U ng/Kg
SL-168-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.102 ng/Kg	0.102U ng/Kg
SL-168-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.0639 ng/Kg	0.0639U ng/Kg
SL-168-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDD	0.0811 ng/Kg	0.0811U ng/Kg
SL-168-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.0653 ng/Kg	0.0653U ng/Kg
SL-168-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDD	0.0593 ng/Kg	0.0593U ng/Kg
SL-168-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.0611 ng/Kg	0.0611U ng/Kg
SL-168-SA5A-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.144 ng/Kg	0.144U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX063 **Laboratory: LL**

EDD Filename: DX063_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-168-SA5A-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.0885 ng/Kg	0.0885U ng/Kg
SL-168-SA5A-SB-4.0-5.0(RES)	2,3,7,8-TCDF	0.0103 ng/Kg	0.0103U ng/Kg
SL-168-SA5A-SB-4.0-5.0(RES)	OCDF	0.542 ng/Kg	0.542U ng/Kg
SL-169-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.359 ng/Kg	0.359U ng/Kg
SL-169-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.404 ng/Kg	0.404U ng/Kg
SL-169-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0968 ng/Kg	0.0968U ng/Kg
SL-169-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HxCDD	0.0828 ng/Kg	0.0828U ng/Kg
SL-169-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.130 ng/Kg	0.130U ng/Kg
SL-169-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDD	0.114 ng/Kg	0.114U ng/Kg
SL-169-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.136 ng/Kg	0.136U ng/Kg
SL-169-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDD	0.122 ng/Kg	0.122U ng/Kg
SL-169-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.112 ng/Kg	0.112U ng/Kg
SL-169-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.137 ng/Kg	0.137U ng/Kg
SL-169-SA5A-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.190 ng/Kg	0.190U ng/Kg
SL-169-SA5A-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.193 ng/Kg	0.193U ng/Kg
SL-169-SA5A-SB-4.0-5.0(RES)	2,3,7,8-TCDD	0.0369 ng/Kg	0.0369U ng/Kg
SL-169-SA5A-SB-4.0-5.0(RES)	2,3,7,8-TCDF	0.0353 ng/Kg	0.0353U ng/Kg
SL-169-SA5A-SB-4.0-5.0(RES)	OCDD	1.18 ng/Kg	1.18U ng/Kg
SL-169-SA5A-SB-4.0-5.0(RES)	OCDF	0.357 ng/Kg	0.357U ng/Kg
SL-180-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.470 ng/Kg	0.470U ng/Kg
SL-180-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.375 ng/Kg	0.375U ng/Kg
SL-180-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0692 ng/Kg	0.0692U ng/Kg
SL-180-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.0805 ng/Kg	0.0805U ng/Kg
SL-180-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDD	0.116 ng/Kg	0.116U ng/Kg
SL-180-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.0603 ng/Kg	0.0603U ng/Kg
SL-180-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDD	0.0311 ng/Kg	0.0311U ng/Kg
SL-180-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.0627 ng/Kg	0.0627U ng/Kg
SL-180-SA5A-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.150 ng/Kg	0.150U ng/Kg
SL-180-SA5A-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.0903 ng/Kg	0.0903U ng/Kg
SL-180-SA5A-SB-4.0-5.0(RES)	2,3,7,8-TCDF	0.0158 ng/Kg	0.0158U ng/Kg
SL-180-SA5A-SB-4.0-5.0(RES)	OCDD	1.60 ng/Kg	1.60U ng/Kg
SL-180-SA5A-SB-4.0-5.0(RES)	OCDF	0.352 ng/Kg	0.352U ng/Kg
SL-181-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	1.52 ng/Kg	1.52U ng/Kg
SL-181-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.189 ng/Kg	0.189U ng/Kg
SL-181-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.125 ng/Kg	0.125U ng/Kg
SL-181-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.217 ng/Kg	0.217U ng/Kg
SL-181-SA5A-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.220 ng/Kg	0.220U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX063 **Laboratory: LL**

EDD Filename: DX063_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1613B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-181-SA5A-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.340 ng/Kg	0.340U ng/Kg
SL-231-SA5A-SB-2.0-3.0(RES)	1,2,3,4,6,7,8-HPCDF	0.450 ng/Kg	0.450U ng/Kg
SL-231-SA5A-SB-2.0-3.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0591 ng/Kg	0.0591U ng/Kg
SL-231-SA5A-SB-2.0-3.0(RES)	1,2,3,4,7,8-HxCDD	0.0526 ng/Kg	0.0526U ng/Kg
SL-231-SA5A-SB-2.0-3.0(RES)	1,2,3,4,7,8-HXCDF	0.241 ng/Kg	0.241U ng/Kg
SL-231-SA5A-SB-2.0-3.0(RES)	1,2,3,6,7,8-HXCDD	0.125 ng/Kg	0.125U ng/Kg
SL-231-SA5A-SB-2.0-3.0(RES)	1,2,3,6,7,8-HXCDF	0.105 ng/Kg	0.105U ng/Kg
SL-231-SA5A-SB-2.0-3.0(RES)	1,2,3,7,8,9-HXCDD	0.130 ng/Kg	0.130U ng/Kg
SL-231-SA5A-SB-2.0-3.0(RES)	1,2,3,7,8,9-HXCDF	0.0770 ng/Kg	0.0770U ng/Kg
SL-231-SA5A-SB-2.0-3.0(RES)	1,2,3,7,8-PECDD	0.0826 ng/Kg	0.0826U ng/Kg
SL-231-SA5A-SB-2.0-3.0(RES)	2,3,4,6,7,8-HXCDF	0.162 ng/Kg	0.162U ng/Kg
SL-231-SA5A-SB-2.0-3.0(RES)	2,3,4,7,8-PECDF	0.201 ng/Kg	0.201U ng/Kg
SL-231-SA5A-SB-2.0-3.0(RES)	2,3,7,8-TCDD	0.0150 ng/Kg	0.0150U ng/Kg
SL-231-SA5A-SB-2.0-3.0(RES)	2,3,7,8-TCDF	0.0525 ng/Kg	0.0525U ng/Kg
SL-231-SA5A-SB-2.0-3.0(RES)	OCDF	0.552 ng/Kg	0.552U ng/Kg
SL-252-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.127 ng/Kg	0.127U ng/Kg
SL-252-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.0468 ng/Kg	0.0468U ng/Kg
SL-252-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0202 ng/Kg	0.0202U ng/Kg
SL-252-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.0249 ng/Kg	0.0249U ng/Kg
SL-252-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDD	0.0474 ng/Kg	0.0474U ng/Kg
SL-252-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.0233 ng/Kg	0.0233U ng/Kg
SL-252-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDD	0.0937 ng/Kg	0.0937U ng/Kg
SL-252-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.0692 ng/Kg	0.0692U ng/Kg
SL-252-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDD	0.0301 ng/Kg	0.0301U ng/Kg
SL-252-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.0336 ng/Kg	0.0336U ng/Kg
SL-252-SA5A-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.0394 ng/Kg	0.0394U ng/Kg
SL-252-SA5A-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.0484 ng/Kg	0.0484U ng/Kg
SL-252-SA5A-SB-4.0-5.0(RES)	OCDD	0.311 ng/Kg	0.311U ng/Kg
SL-252-SA5A-SB-4.0-5.0(RES)	OCDF	0.131 ng/Kg	0.131U ng/Kg

Reporting Limit Outliers

Lab Reporting Batch ID: DX063 **Laboratory: LL**

EDD Filename: DX063_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1613B

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB08-SA5A-032211	1,2,3,4,6,7,8-HPCDD	JB	3.09	10.1	PQL	pg/L	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	1.93	10.1	PQL	pg/L	
	1,2,3,4,7,8,9-HPCDF	JB	0.978	10.1	PQL	pg/L	
	1,2,3,4,7,8-HxCDD	JBQ	0.850	10.1	PQL	pg/L	
	1,2,3,4,7,8-HXCDF	JBQ	1.05	10.1	PQL	pg/L	
	1,2,3,6,7,8-HXCDD	JBQ	0.635	10.1	PQL	pg/L	
	1,2,3,6,7,8-HXCDF	JBQ	0.766	10.1	PQL	pg/L	
	1,2,3,7,8,9-HXCDD	JB	0.793	10.1	PQL	pg/L	
	1,2,3,7,8,9-HXCDF	JBQ	1.07	10.1	PQL	pg/L	
	1,2,3,7,8-PECDD	JBQ	0.945	10.1	PQL	pg/L	
	1,2,3,7,8-PECDF	JBQ	0.643	10.1	PQL	pg/L	
	2,3,4,6,7,8-HXCDF	JB	0.933	10.1	PQL	pg/L	
	2,3,4,7,8-PECDF	JBQ	0.902	10.1	PQL	pg/L	
	2,3,7,8-TCDD	JQ	0.238	2.01	PQL	pg/L	
	OCDD	JBQ	5.66	20.1	PQL	pg/L	
	OCDF	JBQ	2.54	20.1	PQL	pg/L	

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-128-SA5A-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDF	JB	2.60	5.62	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JB	0.192	5.62	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0500	5.62	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.267	5.62	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.352	5.62	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.171	5.62	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.239	5.62	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.179	5.62	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.137	5.62	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.543	5.62	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.232	5.62	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.246	5.62	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0258	1.12	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.0569	1.12	PQL	ng/Kg	
	OCDF	JB	5.87	11.2	PQL	ng/Kg	
SL-128-SA5A-SB-9.0-10.0	1,2,3,4,6,7,8-HPCDD	JB	3.12	5.29	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	1.11	5.29	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.100	5.29	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0276	5.29	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.179	5.29	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.153	5.29	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.139	5.29	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.163	5.29	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.138	5.29	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0726	5.29	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.736	5.29	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.177	5.29	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.287	5.29	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.0299	1.06	PQL	ng/Kg	
	OCDF	JB	2.24	10.6	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX063 **Laboratory: LL**

EDD Filename: DX063_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-133-SA5A-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDF	JB	1.37	5.63	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JB	0.103	5.63	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0438	5.63	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.151	5.63	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.196	5.63	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.119	5.63	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.259	5.63	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.148	5.63	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.0800	5.63	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.208	5.63	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.208	5.63	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.312	5.63	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0182	1.13	PQL	ng/Kg	
	OCDF	JB	3.34	11.3	PQL	ng/Kg	
SL-136-SA5A-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JB	0.389	5.31	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JBQ	0.373	5.31	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.0585	5.31	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.0154	5.31	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0496	5.31	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.0286	5.31	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0608	5.31	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.0280	5.31	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.0595	5.31	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.0193	5.31	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.0135	5.31	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.129	5.31	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0830	5.31	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.0109	1.06	PQL	ng/Kg	
	OCDD	JB	2.57	10.6	PQL	ng/Kg	
	OCDF	JB	0.305	10.6	PQL	ng/Kg	
SL-139-SA5A-SB-2.5-3.5	1,2,3,4,6,7,8-HPCDD	JB	0.691	5.46	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.424	5.46	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0743	5.46	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.0654	5.46	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0627	5.46	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.0594	5.46	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.0467	5.46	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0243	5.46	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0219	5.46	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.141	5.46	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0774	5.46	PQL	ng/Kg	
	OCDD	JB	5.32	10.9	PQL	ng/Kg	
	OCDF	JB	0.367	10.9	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX063 **Laboratory: LL**

EDD Filename: DX063_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-146-SA5A-SB-3.0-4.0	1,2,3,4,6,7,8-HPCDF	JB	4.97	5.75	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JB	0.424	5.75	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.192	5.75	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.386	5.75	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.564	5.75	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.224	5.75	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.321	5.75	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.217	5.75	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.108	5.75	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.0718	5.75	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.364	5.75	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.184	5.75	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0409	1.15	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.0194	1.15	PQL	ng/Kg	
	OCDF	JB	8.66	11.5	PQL	ng/Kg	
SL-158-SA5A-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JB	2.96	5.61	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.702	5.61	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0718	5.61	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.0700	5.61	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.0745	5.61	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0705	5.61	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.0522	5.61	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.0457	5.61	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0158	5.61	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.0206	5.61	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.143	5.61	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.0914	5.61	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.0185	1.12	PQL	ng/Kg	
	OCDF	JB	1.58	11.2	PQL	ng/Kg	
SL-159-SA5A-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JB	0.289	5.45	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.419	5.45	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.0525	5.45	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0282	5.45	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.0841	5.45	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.0514	5.45	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0856	5.45	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.0624	5.45	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.0670	5.45	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0482	5.45	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.0766	5.45	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.147	5.45	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.115	5.45	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0157	1.09	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.0271	1.09	PQL	ng/Kg	
	OCDD	JB	0.725	10.9	PQL	ng/Kg	
	OCDF	JB	0.289	10.9	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX063 **Laboratory: LL**

EDD Filename: DX063_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-160-SA5A-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JB	0.188	5.66	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.128	5.66	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0344	5.66	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0249	5.66	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.0332	5.66	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0214	5.66	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.0912	5.66	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.0622	5.66	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0178	5.66	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.0514	5.66	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0467	5.66	PQL	ng/Kg	
	OCDD	JB	0.565	11.3	PQL	ng/Kg	
	OCDF	JBQ	0.111	11.3	PQL	ng/Kg	
SL-160-SA5A-SB-9.0-10.0	1,2,3,4,6,7,8-HPCDD	JB	0.416	5.38	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.188	5.38	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0260	5.38	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0233	5.38	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.0303	5.38	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0252	5.38	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.0301	5.38	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.0309	5.38	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.00982	5.38	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0408	5.38	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0568	5.38	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0292	1.08	PQL	ng/Kg	
	OCDD	JB	3.22	10.8	PQL	ng/Kg	
	OCDF	JB	0.262	10.8	PQL	ng/Kg	
SL-161-SA5A-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JB	0.174	5.56	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.0864	5.56	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.0491	5.56	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0183	5.56	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.140	5.56	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.0787	5.56	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0179	5.56	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.0190	5.56	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.0351	5.56	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0476	5.56	PQL	ng/Kg	
	OCDD	JB	0.612	11.1	PQL	ng/Kg	
	OCDF	JBQ	0.116	11.1	PQL	ng/Kg	
SL-161-SA5A-SB-7.5-8.5	1,2,3,4,6,7,8-HPCDD	JB	0.170	5.38	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.111	5.38	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0461	5.38	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0101	5.38	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0222	5.38	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.0169	5.38	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0192	5.38	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.0159	5.38	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.0225	5.38	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.00950	5.38	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0429	5.38	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0469	5.38	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.0125	1.08	PQL	ng/Kg	
	OCDD	JB	0.459	10.8	PQL	ng/Kg	
	OCDF	JBQ	0.140	10.8	PQL	ng/Kg	

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Reporting Limit Outliers

Lab Reporting Batch ID: DX063 **Laboratory: LL**

EDD Filename: DX063_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-163-SA5A-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JB	0.184	5.79	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JBQ	0.0906	5.79	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.0260	5.79	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0315	5.79	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.0215	5.79	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0231	5.79	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.0411	5.79	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.0230	5.79	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.0446	5.79	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0468	5.79	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.0137	1.16	PQL	ng/Kg	
	OCDD	JB	0.515	11.6	PQL	ng/Kg	
	OCDF	JBQ	0.104	11.6	PQL	ng/Kg	
SL-168-SA5A-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDF	JB	0.546	5.61	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.102	5.61	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.0639	5.61	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.0811	5.61	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0653	5.61	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.0593	5.61	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JBQ	0.0611	5.61	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.144	5.61	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0885	5.61	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.0103	1.12	PQL	ng/Kg	
	OCDF	JB	0.542	11.2	PQL	ng/Kg	
SL-169-SA5A-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JB	0.359	5.80	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.404	5.80	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0968	5.80	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.0828	5.80	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.130	5.80	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.114	5.80	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.136	5.80	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.122	5.80	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.112	5.80	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	0.158	5.80	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.137	5.80	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.190	5.80	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.193	5.80	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0369	1.16	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.0353	1.16	PQL	ng/Kg	
	OCDD	JB	1.18	11.6	PQL	ng/Kg	
	OCDF	JB	0.357	11.6	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX063 **Laboratory: LL**

EDD Filename: DX063_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-180-SA5A-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JB	0.470	5.81	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.375	5.81	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.0692	5.81	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.0805	5.81	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.116	5.81	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0603	5.81	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.384	5.81	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.434	5.81	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.0311	5.81	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.0627	5.81	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.150	5.81	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0903	5.81	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.0158	1.16	PQL	ng/Kg	
	OCDD	JB	1.60	11.6	PQL	ng/Kg	
	OCDF	JB	0.352	11.6	PQL	ng/Kg	
SL-181-SA5A-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDF	JB	1.52	6.12	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JB	0.189	6.12	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.125	6.12	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.527	6.12	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.217	6.12	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.573	6.12	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.469	6.12	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.156	6.12	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.220	6.12	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.340	6.12	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.182	1.22	PQL	ng/Kg	
	OCDF	JB	6.36	12.2	PQL	ng/Kg	
SL-231-SA5A-SB-2.0-3.0	1,2,3,4,6,7,8-HPCDD	JB	1.60	5.66	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.450	5.66	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.0591	5.66	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0526	5.66	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.241	5.66	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.125	5.66	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.105	5.66	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.130	5.66	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.0770	5.66	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0826	5.66	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.461	5.66	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.162	5.66	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.201	5.66	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0150	1.13	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.0525	1.13	PQL	ng/Kg	
	OCDF	JB	0.552	11.3	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX063 **Laboratory: LL**

EDD Filename: DX063_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-252-SA5A-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JBQ	0.127	5.71	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.0468	5.71	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0202	5.71	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0249	5.71	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.0474	5.71	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0233	5.71	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.0937	5.71	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.0692	5.71	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.0301	5.71	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0336	5.71	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0394	5.71	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.0484	5.71	PQL	ng/Kg	
	OCDD	JBQ	0.311	11.4	PQL	ng/Kg	
	OCDF	JBQ	0.131	11.4	PQL	ng/Kg	

SAMPLE DELIVERY GROUP

DX064

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
23-Mar-2011	SL-239-SA5A-SB-4.0-5.0	6237977	N	METHOD	1613B	III
23-Mar-2011	SL-240-SA5A-SB-4.0-5.0	6237978	N	METHOD	1613B	III
23-Mar-2011	SL-240-SA5A-SB-9.0-10.0	6237979	N	METHOD	1613B	III
23-Mar-2011	SL-197-SA5A-SB-4.0-5.0	6237980	N	METHOD	1613B	III
23-Mar-2011	SL-197-SA5A-SB-8.0-9.0	6237981	N	METHOD	1613B	III
23-Mar-2011	SL-198-SA5A-SB-3.0-4.0	6237982	N	METHOD	1613B	III
23-Mar-2011	SL-200-SA5A-SB-4.0-5.0	6237983	N	METHOD	1613B	III
24-Mar-2011	SL-199-SA5A-SB-2.5-3.5	6239186	N	METHOD	1613B	III
24-Mar-2011	DUP10-SA5A-QC-032411	6239191	FD	METHOD	1613B	III
24-Mar-2011	SL-223-SA5A-SB-8.5-9.5	6239190	N	METHOD	1613B	III
24-Mar-2011	SL-223-SA5A-SB-4.0-5.0	6239187	N	METHOD	1613B	III
24-Mar-2011	SL-223-SA5A-SB-4.0-5.0MS	6239188	MS	METHOD	1613B	III
24-Mar-2011	SL-223-SA5A-SB-4.0-5.0MSD	6239189	MSD	METHOD	1613B	III
24-Mar-2011	SL-226-SA5A-SB-4.0-5.0	6239192	N	METHOD	1613B	III
24-Mar-2011	SL-225-SA5A-SB-4.0-5.0	6239193	N	METHOD	1613B	III
24-Mar-2011	SL-224-SA5A-SB-4.0-5.0	6239194	N	METHOD	1613B	III
25-Mar-2011	SL-213-SA5A-SB-4.0-5.0	6240612	N	METHOD	1613B	III
25-Mar-2011	SL-213-SA5A-SB-8.0-9.0	6240613	N	METHOD	1613B	III
25-Mar-2011	SL-143-SA5A-SB-4.0-5.0	6240614	N	METHOD	1613B	III
25-Mar-2011	SL-143-SA5A-SB-8.0-9.0	6240615	N	METHOD	1613B	III
25-Mar-2011	SL-144-SA5A-SB-4.0-5.0	6240616	N	METHOD	1613B	III
25-Mar-2011	SL-144-SA5A-SB-7.0-8.0	6240617	N	METHOD	1613B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DX064 **Laboratory: LL**

EDD Filename: DX064_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: DUP10-SA5A-QC-032411 **Collected:** 3/24/2011 10:58:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	1.08	JB	0.0309	MDL	5.54	PQL	ng/Kg	UJ	B, FD
1,2,3,4,6,7,8-HPCDF	0.315	JB	0.0144	MDL	5.54	PQL	ng/Kg	UJ	B, FD
1,2,3,4,7,8,9-HPCDF	0.0537	JBQ	0.0167	MDL	5.54	PQL	ng/Kg	UJ	B, FD
1,2,3,4,7,8-HxCDD	0.0244	JBQ	0.0238	MDL	5.54	PQL	ng/Kg	UJ	B, FD
1,2,3,4,7,8-HXCDF	1.13	JB	0.0495	MDL	5.54	PQL	ng/Kg	J	Z, FD
1,2,3,6,7,8-HXCDD	0.321	JB	0.0244	MDL	5.54	PQL	ng/Kg	J	Z, FD
1,2,3,6,7,8-HXCDF	0.132	JB	0.0357	MDL	5.54	PQL	ng/Kg	UJ	B, FD
1,2,3,7,8,9-HXCDD	0.388	JB	0.0223	MDL	5.54	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.342	JB	0.0368	MDL	5.54	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.135	JB	0.0220	MDL	5.54	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0298	U	0.0298	MDL	5.54	PQL	ng/Kg	UJ	FD
2,3,4,6,7,8-HXCDF	0.104	JB	0.0307	MDL	5.54	PQL	ng/Kg	UJ	B, FD
2,3,4,7,8-PECDF	0.410	JB	0.0287	MDL	5.54	PQL	ng/Kg	J	Z, FD
2,3,7,8-TCDD	0.0207	JQ	0.0140	MDL	1.11	PQL	ng/Kg	J	Z, FD
2,3,7,8-TCDF	0.0947	JBQ	0.0408	MDL	1.11	PQL	ng/Kg	UJ	B, FD
OCDD	10.7	JB	0.0360	MDL	11.1	PQL	ng/Kg	J	Z, FD
OCDF	0.532	JB	0.0235	MDL	11.1	PQL	ng/Kg	UJ	B, FD

Sample ID: SL-143-SA5A-SB-4.0-5.0 **Collected:** 3/25/2011 2:04:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.318	JB	0.0153	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.116	JB	0.00986	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0762	JBQ	0.00940	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0520	JBQ	0.0118	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0987	JBQ	0.0202	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0568	JB	0.0107	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0844	JB	0.0131	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0558	JB	0.00917	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0963	JB	0.00952	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0556	JB	0.0114	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0490	JBQ	0.00516	MDL	5.73	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0624	JB	0.00826	MDL	5.73	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0893	JBQ	0.00550	MDL	5.73	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX064 **Laboratory: LL**

EDD Filename: DX064_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-143-SA5A-SB-4.0-5.0 **Collected:** 3/25/2011 2:04:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,3,7,8-TCDD	0.0227	JQ	0.00963	MDL	1.15	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.0133	JB	0.00837	MDL	1.15	PQL	ng/Kg	U	B
OCDD	2.41	JB	0.0195	MDL	11.5	PQL	ng/Kg	U	B
OCDF	0.250	JB	0.0159	MDL	11.5	PQL	ng/Kg	U	B

Sample ID: SL-143-SA5A-SB-8.0-9.0 **Collected:** 3/25/2011 2:15:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.318	JB	0.0175	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.0814	JB	0.00734	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0726	JBQ	0.0117	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0419	JB	0.0118	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0592	JBQ	0.0120	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0352	JB	0.0122	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0423	JB	0.00849	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0537	JB	0.0114	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.100	JB	0.00975	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0579	JBQ	0.0119	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0533	JBQ	0.00573	MDL	5.73	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0625	JBQ	0.00826	MDL	5.73	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0834	JB	0.00596	MDL	5.73	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0197	J	0.0133	MDL	1.15	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.0156	JBQ	0.00929	MDL	1.15	PQL	ng/Kg	U	B
OCDD	2.21	JB	0.0203	MDL	11.5	PQL	ng/Kg	U	B
OCDF	0.245	JB	0.0185	MDL	11.5	PQL	ng/Kg	U	B

Sample ID: SL-144-SA5A-SB-4.0-5.0 **Collected:** 3/25/2011 3:18:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.422	JB	0.0153	MDL	5.46	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.0795	JBQ	0.00742	MDL	5.46	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0449	JB	0.00917	MDL	5.46	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0335	JBQ	0.00906	MDL	5.46	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0505	JBQ	0.0118	MDL	5.46	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0335	JB	0.00906	MDL	5.46	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX064 **Laboratory: LL**

EDD Filename: DX064_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-144-SA5A-SB-4.0-5.0 **Collected:** 3/25/2011 3:18:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,6,7,8-HXCDF	0.0329	JBQ	0.00764	MDL	5.46	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0349	JBQ	0.00852	MDL	5.46	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0812	JB	0.00764	MDL	5.46	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0369	JBQ	0.00983	MDL	5.46	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0403	JB	0.00480	MDL	5.46	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0401	JBQ	0.00622	MDL	5.46	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0633	JB	0.00491	MDL	5.46	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0212	JQ	0.00939	MDL	1.09	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.0101	JB	0.00655	MDL	1.09	PQL	ng/Kg	U	B
OCDD	4.48	JB	0.0158	MDL	10.9	PQL	ng/Kg	J	Z
OCDF	0.247	JB	0.0146	MDL	10.9	PQL	ng/Kg	U	B

Sample ID: SL-144-SA5A-SB-7.0-8.0 **Collected:** 3/25/2011 3:24:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.375	JB	0.0150	MDL	5.25	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.0590	JB	0.00693	MDL	5.25	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0473	JB	0.00809	MDL	5.25	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0212	JB	0.00851	MDL	5.25	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0555	JBQ	0.00872	MDL	5.25	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0303	JB	0.00851	MDL	5.25	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0267	JBQ	0.00599	MDL	5.25	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0320	JBQ	0.00767	MDL	5.25	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0500	JB	0.00557	MDL	5.25	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0339	JBQ	0.00830	MDL	5.25	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0311	JBQ	0.00431	MDL	5.25	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0380	JBQ	0.00483	MDL	5.25	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0660	JB	0.00420	MDL	5.25	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0106	JQ	0.00861	MDL	1.05	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.00856	JB	0.00662	MDL	1.05	PQL	ng/Kg	U	B
OCDD	3.80	JB	0.0158	MDL	10.5	PQL	ng/Kg	U	B
OCDF	0.221	JB	0.0128	MDL	10.5	PQL	ng/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DX064 **Laboratory: LL**

EDD Filename: DX064_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-197-SA5A-SB-4.0-5.0 **Collected:** 3/23/2011 12:14:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.202	JB	0.0197	MDL	5.57	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.121	JB	0.00679	MDL	5.57	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0259	JB	0.00958	MDL	5.57	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0139	JBQ	0.0118	MDL	5.57	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0213	JBQ	0.00802	MDL	5.57	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0352	JBQ	0.0121	MDL	5.57	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0202	JB	0.00635	MDL	5.57	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0399	JBQ	0.0116	MDL	5.57	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0316	JBQ	0.00768	MDL	5.57	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0197	JBQ	0.00557	MDL	5.57	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0536	JB	0.00646	MDL	5.57	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0615	JBQ	0.00535	MDL	5.57	PQL	ng/Kg	U	B
OCDD	0.700	JB	0.0362	MDL	11.1	PQL	ng/Kg	U	B
OCDF	0.134	JB	0.0174	MDL	11.1	PQL	ng/Kg	U	B

Sample ID: SL-197-SA5A-SB-8.0-9.0 **Collected:** 3/23/2011 12:23:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.394	JB	0.0264	MDL	5.94	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.114	JB	0.00748	MDL	5.94	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0302	JBQ	0.00986	MDL	5.94	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0197	JBQ	0.0102	MDL	5.94	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0343	JBQ	0.0221	MDL	5.94	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0356	JB	0.00760	MDL	5.94	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0818	JB	0.0220	MDL	5.94	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0282	JBQ	0.00819	MDL	5.94	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0387	JB	0.0196	MDL	5.94	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0156	JB	0.00629	MDL	5.94	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0525	JBQ	0.00689	MDL	5.94	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0588	JB	0.00641	MDL	5.94	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0274	JQ	0.0137	MDL	1.19	PQL	ng/Kg	J	Z
OCDD	0.743	JB	0.0397	MDL	11.9	PQL	ng/Kg	U	B
OCDF	0.163	JBQ	0.0175	MDL	11.9	PQL	ng/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DX064 **Laboratory: LL**

EDD Filename: DX064_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-198-SA5A-SB-3.0-4.0 ***Collected:*** 3/23/2011 2:24:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.227	JBQ	0.0185	MDL	5.61	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.0782	JBQ	0.00741	MDL	5.61	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0359	JBQ	0.00808	MDL	5.61	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0224	JBQ	0.0180	MDL	5.61	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0701	JB	0.0150	MDL	5.61	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.108	JB	0.0185	MDL	5.61	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.0757	JBQ	0.0103	MDL	5.61	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.229	JB	0.0167	MDL	5.61	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.0811	JB	0.00976	MDL	5.61	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0724	JBQ	0.0149	MDL	5.61	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.106	JB	0.00696	MDL	5.61	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0734	JBQ	0.00808	MDL	5.61	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.102	JB	0.00685	MDL	5.61	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0152	J	0.0140	MDL	1.12	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.0256	JB	0.0110	MDL	1.12	PQL	ng/Kg	U	B
OCDD	0.778	JB	0.0391	MDL	11.2	PQL	ng/Kg	U	B
OCDF	0.146	JB	0.0176	MDL	11.2	PQL	ng/Kg	U	B

Sample ID: SL-199-SA5A-SB-2.5-3.5 ***Collected:*** 3/24/2011 8:59:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.136	JB	0.0196	MDL	5.35	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.0562	JBQ	0.0104	MDL	5.35	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0306	JBQ	0.00953	MDL	5.35	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0640	JB	0.0135	MDL	5.35	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0265	JB	0.0113	MDL	5.35	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.107	JB	0.0115	MDL	5.35	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0422	JBQ	0.00814	MDL	5.35	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0400	JBQ	0.0149	MDL	5.35	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0487	JBQ	0.00685	MDL	5.35	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0513	JB	0.00653	MDL	5.35	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0583	JB	0.00717	MDL	5.35	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0173	J	0.0134	MDL	1.07	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.0325	JB	0.00996	MDL	1.07	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX064 **Laboratory: LL**

EDD Filename: DX064_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-199-SA5A-SB-2.5-3.5 **Collected:** 3/24/2011 8:59:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
OCDD	0.429	JB	0.0370	MDL	10.7	PQL	ng/Kg	U	B
OCDF	0.129	JB	0.0213	MDL	10.7	PQL	ng/Kg	U	B

Sample ID: SL-200-SA5A-SB-4.0-5.0 **Collected:** 3/23/2011 3:49:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.183	JB	0.0189	MDL	5.49	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.112	JB	0.00934	MDL	5.49	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0466	JBQ	0.0111	MDL	5.49	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0599	JBQ	0.0132	MDL	5.49	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0776	JBQ	0.0135	MDL	5.49	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0458	JBQ	0.0133	MDL	5.49	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0614	JB	0.00967	MDL	5.49	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0628	JB	0.0120	MDL	5.49	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0374	JB	0.00945	MDL	5.49	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.112	JB	0.0151	MDL	5.49	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.163	JBQ	0.00747	MDL	5.49	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.0807	JBQ	0.00791	MDL	5.49	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.155	JB	0.00769	MDL	5.49	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0654	J	0.0138	MDL	1.10	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.0534	JBQ	0.0116	MDL	1.10	PQL	ng/Kg	U	B
OCDD	0.516	JB	0.0376	MDL	11.0	PQL	ng/Kg	U	B
OCDF	0.158	JBQ	0.0198	MDL	11.0	PQL	ng/Kg	U	B

Sample ID: SL-213-SA5A-SB-4.0-5.0 **Collected:** 3/25/2011 10:14:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.244	JB	0.0157	MDL	5.92	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.0678	JB	0.00473	MDL	5.92	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0272	JB	0.00746	MDL	5.92	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0258	JBQ	0.0104	MDL	5.92	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0303	JBQ	0.00793	MDL	5.92	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0276	JBQ	0.0105	MDL	5.92	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0321	JBQ	0.00604	MDL	5.92	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0292	JBQ	0.00982	MDL	5.92	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX064 **Laboratory: LL**

EDD Filename: DX064_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-213-SA5A-SB-4.0-5.0 *Collected:* 3/25/2011 10:14:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,7,8,9-HXCDF	0.0358	JBQ	0.00722	MDL	5.92	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0599	JBQ	0.0142	MDL	5.92	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0754	JB	0.00580	MDL	5.92	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0317	JB	0.00592	MDL	5.92	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0930	JB	0.00604	MDL	5.92	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0326	JBQ	0.0102	MDL	1.18	PQL	ng/Kg	U	B
OCDD	1.51	JB	0.0299	MDL	11.8	PQL	ng/Kg	U	B
OCDF	0.166	JBQ	0.0170	MDL	11.8	PQL	ng/Kg	U	B

Sample ID: SL-213-SA5A-SB-8.0-9.0 *Collected:* 3/25/2011 10:18:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.232	JB	0.0185	MDL	6.08	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.0495	JBQ	0.00523	MDL	6.08	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0119	JB	0.00742	MDL	6.08	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0231	JBQ	0.0162	MDL	6.08	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0160	JB	0.00827	MDL	6.08	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0175	JBQ	0.0165	MDL	6.08	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0273	JBQ	0.00693	MDL	6.08	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0424	JBQ	0.0155	MDL	6.08	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0245	JBQ	0.00742	MDL	6.08	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0304	JBQ	0.0164	MDL	6.08	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0237	JB	0.00608	MDL	6.08	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0180	JBQ	0.00645	MDL	6.08	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0483	JB	0.00584	MDL	6.08	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0126	JBQ	0.00937	MDL	1.22	PQL	ng/Kg	U	B
OCDD	0.689	JB	0.0308	MDL	12.2	PQL	ng/Kg	U	B
OCDF	0.0889	JBQ	0.0145	MDL	12.2	PQL	ng/Kg	U	B

Sample ID: SL-223-SA5A-SB-4.0-5.0 *Collected:* 3/24/2011 11:14:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	13.3	B	0.0470	MDL	5.68	PQL	ng/Kg	J	FD
1,2,3,4,6,7,8-HPCDF	2.54	JB	0.0319	MDL	5.68	PQL	ng/Kg	J	Z, FD
1,2,3,4,7,8,9-HPCDF	0.298	JB	0.0265	MDL	5.68	PQL	ng/Kg	J	Z, FD

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX064 **Laboratory: LL**

EDD Filename: DX064_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-223-SA5A-SB-4.0-5.0 **Collected:** 3/24/2011 11:14:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8-HxCDD	0.104	JB	0.0472	MDL	5.68	PQL	ng/Kg	J	Z, FD
1,2,3,4,7,8-HXCDF	0.345	JB	0.0491	MDL	5.68	PQL	ng/Kg	J	Z, FD
1,2,3,6,7,8-HXCDD	0.587	JBQ	0.0453	MDL	5.68	PQL	ng/Kg	J	Z, FD
1,2,3,6,7,8-HXCDF	0.254	JB	0.0357	MDL	5.68	PQL	ng/Kg	J	Z, FD
1,2,3,7,8,9-HXCDD	0.403	JB	0.0424	MDL	5.68	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.330	JBQ	0.0306	MDL	5.68	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.101	JBQ	0.0213	MDL	5.68	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.172	JB	0.0220	MDL	5.68	PQL	ng/Kg	J	Z, FD
2,3,4,6,7,8-HXCDF	0.418	JB	0.0281	MDL	5.68	PQL	ng/Kg	J	Z, FD
2,3,4,7,8-PECDF	0.700	JB	0.0224	MDL	5.68	PQL	ng/Kg	J	Z, FD
2,3,7,8-TCDD	0.0163	U	0.0163	MDL	1.14	PQL	ng/Kg	UJ	FD
2,3,7,8-TCDF	0.351	JB	0.0586	MDL	1.14	PQL	ng/Kg	J	Z, FD
OCDD	144	B	0.0519	MDL	11.4	PQL	ng/Kg	J	FD
OCDF	3.26	JB	0.0234	MDL	11.4	PQL	ng/Kg	J	Z, FD

Sample ID: SL-223-SA5A-SB-8.5-9.5 **Collected:** 3/24/2011 11:04:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.186	JB	0.0154	MDL	5.32	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.108	JB	0.0109	MDL	5.32	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0713	JBQ	0.00957	MDL	5.32	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0315	JBQ	0.0138	MDL	5.32	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0581	JBQ	0.0129	MDL	5.32	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0541	JB	0.0140	MDL	5.32	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0566	JB	0.0114	MDL	5.32	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0740	JBQ	0.0100	MDL	5.32	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0715	JBQ	0.0144	MDL	5.32	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0850	JBQ	0.00649	MDL	5.32	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0761	JBQ	0.00872	MDL	5.32	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0959	JBQ	0.00617	MDL	5.32	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0248	JB	0.00883	MDL	1.06	PQL	ng/Kg	U	B
OCDD	0.646	JB	0.0304	MDL	10.6	PQL	ng/Kg	U	B
OCDF	0.171	JBQ	0.0180	MDL	10.6	PQL	ng/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DX064 **Laboratory: LL**

EDD Filename: DX064_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-224-SA5A-SB-4.0-5.0 **Collected:** 3/24/2011 3:29:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.284	JB	0.0197	MDL	5.57	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.198	JB	0.0176	MDL	5.57	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.196	JBQ	0.0200	MDL	5.57	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.106	JBQ	0.0219	MDL	5.57	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.171	JBQ	0.0366	MDL	5.57	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.181	JB	0.0216	MDL	5.57	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.189	JBQ	0.0250	MDL	5.57	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.234	JB	0.0177	MDL	5.57	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.243	JB	0.0210	MDL	5.57	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.186	JBQ	0.0186	MDL	5.57	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.165	JB	0.00959	MDL	5.57	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.170	JB	0.0171	MDL	5.57	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.184	JB	0.0101	MDL	5.57	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0382	JQ	0.0188	MDL	1.11	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.0328	JBQ	0.0142	MDL	1.11	PQL	ng/Kg	U	B
OCDD	0.860	JB	0.0294	MDL	11.1	PQL	ng/Kg	U	B
OCDF	0.365	JB	0.0263	MDL	11.1	PQL	ng/Kg	U	B

Sample ID: SL-225-SA5A-SB-4.0-5.0 **Collected:** 3/24/2011 2:33:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.931	JB	0.0314	MDL	5.91	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.290	JB	0.0115	MDL	5.91	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0455	JB	0.0167	MDL	5.91	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	1.15	JB	0.0517	MDL	5.91	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.201	JB	0.0214	MDL	5.91	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.0597	JBQ	0.0348	MDL	5.91	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.322	JB	0.0201	MDL	5.91	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.221	JB	0.0359	MDL	5.91	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.0375	JBQ	0.0247	MDL	5.91	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0883	JB	0.0293	MDL	5.91	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.651	JB	0.0252	MDL	5.91	PQL	ng/Kg	J	Z
OCDD	11.5	JB	0.0307	MDL	11.8	PQL	ng/Kg	J	Z
OCDF	0.596	JB	0.0236	MDL	11.8	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX064 **Laboratory: LL**

EDD Filename: DX064_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: **SL-226-SA5A-SB-4.0-5.0** ***Collected:*** **3/24/2011 12:24:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	1.98	JB	0.0436	MDL	5.66	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.404	JB	0.0191	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0672	JBQ	0.0197	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0310	JBQ	0.0217	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0665	JBQ	0.0254	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.154	JB	0.0205	MDL	5.66	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.0671	JBQ	0.0165	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.173	JB	0.0178	MDL	5.66	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.0929	JB	0.0152	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0393	JB	0.0249	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0551	JBQ	0.0110	MDL	5.66	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0938	JB	0.0118	MDL	5.66	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.268	JB	0.0112	MDL	5.66	PQL	ng/Kg	U	B
OCDF	0.800	JB	0.0302	MDL	11.3	PQL	ng/Kg	U	B

Sample ID: **SL-239-SA5A-SB-4.0-5.0** ***Collected:*** **3/23/2011 9:34:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.220	JBQ	0.0254	MDL	5.42	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.152	JB	0.00857	MDL	5.42	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0392	JB	0.0112	MDL	5.42	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0175	JBQ	0.0136	MDL	5.42	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0232	JB	0.0115	MDL	5.42	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0362	JBQ	0.0140	MDL	5.42	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0219	JBQ	0.00879	MDL	5.42	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0417	JB	0.0130	MDL	5.42	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0544	JB	0.0102	MDL	5.42	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0209	JB	0.00705	MDL	5.42	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0655	JB	0.00868	MDL	5.42	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0692	JB	0.00651	MDL	5.42	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0108	JBQ	0.0104	MDL	1.08	PQL	ng/Kg	U	B
OCDD	0.771	JB	0.0473	MDL	10.8	PQL	ng/Kg	U	B
OCDF	0.136	JB	0.0198	MDL	10.8	PQL	ng/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DX064 **Laboratory: LL**

EDD Filename: DX064_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-240-SA5A-SB-4.0-5.0 *Collected:* 3/23/2011 10:55:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.274	JB	0.0250	MDL	5.57	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.151	JB	0.00825	MDL	5.57	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0474	JB	0.0114	MDL	5.57	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0279	JBQ	0.0162	MDL	5.57	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0587	JBQ	0.0113	MDL	5.57	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0771	JB	0.0167	MDL	5.57	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0569	JB	0.00914	MDL	5.57	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.123	JB	0.0157	MDL	5.57	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.112	JB	0.0103	MDL	5.57	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0709	JBQ	0.0138	MDL	5.57	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0997	JB	0.00747	MDL	5.57	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0968	JB	0.00858	MDL	5.57	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.102	JBQ	0.00725	MDL	5.57	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0191	JBQ	0.0111	MDL	1.11	PQL	ng/Kg	U	B
OCDD	2.37	JB	0.0494	MDL	11.1	PQL	ng/Kg	U	B
OCDF	0.175	JB	0.0172	MDL	11.1	PQL	ng/Kg	U	B

Sample ID: SL-240-SA5A-SB-9.0-10.0 *Collected:* 3/23/2011 11:03:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.283	JB	0.0232	MDL	5.92	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.146	JB	0.0107	MDL	5.92	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0323	JB	0.0135	MDL	5.92	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0548	JB	0.0129	MDL	5.92	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0555	JBQ	0.0143	MDL	5.92	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0803	JB	0.0104	MDL	5.92	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0505	JBQ	0.0131	MDL	5.92	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0519	JB	0.0108	MDL	5.92	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0834	JBQ	0.0167	MDL	5.92	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.115	JB	0.00746	MDL	5.92	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0837	JB	0.00935	MDL	5.92	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.134	JB	0.00698	MDL	5.92	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0508	J	0.0149	MDL	1.18	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.0261	JB	0.0125	MDL	1.18	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX064 **Laboratory: LL**

EDD Filename: DX064_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: **SL-240-SA5A-SB-9.0-10.0** ***Collected:*** **3/23/2011 11:03:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	*Lab Result*	*Lab Qual*	*DL*	*DL Type*	*RL*	*RL Type*	*Units*	*Data Review Qual*	*Reason Code*
OCDD	1.36	JB	0.0475	MDL	11.8	PQL	ng/Kg	U	B
OCDF	0.171	JB	0.0191	MDL	11.8	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX064 **Laboratory: LL**

EDD Filename: DX064_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
	Sampling to Leaching Estimation
	Sampling to Leaching Rejection
*#	Professional Judgment
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Continuing Calibration Verification Percent Recovery Lower Estimation
C	Continuing Calibration Verification Percent Recovery Lower Rejection
C	Continuing Calibration Verification Percent Recovery Upper Estimation
C	Continuing Calibration Verification Percent Recovery Upper Rejection
C	Continuing Calibration Verification Relative Response Factor
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Relative Response Factor
C	Initial Calibration Verification Correlation Coefficient

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DX064 **Laboratory: LL**

EDD Filename: DX064_v1 **eQAPP Name: CDM_SSFL_110509**

C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Verification Percent Recovery Lower Estimation
C	Initial Calibration Verification Percent Recovery Lower Rejection
C	Initial Calibration Verification Percent Recovery Upper Estimation
C	Initial Calibration Verification Percent Recovery Upper Rejection
C	Initial Calibration Verification Relative Response Factor
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Laboratory Triplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination
F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DX064 **Laboratory: LL**

EDD Filename: DX064_v1 **eQAPP Name: CDM_SSFL_110509**

L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Laboratory Triplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Q	Matrix Spike Upper Rejection
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control Outlier Reports

DX064

Method Blank Outlier Report

Lab Reporting Batch ID: DX064 **Laboratory: LL**

EDD Filename: DX064_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLK0940B371733	4/7/2011 5:33:00 PM	1,2,3,4,6,7,8-HPCDD	0.231 ng/Kg	DUP10-SA5A-QC-032411
		1,2,3,4,6,7,8-HPCDF	0.184 ng/Kg	SL-143-SA5A-SB-4.0-5.0
		1,2,3,4,7,8,9-HPCDF	0.0521 ng/Kg	SL-143-SA5A-SB-8.0-9.0
		1,2,3,4,7,8-HxCDD	0.0177 ng/Kg	SL-144-SA5A-SB-4.0-5.0
		1,2,3,4,7,8-HXCDF	0.0298 ng/Kg	SL-144-SA5A-SB-7.0-8.0
		1,2,3,6,7,8-HXCDD	0.0207 ng/Kg	SL-197-SA5A-SB-4.0-5.0
		1,2,3,6,7,8-HXCDF	0.0271 ng/Kg	SL-197-SA5A-SB-8.0-9.0
		1,2,3,7,8,9-HXCDD	0.0266 ng/Kg	SL-198-SA5A-SB-3.0-4.0
		1,2,3,7,8,9-HXCDF	0.0264 ng/Kg	SL-199-SA5A-SB-2.5-3.5
		1,2,3,7,8-PECDD	0.0313 ng/Kg	SL-200-SA5A-SB-4.0-5.0
		1,2,3,7,8-PECDF	0.0280 ng/Kg	SL-213-SA5A-SB-4.0-5.0
		2,3,4,6,7,8-HXCDF	0.0678 ng/Kg	SL-213-SA5A-SB-8.0-9.0
		2,3,4,7,8-PECDF	0.0638 ng/Kg	SL-223-SA5A-SB-4.0-5.0
		2,3,7,8-TCDF	0.0202 ng/Kg	SL-223-SA5A-SB-8.5-9.5
		OCDD	0.889 ng/Kg	SL-224-SA5A-SB-4.0-5.0
		OCDF	0.213 ng/Kg	SL-225-SA5A-SB-4.0-5.0
				SL-226-SA5A-SB-4.0-5.0
				SL-239-SA5A-SB-4.0-5.0
				SL-240-SA5A-SB-4.0-5.0
				SL-240-SA5A-SB-9.0-10.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
DUP10-SA5A-QC-032411(RES)	1,2,3,4,6,7,8-HPCDD	1.08 ng/Kg	1.08U ng/Kg
DUP10-SA5A-QC-032411(RES)	1,2,3,4,6,7,8-HPCDF	0.315 ng/Kg	0.315U ng/Kg
DUP10-SA5A-QC-032411(RES)	1,2,3,4,7,8,9-HPCDF	0.0537 ng/Kg	0.0537U ng/Kg
DUP10-SA5A-QC-032411(RES)	1,2,3,4,7,8-HxCDD	0.0244 ng/Kg	0.0244U ng/Kg
DUP10-SA5A-QC-032411(RES)	1,2,3,6,7,8-HXCDF	0.132 ng/Kg	0.132U ng/Kg
DUP10-SA5A-QC-032411(RES)	1,2,3,7,8-PECDD	0.135 ng/Kg	0.135U ng/Kg
DUP10-SA5A-QC-032411(RES)	2,3,4,6,7,8-HXCDF	0.104 ng/Kg	0.104U ng/Kg
DUP10-SA5A-QC-032411(RES)	2,3,7,8-TCDF	0.0947 ng/Kg	0.0947U ng/Kg
DUP10-SA5A-QC-032411(RES)	OCDF	0.532 ng/Kg	0.532U ng/Kg
SL-143-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.318 ng/Kg	0.318U ng/Kg
SL-143-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.116 ng/Kg	0.116U ng/Kg
SL-143-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0762 ng/Kg	0.0762U ng/Kg
SL-143-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HxCDD	0.0520 ng/Kg	0.0520U ng/Kg
SL-143-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.0987 ng/Kg	0.0987U ng/Kg
SL-143-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDD	0.0568 ng/Kg	0.0568U ng/Kg
SL-143-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.0844 ng/Kg	0.0844U ng/Kg
SL-143-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDD	0.0558 ng/Kg	0.0558U ng/Kg
SL-143-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.0963 ng/Kg	0.0963U ng/Kg
SL-143-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDD	0.0556 ng/Kg	0.0556U ng/Kg
SL-143-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.0490 ng/Kg	0.0490U ng/Kg
SL-143-SA5A-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.0624 ng/Kg	0.0624U ng/Kg
SL-143-SA5A-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.0893 ng/Kg	0.0893U ng/Kg
SL-143-SA5A-SB-4.0-5.0(RES)	2,3,7,8-TCDF	0.0133 ng/Kg	0.0133U ng/Kg
SL-143-SA5A-SB-4.0-5.0(RES)	OCDD	2.41 ng/Kg	2.41U ng/Kg
SL-143-SA5A-SB-4.0-5.0(RES)	OCDF	0.250 ng/Kg	0.250U ng/Kg
SL-143-SA5A-SB-8.0-9.0(RES)	1,2,3,4,6,7,8-HPCDD	0.318 ng/Kg	0.318U ng/Kg
SL-143-SA5A-SB-8.0-9.0(RES)	1,2,3,4,6,7,8-HPCDF	0.0814 ng/Kg	0.0814U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX064 **Laboratory: LL**

EDD Filename: DX064_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-143-SA5A-SB-8.0-9.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0726 ng/Kg	0.0726U ng/Kg
SL-143-SA5A-SB-8.0-9.0(RES)	1,2,3,4,7,8-HxCDD	0.0419 ng/Kg	0.0419U ng/Kg
SL-143-SA5A-SB-8.0-9.0(RES)	1,2,3,4,7,8-HXCDF	0.0592 ng/Kg	0.0592U ng/Kg
SL-143-SA5A-SB-8.0-9.0(RES)	1,2,3,6,7,8-HXCDD	0.0352 ng/Kg	0.0352U ng/Kg
SL-143-SA5A-SB-8.0-9.0(RES)	1,2,3,6,7,8-HXCDF	0.0423 ng/Kg	0.0423U ng/Kg
SL-143-SA5A-SB-8.0-9.0(RES)	1,2,3,7,8,9-HXCDD	0.0537 ng/Kg	0.0537U ng/Kg
SL-143-SA5A-SB-8.0-9.0(RES)	1,2,3,7,8,9-HXCDF	0.100 ng/Kg	0.100U ng/Kg
SL-143-SA5A-SB-8.0-9.0(RES)	1,2,3,7,8-PECDD	0.0579 ng/Kg	0.0579U ng/Kg
SL-143-SA5A-SB-8.0-9.0(RES)	1,2,3,7,8-PECDF	0.0533 ng/Kg	0.0533U ng/Kg
SL-143-SA5A-SB-8.0-9.0(RES)	2,3,4,6,7,8-HXCDF	0.0625 ng/Kg	0.0625U ng/Kg
SL-143-SA5A-SB-8.0-9.0(RES)	2,3,4,7,8-PECDF	0.0834 ng/Kg	0.0834U ng/Kg
SL-143-SA5A-SB-8.0-9.0(RES)	2,3,7,8-TCDF	0.0156 ng/Kg	0.0156U ng/Kg
SL-143-SA5A-SB-8.0-9.0(RES)	OCDD	2.21 ng/Kg	2.21U ng/Kg
SL-143-SA5A-SB-8.0-9.0(RES)	OCDF	0.245 ng/Kg	0.245U ng/Kg
SL-144-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.422 ng/Kg	0.422U ng/Kg
SL-144-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.0795 ng/Kg	0.0795U ng/Kg
SL-144-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0449 ng/Kg	0.0449U ng/Kg
SL-144-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HxCDD	0.0335 ng/Kg	0.0335U ng/Kg
SL-144-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.0505 ng/Kg	0.0505U ng/Kg
SL-144-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDD	0.0335 ng/Kg	0.0335U ng/Kg
SL-144-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.0329 ng/Kg	0.0329U ng/Kg
SL-144-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDD	0.0349 ng/Kg	0.0349U ng/Kg
SL-144-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.0812 ng/Kg	0.0812U ng/Kg
SL-144-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDD	0.0369 ng/Kg	0.0369U ng/Kg
SL-144-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.0403 ng/Kg	0.0403U ng/Kg
SL-144-SA5A-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.0401 ng/Kg	0.0401U ng/Kg
SL-144-SA5A-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.0633 ng/Kg	0.0633U ng/Kg
SL-144-SA5A-SB-4.0-5.0(RES)	2,3,7,8-TCDF	0.0101 ng/Kg	0.0101U ng/Kg
SL-144-SA5A-SB-4.0-5.0(RES)	OCDF	0.247 ng/Kg	0.247U ng/Kg
SL-144-SA5A-SB-7.0-8.0(RES)	1,2,3,4,6,7,8-HPCDD	0.375 ng/Kg	0.375U ng/Kg
SL-144-SA5A-SB-7.0-8.0(RES)	1,2,3,4,6,7,8-HPCDF	0.0590 ng/Kg	0.0590U ng/Kg
SL-144-SA5A-SB-7.0-8.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0473 ng/Kg	0.0473U ng/Kg
SL-144-SA5A-SB-7.0-8.0(RES)	1,2,3,4,7,8-HxCDD	0.0212 ng/Kg	0.0212U ng/Kg
SL-144-SA5A-SB-7.0-8.0(RES)	1,2,3,4,7,8-HXCDF	0.0555 ng/Kg	0.0555U ng/Kg
SL-144-SA5A-SB-7.0-8.0(RES)	1,2,3,6,7,8-HXCDD	0.0303 ng/Kg	0.0303U ng/Kg
SL-144-SA5A-SB-7.0-8.0(RES)	1,2,3,6,7,8-HXCDF	0.0267 ng/Kg	0.0267U ng/Kg
SL-144-SA5A-SB-7.0-8.0(RES)	1,2,3,7,8,9-HXCDD	0.0320 ng/Kg	0.0320U ng/Kg
SL-144-SA5A-SB-7.0-8.0(RES)	1,2,3,7,8,9-HXCDF	0.0500 ng/Kg	0.0500U ng/Kg
SL-144-SA5A-SB-7.0-8.0(RES)	1,2,3,7,8-PECDD	0.0339 ng/Kg	0.0339U ng/Kg
SL-144-SA5A-SB-7.0-8.0(RES)	1,2,3,7,8-PECDF	0.0311 ng/Kg	0.0311U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX064 **Laboratory: LL**

EDD Filename: DX064_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-144-SA5A-SB-7.0-8.0(RES)	2,3,4,6,7,8-HXCDF	0.0380 ng/Kg	0.0380U ng/Kg
SL-144-SA5A-SB-7.0-8.0(RES)	2,3,4,7,8-PECDF	0.0660 ng/Kg	0.0660U ng/Kg
SL-144-SA5A-SB-7.0-8.0(RES)	2,3,7,8-TCDF	0.00856 ng/Kg	0.00856U ng/Kg
SL-144-SA5A-SB-7.0-8.0(RES)	OCDD	3.80 ng/Kg	3.80U ng/Kg
SL-144-SA5A-SB-7.0-8.0(RES)	OCDF	0.221 ng/Kg	0.221U ng/Kg
SL-197-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.202 ng/Kg	0.202U ng/Kg
SL-197-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.121 ng/Kg	0.121U ng/Kg
SL-197-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0259 ng/Kg	0.0259U ng/Kg
SL-197-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HxCDD	0.0139 ng/Kg	0.0139U ng/Kg
SL-197-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.0213 ng/Kg	0.0213U ng/Kg
SL-197-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDD	0.0352 ng/Kg	0.0352U ng/Kg
SL-197-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.0202 ng/Kg	0.0202U ng/Kg
SL-197-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDD	0.0399 ng/Kg	0.0399U ng/Kg
SL-197-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.0316 ng/Kg	0.0316U ng/Kg
SL-197-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.0197 ng/Kg	0.0197U ng/Kg
SL-197-SA5A-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.0536 ng/Kg	0.0536U ng/Kg
SL-197-SA5A-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.0615 ng/Kg	0.0615U ng/Kg
SL-197-SA5A-SB-4.0-5.0(RES)	OCDD	0.700 ng/Kg	0.700U ng/Kg
SL-197-SA5A-SB-4.0-5.0(RES)	OCDF	0.134 ng/Kg	0.134U ng/Kg
SL-197-SA5A-SB-8.0-9.0(RES)	1,2,3,4,6,7,8-HPCDD	0.394 ng/Kg	0.394U ng/Kg
SL-197-SA5A-SB-8.0-9.0(RES)	1,2,3,4,6,7,8-HPCDF	0.114 ng/Kg	0.114U ng/Kg
SL-197-SA5A-SB-8.0-9.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0302 ng/Kg	0.0302U ng/Kg
SL-197-SA5A-SB-8.0-9.0(RES)	1,2,3,4,7,8-HXCDF	0.0197 ng/Kg	0.0197U ng/Kg
SL-197-SA5A-SB-8.0-9.0(RES)	1,2,3,6,7,8-HXCDD	0.0343 ng/Kg	0.0343U ng/Kg
SL-197-SA5A-SB-8.0-9.0(RES)	1,2,3,6,7,8-HXCDF	0.0356 ng/Kg	0.0356U ng/Kg
SL-197-SA5A-SB-8.0-9.0(RES)	1,2,3,7,8,9-HXCDD	0.0818 ng/Kg	0.0818U ng/Kg
SL-197-SA5A-SB-8.0-9.0(RES)	1,2,3,7,8,9-HXCDF	0.0282 ng/Kg	0.0282U ng/Kg
SL-197-SA5A-SB-8.0-9.0(RES)	1,2,3,7,8-PECDD	0.0387 ng/Kg	0.0387U ng/Kg
SL-197-SA5A-SB-8.0-9.0(RES)	1,2,3,7,8-PECDF	0.0156 ng/Kg	0.0156U ng/Kg
SL-197-SA5A-SB-8.0-9.0(RES)	2,3,4,6,7,8-HXCDF	0.0525 ng/Kg	0.0525U ng/Kg
SL-197-SA5A-SB-8.0-9.0(RES)	2,3,4,7,8-PECDF	0.0588 ng/Kg	0.0588U ng/Kg
SL-197-SA5A-SB-8.0-9.0(RES)	OCDD	0.743 ng/Kg	0.743U ng/Kg
SL-197-SA5A-SB-8.0-9.0(RES)	OCDF	0.163 ng/Kg	0.163U ng/Kg
SL-198-SA5A-SB-3.0-4.0(RES)	1,2,3,4,6,7,8-HPCDD	0.227 ng/Kg	0.227U ng/Kg
SL-198-SA5A-SB-3.0-4.0(RES)	1,2,3,4,6,7,8-HPCDF	0.0782 ng/Kg	0.0782U ng/Kg
SL-198-SA5A-SB-3.0-4.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0359 ng/Kg	0.0359U ng/Kg
SL-198-SA5A-SB-3.0-4.0(RES)	1,2,3,4,7,8-HxCDD	0.0224 ng/Kg	0.0224U ng/Kg
SL-198-SA5A-SB-3.0-4.0(RES)	1,2,3,4,7,8-HXCDF	0.0701 ng/Kg	0.0701U ng/Kg
SL-198-SA5A-SB-3.0-4.0(RES)	1,2,3,6,7,8-HXCDF	0.0757 ng/Kg	0.0757U ng/Kg
SL-198-SA5A-SB-3.0-4.0(RES)	1,2,3,7,8,9-HXCDF	0.0811 ng/Kg	0.0811U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX064 **Laboratory: LL**

EDD Filename: DX064_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-198-SA5A-SB-3.0-4.0(RES)	1,2,3,7,8-PECDD	0.0724 ng/Kg	0.0724U ng/Kg
SL-198-SA5A-SB-3.0-4.0(RES)	1,2,3,7,8-PECDF	0.106 ng/Kg	0.106U ng/Kg
SL-198-SA5A-SB-3.0-4.0(RES)	2,3,4,6,7,8-HXCDF	0.0734 ng/Kg	0.0734U ng/Kg
SL-198-SA5A-SB-3.0-4.0(RES)	2,3,4,7,8-PECDF	0.102 ng/Kg	0.102U ng/Kg
SL-198-SA5A-SB-3.0-4.0(RES)	2,3,7,8-TCDF	0.0256 ng/Kg	0.0256U ng/Kg
SL-198-SA5A-SB-3.0-4.0(RES)	OCDD	0.778 ng/Kg	0.778U ng/Kg
SL-198-SA5A-SB-3.0-4.0(RES)	OCDF	0.146 ng/Kg	0.146U ng/Kg
SL-199-SA5A-SB-2.5-3.5(RES)	1,2,3,4,6,7,8-HPCDD	0.136 ng/Kg	0.136U ng/Kg
SL-199-SA5A-SB-2.5-3.5(RES)	1,2,3,4,6,7,8-HPCDF	0.0562 ng/Kg	0.0562U ng/Kg
SL-199-SA5A-SB-2.5-3.5(RES)	1,2,3,4,7,8,9-HPCDF	0.0306 ng/Kg	0.0306U ng/Kg
SL-199-SA5A-SB-2.5-3.5(RES)	1,2,3,6,7,8-HXCDD	0.0640 ng/Kg	0.0640U ng/Kg
SL-199-SA5A-SB-2.5-3.5(RES)	1,2,3,6,7,8-HXCDF	0.0265 ng/Kg	0.0265U ng/Kg
SL-199-SA5A-SB-2.5-3.5(RES)	1,2,3,7,8,9-HXCDD	0.107 ng/Kg	0.107U ng/Kg
SL-199-SA5A-SB-2.5-3.5(RES)	1,2,3,7,8,9-HXCDF	0.0422 ng/Kg	0.0422U ng/Kg
SL-199-SA5A-SB-2.5-3.5(RES)	1,2,3,7,8-PECDD	0.0400 ng/Kg	0.0400U ng/Kg
SL-199-SA5A-SB-2.5-3.5(RES)	1,2,3,7,8-PECDF	0.0487 ng/Kg	0.0487U ng/Kg
SL-199-SA5A-SB-2.5-3.5(RES)	2,3,4,6,7,8-HXCDF	0.0513 ng/Kg	0.0513U ng/Kg
SL-199-SA5A-SB-2.5-3.5(RES)	2,3,4,7,8-PECDF	0.0583 ng/Kg	0.0583U ng/Kg
SL-199-SA5A-SB-2.5-3.5(RES)	2,3,7,8-TCDF	0.0325 ng/Kg	0.0325U ng/Kg
SL-199-SA5A-SB-2.5-3.5(RES)	OCDD	0.429 ng/Kg	0.429U ng/Kg
SL-199-SA5A-SB-2.5-3.5(RES)	OCDF	0.129 ng/Kg	0.129U ng/Kg
SL-200-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.183 ng/Kg	0.183U ng/Kg
SL-200-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.112 ng/Kg	0.112U ng/Kg
SL-200-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0466 ng/Kg	0.0466U ng/Kg
SL-200-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HxCDD	0.0599 ng/Kg	0.0599U ng/Kg
SL-200-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.0776 ng/Kg	0.0776U ng/Kg
SL-200-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDD	0.0458 ng/Kg	0.0458U ng/Kg
SL-200-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.0614 ng/Kg	0.0614U ng/Kg
SL-200-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDD	0.0628 ng/Kg	0.0628U ng/Kg
SL-200-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.0374 ng/Kg	0.0374U ng/Kg
SL-200-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDD	0.112 ng/Kg	0.112U ng/Kg
SL-200-SA5A-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.0807 ng/Kg	0.0807U ng/Kg
SL-200-SA5A-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.155 ng/Kg	0.155U ng/Kg
SL-200-SA5A-SB-4.0-5.0(RES)	2,3,7,8-TCDF	0.0534 ng/Kg	0.0534U ng/Kg
SL-200-SA5A-SB-4.0-5.0(RES)	OCDD	0.516 ng/Kg	0.516U ng/Kg
SL-200-SA5A-SB-4.0-5.0(RES)	OCDF	0.158 ng/Kg	0.158U ng/Kg
SL-213-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.244 ng/Kg	0.244U ng/Kg
SL-213-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.0678 ng/Kg	0.0678U ng/Kg
SL-213-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0272 ng/Kg	0.0272U ng/Kg
SL-213-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HxCDD	0.0258 ng/Kg	0.0258U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX064 **Laboratory: LL**

EDD Filename: DX064_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-213-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.0303 ng/Kg	0.0303U ng/Kg
SL-213-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDD	0.0276 ng/Kg	0.0276U ng/Kg
SL-213-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.0321 ng/Kg	0.0321U ng/Kg
SL-213-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDD	0.0292 ng/Kg	0.0292U ng/Kg
SL-213-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.0358 ng/Kg	0.0358U ng/Kg
SL-213-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDD	0.0599 ng/Kg	0.0599U ng/Kg
SL-213-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.0754 ng/Kg	0.0754U ng/Kg
SL-213-SA5A-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.0317 ng/Kg	0.0317U ng/Kg
SL-213-SA5A-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.0930 ng/Kg	0.0930U ng/Kg
SL-213-SA5A-SB-4.0-5.0(RES)	2,3,7,8-TCDF	0.0326 ng/Kg	0.0326U ng/Kg
SL-213-SA5A-SB-4.0-5.0(RES)	OCDD	1.51 ng/Kg	1.51U ng/Kg
SL-213-SA5A-SB-4.0-5.0(RES)	OCDF	0.166 ng/Kg	0.166U ng/Kg
SL-213-SA5A-SB-8.0-9.0(RES)	1,2,3,4,6,7,8-HPCDD	0.232 ng/Kg	0.232U ng/Kg
SL-213-SA5A-SB-8.0-9.0(RES)	1,2,3,4,6,7,8-HPCDF	0.0495 ng/Kg	0.0495U ng/Kg
SL-213-SA5A-SB-8.0-9.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0119 ng/Kg	0.0119U ng/Kg
SL-213-SA5A-SB-8.0-9.0(RES)	1,2,3,4,7,8-HxCDD	0.0231 ng/Kg	0.0231U ng/Kg
SL-213-SA5A-SB-8.0-9.0(RES)	1,2,3,4,7,8-HXCDF	0.0160 ng/Kg	0.0160U ng/Kg
SL-213-SA5A-SB-8.0-9.0(RES)	1,2,3,6,7,8-HXCDD	0.0175 ng/Kg	0.0175U ng/Kg
SL-213-SA5A-SB-8.0-9.0(RES)	1,2,3,6,7,8-HXCDF	0.0273 ng/Kg	0.0273U ng/Kg
SL-213-SA5A-SB-8.0-9.0(RES)	1,2,3,7,8,9-HXCDD	0.0424 ng/Kg	0.0424U ng/Kg
SL-213-SA5A-SB-8.0-9.0(RES)	1,2,3,7,8,9-HXCDF	0.0245 ng/Kg	0.0245U ng/Kg
SL-213-SA5A-SB-8.0-9.0(RES)	1,2,3,7,8-PECDD	0.0304 ng/Kg	0.0304U ng/Kg
SL-213-SA5A-SB-8.0-9.0(RES)	1,2,3,7,8-PECDF	0.0237 ng/Kg	0.0237U ng/Kg
SL-213-SA5A-SB-8.0-9.0(RES)	2,3,4,6,7,8-HXCDF	0.0180 ng/Kg	0.0180U ng/Kg
SL-213-SA5A-SB-8.0-9.0(RES)	2,3,4,7,8-PECDF	0.0483 ng/Kg	0.0483U ng/Kg
SL-213-SA5A-SB-8.0-9.0(RES)	2,3,7,8-TCDF	0.0126 ng/Kg	0.0126U ng/Kg
SL-213-SA5A-SB-8.0-9.0(RES)	OCDD	0.689 ng/Kg	0.689U ng/Kg
SL-213-SA5A-SB-8.0-9.0(RES)	OCDF	0.0889 ng/Kg	0.0889U ng/Kg
SL-223-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDD	0.101 ng/Kg	0.101U ng/Kg
SL-223-SA5A-SB-8.5-9.5(RES)	1,2,3,4,6,7,8-HPCDD	0.186 ng/Kg	0.186U ng/Kg
SL-223-SA5A-SB-8.5-9.5(RES)	1,2,3,4,6,7,8-HPCDF	0.108 ng/Kg	0.108U ng/Kg
SL-223-SA5A-SB-8.5-9.5(RES)	1,2,3,4,7,8,9-HPCDF	0.0713 ng/Kg	0.0713U ng/Kg
SL-223-SA5A-SB-8.5-9.5(RES)	1,2,3,4,7,8-HxCDD	0.0315 ng/Kg	0.0315U ng/Kg
SL-223-SA5A-SB-8.5-9.5(RES)	1,2,3,6,7,8-HXCDD	0.0581 ng/Kg	0.0581U ng/Kg
SL-223-SA5A-SB-8.5-9.5(RES)	1,2,3,6,7,8-HXCDF	0.0541 ng/Kg	0.0541U ng/Kg
SL-223-SA5A-SB-8.5-9.5(RES)	1,2,3,7,8,9-HXCDD	0.0566 ng/Kg	0.0566U ng/Kg
SL-223-SA5A-SB-8.5-9.5(RES)	1,2,3,7,8,9-HXCDF	0.0740 ng/Kg	0.0740U ng/Kg
SL-223-SA5A-SB-8.5-9.5(RES)	1,2,3,7,8-PECDD	0.0715 ng/Kg	0.0715U ng/Kg
SL-223-SA5A-SB-8.5-9.5(RES)	1,2,3,7,8-PECDF	0.0850 ng/Kg	0.0850U ng/Kg
SL-223-SA5A-SB-8.5-9.5(RES)	2,3,4,6,7,8-HXCDF	0.0761 ng/Kg	0.0761U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX064 **Laboratory: LL**

EDD Filename: DX064_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-223-SA5A-SB-8.5-9.5(RES)	2,3,4,7,8-PECDF	0.0959 ng/Kg	0.0959U ng/Kg
SL-223-SA5A-SB-8.5-9.5(RES)	2,3,7,8-TCDF	0.0248 ng/Kg	0.0248U ng/Kg
SL-223-SA5A-SB-8.5-9.5(RES)	OCDD	0.646 ng/Kg	0.646U ng/Kg
SL-223-SA5A-SB-8.5-9.5(RES)	OCDF	0.171 ng/Kg	0.171U ng/Kg
SL-224-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.284 ng/Kg	0.284U ng/Kg
SL-224-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.198 ng/Kg	0.198U ng/Kg
SL-224-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.196 ng/Kg	0.196U ng/Kg
SL-224-SA5A-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.170 ng/Kg	0.170U ng/Kg
SL-224-SA5A-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.184 ng/Kg	0.184U ng/Kg
SL-224-SA5A-SB-4.0-5.0(RES)	2,3,7,8-TCDF	0.0328 ng/Kg	0.0328U ng/Kg
SL-224-SA5A-SB-4.0-5.0(RES)	OCDD	0.860 ng/Kg	0.860U ng/Kg
SL-224-SA5A-SB-4.0-5.0(RES)	OCDF	0.365 ng/Kg	0.365U ng/Kg
SL-225-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.931 ng/Kg	0.931U ng/Kg
SL-225-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.290 ng/Kg	0.290U ng/Kg
SL-225-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0455 ng/Kg	0.0455U ng/Kg
SL-225-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.0597 ng/Kg	0.0597U ng/Kg
SL-225-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDD	0.0375 ng/Kg	0.0375U ng/Kg
SL-225-SA5A-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.0883 ng/Kg	0.0883U ng/Kg
SL-225-SA5A-SB-4.0-5.0(RES)	OCDF	0.596 ng/Kg	0.596U ng/Kg
SL-226-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.404 ng/Kg	0.404U ng/Kg
SL-226-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0672 ng/Kg	0.0672U ng/Kg
SL-226-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HxCDD	0.0310 ng/Kg	0.0310U ng/Kg
SL-226-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.0665 ng/Kg	0.0665U ng/Kg
SL-226-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.0671 ng/Kg	0.0671U ng/Kg
SL-226-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.0929 ng/Kg	0.0929U ng/Kg
SL-226-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDD	0.0393 ng/Kg	0.0393U ng/Kg
SL-226-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.0551 ng/Kg	0.0551U ng/Kg
SL-226-SA5A-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.0938 ng/Kg	0.0938U ng/Kg
SL-226-SA5A-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.268 ng/Kg	0.268U ng/Kg
SL-226-SA5A-SB-4.0-5.0(RES)	OCDF	0.800 ng/Kg	0.800U ng/Kg
SL-239-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.220 ng/Kg	0.220U ng/Kg
SL-239-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.152 ng/Kg	0.152U ng/Kg
SL-239-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0392 ng/Kg	0.0392U ng/Kg
SL-239-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HxCDD	0.0175 ng/Kg	0.0175U ng/Kg
SL-239-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.0232 ng/Kg	0.0232U ng/Kg
SL-239-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDD	0.0362 ng/Kg	0.0362U ng/Kg
SL-239-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.0219 ng/Kg	0.0219U ng/Kg
SL-239-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDD	0.0417 ng/Kg	0.0417U ng/Kg
SL-239-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.0544 ng/Kg	0.0544U ng/Kg
SL-239-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.0209 ng/Kg	0.0209U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX064 **Laboratory: LL**

EDD Filename: DX064_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-239-SA5A-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.0655 ng/Kg	0.0655U ng/Kg
SL-239-SA5A-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.0692 ng/Kg	0.0692U ng/Kg
SL-239-SA5A-SB-4.0-5.0(RES)	2,3,7,8-TCDF	0.0108 ng/Kg	0.0108U ng/Kg
SL-239-SA5A-SB-4.0-5.0(RES)	OCDD	0.771 ng/Kg	0.771U ng/Kg
SL-239-SA5A-SB-4.0-5.0(RES)	OCDF	0.136 ng/Kg	0.136U ng/Kg
SL-240-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.274 ng/Kg	0.274U ng/Kg
SL-240-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.151 ng/Kg	0.151U ng/Kg
SL-240-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0474 ng/Kg	0.0474U ng/Kg
SL-240-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HxCDD	0.0279 ng/Kg	0.0279U ng/Kg
SL-240-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.0587 ng/Kg	0.0587U ng/Kg
SL-240-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDD	0.0771 ng/Kg	0.0771U ng/Kg
SL-240-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.0569 ng/Kg	0.0569U ng/Kg
SL-240-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDD	0.123 ng/Kg	0.123U ng/Kg
SL-240-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.112 ng/Kg	0.112U ng/Kg
SL-240-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDD	0.0709 ng/Kg	0.0709U ng/Kg
SL-240-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.0997 ng/Kg	0.0997U ng/Kg
SL-240-SA5A-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.0968 ng/Kg	0.0968U ng/Kg
SL-240-SA5A-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.102 ng/Kg	0.102U ng/Kg
SL-240-SA5A-SB-4.0-5.0(RES)	2,3,7,8-TCDF	0.0191 ng/Kg	0.0191U ng/Kg
SL-240-SA5A-SB-4.0-5.0(RES)	OCDD	2.37 ng/Kg	2.37U ng/Kg
SL-240-SA5A-SB-4.0-5.0(RES)	OCDF	0.175 ng/Kg	0.175U ng/Kg
SL-240-SA5A-SB-9.0-10.0(RES)	1,2,3,4,6,7,8-HPCDD	0.283 ng/Kg	0.283U ng/Kg
SL-240-SA5A-SB-9.0-10.0(RES)	1,2,3,4,6,7,8-HPCDF	0.146 ng/Kg	0.146U ng/Kg
SL-240-SA5A-SB-9.0-10.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0323 ng/Kg	0.0323U ng/Kg
SL-240-SA5A-SB-9.0-10.0(RES)	1,2,3,4,7,8-HXCDF	0.0548 ng/Kg	0.0548U ng/Kg
SL-240-SA5A-SB-9.0-10.0(RES)	1,2,3,6,7,8-HXCDD	0.0555 ng/Kg	0.0555U ng/Kg
SL-240-SA5A-SB-9.0-10.0(RES)	1,2,3,6,7,8-HXCDF	0.0803 ng/Kg	0.0803U ng/Kg
SL-240-SA5A-SB-9.0-10.0(RES)	1,2,3,7,8,9-HXCDD	0.0505 ng/Kg	0.0505U ng/Kg
SL-240-SA5A-SB-9.0-10.0(RES)	1,2,3,7,8,9-HXCDF	0.0519 ng/Kg	0.0519U ng/Kg
SL-240-SA5A-SB-9.0-10.0(RES)	1,2,3,7,8-PECDD	0.0834 ng/Kg	0.0834U ng/Kg
SL-240-SA5A-SB-9.0-10.0(RES)	1,2,3,7,8-PECDF	0.115 ng/Kg	0.115U ng/Kg
SL-240-SA5A-SB-9.0-10.0(RES)	2,3,4,6,7,8-HXCDF	0.0837 ng/Kg	0.0837U ng/Kg
SL-240-SA5A-SB-9.0-10.0(RES)	2,3,4,7,8-PECDF	0.134 ng/Kg	0.134U ng/Kg
SL-240-SA5A-SB-9.0-10.0(RES)	2,3,7,8-TCDF	0.0261 ng/Kg	0.0261U ng/Kg
SL-240-SA5A-SB-9.0-10.0(RES)	OCDD	1.36 ng/Kg	1.36U ng/Kg
SL-240-SA5A-SB-9.0-10.0(RES)	OCDF	0.171 ng/Kg	0.171U ng/Kg

Field Duplicate RPD Report

Lab Reporting Batch ID: DX064 **Laboratory: LL**

EDD Filename: DX064_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 160.3M
Matrix: SO

Analyte	Concentration (%)		Sample RPD	eQAPP RPD	Flag
	SL-223-SA5A-SB-4.0-5.0	DUP10-SA5A-QC-032411			
MOISTURE	12.0	9.7	21		No Qualifiers Applied

Method: 1613B
Matrix: SO

Analyte	Concentration (ng/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-223-SA5A-SB-4.0-5.0	DUP10-SA5A-QC-032411			
1,2,3,7,8,9-HXCDD	0.403	0.388	4	50.00	No Qualifiers Applied
1,2,3,7,8,9-HXCDF	0.330	0.342	4	50.00	
1,2,3,7,8-PECDD	0.101	0.135	29	50.00	
1,2,3,4,6,7,8-HPCDD	13.3	1.08	170	50.00	J(all detects) UJ(all non-detects)
1,2,3,4,6,7,8-HPCDF	2.54	0.315	156	50.00	
1,2,3,4,7,8,9-HPCDF	0.298	0.0537	139	50.00	
1,2,3,4,7,8-HxCDD	0.104	0.0244	124	50.00	
1,2,3,4,7,8-HXCDF	0.345	1.13	106	50.00	
1,2,3,6,7,8-HXCDD	0.587	0.321	59	50.00	
1,2,3,6,7,8-HXCDF	0.254	0.132	63	50.00	
1,2,3,7,8-PECDF	0.172	5.54 U	200	50.00	
2,3,4,6,7,8-HXCDF	0.418	0.104	120	50.00	
2,3,4,7,8-PECDF	0.700	0.410	52	50.00	
2,3,7,8-TCDD	1.14 U	0.0207	200	50.00	
2,3,7,8-TCDF	0.351	0.0947	115	50.00	
OCDD	144	10.7	172	50.00	
OCDF	3.26	0.532	144	50.00	

Reporting Limit Outliers

Lab Reporting Batch ID: DX064 **Laboratory: LL**

EDD Filename: DX064_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP10-SA5A-QC-032411	1,2,3,4,6,7,8-HPCDD	JB	1.08	5.54	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.315	5.54	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0537	5.54	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0244	5.54	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	1.13	5.54	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.321	5.54	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.132	5.54	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.388	5.54	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.342	5.54	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.135	5.54	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.104	5.54	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.410	5.54	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0207	1.11	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.0947	1.11	PQL	ng/Kg	
	OCDD	JB	10.7	11.1	PQL	ng/Kg	
	OCDF	JB	0.532	11.1	PQL	ng/Kg	
SL-143-SA5A-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JB	0.318	5.73	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.116	5.73	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0762	5.73	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0520	5.73	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0987	5.73	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.0568	5.73	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0844	5.73	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.0558	5.73	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.0963	5.73	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.0556	5.73	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0490	5.73	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.0624	5.73	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0893	5.73	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0227	1.15	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.0133	1.15	PQL	ng/Kg	
	OCDD	JB	2.41	11.5	PQL	ng/Kg	
	OCDF	JB	0.250	11.5	PQL	ng/Kg	
SL-143-SA5A-SB-8.0-9.0	1,2,3,4,6,7,8-HPCDD	JB	0.318	5.73	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.0814	5.73	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0726	5.73	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.0419	5.73	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0592	5.73	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.0352	5.73	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0423	5.73	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.0537	5.73	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.100	5.73	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0579	5.73	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0533	5.73	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0625	5.73	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.0834	5.73	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.0197	1.15	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.0156	1.15	PQL	ng/Kg	
	OCDD	JB	2.21	11.5	PQL	ng/Kg	
	OCDF	JB	0.245	11.5	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX064 **Laboratory: LL**

EDD Filename: DX064_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-144-SA5A-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JB	0.422	5.46	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JBQ	0.0795	5.46	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.0449	5.46	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0335	5.46	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0505	5.46	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.0335	5.46	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0329	5.46	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.0349	5.46	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.0812	5.46	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.0369	5.46	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.0403	5.46	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0401	5.46	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.0633	5.46	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0212	1.09	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.0101	1.09	PQL	ng/Kg	
	OCDD	JB	4.48	10.9	PQL	ng/Kg	
	OCDF	JB	0.247	10.9	PQL	ng/Kg	
SL-144-SA5A-SB-7.0-8.0	1,2,3,4,6,7,8-HPCDD	JB	0.375	5.25	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.0590	5.25	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.0473	5.25	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.0212	5.25	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0555	5.25	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.0303	5.25	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0267	5.25	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.0320	5.25	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.0500	5.25	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.0339	5.25	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0311	5.25	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0380	5.25	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.0660	5.25	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0106	1.05	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.00856	1.05	PQL	ng/Kg	
	OCDD	JB	3.80	10.5	PQL	ng/Kg	
	OCDF	JB	0.221	10.5	PQL	ng/Kg	
SL-197-SA5A-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JB	0.202	5.57	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.121	5.57	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.0259	5.57	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0139	5.57	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0213	5.57	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.0352	5.57	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0202	5.57	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.0399	5.57	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JBQ	0.0316	5.57	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0197	5.57	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.0536	5.57	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0615	5.57	PQL	ng/Kg	
	OCDD	JB	0.700	11.1	PQL	ng/Kg	
	OCDF	JB	0.134	11.1	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX064 **Laboratory: LL**

EDD Filename: DX064_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-197-SA5A-SB-8.0-9.0	1,2,3,4,6,7,8-HPCDD	JB	0.394	5.94	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.114	5.94	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0302	5.94	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0197	5.94	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.0343	5.94	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0356	5.94	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.0818	5.94	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.0282	5.94	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	0.0387	5.94	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.0156	5.94	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0525	5.94	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.0588	5.94	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0274	1.19	PQL	ng/Kg	
	OCDD	JB	0.743	11.9	PQL	ng/Kg	
	OCDF	JBQ	0.163	11.9	PQL	ng/Kg	
SL-198-SA5A-SB-3.0-4.0	1,2,3,4,6,7,8-HPCDD	JBQ	0.227	5.61	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JBQ	0.0782	5.61	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0359	5.61	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0224	5.61	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.0701	5.61	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.108	5.61	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0757	5.61	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.229	5.61	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.0811	5.61	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.0724	5.61	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.106	5.61	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0734	5.61	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.102	5.61	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.0152	1.12	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.0256	1.12	PQL	ng/Kg	
	OCDD	JB	0.778	11.2	PQL	ng/Kg	
	OCDF	JB	0.146	11.2	PQL	ng/Kg	
SL-199-SA5A-SB-2.5-3.5	1,2,3,4,6,7,8-HPCDD	JB	0.136	5.35	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JBQ	0.0562	5.35	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0306	5.35	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.0640	5.35	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0265	5.35	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.107	5.35	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.0422	5.35	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0400	5.35	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDF	JBQ	0.0487	5.35	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.0513	5.35	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.0583	5.35	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.0173	1.07	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.0325	1.07	PQL	ng/Kg	
	OCDD	JB	0.429	10.7	PQL	ng/Kg	
	OCDF	JB	0.129	10.7	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX064 **Laboratory: LL**

EDD Filename: DX064_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-200-SA5A-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JB	0.183	5.49	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.112	5.49	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0466	5.49	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0599	5.49	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0776	5.49	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.0458	5.49	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0614	5.49	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.0628	5.49	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.0374	5.49	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.112	5.49	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.163	5.49	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0807	5.49	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.155	5.49	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.0654	1.10	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.0534	1.10	PQL	ng/Kg	
	OCDD	JB	0.516	11.0	PQL	ng/Kg	
	OCDF	JBQ	0.158	11.0	PQL	ng/Kg	
SL-213-SA5A-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JB	0.244	5.92	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.0678	5.92	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.0272	5.92	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0258	5.92	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0303	5.92	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.0276	5.92	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0321	5.92	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.0292	5.92	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.0358	5.92	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0599	5.92	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.0754	5.92	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.0317	5.92	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.0930	5.92	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.0326	1.18	PQL	ng/Kg	
	OCDD	JB	1.51	11.8	PQL	ng/Kg	
	OCDF	JBQ	0.166	11.8	PQL	ng/Kg	
SL-213-SA5A-SB-8.0-9.0	1,2,3,4,6,7,8-HPCDD	JB	0.232	6.08	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JBQ	0.0495	6.08	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.0119	6.08	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0231	6.08	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.0160	6.08	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.0175	6.08	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0273	6.08	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.0424	6.08	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.0245	6.08	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0304	6.08	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.0237	6.08	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0180	6.08	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.0483	6.08	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.0126	1.22	PQL	ng/Kg	
	OCDD	JB	0.689	12.2	PQL	ng/Kg	
	OCDF	JBQ	0.0889	12.2	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX064 **Laboratory: LL**

EDD Filename: DX064_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-223-SA5A-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDF	JB	2.54	5.68	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JB	0.298	5.68	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.104	5.68	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.345	5.68	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.587	5.68	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.254	5.68	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.403	5.68	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.330	5.68	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.101	5.68	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.172	5.68	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.418	5.68	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.700	5.68	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.351	1.14	PQL	ng/Kg	
	OCDF	JB	3.26	11.4	PQL	ng/Kg	
SL-223-SA5A-SB-8.5-9.5	1,2,3,4,6,7,8-HPCDD	JB	0.186	5.32	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.108	5.32	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0713	5.32	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0315	5.32	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.0581	5.32	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0541	5.32	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.0566	5.32	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.0740	5.32	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0715	5.32	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0850	5.32	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0761	5.32	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0959	5.32	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.0248	1.06	PQL	ng/Kg	
	OCDD	JB	0.646	10.6	PQL	ng/Kg	
	OCDF	JBQ	0.171	10.6	PQL	ng/Kg	
SL-224-SA5A-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JB	0.284	5.57	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.198	5.57	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.196	5.57	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.106	5.57	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.171	5.57	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.181	5.57	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.189	5.57	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.234	5.57	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.243	5.57	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.186	5.57	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.165	5.57	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.170	5.57	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.184	5.57	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0382	1.11	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.0328	1.11	PQL	ng/Kg	
	OCDD	JB	0.860	11.1	PQL	ng/Kg	
	OCDF	JB	0.365	11.1	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX064 **Laboratory: LL**

EDD Filename: DX064_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-225-SA5A-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JB	0.931	5.91	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.290	5.91	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.0455	5.91	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	1.15	5.91	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.201	5.91	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0597	5.91	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.322	5.91	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.221	5.91	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0375	5.91	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.0883	5.91	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.651	5.91	PQL	ng/Kg	
	OCDD	JB	11.5	11.8	PQL	ng/Kg	
	OCDF	JB	0.596	11.8	PQL	ng/Kg	
SL-226-SA5A-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JB	1.98	5.66	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.404	5.66	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0672	5.66	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0310	5.66	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0665	5.66	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.154	5.66	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0671	5.66	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.173	5.66	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.0929	5.66	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.0393	5.66	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0551	5.66	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.0938	5.66	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.268	5.66	PQL	ng/Kg	
	OCDF	JB	0.800	11.3	PQL	ng/Kg	
SL-239-SA5A-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JBQ	0.220	5.42	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.152	5.42	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.0392	5.42	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0175	5.42	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.0232	5.42	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.0362	5.42	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0219	5.42	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.0417	5.42	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.0544	5.42	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.0209	5.42	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.0655	5.42	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.0692	5.42	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.0108	1.08	PQL	ng/Kg	
	OCDD	JB	0.771	10.8	PQL	ng/Kg	
	OCDF	JB	0.136	10.8	PQL	ng/Kg	
SL-240-SA5A-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JB	0.274	5.57	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.151	5.57	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.0474	5.57	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0279	5.57	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0587	5.57	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.0771	5.57	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0569	5.57	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.123	5.57	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.112	5.57	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0709	5.57	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.0997	5.57	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.0968	5.57	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.102	5.57	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.0191	1.11	PQL	ng/Kg	
	OCDD	JB	2.37	11.1	PQL	ng/Kg	
	OCDF	JB	0.175	11.1	PQL	ng/Kg	

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Reporting Limit Outliers

Lab Reporting Batch ID: DX064 **Laboratory: LL**

EDD Filename: DX064_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	*Analyte*	*Lab Qual*	*Result*	*Reporting Limit*	*RL Type*	*Units*	*Flag*
SL-240-SA5A-SB-9.0-10.0	1,2,3,4,6,7,8-HPCDD	JB	0.283	5.92	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.146	5.92	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.0323	5.92	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.0548	5.92	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.0555	5.92	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0803	5.92	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.0505	5.92	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.0519	5.92	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0834	5.92	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.115	5.92	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.0837	5.92	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.134	5.92	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.0508	1.18	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.0261	1.18	PQL	ng/Kg	
	OCDD	JB	1.36	11.8	PQL	ng/Kg	
	OCDF	JB	0.171	11.8	PQL	ng/Kg	

SAMPLE DELIVERY GROUP

DX065

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
28-Mar-2011	SL-211-SA5A-SB-2.5-3.5	6241898	N	METHOD	1613B	III
28-Mar-2011	SL-216-SA5A-SB-4.0-5.0	6241902	N	METHOD	1613B	III
28-Mar-2011	SL-214-SA5A-SB-4.0-5.0	6241899	N	METHOD	1613B	III
28-Mar-2011	SL-214-SA5A-SB-8.5-9.5	6241900	N	METHOD	1613B	III
28-Mar-2011	SL-215-SA5A-SB-4.0-5.0	6241901	N	METHOD	1613B	III
28-Mar-2011	SL-209-SA5A-SB-4.0-5.0	6241897	N	METHOD	1613B	III
29-Mar-2011	SL-208-SA5A-SB-4.0-5.0	6242775	N	METHOD	1613B	III
29-Mar-2011	SL-208-SA5A-SB-7.5-8.5	6242776	N	METHOD	1613B	III
29-Mar-2011	EB10-SA5A-032911	6242778	EB	METHOD	1613B	III
29-Mar-2011	SL-091-SA5A-SB-3.0-4.0	6242774	N	METHOD	1613B	III
29-Mar-2011	SL-221-SA5A-SB-3.0-4.0	6242777	N	METHOD	1613B	III
30-Mar-2011	SL-257-SA5A-SB-2.5-3.5	6244316	N	METHOD	1613B	III
30-Mar-2011	SL-222-SA5A-SB-3.5-4.5	6244313	N	METHOD	1613B	III
30-Mar-2011	SL-222-SA5A-SB-3.5-4.5MS	6244314	MS	METHOD	1613B	III
30-Mar-2011	SL-222-SA5A-SB-3.5-4.5MSD	6244315	MSD	METHOD	1613B	III
30-Mar-2011	SL-222-SA5A-SB-3.5-4.5	6281729	N	METHOD	1613B	III
30-Mar-2011	SL-222-SA5A-SB-3.5-4.5MS	6281730	MS	METHOD	1613B	III
30-Mar-2011	SL-222-SA5A-SB-3.5-4.5MSD	6281731	MSD	METHOD	1613B	III
30-Mar-2011	DUP-11-SA5A-QC-033011	6244306	FD	METHOD	1613B	III
30-Mar-2011	SL-090-SA5A-SB-4.0-5.0	6244311	N	METHOD	1613B	III
30-Mar-2011	DUP-12-SA5A-QC-033011	6244307	FD	METHOD	1613B	III
30-Mar-2011	SL-093-SA5A-SB-3.5-4.5	6244312	N	METHOD	1613B	III
30-Mar-2011	SL-083-SA5A-SB-4.0-5.0	6244309	N	METHOD	1613B	III
30-Mar-2011	SL-083-SA5A-SB-9.0-10.0	6244310	N	METHOD	1613B	III
30-Mar-2011	SL-082-SA5A-SB-4.0-5.0	6244308	N	METHOD	1613B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DX065 **Laboratory: LL**

EDD Filename: PrepDX065 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** AQ

Sample ID: EB10-SA5A-032911 *Collected:* 3/29/2011 9:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	1.95	JBQ	0.257	MDL	10.2	PQL	pg/L	U	B
1,2,3,4,6,7,8-HPCDF	0.921	JB	0.113	MDL	10.2	PQL	pg/L	U	B
1,2,3,4,7,8,9-HPCDF	0.463	JB	0.128	MDL	10.2	PQL	pg/L	U	B
1,2,3,4,7,8-HxCDD	0.242	JB	0.190	MDL	10.2	PQL	pg/L	U	B
1,2,3,4,7,8-HXCDF	0.797	JB	0.141	MDL	10.2	PQL	pg/L	U	B
1,2,3,6,7,8-HXCDD	0.605	JBQ	0.187	MDL	10.2	PQL	pg/L	U	B
1,2,3,6,7,8-HXCDF	0.466	JB	0.115	MDL	10.2	PQL	pg/L	U	B
1,2,3,7,8,9-HXCDD	0.453	JB	0.186	MDL	10.2	PQL	pg/L	U	B
1,2,3,7,8,9-HXCDF	0.611	JBQ	0.121	MDL	10.2	PQL	pg/L	U	B
1,2,3,7,8-PECDD	0.677	JBQ	0.222	MDL	10.2	PQL	pg/L	U	B
1,2,3,7,8-PECDF	0.426	JB	0.120	MDL	10.2	PQL	pg/L	U	B
2,3,4,6,7,8-HXCDF	0.579	JBQ	0.111	MDL	10.2	PQL	pg/L	U	B
2,3,4,7,8-PECDF	0.826	JBQ	0.116	MDL	10.2	PQL	pg/L	U	B
OCDD	3.59	JB	0.282	MDL	20.3	PQL	pg/L	U	B

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: DUP-11-SA5A-QC-033011 *Collected:* 3/30/2011 10:02:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	1.21	JB	0.0311	MDL	5.53	PQL	ng/Kg	UJ	B, FD
1,2,3,4,6,7,8-HPCDF	0.300	JBQ	0.0175	MDL	5.53	PQL	ng/Kg	UJ	B, FD
1,2,3,4,7,8,9-HPCDF	0.101	JBQ	0.0221	MDL	5.53	PQL	ng/Kg	UJ	B, FD
1,2,3,4,7,8-HxCDD	0.103	JBQ	0.0300	MDL	5.53	PQL	ng/Kg	UJ	B, FD
1,2,3,4,7,8-HXCDF	0.871	JBQ	0.0410	MDL	5.53	PQL	ng/Kg	J	Z, FD
1,2,3,6,7,8-HXCDD	0.197	JBQ	0.0297	MDL	5.53	PQL	ng/Kg	UJ	B, FD
1,2,3,6,7,8-HXCDF	0.133	JB	0.0276	MDL	5.53	PQL	ng/Kg	UJ	B, FD
1,2,3,7,8,9-HXCDD	0.190	JB	0.0281	MDL	5.53	PQL	ng/Kg	UJ	B, FD
1,2,3,7,8,9-HXCDF	0.168	JBQ	0.0296	MDL	5.53	PQL	ng/Kg	UJ	B, FD
1,2,3,7,8-PECDD	0.103	JBQ	0.0300	MDL	5.53	PQL	ng/Kg	UJ	B, FD
1,2,3,7,8-PECDF	0.161	JBQ	0.0232	MDL	5.53	PQL	ng/Kg	UJ	B, FD
2,3,4,6,7,8-HXCDF	0.176	JB	0.0229	MDL	5.53	PQL	ng/Kg	UJ	B, FD
2,3,4,7,8-PECDF	0.169	JBQ	0.0212	MDL	5.53	PQL	ng/Kg	UJ	B, FD

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX065 **Laboratory: LL**

EDD Filename: PrepDX065 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: DUP-11-SA5A-QC-033011 ***Collected:*** 3/30/2011 10:02:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,3,7,8-TCDD	0.0402	JQ	0.0355	MDL	1.11	PQL	ng/Kg	J	Z, FD
2,3,7,8-TCDF	0.0706	JB	0.0387	MDL	1.11	PQL	ng/Kg	UJ	B, FD
OCDD	4.16	JB	0.0265	MDL	11.1	PQL	ng/Kg	UJ	B, FD
OCDF	0.384	JB	0.0291	MDL	11.1	PQL	ng/Kg	UJ	B, FD

Sample ID: DUP-12-SA5A-QC-033011 ***Collected:*** 3/30/2011 11:11:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	2.76	JB	0.0193	MDL	5.53	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.520	JB	0.0218	MDL	5.53	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.332	JB	0.0336	MDL	5.53	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	1.02	JB	0.0315	MDL	5.53	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	1.04	JB	0.0344	MDL	5.53	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.690	JB	0.0249	MDL	5.53	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.780	JB	0.0299	MDL	5.53	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.361	JB	0.0203	MDL	5.53	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.482	JB	0.0412	MDL	5.53	PQL	ng/Kg	UJ	B, FD
1,2,3,7,8-PECDF	0.513	JB	0.0270	MDL	5.53	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.694	JB	0.0219	MDL	5.53	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.925	JB	0.0260	MDL	5.53	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0526	JQ	0.0383	MDL	1.11	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.182	JB	0.0622	MDL	1.11	PQL	ng/Kg	U	B
OCDF	2.83	JB	0.0221	MDL	11.1	PQL	ng/Kg	J	Z

Sample ID: SL-082-SA5A-SB-4.0-5.0 ***Collected:*** 3/30/2011 4:03:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	2.29	JB	0.0420	MDL	5.57	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	2.85	JB	0.0843	MDL	5.57	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	4.31	JB	0.0602	MDL	5.57	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.759	JB	0.0471	MDL	5.57	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	1.32	JB	0.0320	MDL	5.57	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	2.14	JB	0.0467	MDL	5.57	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	2.75	JB	0.0333	MDL	5.57	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.751	JBQ	0.0631	MDL	1.11	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX065 **Laboratory: LL**

EDD Filename: PrepDX065 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: **SL-083-SA5A-SB-4.0-5.0** ***Collected:*** **3/30/2011 3:08:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.484	JB	0.0375	MDL	5.31	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.308	JBQ	0.0232	MDL	5.31	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.107	JBQ	0.0216	MDL	5.31	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.140	JB	0.0361	MDL	5.31	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.195	JB	0.0442	MDL	5.31	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0800	JB	0.0340	MDL	5.31	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.163	JB	0.0299	MDL	5.31	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.148	JB	0.0295	MDL	5.31	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.130	JB	0.0220	MDL	5.31	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.120	JBQ	0.0388	MDL	5.31	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.158	JBQ	0.0198	MDL	5.31	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.171	JB	0.0194	MDL	5.31	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.245	JBQ	0.0203	MDL	5.31	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0827	JQ	0.0439	MDL	1.06	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.0478	JBQ	0.0369	MDL	1.06	PQL	ng/Kg	U	B
OCDD	1.38	JB	0.0339	MDL	10.6	PQL	ng/Kg	U	B
OCDF	0.317	JB	0.0353	MDL	10.6	PQL	ng/Kg	U	B

Sample ID: **SL-083-SA5A-SB-9.0-10.0** ***Collected:*** **3/30/2011 3:13:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.822	JB	0.0644	MDL	5.09	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.417	JB	0.0355	MDL	5.09	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.188	JB	0.0467	MDL	5.09	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.165	JBQ	0.0533	MDL	5.09	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.263	JB	0.0590	MDL	5.09	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.255	JB	0.0529	MDL	5.09	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.254	JBQ	0.0385	MDL	5.09	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.142	JB	0.0486	MDL	5.09	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.234	JBQ	0.0395	MDL	5.09	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.325	JB	0.0621	MDL	5.09	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.215	JBQ	0.0314	MDL	5.09	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.222	JBQ	0.0327	MDL	5.09	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.248	JBQ	0.0325	MDL	5.09	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX065 **Laboratory: LL**

EDD Filename: PrepDX065 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: SL-083-SA5A-SB-9.0-10.0 ***Collected:*** 3/30/2011 3:13:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
OCDD	7.66	JB	0.0613	MDL	10.2	PQL	ng/Kg	J	Z
OCDF	0.535	JB	0.0724	MDL	10.2	PQL	ng/Kg	U	B

Sample ID: SL-090-SA5A-SB-4.0-5.0 ***Collected:*** 3/30/2011 11:05:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	2.39	JB	0.0200	MDL	5.52	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.325	JB	0.0193	MDL	5.52	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.288	JBQ	0.0418	MDL	5.52	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.665	JB	0.0406	MDL	5.52	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.868	JB	0.0392	MDL	5.52	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.501	JB	0.0312	MDL	5.52	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.535	JB	0.0376	MDL	5.52	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.245	JB	0.0275	MDL	5.52	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.266	JB	0.0433	MDL	5.52	PQL	ng/Kg	UJ	B, FD
1,2,3,7,8-PECDF	0.391	JB	0.0272	MDL	5.52	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.551	JB	0.0251	MDL	5.52	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.761	JBQ	0.0257	MDL	5.52	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0541	JQ	0.0366	MDL	1.10	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.210	JBQ	0.0557	MDL	1.10	PQL	ng/Kg	J	Z
OCDF	3.79	JB	0.0249	MDL	11.0	PQL	ng/Kg	J	Z

Sample ID: SL-091-SA5A-SB-3.0-4.0 ***Collected:*** 3/29/2011 10:59:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.239	JB	0.0225	MDL	5.55	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.169	JBQ	0.0115	MDL	5.55	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0698	JBQ	0.0108	MDL	5.55	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.115	JB	0.0259	MDL	5.55	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.236	JB	0.0267	MDL	5.55	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.154	JB	0.0251	MDL	5.55	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.148	JBQ	0.0193	MDL	5.55	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.284	JB	0.0222	MDL	5.55	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.223	JB	0.0158	MDL	5.55	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.144	JB	0.0293	MDL	5.55	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX065 **Laboratory: LL**

EDD Filename: PrepDX065 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: SL-091-SA5A-SB-3.0-4.0 ***Collected:*** 3/29/2011 10:59:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,7,8-PECDF	0.179	JB	0.0149	MDL	5.55	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.123	JBQ	0.0141	MDL	5.55	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.193	JBQ	0.0148	MDL	5.55	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0494	JQ	0.0326	MDL	1.11	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.0499	JBQ	0.0307	MDL	1.11	PQL	ng/Kg	U	B
OCDD	1.45	JB	0.0199	MDL	11.1	PQL	ng/Kg	U	B
OCDF	0.191	JBQ	0.0248	MDL	11.1	PQL	ng/Kg	U	B

Sample ID: SL-093-SA5A-SB-3.5-4.5 ***Collected:*** 3/30/2011 12:20:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	0.940	JB	0.0420	MDL	5.68	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	2.26	JB	0.0597	MDL	5.68	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	4.32	JB	0.0625	MDL	5.68	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	3.08	JB	0.0472	MDL	5.68	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	4.91	JB	0.0578	MDL	5.68	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.720	JB	0.0537	MDL	5.68	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	1.51	JBQ	0.100	MDL	5.68	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	3.50	JBQ	0.0480	MDL	5.68	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	3.26	JB	0.0440	MDL	5.68	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	3.97	JB	0.0478	MDL	5.68	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.300	JQ	0.0820	MDL	1.14	PQL	ng/Kg	J	Z
OCDF	8.78	JB	0.0512	MDL	11.4	PQL	ng/Kg	J	Z

Sample ID: SL-208-SA5A-SB-4.0-5.0 ***Collected:*** 3/29/2011 8:50:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.220	JB	0.0232	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.140	JB	0.0133	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0635	JBQ	0.0119	MDL	5.66	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX065 **Laboratory: LL**

EDD Filename: PrepDX065 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: **SL-208-SA5A-SB-4.0-5.0** ***Collected:*** **3/29/2011 8:50:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8-HxCDD	0.103	JB	0.0297	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.172	JBQ	0.0286	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.141	JB	0.0285	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.164	JBQ	0.0193	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.244	JBQ	0.0263	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.108	JBQ	0.0152	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.147	JB	0.0288	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.189	JBQ	0.0153	MDL	5.66	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0980	JB	0.0133	MDL	5.66	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.158	JBQ	0.0151	MDL	5.66	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0991	JQ	0.0342	MDL	1.13	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.0611	JB	0.0330	MDL	1.13	PQL	ng/Kg	U	B
OCDD	0.660	JBQ	0.0226	MDL	11.3	PQL	ng/Kg	U	B
OCDF	0.183	JBQ	0.0226	MDL	11.3	PQL	ng/Kg	U	B

Sample ID: **SL-208-SA5A-SB-7.5-8.5** ***Collected:*** **3/29/2011 9:00:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.251	JB	0.0220	MDL	5.76	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.353	JB	0.0183	MDL	5.76	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0947	JB	0.0141	MDL	5.76	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.159	JB	0.0260	MDL	5.76	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.209	JB	0.0403	MDL	5.76	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0833	JBQ	0.0232	MDL	5.76	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.181	JB	0.0278	MDL	5.76	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.137	JBQ	0.0196	MDL	5.76	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.124	JB	0.0179	MDL	5.76	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.151	JBQ	0.0301	MDL	5.76	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.146	JB	0.0145	MDL	5.76	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.141	JB	0.0159	MDL	5.76	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.155	JBQ	0.0149	MDL	5.76	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0684	JQ	0.0331	MDL	1.15	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.0378	JBQ	0.0287	MDL	1.15	PQL	ng/Kg	U	B
OCDD	0.588	JB	0.0179	MDL	11.5	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX065 **Laboratory: LL**

EDD Filename: PrepDX065 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: SL-208-SA5A-SB-7.5-8.5 ***Collected:*** 3/29/2011 9:00:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
OCDF	0.302	JBQ	0.0299	MDL	11.5	PQL	ng/Kg	U	B

Sample ID: SL-209-SA5A-SB-4.0-5.0 ***Collected:*** 3/28/2011 3:48:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.302	JB	0.0276	MDL	5.57	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.145	JB	0.0143	MDL	5.57	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.142	JBQ	0.0153	MDL	5.57	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.148	JB	0.0296	MDL	5.57	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.216	JBQ	0.0320	MDL	5.57	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.138	JBQ	0.0290	MDL	5.57	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.167	JBQ	0.0230	MDL	5.57	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.210	JBQ	0.0283	MDL	5.57	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.166	JB	0.0200	MDL	5.57	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.121	JBQ	0.0400	MDL	5.57	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.172	JBQ	0.0194	MDL	5.57	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.106	JBQ	0.0191	MDL	5.57	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.187	JBQ	0.0189	MDL	5.57	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0948	JQ	0.0412	MDL	1.11	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.0572	JBQ	0.0368	MDL	1.11	PQL	ng/Kg	U	B
OCDD	0.857	JB	0.0246	MDL	11.1	PQL	ng/Kg	U	B
OCDF	0.206	JBQ	0.0283	MDL	11.1	PQL	ng/Kg	U	B

Sample ID: SL-211-SA5A-SB-2.5-3.5 ***Collected:*** 3/28/2011 9:50:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.288	JBQ	0.0481	MDL	5.41	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.214	JB	0.0290	MDL	5.41	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.237	JB	0.0322	MDL	5.41	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.213	JB	0.0507	MDL	5.41	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.282	JB	0.0538	MDL	5.41	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.244	JBQ	0.0510	MDL	5.41	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.249	JBQ	0.0377	MDL	5.41	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.200	JB	0.0508	MDL	5.41	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.383	JB	0.0420	MDL	5.41	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX065 **Laboratory: LL**

EDD Filename: PrepDX065 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: **SL-211-SA5A-SB-2.5-3.5** ***Collected:*** **3/28/2011 9:50:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,7,8-PECDD	0.177	JBQ	0.0551	MDL	5.41	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.266	JBQ	0.0284	MDL	5.41	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.186	JBQ	0.0324	MDL	5.41	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.318	JB	0.0287	MDL	5.41	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0708	JQ	0.0599	MDL	1.08	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.0921	JB	0.0552	MDL	1.08	PQL	ng/Kg	U	B
OCDD	0.903	JBQ	0.0533	MDL	10.8	PQL	ng/Kg	U	B
OCDF	0.358	JB	0.0643	MDL	10.8	PQL	ng/Kg	U	B

Sample ID: **SL-214-SA5A-SB-4.0-5.0** ***Collected:*** **3/28/2011 12:03:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.319	JB	0.0221	MDL	5.43	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.182	JB	0.0130	MDL	5.43	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0689	JB	0.0132	MDL	5.43	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.113	JBQ	0.0264	MDL	5.43	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.168	JBQ	0.0276	MDL	5.43	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.307	JB	0.0252	MDL	5.43	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.155	JBQ	0.0193	MDL	5.43	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.367	JBQ	0.0224	MDL	5.43	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.311	JB	0.0167	MDL	5.43	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.158	JBQ	0.0301	MDL	5.43	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.138	JBQ	0.0130	MDL	5.43	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.121	JBQ	0.0142	MDL	5.43	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.121	JBQ	0.0136	MDL	5.43	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0660	J	0.0304	MDL	1.09	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.0279	JB	0.0270	MDL	1.09	PQL	ng/Kg	U	B
OCDD	1.28	JB	0.0209	MDL	10.9	PQL	ng/Kg	U	B
OCDF	0.294	JBQ	0.0263	MDL	10.9	PQL	ng/Kg	U	B

Sample ID: **SL-214-SA5A-SB-8.5-9.5** ***Collected:*** **3/28/2011 12:05:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.172	JBQ	0.0215	MDL	5.58	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.137	JBQ	0.0117	MDL	5.58	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX065 **Laboratory: LL**

EDD Filename: PrepDX065 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: **SL-214-SA5A-SB-8.5-9.5** ***Collected:*** **3/28/2011 12:05:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	0.0948	JBQ	0.0135	MDL	5.58	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0674	JBQ	0.0233	MDL	5.58	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.196	JBQ	0.0262	MDL	5.58	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0682	JB	0.0227	MDL	5.58	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.114	JBQ	0.0174	MDL	5.58	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.113	JB	0.0213	MDL	5.58	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0946	JBQ	0.0161	MDL	5.58	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.109	JBQ	0.0252	MDL	5.58	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.131	JB	0.0131	MDL	5.58	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0848	JB	0.0139	MDL	5.58	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.122	JB	0.0129	MDL	5.58	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0272	JQ	0.0252	MDL	1.12	PQL	ng/Kg	J	Z
OCDD	0.458	JB	0.0214	MDL	11.2	PQL	ng/Kg	U	B
OCDF	0.176	JB	0.0253	MDL	11.2	PQL	ng/Kg	U	B

Sample ID: **SL-215-SA5A-SB-4.0-5.0** ***Collected:*** **3/28/2011 2:52:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	1.53	JBQ	0.0314	MDL	5.42	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.479	JBQ	0.0160	MDL	5.42	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.126	JBQ	0.0183	MDL	5.42	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.140	JB	0.0336	MDL	5.42	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.378	JB	0.0394	MDL	5.42	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.510	JB	0.0337	MDL	5.42	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.180	JB	0.0275	MDL	5.42	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.728	JB	0.0319	MDL	5.42	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.431	JB	0.0232	MDL	5.42	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.181	JB	0.0355	MDL	5.42	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.229	JBQ	0.0222	MDL	5.42	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.151	JBQ	0.0228	MDL	5.42	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.350	JBQ	0.0225	MDL	5.42	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0358	JQ	0.0331	MDL	1.08	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.0821	JBQ	0.0556	MDL	1.08	PQL	ng/Kg	U	B
OCDF	0.729	JB	0.0326	MDL	10.8	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX065 **Laboratory: LL**

EDD Filename: PrepDX065 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: **SL-216-SA5A-SB-4.0-5.0** ***Collected:*** **3/28/2011 11:30:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.214	JB	0.0240	MDL	5.61	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.0937	JBQ	0.0113	MDL	5.61	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0506	JBQ	0.0172	MDL	5.61	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.130	JB	0.0258	MDL	5.61	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.181	JBQ	0.0202	MDL	5.61	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.324	JB	0.0277	MDL	5.61	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.145	JBQ	0.0146	MDL	5.61	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.362	JB	0.0247	MDL	5.61	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.282	JB	0.0172	MDL	5.61	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.145	JBQ	0.0358	MDL	5.61	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.209	JB	0.0163	MDL	5.61	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0901	JBQ	0.0139	MDL	5.61	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.199	JB	0.0161	MDL	5.61	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0450	JQ	0.0332	MDL	1.12	PQL	ng/Kg	J	Z
OCDD	0.704	JB	0.0253	MDL	11.2	PQL	ng/Kg	U	B
OCDF	0.201	JB	0.0301	MDL	11.2	PQL	ng/Kg	U	B

Sample ID: **SL-221-SA5A-SB-3.0-4.0** ***Collected:*** **3/29/2011 2:19:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
OCDD	6490	EB	0.127	MDL	11.7	PQL	ng/Kg	J	*XI

Sample ID: **SL-222-SA5A-SB-3.5-4.5** ***Collected:*** **3/30/2011 9:57:00** ***Analysis Type:*** **REA** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,3,7,8-TCDF	50.0	B	0.0834	MDL	1.09	PQL	ng/Kg	J	Q, FD

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DX065 **Laboratory: LL**

EDD Filename: PrepDX065 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: **SL-222-SA5A-SB-3.5-4.5** ***Collected:*** **3/30/2011 9:57:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	896	B	0.148	MDL	5.43	PQL	ng/Kg	J	FD
1,2,3,4,6,7,8-HPCDF	964	B	0.119	MDL	5.43	PQL	ng/Kg	J	FD
1,2,3,4,7,8,9-HPCDF	136	B	0.0865	MDL	5.43	PQL	ng/Kg	J	Q, FD
1,2,3,4,7,8-HxCDD	41.0	B	0.108	MDL	5.43	PQL	ng/Kg	J	FD
1,2,3,4,7,8-HXCDF	225	B	0.140	MDL	5.43	PQL	ng/Kg	J	Q, FD
1,2,3,6,7,8-HXCDD	90.6	B	0.100	MDL	5.43	PQL	ng/Kg	J	Q, FD
1,2,3,6,7,8-HXCDF	197	B	0.117	MDL	5.43	PQL	ng/Kg	J	Q, FD
1,2,3,7,8,9-HXCDD	64.2	B	0.0775	MDL	5.43	PQL	ng/Kg	J	FD
1,2,3,7,8,9-HXCDF	79.8	B	0.0770	MDL	5.43	PQL	ng/Kg	J	Q, FD
1,2,3,7,8-PECDD	34.9	B	0.0830	MDL	5.43	PQL	ng/Kg	J	FD
1,2,3,7,8-PECDF	89.7	B	0.0568	MDL	5.43	PQL	ng/Kg	J	Q, FD
2,3,4,6,7,8-HXCDF	369	B	0.0789	MDL	5.43	PQL	ng/Kg	J	Q, FD
2,3,4,7,8-PECDF	187	B	0.0552	MDL	5.43	PQL	ng/Kg	J	Q, FD
2,3,7,8-TCDD	4.91		0.145	MDL	1.09	PQL	ng/Kg	J	FD
OCDD	2420	B	0.0648	MDL	10.9	PQL	ng/Kg	J	FD
OCDF	624	B	0.0605	MDL	10.9	PQL	ng/Kg	J	Q, FD

Sample ID: **SL-257-SA5A-SB-2.5-3.5** ***Collected:*** **3/30/2011 8:45:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.236	JB	0.0214	MDL	5.32	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.108	JB	0.00824	MDL	5.32	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0482	JBQ	0.0116	MDL	5.32	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0500	JB	0.0116	MDL	5.32	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0316	JBQ	0.0134	MDL	5.32	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0430	JB	0.0103	MDL	5.32	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0384	JB	0.0123	MDL	5.32	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0652	JBQ	0.0114	MDL	5.32	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0484	JBQ	0.0150	MDL	5.32	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0648	JBQ	0.00791	MDL	5.32	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0605	JBQ	0.00973	MDL	5.32	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.103	JB	0.00770	MDL	5.32	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0190	JQ	0.0147	MDL	1.06	PQL	ng/Kg	J	Z
OCDD	0.467	JB	0.0228	MDL	10.6	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX065 **Laboratory: LL**

EDD Filename: PrepDX065 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: **SL-257-SA5A-SB-2.5-3.5** ***Collected:*** **3/30/2011 8:45:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
OCDF	0.115	JB	0.0203	MDL	10.6	PQL	ng/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DX065 **Laboratory: LL**

EDD Filename: PrepDX065 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Laboratory Triplicate Precision
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
*XI	Compound Quantitation and CRQLs
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Verification Correlation Coefficient
C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Verification Percent Recovery Upper Rejection
E	Laboratory Control Precision
E	Laboratory Duplicate Precision

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DX065 **Laboratory: LL**

EDD Filename: PrepDX065 **eQAPP Name: CDM_SSFL_110509**

E	Matrix Spike Precision
F	Equipment Blank Contamination
F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation
L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Q	Matrix Spike Upper Rejection

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DX065 **Laboratory: LL**

EDD Filename: PrepDX065 **eQAPP Name: CDM_SSFL_110509**

R	Continuing Calibration Verification Percent Recovery Lower Estimation
R	Continuing Calibration Verification Percent Recovery Lower Rejection
R	Continuing Calibration Verification Percent Recovery Upper Estimation
R	Continuing Calibration Verification Percent Recovery Upper Rejection
R	Continuing Calibration Verification Relative Response Factor
R	Initial Calibration Relative Response Factor
R	Initial Calibration Verification Percent Recovery Lower Estimation
R	Initial Calibration Verification Percent Recovery Lower Rejection
R	Initial Calibration Verification Percent Recovery Upper Estimation
R	Initial Calibration Verification Percent Recovery Upper Rejection
R	Initial Calibration Verification Relative Response Factor
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control Outlier Reports

DX065

Method Blank Outlier Report

Lab Reporting Batch ID: DX065 **Laboratory: LL**

EDD Filename: PrepDX065 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **AQ**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLK0960B372048	4/7/2011 8:48:00 PM	1,2,3,4,6,7,8-HPCDD	2.46 pg/L	EB10-SA5A-032911
		1,2,3,4,6,7,8-HPCDF	1.36 pg/L	
		1,2,3,4,7,8,9-HPCDF	1.23 pg/L	
		1,2,3,4,7,8-HxCDD	0.912 pg/L	
		1,2,3,4,7,8-HXCDF	0.954 pg/L	
		1,2,3,6,7,8-HXCDD	1.14 pg/L	
		1,2,3,6,7,8-HXCDF	0.764 pg/L	
		1,2,3,7,8,9-HXCDD	0.734 pg/L	
		1,2,3,7,8,9-HXCDF	0.993 pg/L	
		1,2,3,7,8-PECDD	1.24 pg/L	
		1,2,3,7,8-PECDF	0.902 pg/L	
		2,3,4,6,7,8-HXCDF	0.783 pg/L	
		2,3,4,7,8-PECDF	1.07 pg/L	
		2,3,7,8-TCDF	0.281 pg/L	
		OCDD	5.27 pg/L	
		OCDF	2.34 pg/L	

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
EB10-SA5A-032911(RES)	1,2,3,4,6,7,8-HPCDD	1.95 pg/L	1.95U pg/L
EB10-SA5A-032911(RES)	1,2,3,4,6,7,8-HPCDF	0.921 pg/L	0.921U pg/L
EB10-SA5A-032911(RES)	1,2,3,4,7,8,9-HPCDF	0.463 pg/L	0.463U pg/L
EB10-SA5A-032911(RES)	1,2,3,4,7,8-HxCDD	0.242 pg/L	0.242U pg/L
EB10-SA5A-032911(RES)	1,2,3,4,7,8-HXCDF	0.797 pg/L	0.797U pg/L
EB10-SA5A-032911(RES)	1,2,3,6,7,8-HXCDD	0.605 pg/L	0.605U pg/L
EB10-SA5A-032911(RES)	1,2,3,6,7,8-HXCDF	0.466 pg/L	0.466U pg/L
EB10-SA5A-032911(RES)	1,2,3,7,8,9-HXCDD	0.453 pg/L	0.453U pg/L
EB10-SA5A-032911(RES)	1,2,3,7,8,9-HXCDF	0.611 pg/L	0.611U pg/L
EB10-SA5A-032911(RES)	1,2,3,7,8-PECDD	0.677 pg/L	0.677U pg/L
EB10-SA5A-032911(RES)	1,2,3,7,8-PECDF	0.426 pg/L	0.426U pg/L
EB10-SA5A-032911(RES)	2,3,4,6,7,8-HXCDF	0.579 pg/L	0.579U pg/L
EB10-SA5A-032911(RES)	2,3,4,7,8-PECDF	0.826 pg/L	0.826U pg/L
EB10-SA5A-032911(RES)	OCDD	3.59 pg/L	3.59U pg/L

Method Blank Outlier Report

Lab Reporting Batch ID: DX065 **Laboratory: LL**

EDD Filename: PrepDX065 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLK0950B370058	4/22/2011 12:58:00 AM	2,3,7,8-TCDF	0.0705 ng/Kg	SL-093-SA5A-SB-3.5-4.5 SL-222-SA5A-SB-3.5-4.5
BLK0950B370150	4/13/2011 1:50:00 AM	1,2,3,4,6,7,8-HPCDD	0.280 ng/Kg	DUP-11-SA5A-QC-033011
		1,2,3,4,6,7,8-HPCDF	0.140 ng/Kg	DUP-12-SA5A-QC-033011
		1,2,3,4,7,8,9-HPCDF	0.105 ng/Kg	SL-082-SA5A-SB-4.0-5.0
		1,2,3,4,7,8-HxCDD	0.0888 ng/Kg	SL-083-SA5A-SB-4.0-5.0
		1,2,3,4,7,8-HXCDF	0.170 ng/Kg	SL-083-SA5A-SB-9.0-10.0
		1,2,3,6,7,8-HXCDD	0.0837 ng/Kg	SL-090-SA5A-SB-4.0-5.0
		1,2,3,6,7,8-HXCDF	0.123 ng/Kg	SL-091-SA5A-SB-3.0-4.0
		1,2,3,7,8,9-HXCDD	0.115 ng/Kg	SL-093-SA5A-SB-3.5-4.5
		1,2,3,7,8,9-HXCDF	0.140 ng/Kg	SL-208-SA5A-SB-4.0-5.0
		1,2,3,7,8-PECDD	0.131 ng/Kg	SL-208-SA5A-SB-7.5-8.5
		1,2,3,7,8-PECDF	0.130 ng/Kg	SL-209-SA5A-SB-4.0-5.0
		2,3,4,6,7,8-HXCDF	0.0964 ng/Kg	SL-211-SA5A-SB-2.5-3.5
		2,3,4,7,8-PECDF	0.187 ng/Kg	SL-214-SA5A-SB-4.0-5.0
		2,3,7,8-TCDF	0.0414 ng/Kg	SL-214-SA5A-SB-8.5-9.5
		OCDD	1.16 ng/Kg	SL-215-SA5A-SB-4.0-5.0
		OCDF	0.274 ng/Kg	SL-216-SA5A-SB-4.0-5.0
				SL-222-SA5A-SB-3.5-4.5
BLK1050B371244	4/18/2011 12:44:00 PM	1,2,3,4,6,7,8-HPCDD	0.347 ng/Kg	SL-221-SA5A-SB-3.0-4.0
		1,2,3,4,6,7,8-HPCDF	0.160 ng/Kg	
		1,2,3,4,7,8,9-HPCDF	0.108 ng/Kg	
		1,2,3,4,7,8-HXCDF	0.0467 ng/Kg	
		1,2,3,6,7,8-HXCDD	0.0256 ng/Kg	
		1,2,3,6,7,8-HXCDF	0.0341 ng/Kg	
		1,2,3,7,8,9-HXCDD	0.0539 ng/Kg	
		1,2,3,7,8,9-HXCDF	0.0443 ng/Kg	
		1,2,3,7,8-PECDD	0.0338 ng/Kg	
		1,2,3,7,8-PECDF	0.0319 ng/Kg	
		2,3,4,6,7,8-HXCDF	0.0734 ng/Kg	
		2,3,4,7,8-PECDF	0.0552 ng/Kg	
		OCDD	0.581 ng/Kg	
		OCDF	0.263 ng/Kg	
BLK1180B371746	5/2/2011 5:46:00 PM	1,2,3,4,6,7,8-HPCDD	0.196 ng/Kg	SL-257-SA5A-SB-2.5-3.5
		1,2,3,4,6,7,8-HPCDF	0.123 ng/Kg	
		1,2,3,4,7,8,9-HPCDF	0.0591 ng/Kg	
		1,2,3,4,7,8-HxCDD	0.0344 ng/Kg	
		1,2,3,4,7,8-HXCDF	0.0551 ng/Kg	
		1,2,3,6,7,8-HXCDD	0.0404 ng/Kg	
		1,2,3,6,7,8-HXCDF	0.0487 ng/Kg	
		1,2,3,7,8,9-HXCDD	0.0363 ng/Kg	
		1,2,3,7,8,9-HXCDF	0.0825 ng/Kg	
		1,2,3,7,8-PECDD	0.0328 ng/Kg	
		1,2,3,7,8-PECDF	0.0530 ng/Kg	
		2,3,4,6,7,8-HXCDF	0.0527 ng/Kg	
		2,3,4,7,8-PECDF	0.0749 ng/Kg	
		OCDD	0.335 ng/Kg	
		OCDF	0.162 ng/Kg	

Method Blank Outlier Report

Lab Reporting Batch ID: DX065 **Laboratory: LL**

EDD Filename: PrepDX065 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLK1370B371826	5/19/2011 6:26:00 PM	1,2,3,4,6,7,8-HPCDD	0.254 ng/Kg	SL-222-SA5A-SB-3.5-4.5
		1,2,3,4,6,7,8-HPCDF	0.188 ng/Kg	
		1,2,3,4,7,8,9-HPCDF	0.106 ng/Kg	
		1,2,3,4,7,8-HxCDD	0.0292 ng/Kg	
		1,2,3,4,7,8-HXCDF	0.0716 ng/Kg	
		1,2,3,6,7,8-HXCDD	0.0513 ng/Kg	
		1,2,3,6,7,8-HXCDF	0.0503 ng/Kg	
		1,2,3,7,8,9-HXCDD	0.0377 ng/Kg	
		1,2,3,7,8,9-HXCDF	0.0917 ng/Kg	
		1,2,3,7,8-PECDD	0.0632 ng/Kg	
		1,2,3,7,8-PECDF	0.0253 ng/Kg	
		2,3,4,6,7,8-HXCDF	0.0914 ng/Kg	
		2,3,4,7,8-PECDF	0.0780 ng/Kg	
		2,3,7,8-TCDD	0.0449 ng/Kg	
		OCDD	0.399 ng/Kg	
		OCDF	0.292 ng/Kg	
BLK1370B372322	5/24/2011 11:22:00 PM	2,3,7,8-TCDF	0.0193 ng/Kg	SL-222-SA5A-SB-3.5-4.5

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
DUP-11-SA5A-QC-033011(RES)	1,2,3,4,6,7,8-HPCDD	1.21 ng/Kg	1.21U ng/Kg
DUP-11-SA5A-QC-033011(RES)	1,2,3,4,6,7,8-HPCDF	0.300 ng/Kg	0.300U ng/Kg
DUP-11-SA5A-QC-033011(RES)	1,2,3,4,7,8,9-HPCDF	0.101 ng/Kg	0.101U ng/Kg
DUP-11-SA5A-QC-033011(RES)	1,2,3,4,7,8-HxCDD	0.103 ng/Kg	0.103U ng/Kg
DUP-11-SA5A-QC-033011(RES)	1,2,3,6,7,8-HXCDD	0.197 ng/Kg	0.197U ng/Kg
DUP-11-SA5A-QC-033011(RES)	1,2,3,6,7,8-HXCDF	0.133 ng/Kg	0.133U ng/Kg
DUP-11-SA5A-QC-033011(RES)	1,2,3,7,8,9-HXCDD	0.190 ng/Kg	0.190U ng/Kg
DUP-11-SA5A-QC-033011(RES)	1,2,3,7,8,9-HXCDF	0.168 ng/Kg	0.168U ng/Kg
DUP-11-SA5A-QC-033011(RES)	1,2,3,7,8-PECDD	0.103 ng/Kg	0.103U ng/Kg
DUP-11-SA5A-QC-033011(RES)	1,2,3,7,8-PECDF	0.161 ng/Kg	0.161U ng/Kg
DUP-11-SA5A-QC-033011(RES)	2,3,4,6,7,8-HXCDF	0.176 ng/Kg	0.176U ng/Kg
DUP-11-SA5A-QC-033011(RES)	2,3,4,7,8-PECDF	0.169 ng/Kg	0.169U ng/Kg
DUP-11-SA5A-QC-033011(RES)	2,3,7,8-TCDF	0.0706 ng/Kg	0.0706U ng/Kg
DUP-11-SA5A-QC-033011(RES)	OCDD	4.16 ng/Kg	4.16U ng/Kg
DUP-11-SA5A-QC-033011(RES)	OCDF	0.384 ng/Kg	0.384U ng/Kg
DUP-12-SA5A-QC-033011(RES)	1,2,3,4,7,8,9-HPCDF	0.520 ng/Kg	0.520U ng/Kg
DUP-12-SA5A-QC-033011(RES)	1,2,3,4,7,8-HxCDD	0.332 ng/Kg	0.332U ng/Kg
DUP-12-SA5A-QC-033011(RES)	1,2,3,7,8,9-HXCDF	0.361 ng/Kg	0.361U ng/Kg
DUP-12-SA5A-QC-033011(RES)	1,2,3,7,8-PECDD	0.482 ng/Kg	0.482U ng/Kg
DUP-12-SA5A-QC-033011(RES)	1,2,3,7,8-PECDF	0.513 ng/Kg	0.513U ng/Kg
DUP-12-SA5A-QC-033011(RES)	2,3,4,7,8-PECDF	0.925 ng/Kg	0.925U ng/Kg
DUP-12-SA5A-QC-033011(RES)	2,3,7,8-TCDF	0.182 ng/Kg	0.182U ng/Kg
SL-083-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.484 ng/Kg	0.484U ng/Kg
SL-083-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.308 ng/Kg	0.308U ng/Kg
SL-083-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.107 ng/Kg	0.107U ng/Kg
SL-083-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HxCDD	0.140 ng/Kg	0.140U ng/Kg
SL-083-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.195 ng/Kg	0.195U ng/Kg
SL-083-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDD	0.0800 ng/Kg	0.0800U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX065 **Laboratory: LL**

EDD Filename: PrepDX065 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-083-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.163 ng/Kg	0.163U ng/Kg
SL-083-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDD	0.148 ng/Kg	0.148U ng/Kg
SL-083-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.130 ng/Kg	0.130U ng/Kg
SL-083-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDD	0.120 ng/Kg	0.120U ng/Kg
SL-083-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.158 ng/Kg	0.158U ng/Kg
SL-083-SA5A-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.171 ng/Kg	0.171U ng/Kg
SL-083-SA5A-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.245 ng/Kg	0.245U ng/Kg
SL-083-SA5A-SB-4.0-5.0(RES)	2,3,7,8-TCDF	0.0478 ng/Kg	0.0478U ng/Kg
SL-083-SA5A-SB-4.0-5.0(RES)	OCDD	1.38 ng/Kg	1.38U ng/Kg
SL-083-SA5A-SB-4.0-5.0(RES)	OCDF	0.317 ng/Kg	0.317U ng/Kg
SL-083-SA5A-SB-9.0-10.0(RES)	1,2,3,4,6,7,8-HPCDD	0.822 ng/Kg	0.822U ng/Kg
SL-083-SA5A-SB-9.0-10.0(RES)	1,2,3,4,6,7,8-HPCDF	0.417 ng/Kg	0.417U ng/Kg
SL-083-SA5A-SB-9.0-10.0(RES)	1,2,3,4,7,8,9-HPCDF	0.188 ng/Kg	0.188U ng/Kg
SL-083-SA5A-SB-9.0-10.0(RES)	1,2,3,4,7,8-HxCDD	0.165 ng/Kg	0.165U ng/Kg
SL-083-SA5A-SB-9.0-10.0(RES)	1,2,3,4,7,8-HXCDF	0.263 ng/Kg	0.263U ng/Kg
SL-083-SA5A-SB-9.0-10.0(RES)	1,2,3,6,7,8-HXCDD	0.255 ng/Kg	0.255U ng/Kg
SL-083-SA5A-SB-9.0-10.0(RES)	1,2,3,6,7,8-HXCDF	0.254 ng/Kg	0.254U ng/Kg
SL-083-SA5A-SB-9.0-10.0(RES)	1,2,3,7,8,9-HXCDD	0.142 ng/Kg	0.142U ng/Kg
SL-083-SA5A-SB-9.0-10.0(RES)	1,2,3,7,8,9-HXCDF	0.234 ng/Kg	0.234U ng/Kg
SL-083-SA5A-SB-9.0-10.0(RES)	1,2,3,7,8-PECDD	0.325 ng/Kg	0.325U ng/Kg
SL-083-SA5A-SB-9.0-10.0(RES)	1,2,3,7,8-PECDF	0.215 ng/Kg	0.215U ng/Kg
SL-083-SA5A-SB-9.0-10.0(RES)	2,3,4,6,7,8-HXCDF	0.222 ng/Kg	0.222U ng/Kg
SL-083-SA5A-SB-9.0-10.0(RES)	2,3,4,7,8-PECDF	0.248 ng/Kg	0.248U ng/Kg
SL-083-SA5A-SB-9.0-10.0(RES)	OCDF	0.535 ng/Kg	0.535U ng/Kg
SL-090-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.325 ng/Kg	0.325U ng/Kg
SL-090-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HxCDD	0.288 ng/Kg	0.288U ng/Kg
SL-090-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.665 ng/Kg	0.665U ng/Kg
SL-090-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.501 ng/Kg	0.501U ng/Kg
SL-090-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDD	0.535 ng/Kg	0.535U ng/Kg
SL-090-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.245 ng/Kg	0.245U ng/Kg
SL-090-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDD	0.266 ng/Kg	0.266U ng/Kg
SL-090-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.391 ng/Kg	0.391U ng/Kg
SL-090-SA5A-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.761 ng/Kg	0.761U ng/Kg
SL-091-SA5A-SB-3.0-4.0(RES)	1,2,3,4,6,7,8-HPCDD	0.239 ng/Kg	0.239U ng/Kg
SL-091-SA5A-SB-3.0-4.0(RES)	1,2,3,4,6,7,8-HPCDF	0.169 ng/Kg	0.169U ng/Kg
SL-091-SA5A-SB-3.0-4.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0698 ng/Kg	0.0698U ng/Kg
SL-091-SA5A-SB-3.0-4.0(RES)	1,2,3,4,7,8-HxCDD	0.115 ng/Kg	0.115U ng/Kg
SL-091-SA5A-SB-3.0-4.0(RES)	1,2,3,4,7,8-HXCDF	0.236 ng/Kg	0.236U ng/Kg
SL-091-SA5A-SB-3.0-4.0(RES)	1,2,3,6,7,8-HXCDD	0.154 ng/Kg	0.154U ng/Kg
SL-091-SA5A-SB-3.0-4.0(RES)	1,2,3,6,7,8-HXCDF	0.148 ng/Kg	0.148U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX065 **Laboratory: LL**

EDD Filename: PrepDX065 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-091-SA5A-SB-3.0-4.0(RES)	1,2,3,7,8,9-HXCDD	0.284 ng/Kg	0.284U ng/Kg
SL-091-SA5A-SB-3.0-4.0(RES)	1,2,3,7,8,9-HXCDF	0.223 ng/Kg	0.223U ng/Kg
SL-091-SA5A-SB-3.0-4.0(RES)	1,2,3,7,8-PECDD	0.144 ng/Kg	0.144U ng/Kg
SL-091-SA5A-SB-3.0-4.0(RES)	1,2,3,7,8-PECDF	0.179 ng/Kg	0.179U ng/Kg
SL-091-SA5A-SB-3.0-4.0(RES)	2,3,4,6,7,8-HXCDF	0.123 ng/Kg	0.123U ng/Kg
SL-091-SA5A-SB-3.0-4.0(RES)	2,3,4,7,8-PECDF	0.193 ng/Kg	0.193U ng/Kg
SL-091-SA5A-SB-3.0-4.0(RES)	2,3,7,8-TCDF	0.0499 ng/Kg	0.0499U ng/Kg
SL-091-SA5A-SB-3.0-4.0(RES)	OCDD	1.45 ng/Kg	1.45U ng/Kg
SL-091-SA5A-SB-3.0-4.0(RES)	OCDF	0.191 ng/Kg	0.191U ng/Kg
SL-208-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.220 ng/Kg	0.220U ng/Kg
SL-208-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.140 ng/Kg	0.140U ng/Kg
SL-208-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0635 ng/Kg	0.0635U ng/Kg
SL-208-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HxCDD	0.103 ng/Kg	0.103U ng/Kg
SL-208-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.172 ng/Kg	0.172U ng/Kg
SL-208-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDD	0.141 ng/Kg	0.141U ng/Kg
SL-208-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.164 ng/Kg	0.164U ng/Kg
SL-208-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDD	0.244 ng/Kg	0.244U ng/Kg
SL-208-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.108 ng/Kg	0.108U ng/Kg
SL-208-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDD	0.147 ng/Kg	0.147U ng/Kg
SL-208-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.189 ng/Kg	0.189U ng/Kg
SL-208-SA5A-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.0980 ng/Kg	0.0980U ng/Kg
SL-208-SA5A-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.158 ng/Kg	0.158U ng/Kg
SL-208-SA5A-SB-4.0-5.0(RES)	2,3,7,8-TCDF	0.0611 ng/Kg	0.0611U ng/Kg
SL-208-SA5A-SB-4.0-5.0(RES)	OCDD	0.660 ng/Kg	0.660U ng/Kg
SL-208-SA5A-SB-4.0-5.0(RES)	OCDF	0.183 ng/Kg	0.183U ng/Kg
SL-208-SA5A-SB-7.5-8.5(RES)	1,2,3,4,6,7,8-HPCDD	0.251 ng/Kg	0.251U ng/Kg
SL-208-SA5A-SB-7.5-8.5(RES)	1,2,3,4,6,7,8-HPCDF	0.353 ng/Kg	0.353U ng/Kg
SL-208-SA5A-SB-7.5-8.5(RES)	1,2,3,4,7,8,9-HPCDF	0.0947 ng/Kg	0.0947U ng/Kg
SL-208-SA5A-SB-7.5-8.5(RES)	1,2,3,4,7,8-HxCDD	0.159 ng/Kg	0.159U ng/Kg
SL-208-SA5A-SB-7.5-8.5(RES)	1,2,3,4,7,8-HXCDF	0.209 ng/Kg	0.209U ng/Kg
SL-208-SA5A-SB-7.5-8.5(RES)	1,2,3,6,7,8-HXCDD	0.0833 ng/Kg	0.0833U ng/Kg
SL-208-SA5A-SB-7.5-8.5(RES)	1,2,3,6,7,8-HXCDF	0.181 ng/Kg	0.181U ng/Kg
SL-208-SA5A-SB-7.5-8.5(RES)	1,2,3,7,8,9-HXCDD	0.137 ng/Kg	0.137U ng/Kg
SL-208-SA5A-SB-7.5-8.5(RES)	1,2,3,7,8,9-HXCDF	0.124 ng/Kg	0.124U ng/Kg
SL-208-SA5A-SB-7.5-8.5(RES)	1,2,3,7,8-PECDD	0.151 ng/Kg	0.151U ng/Kg
SL-208-SA5A-SB-7.5-8.5(RES)	1,2,3,7,8-PECDF	0.146 ng/Kg	0.146U ng/Kg
SL-208-SA5A-SB-7.5-8.5(RES)	2,3,4,6,7,8-HXCDF	0.141 ng/Kg	0.141U ng/Kg
SL-208-SA5A-SB-7.5-8.5(RES)	2,3,4,7,8-PECDF	0.155 ng/Kg	0.155U ng/Kg
SL-208-SA5A-SB-7.5-8.5(RES)	2,3,7,8-TCDF	0.0378 ng/Kg	0.0378U ng/Kg
SL-208-SA5A-SB-7.5-8.5(RES)	OCDD	0.588 ng/Kg	0.588U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX065 **Laboratory: LL**

EDD Filename: PrepDX065 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-208-SA5A-SB-7.5-8.5(RES)	OCDF	0.302 ng/Kg	0.302U ng/Kg
SL-209-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.302 ng/Kg	0.302U ng/Kg
SL-209-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.145 ng/Kg	0.145U ng/Kg
SL-209-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.142 ng/Kg	0.142U ng/Kg
SL-209-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HxCDD	0.148 ng/Kg	0.148U ng/Kg
SL-209-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.216 ng/Kg	0.216U ng/Kg
SL-209-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDD	0.138 ng/Kg	0.138U ng/Kg
SL-209-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.167 ng/Kg	0.167U ng/Kg
SL-209-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDD	0.210 ng/Kg	0.210U ng/Kg
SL-209-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.166 ng/Kg	0.166U ng/Kg
SL-209-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDD	0.121 ng/Kg	0.121U ng/Kg
SL-209-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.172 ng/Kg	0.172U ng/Kg
SL-209-SA5A-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.106 ng/Kg	0.106U ng/Kg
SL-209-SA5A-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.187 ng/Kg	0.187U ng/Kg
SL-209-SA5A-SB-4.0-5.0(RES)	2,3,7,8-TCDF	0.0572 ng/Kg	0.0572U ng/Kg
SL-209-SA5A-SB-4.0-5.0(RES)	OCDD	0.857 ng/Kg	0.857U ng/Kg
SL-209-SA5A-SB-4.0-5.0(RES)	OCDF	0.206 ng/Kg	0.206U ng/Kg
SL-211-SA5A-SB-2.5-3.5(RES)	1,2,3,4,6,7,8-HPCDD	0.288 ng/Kg	0.288U ng/Kg
SL-211-SA5A-SB-2.5-3.5(RES)	1,2,3,4,6,7,8-HPCDF	0.214 ng/Kg	0.214U ng/Kg
SL-211-SA5A-SB-2.5-3.5(RES)	1,2,3,4,7,8,9-HPCDF	0.237 ng/Kg	0.237U ng/Kg
SL-211-SA5A-SB-2.5-3.5(RES)	1,2,3,4,7,8-HxCDD	0.213 ng/Kg	0.213U ng/Kg
SL-211-SA5A-SB-2.5-3.5(RES)	1,2,3,4,7,8-HXCDF	0.282 ng/Kg	0.282U ng/Kg
SL-211-SA5A-SB-2.5-3.5(RES)	1,2,3,6,7,8-HXCDD	0.244 ng/Kg	0.244U ng/Kg
SL-211-SA5A-SB-2.5-3.5(RES)	1,2,3,6,7,8-HXCDF	0.249 ng/Kg	0.249U ng/Kg
SL-211-SA5A-SB-2.5-3.5(RES)	1,2,3,7,8,9-HXCDD	0.200 ng/Kg	0.200U ng/Kg
SL-211-SA5A-SB-2.5-3.5(RES)	1,2,3,7,8,9-HXCDF	0.383 ng/Kg	0.383U ng/Kg
SL-211-SA5A-SB-2.5-3.5(RES)	1,2,3,7,8-PECDD	0.177 ng/Kg	0.177U ng/Kg
SL-211-SA5A-SB-2.5-3.5(RES)	1,2,3,7,8-PECDF	0.266 ng/Kg	0.266U ng/Kg
SL-211-SA5A-SB-2.5-3.5(RES)	2,3,4,6,7,8-HXCDF	0.186 ng/Kg	0.186U ng/Kg
SL-211-SA5A-SB-2.5-3.5(RES)	2,3,4,7,8-PECDF	0.318 ng/Kg	0.318U ng/Kg
SL-211-SA5A-SB-2.5-3.5(RES)	2,3,7,8-TCDF	0.0921 ng/Kg	0.0921U ng/Kg
SL-211-SA5A-SB-2.5-3.5(RES)	OCDD	0.903 ng/Kg	0.903U ng/Kg
SL-211-SA5A-SB-2.5-3.5(RES)	OCDF	0.358 ng/Kg	0.358U ng/Kg
SL-214-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.319 ng/Kg	0.319U ng/Kg
SL-214-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.182 ng/Kg	0.182U ng/Kg
SL-214-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0689 ng/Kg	0.0689U ng/Kg
SL-214-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HxCDD	0.113 ng/Kg	0.113U ng/Kg
SL-214-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.168 ng/Kg	0.168U ng/Kg
SL-214-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDD	0.307 ng/Kg	0.307U ng/Kg
SL-214-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.155 ng/Kg	0.155U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX065 **Laboratory: LL**

EDD Filename: PrepDX065 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-214-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDD	0.367 ng/Kg	0.367U ng/Kg
SL-214-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.311 ng/Kg	0.311U ng/Kg
SL-214-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDD	0.158 ng/Kg	0.158U ng/Kg
SL-214-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.138 ng/Kg	0.138U ng/Kg
SL-214-SA5A-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.121 ng/Kg	0.121U ng/Kg
SL-214-SA5A-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.121 ng/Kg	0.121U ng/Kg
SL-214-SA5A-SB-4.0-5.0(RES)	2,3,7,8-TCDF	0.0279 ng/Kg	0.0279U ng/Kg
SL-214-SA5A-SB-4.0-5.0(RES)	OCDD	1.28 ng/Kg	1.28U ng/Kg
SL-214-SA5A-SB-4.0-5.0(RES)	OCDF	0.294 ng/Kg	0.294U ng/Kg
SL-214-SA5A-SB-8.5-9.5(RES)	1,2,3,4,6,7,8-HPCDD	0.172 ng/Kg	0.172U ng/Kg
SL-214-SA5A-SB-8.5-9.5(RES)	1,2,3,4,6,7,8-HPCDF	0.137 ng/Kg	0.137U ng/Kg
SL-214-SA5A-SB-8.5-9.5(RES)	1,2,3,4,7,8,9-HPCDF	0.0948 ng/Kg	0.0948U ng/Kg
SL-214-SA5A-SB-8.5-9.5(RES)	1,2,3,4,7,8-HxCDD	0.0674 ng/Kg	0.0674U ng/Kg
SL-214-SA5A-SB-8.5-9.5(RES)	1,2,3,4,7,8-HXCDF	0.196 ng/Kg	0.196U ng/Kg
SL-214-SA5A-SB-8.5-9.5(RES)	1,2,3,6,7,8-HXCDD	0.0682 ng/Kg	0.0682U ng/Kg
SL-214-SA5A-SB-8.5-9.5(RES)	1,2,3,6,7,8-HXCDF	0.114 ng/Kg	0.114U ng/Kg
SL-214-SA5A-SB-8.5-9.5(RES)	1,2,3,7,8,9-HXCDD	0.113 ng/Kg	0.113U ng/Kg
SL-214-SA5A-SB-8.5-9.5(RES)	1,2,3,7,8,9-HXCDF	0.0946 ng/Kg	0.0946U ng/Kg
SL-214-SA5A-SB-8.5-9.5(RES)	1,2,3,7,8-PECDD	0.109 ng/Kg	0.109U ng/Kg
SL-214-SA5A-SB-8.5-9.5(RES)	1,2,3,7,8-PECDF	0.131 ng/Kg	0.131U ng/Kg
SL-214-SA5A-SB-8.5-9.5(RES)	2,3,4,6,7,8-HXCDF	0.0848 ng/Kg	0.0848U ng/Kg
SL-214-SA5A-SB-8.5-9.5(RES)	2,3,4,7,8-PECDF	0.122 ng/Kg	0.122U ng/Kg
SL-214-SA5A-SB-8.5-9.5(RES)	OCDD	0.458 ng/Kg	0.458U ng/Kg
SL-214-SA5A-SB-8.5-9.5(RES)	OCDF	0.176 ng/Kg	0.176U ng/Kg
SL-215-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.479 ng/Kg	0.479U ng/Kg
SL-215-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.126 ng/Kg	0.126U ng/Kg
SL-215-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HxCDD	0.140 ng/Kg	0.140U ng/Kg
SL-215-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.378 ng/Kg	0.378U ng/Kg
SL-215-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.180 ng/Kg	0.180U ng/Kg
SL-215-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.431 ng/Kg	0.431U ng/Kg
SL-215-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDD	0.181 ng/Kg	0.181U ng/Kg
SL-215-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.229 ng/Kg	0.229U ng/Kg
SL-215-SA5A-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.151 ng/Kg	0.151U ng/Kg
SL-215-SA5A-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.350 ng/Kg	0.350U ng/Kg
SL-215-SA5A-SB-4.0-5.0(RES)	2,3,7,8-TCDF	0.0821 ng/Kg	0.0821U ng/Kg
SL-215-SA5A-SB-4.0-5.0(RES)	OCDF	0.729 ng/Kg	0.729U ng/Kg
SL-216-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.214 ng/Kg	0.214U ng/Kg
SL-216-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.0937 ng/Kg	0.0937U ng/Kg
SL-216-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0506 ng/Kg	0.0506U ng/Kg
SL-216-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HxCDD	0.130 ng/Kg	0.130U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX065 **Laboratory: LL**

EDD Filename: PrepDX065 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-216-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.181 ng/Kg	0.181U ng/Kg
SL-216-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDD	0.324 ng/Kg	0.324U ng/Kg
SL-216-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.145 ng/Kg	0.145U ng/Kg
SL-216-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDD	0.362 ng/Kg	0.362U ng/Kg
SL-216-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.282 ng/Kg	0.282U ng/Kg
SL-216-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDD	0.145 ng/Kg	0.145U ng/Kg
SL-216-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.209 ng/Kg	0.209U ng/Kg
SL-216-SA5A-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.0901 ng/Kg	0.0901U ng/Kg
SL-216-SA5A-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.199 ng/Kg	0.199U ng/Kg
SL-216-SA5A-SB-4.0-5.0(RES)	OCDD	0.704 ng/Kg	0.704U ng/Kg
SL-216-SA5A-SB-4.0-5.0(RES)	OCDF	0.201 ng/Kg	0.201U ng/Kg
SL-257-SA5A-SB-2.5-3.5(RES)	1,2,3,4,6,7,8-HPCDD	0.236 ng/Kg	0.236U ng/Kg
SL-257-SA5A-SB-2.5-3.5(RES)	1,2,3,4,6,7,8-HPCDF	0.108 ng/Kg	0.108U ng/Kg
SL-257-SA5A-SB-2.5-3.5(RES)	1,2,3,4,7,8,9-HPCDF	0.0482 ng/Kg	0.0482U ng/Kg
SL-257-SA5A-SB-2.5-3.5(RES)	1,2,3,4,7,8-HXCDF	0.0500 ng/Kg	0.0500U ng/Kg
SL-257-SA5A-SB-2.5-3.5(RES)	1,2,3,6,7,8-HXCDD	0.0316 ng/Kg	0.0316U ng/Kg
SL-257-SA5A-SB-2.5-3.5(RES)	1,2,3,6,7,8-HXCDF	0.0430 ng/Kg	0.0430U ng/Kg
SL-257-SA5A-SB-2.5-3.5(RES)	1,2,3,7,8,9-HXCDD	0.0384 ng/Kg	0.0384U ng/Kg
SL-257-SA5A-SB-2.5-3.5(RES)	1,2,3,7,8,9-HXCDF	0.0652 ng/Kg	0.0652U ng/Kg
SL-257-SA5A-SB-2.5-3.5(RES)	1,2,3,7,8-PECDD	0.0464 ng/Kg	0.0484U ng/Kg
SL-257-SA5A-SB-2.5-3.5(RES)	1,2,3,7,8-PECDF	0.0648 ng/Kg	0.0648U ng/Kg
SL-257-SA5A-SB-2.5-3.5(RES)	2,3,4,6,7,8-HXCDF	0.0605 ng/Kg	0.0805U ng/Kg
SL-257-SA5A-SB-2.5-3.5(RES)	2,3,4,7,8-PECDF	0.103 ng/Kg	0.103U ng/Kg
SL-257-SA5A-SB-2.5-3.5(RES)	OCDD	0.467 ng/Kg	0.467U ng/Kg
SL-257-SA5A-SB-2.5-3.5(RES)	OCDF	0.115 ng/Kg	0.115U ng/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DX065 **Laboratory: LL**

EDD Filename: DX065 **eQAPP Name: CDM_SSFL_110509**

***Method:* 1613B**
***Matrix:* SO**

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-222-SA5A-SB-3.5-4.5MS SL-222-SA5A-SB-3.5-4.5MSD (SL-222-SA5A-SB-3.5-4.5)	1,2,3,4,6,7,8-HPCDD	-652	-723	40.00-135.00	50 (20.00)	1,2,3,4,6,7,8-HPCDD	
	1,2,3,4,6,7,8-HPCDF	-775	-786	40.00-135.00	-	1,2,3,4,6,7,8-HPCDF	
	1,2,3,4,7,8,9-HPCDF	-20	-19	40.00-135.00	-	1,2,3,4,7,8,9-HPCDF	J (all detects) R (all non-detects)
	1,2,3,4,7,8-HXCDF	-100	-104	40.00-135.00	-	1,2,3,4,7,8-HXCDF	
	1,2,3,6,7,8-HXCDF	-75	-79	40.00-135.00	-	1,2,3,6,7,8-HXCDF	
	2,3,4,6,7,8-HXCDF	-232	-236	40.00-135.00	-	2,3,4,6,7,8-HXCDF	1,2,3,4,6,7,8-HPCDD, 1,2,3,4,6,7,8-HPCDF, OCDD, No Qual, >4x
	2,3,4,7,8-PECDF	-66	-69	40.00-135.00	-	2,3,4,7,8-PECDF	
	2,3,7,8-TCDF	-124	-134	40.00-135.00	-	2,3,7,8-TCDF	
	OCDD	-897	-1012	40.00-135.00	71 (20.00)	OCDD	
	OCDF	-179	-184	40.00-135.00	-	OCDF	
SL-222-SA5A-SB-3.5-4.5MS SL-222-SA5A-SB-3.5-4.5MSD (SL-222-SA5A-SB-3.5-4.5)	1,2,3,6,7,8-HXCDD	27	20	40.00-135.00	-	1,2,3,6,7,8-HXCDD	J(all detects) UJ(all non-detects)
	1,2,3,7,8,9-HXCDF	29	27	40.00-135.00	-	1,2,3,7,8,9-HXCDF	
	1,2,3,7,8-PECDF	23	21	40.00-135.00	-	1,2,3,7,8-PECDF	
SL-222-SA5A-SB-3.5-4.5MSD (SL-222-SA5A-SB-3.5-4.5)	OCDD	-	146	40.00-135.00	-	OCDD	No Qual, >4x

Field Duplicate RPD Report

Lab Reporting Batch ID: DX065 **Laboratory: LL**

EDD Filename: DX065 **eQAPP Name: CDM_SSFL_110509**

Method: 160.3M
Matrix: SO

Analyte	Concentration (%) SL-222-SA5A-SB-3.5-4.5	Concentration (%) DUP-11-SA5A-QC-033011	Sample RPD	eQAPP RPD	Flag
MOISTURE	8.4	9.9	16		No Qualifiers Applied

Analyte	Concentration (%) SL-090-SA5A-SB-4.0-5.0	Concentration (%) DUP-12-SA5A-QC-033011	Sample RPD	eQAPP RPD	Flag
MOISTURE	9.8	11.0	12		No Qualifiers Applied

Method: 1613B
Matrix: SO

Analyte	Concentration (ng/Kg) SL-222-SA5A-SB-3.5-4.5	Concentration (ng/Kg) DUP-11-SA5A-QC-033011	Sample RPD	eQAPP RPD	Flag
1,2,3,4,6,7,8-HPCDD	896	1.21	199	50.00	J(all detects)
1,2,3,4,6,7,8-HPCDF	964	0.300	200	50.00	
1,2,3,4,7,8,9-HPCDF	136	0.101	200	50.00	
1,2,3,4,7,8-HxCDD	41.0	0.103	199	50.00	
1,2,3,4,7,8-HXCDF	225	0.871	198	50.00	
1,2,3,6,7,8-HXCDD	90.6	0.197	199	50.00	
1,2,3,6,7,8-HXCDF	197	0.133	200	50.00	
1,2,3,7,8,9-HXCDD	64.2	0.190	199	50.00	
1,2,3,7,8,9-HXCDF	79.8	0.168	199	50.00	
1,2,3,7,8-PECDD	34.9	0.103	199	50.00	
1,2,3,7,8-PECDF	89.7	0.161	199	50.00	
2,3,4,6,7,8-HXCDF	369	0.176	200	50.00	
2,3,4,7,8-PECDF	187	0.169	200	50.00	
2,3,7,8-TCDD	4.91	0.0402	197	50.00	
2,3,7,8-TCDF	50.0	0.0706	199	50.00	
OCDD	2420	4.16	199	50.00	
OCDF	624	0.384	200	50.00	

Analyte	Concentration (ng/Kg) SL-090-SA5A-SB-4.0-5.0	Concentration (ng/Kg) DUP-12-SA5A-QC-033011	Sample RPD	eQAPP RPD	Flag
1,2,3,4,6,7,8-HPCDD	12.1	8.87	31	50.00	No Qualifiers Applied
1,2,3,4,6,7,8-HPCDF	2.39	2.76	14	50.00	
1,2,3,4,7,8,9-HPCDF	0.325	0.520	46	50.00	
1,2,3,4,7,8-HxCDD	0.288	0.332	14	50.00	
1,2,3,4,7,8-HXCDF	0.665	1.02	42	50.00	
1,2,3,6,7,8-HXCDD	0.868	1.04	18	50.00	
1,2,3,6,7,8-HXCDF	0.501	0.690	32	50.00	
1,2,3,7,8,9-HXCDD	0.535	0.780	37	50.00	
1,2,3,7,8,9-HXCDF	0.245	0.361	38	50.00	
1,2,3,7,8-PECDF	0.391	0.513	27	50.00	
2,3,4,6,7,8-HXCDF	0.551	0.694	23	50.00	
2,3,4,7,8-PECDF	0.761	0.925	19	50.00	
2,3,7,8-TCDD	0.0541	0.0526	3	50.00	
2,3,7,8-TCDF	0.210	0.182	14	50.00	
OCDD	78.4	55.1	35	50.00	
OCDF	3.79	2.83	29	50.00	
1,2,3,7,8-PECDD	0.266	0.482	58	50.00	J(all detects)

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Reporting Limit Outliers

Lab Reporting Batch ID: DX065 **Laboratory: LL**

EDD Filename: DX065 **eQAPP Name: CDM_SSFL_110509**

Method: 1613B

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB10-SA5A-032911	1,2,3,4,6,7,8-HPCDD	JBQ	1.95	10.2	PQL	pg/L	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.921	10.2	PQL	pg/L	
	1,2,3,4,7,8,9-HPCDF	JB	0.463	10.2	PQL	pg/L	
	1,2,3,4,7,8-HxCDD	JB	0.242	10.2	PQL	pg/L	
	1,2,3,4,7,8-HXCDF	JB	0.797	10.2	PQL	pg/L	
	1,2,3,6,7,8-HXCDD	JBQ	0.605	10.2	PQL	pg/L	
	1,2,3,6,7,8-HXCDF	JB	0.466	10.2	PQL	pg/L	
	1,2,3,7,8,9-HXCDD	JB	0.453	10.2	PQL	pg/L	
	1,2,3,7,8,9-HXCDF	JBQ	0.611	10.2	PQL	pg/L	
	1,2,3,7,8-PECDD	JBQ	0.677	10.2	PQL	pg/L	
	1,2,3,7,8-PECDF	JB	0.426	10.2	PQL	pg/L	
	2,3,4,6,7,8-HXCDF	JBQ	0.579	10.2	PQL	pg/L	
	2,3,4,7,8-PECDF	JBQ	0.826	10.2	PQL	pg/L	
	OCDD	JB	3.59	20.3	PQL	pg/L	

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-11-SA5A-QC-033011	1,2,3,4,6,7,8-HPCDD	JB	1.21	5.53	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JBQ	0.300	5.53	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.101	5.53	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.103	5.53	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.871	5.53	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.197	5.53	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.133	5.53	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.190	5.53	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.168	5.53	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.103	5.53	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.161	5.53	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.176	5.53	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.169	5.53	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0402	1.11	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.0706	1.11	PQL	ng/Kg	
	OCDD	JB	4.16	11.1	PQL	ng/Kg	
	OCDF	JB	0.384	11.1	PQL	ng/Kg	
DUP-12-SA5A-QC-033011	1,2,3,4,6,7,8-HPCDF	JB	2.76	5.53	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JB	0.520	5.53	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.332	5.53	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	1.02	5.53	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	1.04	5.53	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.690	5.53	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.780	5.53	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.361	5.53	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.482	5.53	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.513	5.53	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.694	5.53	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.925	5.53	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0526	1.11	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.182	1.11	PQL	ng/Kg	
	OCDF	JB	2.83	11.1	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX065 **Laboratory: LL**

EDD Filename: DX065 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-082-SA5A-SB-4.0-5.0	1,2,3,4,7,8,9-HPCDF	JB	2.29	5.57	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8-HXCDF	JB	2.85	5.57	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	4.31	5.57	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.759	5.57	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	1.32	5.57	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	2.14	5.57	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	2.75	5.57	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.751	1.11	PQL	ng/Kg	
SL-083-SA5A-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JB	0.484	5.31	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JBQ	0.308	5.31	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.107	5.31	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.140	5.31	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.195	5.31	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.0800	5.31	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.163	5.31	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.148	5.31	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.130	5.31	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.120	5.31	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.158	5.31	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.171	5.31	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.245	5.31	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0827	1.06	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.0478	1.06	PQL	ng/Kg	
	OCDD	JB	1.38	10.6	PQL	ng/Kg	
	OCDF	JB	0.317	10.6	PQL	ng/Kg	
SL-083-SA5A-SB-9.0-10.0	1,2,3,4,6,7,8-HPCDD	JB	0.822	5.09	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.417	5.09	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.188	5.09	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.165	5.09	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.263	5.09	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.255	5.09	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.254	5.09	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.142	5.09	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.234	5.09	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.325	5.09	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.215	5.09	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.222	5.09	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.248	5.09	PQL	ng/Kg	
	OCDD	JB	7.66	10.2	PQL	ng/Kg	
	OCDF	JB	0.535	10.2	PQL	ng/Kg	
SL-090-SA5A-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDF	JB	2.39	5.52	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JB	0.325	5.52	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.288	5.52	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.665	5.52	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.868	5.52	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.501	5.52	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.535	5.52	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.245	5.52	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.266	5.52	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.391	5.52	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.551	5.52	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.761	5.52	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0541	1.10	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.210	1.10	PQL	ng/Kg	
	OCDF	JB	3.79	11.0	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX065 **Laboratory: LL**

EDD Filename: DX065 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-091-SA5A-SB-3.0-4.0	1,2,3,4,6,7,8-HPCDD	JB	0.239	5.55	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JBQ	0.169	5.55	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0698	5.55	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.115	5.55	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.236	5.55	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.154	5.55	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.148	5.55	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.284	5.55	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.223	5.55	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.144	5.55	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.179	5.55	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.123	5.55	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.193	5.55	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0494	1.11	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.0499	1.11	PQL	ng/Kg	
	OCDD	JB	1.45	11.1	PQL	ng/Kg	
	OCDF	JBQ	0.191	11.1	PQL	ng/Kg	
SL-093-SA5A-SB-3.5-4.5	1,2,3,4,7,8,9-HPCDF	JB	0.940	5.68	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8-HxCDD	JB	2.26	5.68	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	4.32	5.68	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	3.08	5.68	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	4.91	5.68	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.720	5.68	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	1.51	5.68	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	3.50	5.68	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	3.26	5.68	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	3.97	5.68	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.300	1.14	PQL	ng/Kg	
	OCDF	JB	8.78	11.4	PQL	ng/Kg	
SL-208-SA5A-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JB	0.220	5.66	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.140	5.66	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0635	5.66	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.103	5.66	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.172	5.66	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.141	5.66	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.164	5.66	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.244	5.66	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.108	5.66	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.147	5.66	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.189	5.66	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.0980	5.66	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.158	5.66	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0991	1.13	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.0611	1.13	PQL	ng/Kg	
	OCDD	JBQ	0.660	11.3	PQL	ng/Kg	
	OCDF	JBQ	0.183	11.3	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX065 **Laboratory: LL**

EDD Filename: DX065 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-208-SA5A-SB-7.5-8.5	1,2,3,4,6,7,8-HPCDD	JB	0.251	5.76	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.353	5.76	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.0947	5.76	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.159	5.76	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.209	5.76	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.0833	5.76	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.181	5.76	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.137	5.76	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.124	5.76	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.151	5.76	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.146	5.76	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.141	5.76	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.155	5.76	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0684	1.15	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.0378	1.15	PQL	ng/Kg	
	OCDD	JB	0.588	11.5	PQL	ng/Kg	
	OCDF	JBQ	0.302	11.5	PQL	ng/Kg	
SL-209-SA5A-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JB	0.302	5.57	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.145	5.57	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.142	5.57	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.148	5.57	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.216	5.57	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.138	5.57	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.167	5.57	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.210	5.57	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.166	5.57	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.121	5.57	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.172	5.57	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.106	5.57	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.187	5.57	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0948	1.11	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.0572	1.11	PQL	ng/Kg	
	OCDD	JB	0.857	11.1	PQL	ng/Kg	
	OCDF	JBQ	0.206	11.1	PQL	ng/Kg	
SL-211-SA5A-SB-2.5-3.5	1,2,3,4,6,7,8-HPCDD	JBQ	0.288	5.41	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.214	5.41	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.237	5.41	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.213	5.41	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.282	5.41	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.244	5.41	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.249	5.41	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.200	5.41	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.383	5.41	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.177	5.41	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.266	5.41	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.186	5.41	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.318	5.41	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0708	1.08	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.0921	1.08	PQL	ng/Kg	
	OCDD	JBQ	0.903	10.8	PQL	ng/Kg	
	OCDF	JB	0.358	10.8	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX065 **Laboratory: LL**

EDD Filename: DX065 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-214-SA5A-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JB	0.319	5.43	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.182	5.43	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.0689	5.43	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.113	5.43	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.168	5.43	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.307	5.43	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.155	5.43	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.367	5.43	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.311	5.43	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.158	5.43	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.138	5.43	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.121	5.43	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.121	5.43	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.0660	1.09	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.0279	1.09	PQL	ng/Kg	
	OCDD	JB	1.28	10.9	PQL	ng/Kg	
	OCDF	JBQ	0.294	10.9	PQL	ng/Kg	
SL-214-SA5A-SB-8.5-9.5	1,2,3,4,6,7,8-HPCDD	JBQ	0.172	5.58	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JBQ	0.137	5.58	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0948	5.58	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0674	5.58	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.196	5.58	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.0682	5.58	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.114	5.58	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.113	5.58	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.0946	5.58	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.109	5.58	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.131	5.58	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.0848	5.58	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.122	5.58	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0272	1.12	PQL	ng/Kg	
	OCDD	JB	0.458	11.2	PQL	ng/Kg	
	OCDF	JB	0.176	11.2	PQL	ng/Kg	
SL-215-SA5A-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JBQ	1.53	5.42	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JBQ	0.479	5.42	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.126	5.42	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.140	5.42	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.378	5.42	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.510	5.42	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.180	5.42	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.728	5.42	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.431	5.42	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.181	5.42	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.229	5.42	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.151	5.42	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.350	5.42	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0358	1.08	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.0821	1.08	PQL	ng/Kg	
	OCDF	JB	0.729	10.8	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX065 **Laboratory: LL**

EDD Filename: DX065 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	*Analyte*	*Lab Qual*	*Result*	*Reporting Limit*	*RL Type*	*Units*	*Flag*
SL-216-SA5A-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JB	0.214	5.61	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JBQ	0.0937	5.61	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0506	5.61	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.130	5.61	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.181	5.61	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.324	5.61	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.145	5.61	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.362	5.61	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.282	5.61	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.145	5.61	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.209	5.61	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0901	5.61	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.199	5.61	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0450	1.12	PQL	ng/Kg	
	OCDD	JB	0.704	11.2	PQL	ng/Kg	
	OCDF	JB	0.201	11.2	PQL	ng/Kg	
SL-257-SA5A-SB-2.5-3.5	1,2,3,4,6,7,8-HPCDD	JB	0.236	5.32	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.108	5.32	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0482	5.32	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.0500	5.32	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.0316	5.32	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0430	5.32	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.0384	5.32	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.0652	5.32	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0484	5.32	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0648	5.32	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0605	5.32	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.103	5.32	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.0190	1.06	PQL	ng/Kg	
	OCDD	JB	0.467	10.6	PQL	ng/Kg	
	OCDF	JB	0.115	10.6	PQL	ng/Kg	

LDC #: 26250A

VALIDATION FINDINGS WORKSHEET
Overall Assessment of Data

Reviewer: CR
2nd Reviewer: [illegible]

METHOD: HRGC/HRMS Dioxins/Dibenzofurans (EPA Method 1613B)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

All available information pertaining to the data were reviewed using professional judgement to compliment the determination of the overall quality of the data.

Y N N/A Was the overall quality and usability of the data acceptable?

#	Lab ID ~~Date~~	Sample ID	Finding	Column ~~Associated Samples~~	Qualifications
		SL-093-SA5A-SB-3.5-4.5	2,3,7,8-TCDF	DB-5MS	R/A
		SL-221-SA5A-SB-3.0-4.0	↓	↓	↓
		SL-222-SA5A-SB-3.5-4.5	↓	↓	↓
	6281729	SL-222-SA5A-SB-3.5-4.5	RE A ash layer was observed in the		R/A
	6281730	↓	MS RE original sample (Lab ID 6244313)		
	6281731	↓	MSD RE therefore the lab re-extracted &		
			re-analyzed. Per client request,		
			the original sample, MS and		
			MSD are being reported		
			because of higher concentrations		

Comments:

LDC #: 26250A

VALIDATION FINDINGS WORKSHEET

Compound Quantitation and Reported CRQLs

Reviewer: [illegible]

2nd Reviewer: [illegible]

METHOD: HRGC/HRMS Dioxins/Dibenzofurans (EPA Method 1613B)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were the correct internal standard (IS), quantitation ions and relative response factors (RRF) used to quantitate the compound?

Y N N/A Compound quantitation and CRQLs were adjusted to reflect all sample dilutions and dry weight factors (if necessary).

#	Date	Sample ID	Finding	Associated Samples	Qualifications
		SL-221-SA5A-SB-30-40	OCDD	>Cal range	J/P (*XI)

SAMPLE DELIVERY GROUP

DX066

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
31-Mar-2011	SL-094-SA5A-SB-4.0-5.0	6245572	N	METHOD	1613B	III
31-Mar-2011	SL-094-SA5A-SB-9.0-10.0	6245573	N	METHOD	1613B	III
31-Mar-2011	SL-089-SA5A-SB-4.0-5.0	6245574	N	METHOD	1613B	III
31-Mar-2011	SL-089-SA5A-SB-9.0-10.0	6245575	N	METHOD	1613B	III
31-Mar-2011	SL-075-SA5A-SB-2.5-3.5	6245576	N	METHOD	1613B	III
01-Apr-2011	SL-076-SA5A-SB-4.0-5.0	6247210	N	METHOD	1613B	III
01-Apr-2011	SL-072-SA5A-SB-4.0-5.0	6247211	N	METHOD	1613B	III
01-Apr-2011	SL-071-SA5A-SB-4.0-5.0	6247212	N	METHOD	1613B	III
04-Apr-2011	SL-085-SA5A-SB-4.0-5.0	6248216	N	METHOD	1613B	III
04-Apr-2011	SL-087-SA5A-SB-2.0-3.0	6248217	N	METHOD	1613B	III
05-Apr-2011	SL-156-SA5A-SB-3.0-4.0	6250049	N	METHOD	1613B	III
05-Apr-2011	SL-154-SA5A-SB-4.0-5.0	6250047	N	METHOD	1613B	III
05-Apr-2011	SL-154-SA5A-SB-7.0-8.0	6250048	N	METHOD	1613B	III
05-Apr-2011	EB11-SA5A-SB-040511	6250050	EB	METHOD	1613B	III
06-Apr-2011	SL-151-SA5A-SB-4.0-5.0	6251861	N	METHOD	1613B	III
07-Apr-2011	SL-081-SA5A-SB-2.0-3.0	6253089	N	METHOD	1613B	III
07-Apr-2011	SL-080-SA5A-SB-3.0-4.0	6253088	N	METHOD	1613B	III
07-Apr-2011	SL-079-SA5A-SB-4.0-5.0	6253087	N	METHOD	1613B	III
07-Apr-2011	SL-258-SA5A-SB-4.0-5.0	6253090	N	METHOD	1613B	III
07-Apr-2011	SL-088-SA5A-SB-4.0-5.0	6253091	N	METHOD	1613B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DX066 **Laboratory: LL**

EDD Filename: DX066_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA
Method: 1613B **Matrix:** AQ

Sample ID: EB11-SA5A-SB-040511 **Collected:** 4/5/2011 2:50:00 PM **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	4.01	JB	0.244	MDL	10.5	PQL	pg/L	U	B
1,2,3,4,6,7,8-HPCDF	3.70	JB	0.159	MDL	10.5	PQL	pg/L	U	B
1,2,3,4,7,8,9-HPCDF	0.773	JB	0.195	MDL	10.5	PQL	pg/L	U	B
1,2,3,4,7,8-HxCDD	0.284	JB	0.142	MDL	10.5	PQL	pg/L	U	B
1,2,3,4,7,8-HXCDF	0.667	JBQ	0.147	MDL	10.5	PQL	pg/L	U	B
1,2,3,6,7,8-HXCDD	0.628	JB	0.144	MDL	10.5	PQL	pg/L	U	B
1,2,3,6,7,8-HXCDF	0.779	JB	0.121	MDL	10.5	PQL	pg/L	U	B
1,2,3,7,8,9-HXCDD	0.425	JBQ	0.135	MDL	10.5	PQL	pg/L	U	B
1,2,3,7,8,9-HXCDF	0.531	JB	0.123	MDL	10.5	PQL	pg/L	U	B
1,2,3,7,8-PECDD	0.475	JBQ	0.173	MDL	10.5	PQL	pg/L	U	B
1,2,3,7,8-PECDF	0.362	JBQ	0.0785	MDL	10.5	PQL	pg/L	U	B
2,3,4,6,7,8-HXCDF	1.86	JB	0.110	MDL	10.5	PQL	pg/L	U	B
2,3,4,7,8-PECDF	1.12	JB	0.0756	MDL	10.5	PQL	pg/L	U	B
2,3,7,8-TCDF	0.124	JBQ	0.122	MDL	2.11	PQL	pg/L	U	B
OCDD	13.4	JB	0.420	MDL	21.1	PQL	pg/L	U	B
OCDF	2.68	JB	0.280	MDL	21.1	PQL	pg/L	U	B

Method Category: SVOA
Method: 1613B **Matrix:** SO

Sample ID: SL-071-SA5A-SB-4.0-5.0 **Collected:** 4/1/2011 12:55:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.560	JB	0.0240	MDL	5.41	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.193	JBQ	0.0437	MDL	5.41	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0394	JQ	0.0236	MDL	5.41	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.0571	JB	0.0179	MDL	5.41	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0679	JBQ	0.0241	MDL	5.41	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0396	JBQ	0.0138	MDL	5.41	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.107	JB	0.0205	MDL	5.41	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0803	JBQ	0.0181	MDL	5.41	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0324	JBQ	0.00952	MDL	5.41	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0760	JBQ	0.0159	MDL	5.41	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0495	JBQ	0.0115	MDL	5.41	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX066 **Laboratory: LL**

EDD Filename: DX066_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-071-SA5A-SB-4.0-5.0 **Collected:** 4/1/2011 12:55:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
OCDD	4.08	JB	0.0397	MDL	10.8	PQL	ng/Kg	J	Z
OCDF	0.240	JB	0.0972	MDL	10.8	PQL	ng/Kg	U	B

Sample ID: SL-072-SA5A-SB-4.0-5.0 **Collected:** 4/1/2011 11:55:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.413	JB	0.0410	MDL	5.71	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.177	JB	0.0954	MDL	5.71	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.260	JBQ	0.156	MDL	5.71	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0732	JB	0.0324	MDL	5.71	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.186	JB	0.0353	MDL	5.71	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.0648	JB	0.0252	MDL	5.71	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.307	JB	0.0333	MDL	5.71	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.284	JB	0.0319	MDL	5.71	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.0661	JBQ	0.0320	MDL	5.71	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0652	JBQ	0.0131	MDL	5.71	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0597	JBQ	0.0223	MDL	5.71	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0576	JBQ	0.0144	MDL	5.71	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0255	JQ	0.0239	MDL	1.14	PQL	ng/Kg	J	Z
OCDD	1.59	JB	0.0544	MDL	11.4	PQL	ng/Kg	U	B
OCDF	0.396	JBQ	0.179	MDL	11.4	PQL	ng/Kg	U	B

Sample ID: SL-075-SA5A-SB-2.5-3.5 **Collected:** 3/31/2011 2:55:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.763	JB	0.0253	MDL	5.55	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.159	JBQ	0.00888	MDL	5.55	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0605	JBQ	0.0189	MDL	5.55	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0339	JQ	0.0220	MDL	5.55	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.0454	JBQ	0.0205	MDL	5.55	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0726	JB	0.0215	MDL	5.55	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0511	JB	0.0147	MDL	5.55	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0979	JBQ	0.0183	MDL	5.55	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0750	JBQ	0.0180	MDL	5.55	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0876	JBQ	0.0155	MDL	5.55	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX066 **Laboratory: LL**

EDD Filename: DX066_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B ***Matrix:*** SO

Sample ID: SL-075-SA5A-SB-2.5-3.5 ***Collected:*** 3/31/2011 2:55:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,3,4,7,8-PECDF	0.0693	JB	0.0106	MDL	5.55	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0279	J	0.0183	MDL	1.11	PQL	ng/Kg	J	Z
OCDD	8.29	JB	0.0247	MDL	11.1	PQL	ng/Kg	J	Z
OCDF	0.337	JB	0.0303	MDL	11.1	PQL	ng/Kg	U	B

Sample ID: SL-076-SA5A-SB-4.0-5.0 ***Collected:*** 4/1/2011 10:55:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	0.666	JBQ	0.0344	MDL	5.21	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.0759	JB	0.0285	MDL	5.21	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0575	JBQ	0.0280	MDL	5.21	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.108	JB	0.0273	MDL	5.21	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.324	JB	0.0261	MDL	5.21	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.0529	JB	0.0193	MDL	5.21	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.183	JBQ	0.0237	MDL	5.21	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0850	JB	0.0166	MDL	5.21	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0508	JBQ	0.0161	MDL	5.21	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0425	JB	0.00873	MDL	5.21	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0641	JB	0.0121	MDL	5.21	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0564	JB	0.00841	MDL	5.21	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0203	JB	0.0183	MDL	1.04	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0198	JBQ	0.0145	MDL	1.04	PQL	ng/Kg	U	B
OCDF	2.63	JB	0.0432	MDL	10.4	PQL	ng/Kg	J	Z

Sample ID: SL-079-SA5A-SB-4.0-5.0 ***Collected:*** 4/7/2011 11:05:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	1.09	JB	0.0260	MDL	5.48	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.267	JB	0.0129	MDL	5.48	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0436	JB	0.0114	MDL	5.48	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0320	JBQ	0.0148	MDL	5.48	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0836	JBQ	0.0207	MDL	5.48	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0775	JBQ	0.0148	MDL	5.48	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0528	JBQ	0.0145	MDL	5.48	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.109	JB	0.0141	MDL	5.48	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX066 **Laboratory: LL**

EDD Filename: DX066_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-079-SA5A-SB-4.0-5.0 **Collected:** 4/7/2011 11:05:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,7,8,9-HXCDF	0.100	JB	0.0119	MDL	5.48	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0489	JBQ	0.0141	MDL	5.48	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0508	JBQ	0.00945	MDL	5.48	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.151	JB	0.0105	MDL	5.48	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0948	JB	0.00868	MDL	5.48	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0153	JBQ	0.0143	MDL	1.10	PQL	ng/Kg	U	B
OCDD	7.80	JB	0.0308	MDL	11.0	PQL	ng/Kg	J	Z
OCDF	0.366	JB	0.0245	MDL	11.0	PQL	ng/Kg	U	B

Sample ID: SL-080-SA5A-SB-3.0-4.0 **Collected:** 4/7/2011 9:58:00 AM **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	0.916	JB	0.00987	MDL	5.51	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.130	JB	0.0222	MDL	5.51	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.461	J	0.0385	MDL	5.51	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.150	JBQ	0.0190	MDL	5.51	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	1.03	JB	0.0397	MDL	5.51	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.145	JB	0.0153	MDL	5.51	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.942	JBQ	0.0384	MDL	5.51	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.211	JBQ	0.0304	MDL	5.51	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.0929	JB	0.0135	MDL	5.51	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.146	JBQ	0.0173	MDL	5.51	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.110	JBQ	0.0159	MDL	5.51	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0256	JQ	0.0214	MDL	1.10	PQL	ng/Kg	J	Z
OCDF	1.88	JB	0.0307	MDL	11.0	PQL	ng/Kg	J	Z

Sample ID: SL-081-SA5A-SB-2.0-3.0 **Collected:** 4/7/2011 9:00:00 AM **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	4.11	JB	0.0340	MDL	5.48	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.387	JB	0.00969	MDL	5.48	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0565	JB	0.0194	MDL	5.48	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0818	JQ	0.0288	MDL	5.48	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.122	JBQ	0.0234	MDL	5.48	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.192	JBQ	0.0305	MDL	5.48	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX066 **Laboratory: LL**

EDD Filename: DX066_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B ***Matrix:*** SO

Sample ID: SL-081-SA5A-SB-2.0-3.0 ***Collected:*** 4/7/2011 9:00:00 AM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,6,7,8-HXCDF	0.0403	JBQ	0.0185	MDL	5.48	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.240	JBQ	0.0278	MDL	5.48	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0643	JB	0.0229	MDL	5.48	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0372	JBQ	0.0255	MDL	5.48	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0430	JBQ	0.0119	MDL	5.48	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.106	JB	0.0187	MDL	5.48	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.119	JB	0.0128	MDL	5.48	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0301	JQ	0.0244	MDL	1.10	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.0335	JQ	0.0259	MDL	1.10	PQL	ng/Kg	J	Z
OCDF	0.614	JB	0.0318	MDL	11.0	PQL	ng/Kg	U	B

Sample ID: SL-085-SA5A-SB-4.0-5.0 ***Collected:*** 4/4/2011 9:54:00 AM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.381	JBQ	0.0270	MDL	5.57	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.153	JBQ	0.0275	MDL	5.57	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0723	JBQ	0.0669	MDL	5.57	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0432	JBQ	0.0194	MDL	5.57	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0600	JBQ	0.0239	MDL	5.57	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0294	JBQ	0.0146	MDL	5.57	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0875	JB	0.0223	MDL	5.57	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0336	JBQ	0.0208	MDL	5.57	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0345	JBQ	0.0113	MDL	5.57	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0748	JBQ	0.0163	MDL	5.57	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0481	JBQ	0.0134	MDL	5.57	PQL	ng/Kg	U	B
OCDD	0.878	JBQ	0.0334	MDL	11.1	PQL	ng/Kg	U	B
OCDF	0.261	JBQ	0.0567	MDL	11.1	PQL	ng/Kg	U	B

Sample ID: SL-087-SA5A-SB-2.0-3.0 ***Collected:*** 4/4/2011 10:56:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.433	JBQ	0.0246	MDL	5.43	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.210	JBQ	0.0341	MDL	5.43	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.206	JBQ	0.0730	MDL	5.43	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0509	JQ	0.0204	MDL	5.43	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX066 **Laboratory: LL**

EDD Filename: DX066_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B ***Matrix:*** SO

Sample ID: SL-087-SA5A-SB-2.0-3.0 ***Collected:*** 4/4/2011 10:56:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8-HXCDF	0.0663	JBQ	0.0223	MDL	5.43	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0920	JBQ	0.0146	MDL	5.43	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.134	JBQ	0.0201	MDL	5.43	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0795	JB	0.0229	MDL	5.43	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0969	JB	0.0288	MDL	5.43	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0834	JB	0.0125	MDL	5.43	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0811	JB	0.0152	MDL	5.43	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.136	JBQ	0.0153	MDL	5.43	PQL	ng/Kg	U	B
OCDD	0.744	JB	0.0326	MDL	10.9	PQL	ng/Kg	U	B
OCDF	0.265	JB	0.0498	MDL	10.9	PQL	ng/Kg	U	B

Sample ID: SL-088-SA5A-SB-4.0-5.0 ***Collected:*** 4/7/2011 3:23:00 PM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.913	JB	0.0261	MDL	5.80	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.400	JBQ	0.0128	MDL	5.80	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0542	JBQ	0.0212	MDL	5.80	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0333	JQ	0.0260	MDL	5.80	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.105	JB	0.0256	MDL	5.80	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0874	JBQ	0.0261	MDL	5.80	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0630	JBQ	0.0185	MDL	5.80	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0715	JBQ	0.0226	MDL	5.80	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0650	JBQ	0.0212	MDL	5.80	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0890	JBQ	0.0156	MDL	5.80	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.115	JBQ	0.0162	MDL	5.80	PQL	ng/Kg	U	B
OCDD	6.97	JB	0.0245	MDL	11.6	PQL	ng/Kg	J	Z
OCDF	0.636	JB	0.0343	MDL	11.6	PQL	ng/Kg	U	B

Sample ID: SL-089-SA5A-SB-4.0-5.0 ***Collected:*** 3/31/2011 10:50:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.256	JB	0.0166	MDL	5.34	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.145	JBQ	0.0165	MDL	5.34	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0326	JBQ	0.0132	MDL	5.34	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0158	JBQ	0.0116	MDL	5.34	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX066 **Laboratory: LL**

EDD Filename: DX066_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: **SL-089-SA5A-SB-4.0-5.0** ***Collected:*** **3/31/2011 10:50:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8-HXCDF	0.0592	JB	0.0191	MDL	5.34	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0296	JBQ	0.0107	MDL	5.34	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0355	JBQ	0.0132	MDL	5.34	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0354	JBQ	0.00965	MDL	5.34	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0407	JBQ	0.00889	MDL	5.34	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0224	JBQ	0.0133	MDL	5.34	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0184	JBQ	0.00586	MDL	5.34	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0803	JBQ	0.00770	MDL	5.34	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0809	JB	0.00575	MDL	5.34	PQL	ng/Kg	U	B
OCDD	0.985	JB	0.0312	MDL	10.7	PQL	ng/Kg	U	B
OCDF	0.192	JBQ	0.0222	MDL	10.7	PQL	ng/Kg	U	B

Sample ID: **SL-089-SA5A-SB-9.0-10.0** ***Collected:*** **3/31/2011 11:05:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	1.24	JB	0.0349	MDL	6.36	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.306	JB	0.0227	MDL	6.36	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0841	JBQ	0.0176	MDL	6.36	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.140	JBQ	0.0346	MDL	6.36	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.108	JB	0.0182	MDL	6.36	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0866	JBQ	0.0236	MDL	6.36	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.136	JB	0.0158	MDL	6.36	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.148	JBQ	0.0150	MDL	6.36	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0523	JBQ	0.0219	MDL	6.36	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0505	JB	0.0102	MDL	6.36	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.138	JB	0.0129	MDL	6.36	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.141	JB	0.0102	MDL	6.36	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0293	JBQ	0.0154	MDL	1.27	PQL	ng/Kg	U	B
OCDD	10.9	JB	0.0380	MDL	12.7	PQL	ng/Kg	J	Z
OCDF	0.613	JB	0.0297	MDL	12.7	PQL	ng/Kg	U	B

Sample ID: **SL-094-SA5A-SB-4.0-5.0** ***Collected:*** **3/31/2011 9:15:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	1.17	JB	0.0407	MDL	5.35	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX066 **Laboratory: LL**

EDD Filename: DX066_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: **SL-094-SA5A-SB-4.0-5.0** ***Collected:*** **3/31/2011 9:15:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8-HxCDD	1.49	JQ	0.0430	MDL	5.35	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	1.99	JB	0.0417	MDL	5.35	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	3.70	JB	0.0432	MDL	5.35	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	1.77	JB	0.0347	MDL	5.35	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	2.83	JB	0.0407	MDL	5.35	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.615	JB	0.0507	MDL	5.35	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	1.31	JB	0.0609	MDL	5.35	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	1.17	JB	0.0282	MDL	5.35	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	2.72	JB	0.0378	MDL	5.35	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	2.19	JBQ	0.0315	MDL	5.35	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.268	JQ	0.0477	MDL	1.07	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.928	J	0.0797	MDL	1.07	PQL	ng/Kg	J	Z

Sample ID: **SL-094-SA5A-SB-9.0-10.0** ***Collected:*** **3/31/2011 9:33:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.544	JB	0.0246	MDL	5.31	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.210	JB	0.0181	MDL	5.31	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0639	JBQ	0.0122	MDL	5.31	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0832	JBQ	0.0252	MDL	5.31	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0677	JBQ	0.0180	MDL	5.31	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0598	JB	0.0173	MDL	5.31	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0859	JBQ	0.0154	MDL	5.31	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0907	JBQ	0.0104	MDL	5.31	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0371	JBQ	0.0176	MDL	5.31	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0342	JBQ	0.00809	MDL	5.31	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.110	JBQ	0.00927	MDL	5.31	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0827	JB	0.00799	MDL	5.31	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0158	JBQ	0.0103	MDL	1.06	PQL	ng/Kg	U	B
OCDD	4.21	JB	0.0325	MDL	10.6	PQL	ng/Kg	U	B
OCDF	0.246	JB	0.0208	MDL	10.6	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX066 **Laboratory: LL**

EDD Filename: DX066_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-151-SA5A-SB-4.0-5.0 **Collected:** 4/6/2011 9:20:00 AM **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.263	JBQ	0.0188	MDL	5.65	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.261	JB	0.0120	MDL	5.65	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0521	JBQ	0.0115	MDL	5.65	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0718	JBQ	0.0202	MDL	5.65	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0332	JBQ	0.0140	MDL	5.65	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0502	JBQ	0.0142	MDL	5.65	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0641	JBQ	0.0129	MDL	5.65	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0438	JBQ	0.0122	MDL	5.65	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0195	JBQ	0.0181	MDL	5.65	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0233	JB	0.00949	MDL	5.65	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.111	JBQ	0.0108	MDL	5.65	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0843	JB	0.00927	MDL	5.65	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0182	JBQ	0.0121	MDL	1.13	PQL	ng/Kg	U	B
OCDD	1.02	JB	0.0297	MDL	11.3	PQL	ng/Kg	U	B
OCDF	0.258	JBQ	0.0214	MDL	11.3	PQL	ng/Kg	U	B

Sample ID: SL-154-SA5A-SB-4.0-5.0 **Collected:** 4/5/2011 11:15:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.407	JBQ	0.0229	MDL	5.84	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.220	JB	0.00982	MDL	5.84	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0927	JBQ	0.0198	MDL	5.84	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0537	JQ	0.0212	MDL	5.84	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.0936	JBQ	0.0196	MDL	5.84	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0975	JBQ	0.0229	MDL	5.84	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.115	JBQ	0.0153	MDL	5.84	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0588	JB	0.0212	MDL	5.84	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0986	JB	0.0220	MDL	5.84	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0768	JBQ	0.0263	MDL	5.84	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.143	JB	0.0112	MDL	5.84	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.112	JBQ	0.0153	MDL	5.84	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.146	JBQ	0.0125	MDL	5.84	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0344	JQ	0.0229	MDL	1.17	PQL	ng/Kg	J	Z
OCDD	0.868	JB	0.0232	MDL	11.7	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX066 **Laboratory: LL**

EDD Filename: DX066_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-154-SA5A-SB-4.0-5.0 **Collected:** 4/5/2011 11:15:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
OCDF	0.321	JB	0.0301	MDL	11.7	PQL	ng/Kg	U	B

Sample ID: SL-154-SA5A-SB-7.0-8.0 **Collected:** 4/5/2011 11:22:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.263	JB	0.0194	MDL	5.89	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.154	JB	0.0176	MDL	5.89	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0487	JBQ	0.0162	MDL	5.89	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0189	JB	0.0136	MDL	5.89	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0455	JB	0.0179	MDL	5.89	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0206	JBQ	0.0133	MDL	5.89	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0317	JBQ	0.0125	MDL	5.89	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0206	JB	0.0124	MDL	5.89	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0603	JB	0.0109	MDL	5.89	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0304	JBQ	0.0198	MDL	5.89	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0267	JBQ	0.00945	MDL	5.89	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.107	JB	0.00968	MDL	5.89	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0624	JBQ	0.00921	MDL	5.89	PQL	ng/Kg	U	B
OCDD	0.896	JB	0.0371	MDL	11.8	PQL	ng/Kg	U	B
OCDF	0.206	JBQ	0.0230	MDL	11.8	PQL	ng/Kg	U	B

Sample ID: SL-156-SA5A-SB-3.0-4.0 **Collected:** 4/5/2011 9:34:00 AM **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	3.99	JB	0.0200	MDL	5.55	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.553	JBQ	0.0371	MDL	5.55	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.282	JQ	0.0371	MDL	5.55	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.475	JB	0.0290	MDL	5.55	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.798	JB	0.0382	MDL	5.55	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.285	JB	0.0249	MDL	5.55	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.398	JB	0.0354	MDL	5.55	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.196	JBQ	0.0343	MDL	5.55	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.180	JBQ	0.0308	MDL	5.55	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.260	JB	0.0186	MDL	5.55	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.342	JB	0.0277	MDL	5.55	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX066 **Laboratory: LL**

EDD Filename: DX066_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: **SL-156-SA5A-SB-3.0-4.0** ***Collected:*** **4/5/2011 9:34:00 AM** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,3,4,7,8-PECDF	0.262	JBQ	0.0198	MDL	5.55	PQL	ng/Kg	U	B
OCDF	8.59	JB	0.0271	MDL	11.1	PQL	ng/Kg	J	Z

Sample ID: **SL-258-SA5A-SB-4.0-5.0** ***Collected:*** **4/7/2011 2:03:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	1.57	JB	0.0364	MDL	5.95	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.568	JB	0.0123	MDL	5.95	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0963	JBQ	0.0268	MDL	5.95	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0489	JQ	0.0290	MDL	5.95	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.152	JBQ	0.0255	MDL	5.95	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0838	JB	0.0301	MDL	5.95	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0680	JB	0.0187	MDL	5.95	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0687	JBQ	0.0277	MDL	5.95	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.116	JBQ	0.0308	MDL	5.95	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0569	JBQ	0.0294	MDL	5.95	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0926	JBQ	0.0171	MDL	5.95	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.112	JB	0.0215	MDL	5.95	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.118	JB	0.0196	MDL	5.95	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0419	JQ	0.0355	MDL	1.19	PQL	ng/Kg	J	Z
OCDF	0.900	JB	0.0403	MDL	11.9	PQL	ng/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DX066 **Laboratory: LL**

EDD Filename: DX066_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
	Sampling to Leaching Estimation
	Sampling to Leaching Rejection
*#	Professional Judgment
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Continuing Calibration Verification Percent Recovery Lower Estimation
C	Continuing Calibration Verification Percent Recovery Lower Rejection
C	Continuing Calibration Verification Percent Recovery Upper Estimation
C	Continuing Calibration Verification Percent Recovery Upper Rejection
C	Continuing Calibration Verification Relative Response Factor
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Relative Response Factor
C	Initial Calibration Verification Correlation Coefficient

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DX066 **Laboratory: LL**

EDD Filename: DX066_v1 **eQAPP Name: CDM_SSFL_110509**

C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Verification Percent Recovery Lower Estimation
C	Initial Calibration Verification Percent Recovery Lower Rejection
C	Initial Calibration Verification Percent Recovery Upper Estimation
C	Initial Calibration Verification Percent Recovery Upper Rejection
C	Initial Calibration Verification Relative Response Factor
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Laboratory Triplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination
F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DX066 **Laboratory: LL**

EDD Filename: DX066_v1 **eQAPP Name: CDM_SSFL_110509**

L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Laboratory Triplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Q	Matrix Spike Upper Rejection
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control Outlier Reports

DX066

Method Blank Outlier Report

Lab Reporting Batch ID: DX066 **Laboratory: LL**

EDD Filename: DX066_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **AQ**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLK1020B370158	4/15/2011 1:58:00 AM	1,2,3,4,6,7,8-HPCDD	3.40 pg/L	EB11-SA5A-SB-040511
		1,2,3,4,6,7,8-HPCDF	5.27 pg/L	
		1,2,3,4,7,8,9-HPCDF	1.10 pg/L	
		1,2,3,4,7,8-HxCDD	0.308 pg/L	
		1,2,3,4,7,8-HXCDF	0.872 pg/L	
		1,2,3,6,7,8-HXCDD	0.634 pg/L	
		1,2,3,6,7,8-HXCDF	0.989 pg/L	
		1,2,3,7,8,9-HXCDD	0.692 pg/L	
		1,2,3,7,8,9-HXCDF	0.654 pg/L	
		1,2,3,7,8-PECDD	0.461 pg/L	
		1,2,3,7,8-PECDF	0.304 pg/L	
		2,3,4,6,7,8-HXCDF	1.63 pg/L	
		2,3,4,7,8-PECDF	1.10 pg/L	
		2,3,7,8-TCDD	0.462 pg/L	
		2,3,7,8-TCDF	0.143 pg/L	
		OCDD	8.12 pg/L	
		OCDF	3.33 pg/L	

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
EB11-SA5A-SB-040511(RES)	1,2,3,4,6,7,8-HPCDD	4.01 pg/L	4.01U pg/L
EB11-SA5A-SB-040511(RES)	1,2,3,4,6,7,8-HPCDF	3.70 pg/L	3.70U pg/L
EB11-SA5A-SB-040511(RES)	1,2,3,4,7,8,9-HPCDF	0.773 pg/L	0.773U pg/L
EB11-SA5A-SB-040511(RES)	1,2,3,4,7,8-HxCDD	0.284 pg/L	0.284U pg/L
EB11-SA5A-SB-040511(RES)	1,2,3,4,7,8-HXCDF	0.667 pg/L	0.667U pg/L
EB11-SA5A-SB-040511(RES)	1,2,3,6,7,8-HXCDD	0.628 pg/L	0.628U pg/L
EB11-SA5A-SB-040511(RES)	1,2,3,6,7,8-HXCDF	0.779 pg/L	0.779U pg/L
EB11-SA5A-SB-040511(RES)	1,2,3,7,8,9-HXCDD	0.425 pg/L	0.425U pg/L
EB11-SA5A-SB-040511(RES)	1,2,3,7,8,9-HXCDF	0.531 pg/L	0.531U pg/L
EB11-SA5A-SB-040511(RES)	1,2,3,7,8-PECDD	0.475 pg/L	0.475U pg/L
EB11-SA5A-SB-040511(RES)	1,2,3,7,8-PECDF	0.362 pg/L	0.362U pg/L
EB11-SA5A-SB-040511(RES)	2,3,4,6,7,8-HXCDF	1.86 pg/L	1.86U pg/L
EB11-SA5A-SB-040511(RES)	2,3,4,7,8-PECDF	1.12 pg/L	1.12U pg/L
EB11-SA5A-SB-040511(RES)	2,3,7,8-TCDF	0.124 pg/L	0.124U pg/L
EB11-SA5A-SB-040511(RES)	OCDD	13.4 pg/L	13.4U pg/L
EB11-SA5A-SB-040511(RES)	OCDF	2.68 pg/L	2.68U pg/L

Method Blank Outlier Report

Lab Reporting Batch ID: DX066 **Laboratory: LL**

EDD Filename: DX066_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLK1020B370102	4/14/2011 1:02:00 AM	1,2,3,4,6,7,8-HPCDD	0.196 ng/Kg	SL-079-SA5A-SB-4.0-5.0
		1,2,3,4,6,7,8-HPCDF	0.128 ng/Kg	SL-089-SA5A-SB-4.0-5.0
		1,2,3,4,7,8,9-HPCDF	0.0709 ng/Kg	SL-089-SA5A-SB-9.0-10.0
		1,2,3,4,7,8-HxCDD	0.0273 ng/Kg	SL-094-SA5A-SB-9.0-10.0
		1,2,3,4,7,8-HXCDF	0.0690 ng/Kg	SL-151-SA5A-SB-4.0-5.0
		1,2,3,6,7,8-HXCDD	0.0220 ng/Kg	SL-154-SA5A-SB-7.0-8.0
		1,2,3,6,7,8-HXCDF	0.0643 ng/Kg	
		1,2,3,7,8,9-HXCDD	0.0366 ng/Kg	
		1,2,3,7,8,9-HXCDF	0.0560 ng/Kg	
		1,2,3,7,8-PECDD	0.0307 ng/Kg	
		1,2,3,7,8-PECDF	0.0371 ng/Kg	
		2,3,4,6,7,8-HXCDF	0.0978 ng/Kg	
		2,3,4,7,8-PECDF	0.0831 ng/Kg	
		2,3,7,8-TCDD	0.0239 ng/Kg	
		2,3,7,8-TCDF	0.0120 ng/Kg	
		OCDD	1.15 ng/Kg	
		OCDF	0.231 ng/Kg	
BLK1050B371244	4/18/2011 12:44:00 PM	1,2,3,4,6,7,8-HPCDD	0.347 ng/Kg	SL-071-SA5A-SB-4.0-5.0
		1,2,3,4,6,7,8-HPCDF	0.160 ng/Kg	SL-072-SA5A-SB-4.0-5.0
		1,2,3,4,7,8,9-HPCDF	0.108 ng/Kg	SL-075-SA5A-SB-2.5-3.5
		1,2,3,4,7,8-HXCDF	0.0467 ng/Kg	SL-080-SA5A-SB-3.0-4.0
		1,2,3,6,7,8-HXCDD	0.0256 ng/Kg	SL-081-SA5A-SB-2.0-3.0
		1,2,3,6,7,8-HXCDF	0.0341 ng/Kg	SL-085-SA5A-SB-4.0-5.0
		1,2,3,7,8,9-HXCDD	0.0539 ng/Kg	SL-087-SA5A-SB-2.0-3.0
		1,2,3,7,8,9-HXCDF	0.0443 ng/Kg	SL-088-SA5A-SB-4.0-5.0
		1,2,3,7,8-PECDD	0.0338 ng/Kg	SL-094-SA5A-SB-4.0-5.0
		1,2,3,7,8-PECDF	0.0319 ng/Kg	SL-154-SA5A-SB-4.0-5.0
		2,3,4,6,7,8-HXCDF	0.0734 ng/Kg	SL-156-SA5A-SB-3.0-4.0
		2,3,4,7,8-PECDF	0.0552 ng/Kg	SL-258-SA5A-SB-4.0-5.0
		OCDD	0.581 ng/Kg	
		OCDF	0.263 ng/Kg	
BLK1110B371312	4/25/2011 1:12:00 PM	1,2,3,4,6,7,8-HPCDD	0.214 ng/Kg	SL-076-SA5A-SB-4.0-5.0
		1,2,3,4,6,7,8-HPCDF	0.123 ng/Kg	
		1,2,3,4,7,8,9-HPCDF	0.0603 ng/Kg	
		1,2,3,4,7,8-HxCDD	0.0291 ng/Kg	
		1,2,3,4,7,8-HXCDF	0.0546 ng/Kg	
		1,2,3,6,7,8-HXCDD	0.0354 ng/Kg	
		1,2,3,6,7,8-HXCDF	0.0424 ng/Kg	
		1,2,3,7,8,9-HXCDD	0.0670 ng/Kg	
		1,2,3,7,8,9-HXCDF	0.0880 ng/Kg	
		1,2,3,7,8-PECDD	0.0378 ng/Kg	
		1,2,3,7,8-PECDF	0.0460 ng/Kg	
		2,3,4,6,7,8-HXCDF	0.0497 ng/Kg	
		2,3,4,7,8-PECDF	0.0785 ng/Kg	
		2,3,7,8-TCDD	0.0407 ng/Kg	
		2,3,7,8-TCDF	0.0156 ng/Kg	
		OCDD	0.583 ng/Kg	
		OCDF	0.155 ng/Kg	

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-071-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.560 ng/Kg	0.560U ng/Kg
SL-071-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.193 ng/Kg	0.193U ng/Kg
SL-071-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.0571 ng/Kg	0.0571U ng/Kg
SL-071-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDD	0.0679 ng/Kg	0.0679U ng/Kg
SL-071-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.0396 ng/Kg	0.0396U ng/Kg
SL-071-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDD	0.107 ng/Kg	0.107U ng/Kg
SL-071-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.0803 ng/Kg	0.0803U ng/Kg
SL-071-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.0324 ng/Kg	0.0324U ng/Kg
SL-071-SA5A-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.0760 ng/Kg	0.0760U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX066 **Laboratory: LL**

EDD Filename: DX066_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-071-SA5A-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.0495 ng/Kg	0.0495U ng/Kg
SL-071-SA5A-SB-4.0-5.0(RES)	OCDF	0.240 ng/Kg	0.240U ng/Kg
SL-072-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.413 ng/Kg	0.413U ng/Kg
SL-072-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.177 ng/Kg	0.177U ng/Kg
SL-072-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.260 ng/Kg	0.260U ng/Kg
SL-072-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.0732 ng/Kg	0.0732U ng/Kg
SL-072-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.0648 ng/Kg	0.0648U ng/Kg
SL-072-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDD	0.0661 ng/Kg	0.0661U ng/Kg
SL-072-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.0652 ng/Kg	0.0652U ng/Kg
SL-072-SA5A-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.0597 ng/Kg	0.0597U ng/Kg
SL-072-SA5A-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.0576 ng/Kg	0.0576U ng/Kg
SL-072-SA5A-SB-4.0-5.0(RES)	OCDD	1.59 ng/Kg	1.59U ng/Kg
SL-072-SA5A-SB-4.0-5.0(RES)	OCDF	0.396 ng/Kg	0.396U ng/Kg
SL-075-SA5A-SB-2.5-3.5(RES)	1,2,3,4,6,7,8-HPCDD	0.763 ng/Kg	0.763U ng/Kg
SL-075-SA5A-SB-2.5-3.5(RES)	1,2,3,4,6,7,8-HPCDF	0.159 ng/Kg	0.159U ng/Kg
SL-075-SA5A-SB-2.5-3.5(RES)	1,2,3,4,7,8,9-HPCDF	0.0605 ng/Kg	0.0605U ng/Kg
SL-075-SA5A-SB-2.5-3.5(RES)	1,2,3,4,7,8-HXCDF	0.0454 ng/Kg	0.0454U ng/Kg
SL-075-SA5A-SB-2.5-3.5(RES)	1,2,3,6,7,8-HXCDD	0.0726 ng/Kg	0.0726U ng/Kg
SL-075-SA5A-SB-2.5-3.5(RES)	1,2,3,6,7,8-HXCDF	0.0511 ng/Kg	0.0511U ng/Kg
SL-075-SA5A-SB-2.5-3.5(RES)	1,2,3,7,8,9-HXCDD	0.0979 ng/Kg	0.0979U ng/Kg
SL-075-SA5A-SB-2.5-3.5(RES)	1,2,3,7,8,9-HXCDF	0.0750 ng/Kg	0.0750U ng/Kg
SL-075-SA5A-SB-2.5-3.5(RES)	2,3,4,6,7,8-HXCDF	0.0876 ng/Kg	0.0876U ng/Kg
SL-075-SA5A-SB-2.5-3.5(RES)	2,3,4,7,8-PECDF	0.0693 ng/Kg	0.0693U ng/Kg
SL-075-SA5A-SB-2.5-3.5(RES)	OCDF	0.337 ng/Kg	0.337U ng/Kg
SL-076-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0759 ng/Kg	0.0759U ng/Kg
SL-076-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HxCDD	0.0575 ng/Kg	0.0575U ng/Kg
SL-076-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.108 ng/Kg	0.108U ng/Kg
SL-076-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.0529 ng/Kg	0.0529U ng/Kg
SL-076-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDD	0.183 ng/Kg	0.183U ng/Kg
SL-076-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.0850 ng/Kg	0.0850U ng/Kg
SL-076-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDD	0.0508 ng/Kg	0.0508U ng/Kg
SL-076-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.0425 ng/Kg	0.0425U ng/Kg
SL-076-SA5A-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.0641 ng/Kg	0.0641U ng/Kg
SL-076-SA5A-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.0564 ng/Kg	0.0564U ng/Kg
SL-076-SA5A-SB-4.0-5.0(RES)	2,3,7,8-TCDD	0.0203 ng/Kg	0.0203U ng/Kg
SL-076-SA5A-SB-4.0-5.0(RES)	2,3,7,8-TCDF	0.0198 ng/Kg	0.0198U ng/Kg
SL-079-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.267 ng/Kg	0.267U ng/Kg
SL-079-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0436 ng/Kg	0.0436U ng/Kg
SL-079-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HxCDD	0.0320 ng/Kg	0.0320U ng/Kg
SL-079-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.0836 ng/Kg	0.0836U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX066 **Laboratory: LL**

EDD Filename: DX066_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-079-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDD	0.0775 ng/Kg	0.0775U ng/Kg
SL-079-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.0528 ng/Kg	0.0528U ng/Kg
SL-079-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDD	0.109 ng/Kg	0.109U ng/Kg
SL-079-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.100 ng/Kg	0.100U ng/Kg
SL-079-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDD	0.0489 ng/Kg	0.0489U ng/Kg
SL-079-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.0508 ng/Kg	0.0508U ng/Kg
SL-079-SA5A-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.151 ng/Kg	0.151U ng/Kg
SL-079-SA5A-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.0948 ng/Kg	0.0948U ng/Kg
SL-079-SA5A-SB-4.0-5.0(RES)	2,3,7,8-TCDD	0.0153 ng/Kg	0.0153U ng/Kg
SL-079-SA5A-SB-4.0-5.0(RES)	OCDF	0.366 ng/Kg	0.366U ng/Kg
SL-080-SA5A-SB-3.0-4.0(RES)	1,2,3,4,7,8,9-HPCDF	0.130 ng/Kg	0.130U ng/Kg
SL-080-SA5A-SB-3.0-4.0(RES)	1,2,3,4,7,8-HXCDF	0.150 ng/Kg	0.150U ng/Kg
SL-080-SA5A-SB-3.0-4.0(RES)	1,2,3,6,7,8-HXCDF	0.145 ng/Kg	0.145U ng/Kg
SL-080-SA5A-SB-3.0-4.0(RES)	1,2,3,7,8-PECDF	0.0929 ng/Kg	0.0929U ng/Kg
SL-080-SA5A-SB-3.0-4.0(RES)	2,3,4,6,7,8-HXCDF	0.146 ng/Kg	0.146U ng/Kg
SL-080-SA5A-SB-3.0-4.0(RES)	2,3,4,7,8-PECDF	0.110 ng/Kg	0.110U ng/Kg
SL-081-SA5A-SB-2.0-3.0(RES)	1,2,3,4,6,7,8-HPCDF	0.387 ng/Kg	0.387U ng/Kg
SL-081-SA5A-SB-2.0-3.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0565 ng/Kg	0.0565U ng/Kg
SL-081-SA5A-SB-2.0-3.0(RES)	1,2,3,4,7,8-HXCDF	0.122 ng/Kg	0.122U ng/Kg
SL-081-SA5A-SB-2.0-3.0(RES)	1,2,3,6,7,8-HXCDF	0.0403 ng/Kg	0.0403U ng/Kg
SL-081-SA5A-SB-2.0-3.0(RES)	1,2,3,7,8,9-HXCDD	0.240 ng/Kg	0.240U ng/Kg
SL-081-SA5A-SB-2.0-3.0(RES)	1,2,3,7,8,9-HXCDF	0.0643 ng/Kg	0.0643U ng/Kg
SL-081-SA5A-SB-2.0-3.0(RES)	1,2,3,7,8-PECDD	0.0372 ng/Kg	0.0372U ng/Kg
SL-081-SA5A-SB-2.0-3.0(RES)	1,2,3,7,8-PECDF	0.0430 ng/Kg	0.0430U ng/Kg
SL-081-SA5A-SB-2.0-3.0(RES)	2,3,4,6,7,8-HXCDF	0.106 ng/Kg	0.106U ng/Kg
SL-081-SA5A-SB-2.0-3.0(RES)	2,3,4,7,8-PECDF	0.119 ng/Kg	0.119U ng/Kg
SL-081-SA5A-SB-2.0-3.0(RES)	OCDF	0.614 ng/Kg	0.614U ng/Kg
SL-085-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.381 ng/Kg	0.381U ng/Kg
SL-085-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.153 ng/Kg	0.153U ng/Kg
SL-085-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0723 ng/Kg	0.0723U ng/Kg
SL-085-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.0432 ng/Kg	0.0432U ng/Kg
SL-085-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDD	0.0600 ng/Kg	0.0600U ng/Kg
SL-085-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.0294 ng/Kg	0.0294U ng/Kg
SL-085-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDD	0.0875 ng/Kg	0.0875U ng/Kg
SL-085-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.0336 ng/Kg	0.0336U ng/Kg
SL-085-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.0345 ng/Kg	0.0345U ng/Kg
SL-085-SA5A-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.0748 ng/Kg	0.0748U ng/Kg
SL-085-SA5A-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.0481 ng/Kg	0.0481U ng/Kg
SL-085-SA5A-SB-4.0-5.0(RES)	OCDD	0.878 ng/Kg	0.878U ng/Kg
SL-085-SA5A-SB-4.0-5.0(RES)	OCDF	0.261 ng/Kg	0.261U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX066 **Laboratory: LL**

EDD Filename: DX066_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-087-SA5A-SB-2.0-3.0(RES)	1,2,3,4,6,7,8-HPCDD	0.433 ng/Kg	0.433U ng/Kg
SL-087-SA5A-SB-2.0-3.0(RES)	1,2,3,4,6,7,8-HPCDF	0.210 ng/Kg	0.210U ng/Kg
SL-087-SA5A-SB-2.0-3.0(RES)	1,2,3,4,7,8,9-HPCDF	0.206 ng/Kg	0.206U ng/Kg
SL-087-SA5A-SB-2.0-3.0(RES)	1,2,3,4,7,8-HXCDF	0.0663 ng/Kg	0.0663U ng/Kg
SL-087-SA5A-SB-2.0-3.0(RES)	1,2,3,6,7,8-HXCDF	0.0920 ng/Kg	0.0920U ng/Kg
SL-087-SA5A-SB-2.0-3.0(RES)	1,2,3,7,8,9-HXCDD	0.134 ng/Kg	0.134U ng/Kg
SL-087-SA5A-SB-2.0-3.0(RES)	1,2,3,7,8,9-HXCDF	0.0795 ng/Kg	0.0795U ng/Kg
SL-087-SA5A-SB-2.0-3.0(RES)	1,2,3,7,8-PECDD	0.0969 ng/Kg	0.0969U ng/Kg
SL-087-SA5A-SB-2.0-3.0(RES)	1,2,3,7,8-PECDF	0.0834 ng/Kg	0.0834U ng/Kg
SL-087-SA5A-SB-2.0-3.0(RES)	2,3,4,6,7,8-HXCDF	0.0811 ng/Kg	0.0811U ng/Kg
SL-087-SA5A-SB-2.0-3.0(RES)	2,3,4,7,8-PECDF	0.136 ng/Kg	0.136U ng/Kg
SL-087-SA5A-SB-2.0-3.0(RES)	OCDD	0.744 ng/Kg	0.744U ng/Kg
SL-087-SA5A-SB-2.0-3.0(RES)	OCDF	0.265 ng/Kg	0.265U ng/Kg
SL-088-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.913 ng/Kg	0.913U ng/Kg
SL-088-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.400 ng/Kg	0.400U ng/Kg
SL-088-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0542 ng/Kg	0.0542U ng/Kg
SL-088-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.105 ng/Kg	0.105U ng/Kg
SL-088-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDD	0.0874 ng/Kg	0.0874U ng/Kg
SL-088-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.0630 ng/Kg	0.0630U ng/Kg
SL-088-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDD	0.0715 ng/Kg	0.0715U ng/Kg
SL-088-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.0650 ng/Kg	0.0650U ng/Kg
SL-088-SA5A-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.0890 ng/Kg	0.0890U ng/Kg
SL-088-SA5A-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.115 ng/Kg	0.115U ng/Kg
SL-088-SA5A-SB-4.0-5.0(RES)	OCDF	0.636 ng/Kg	0.636U ng/Kg
SL-089-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.256 ng/Kg	0.256U ng/Kg
SL-089-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.145 ng/Kg	0.145U ng/Kg
SL-089-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0326 ng/Kg	0.0326U ng/Kg
SL-089-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HxCDD	0.0158 ng/Kg	0.0158U ng/Kg
SL-089-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.0592 ng/Kg	0.0592U ng/Kg
SL-089-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDD	0.0296 ng/Kg	0.0296U ng/Kg
SL-089-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.0355 ng/Kg	0.0355U ng/Kg
SL-089-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDD	0.0354 ng/Kg	0.0354U ng/Kg
SL-089-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.0407 ng/Kg	0.0407U ng/Kg
SL-089-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDD	0.0224 ng/Kg	0.0224U ng/Kg
SL-089-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.0184 ng/Kg	0.0184U ng/Kg
SL-089-SA5A-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.0803 ng/Kg	0.0803U ng/Kg
SL-089-SA5A-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.0809 ng/Kg	0.0809U ng/Kg
SL-089-SA5A-SB-4.0-5.0(RES)	OCDD	0.985 ng/Kg	0.985U ng/Kg
SL-089-SA5A-SB-4.0-5.0(RES)	OCDF	0.192 ng/Kg	0.192U ng/Kg
SL-089-SA5A-SB-9.0-10.0(RES)	1,2,3,4,6,7,8-HPCDF	0.306 ng/Kg	0.306U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX066 **Laboratory: LL**

EDD Filename: DX066_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-089-SA5A-SB-9.0-10.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0841 ng/Kg	0.0841U ng/Kg
SL-089-SA5A-SB-9.0-10.0(RES)	1,2,3,4,7,8-HXCDF	0.140 ng/Kg	0.140U ng/Kg
SL-089-SA5A-SB-9.0-10.0(RES)	1,2,3,6,7,8-HXCDD	0.108 ng/Kg	0.108U ng/Kg
SL-089-SA5A-SB-9.0-10.0(RES)	1,2,3,6,7,8-HXCDF	0.0866 ng/Kg	0.0866U ng/Kg
SL-089-SA5A-SB-9.0-10.0(RES)	1,2,3,7,8,9-HXCDD	0.136 ng/Kg	0.136U ng/Kg
SL-089-SA5A-SB-9.0-10.0(RES)	1,2,3,7,8,9-HXCDF	0.148 ng/Kg	0.148U ng/Kg
SL-089-SA5A-SB-9.0-10.0(RES)	1,2,3,7,8-PECDD	0.0523 ng/Kg	0.0523U ng/Kg
SL-089-SA5A-SB-9.0-10.0(RES)	1,2,3,7,8-PECDF	0.0505 ng/Kg	0.0505U ng/Kg
SL-089-SA5A-SB-9.0-10.0(RES)	2,3,4,6,7,8-HXCDF	0.138 ng/Kg	0.138U ng/Kg
SL-089-SA5A-SB-9.0-10.0(RES)	2,3,4,7,8-PECDF	0.141 ng/Kg	0.141U ng/Kg
SL-089-SA5A-SB-9.0-10.0(RES)	2,3,7,8-TCDF	0.0293 ng/Kg	0.0293U ng/Kg
SL-089-SA5A-SB-9.0-10.0(RES)	OCDF	0.613 ng/Kg	0.613U ng/Kg
SL-094-SA5A-SB-9.0-10.0(RES)	1,2,3,4,6,7,8-HPCDD	0.544 ng/Kg	0.544U ng/Kg
SL-094-SA5A-SB-9.0-10.0(RES)	1,2,3,4,6,7,8-HPCDF	0.210 ng/Kg	0.210U ng/Kg
SL-094-SA5A-SB-9.0-10.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0639 ng/Kg	0.0639U ng/Kg
SL-094-SA5A-SB-9.0-10.0(RES)	1,2,3,4,7,8-HXCDF	0.0832 ng/Kg	0.0832U ng/Kg
SL-094-SA5A-SB-9.0-10.0(RES)	1,2,3,6,7,8-HXCDD	0.0677 ng/Kg	0.0677U ng/Kg
SL-094-SA5A-SB-9.0-10.0(RES)	1,2,3,6,7,8-HXCDF	0.0598 ng/Kg	0.0598U ng/Kg
SL-094-SA5A-SB-9.0-10.0(RES)	1,2,3,7,8,9-HXCDD	0.0859 ng/Kg	0.0859U ng/Kg
SL-094-SA5A-SB-9.0-10.0(RES)	1,2,3,7,8,9-HXCDF	0.0907 ng/Kg	0.0907U ng/Kg
SL-094-SA5A-SB-9.0-10.0(RES)	1,2,3,7,8-PECDD	0.0371 ng/Kg	0.0371U ng/Kg
SL-094-SA5A-SB-9.0-10.0(RES)	1,2,3,7,8-PECDF	0.0342 ng/Kg	0.0342U ng/Kg
SL-094-SA5A-SB-9.0-10.0(RES)	2,3,4,6,7,8-HXCDF	0.110 ng/Kg	0.110U ng/Kg
SL-094-SA5A-SB-9.0-10.0(RES)	2,3,4,7,8-PECDF	0.0827 ng/Kg	0.0827U ng/Kg
SL-094-SA5A-SB-9.0-10.0(RES)	2,3,7,8-TCDF	0.0158 ng/Kg	0.0158U ng/Kg
SL-094-SA5A-SB-9.0-10.0(RES)	OCDD	4.21 ng/Kg	4.21U ng/Kg
SL-094-SA5A-SB-9.0-10.0(RES)	OCDF	0.246 ng/Kg	0.246U ng/Kg
SL-151-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.263 ng/Kg	0.263U ng/Kg
SL-151-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.261 ng/Kg	0.261U ng/Kg
SL-151-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0521 ng/Kg	0.0521U ng/Kg
SL-151-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.0718 ng/Kg	0.0718U ng/Kg
SL-151-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDD	0.0332 ng/Kg	0.0332U ng/Kg
SL-151-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.0502 ng/Kg	0.0502U ng/Kg
SL-151-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDD	0.0641 ng/Kg	0.0641U ng/Kg
SL-151-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.0438 ng/Kg	0.0438U ng/Kg
SL-151-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDD	0.0195 ng/Kg	0.0195U ng/Kg
SL-151-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.0233 ng/Kg	0.0233U ng/Kg
SL-151-SA5A-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.111 ng/Kg	0.111U ng/Kg
SL-151-SA5A-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.0843 ng/Kg	0.0843U ng/Kg
SL-151-SA5A-SB-4.0-5.0(RES)	2,3,7,8-TCDF	0.0182 ng/Kg	0.0182U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX066 **Laboratory: LL**

EDD Filename: DX066_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-151-SA5A-SB-4.0-5.0(RES)	OCDD	1.02 ng/Kg	1.02U ng/Kg
SL-151-SA5A-SB-4.0-5.0(RES)	OCDF	0.258 ng/Kg	0.258U ng/Kg
SL-154-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.407 ng/Kg	0.407U ng/Kg
SL-154-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.220 ng/Kg	0.220U ng/Kg
SL-154-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0927 ng/Kg	0.0927U ng/Kg
SL-154-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.0936 ng/Kg	0.0936U ng/Kg
SL-154-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDD	0.0975 ng/Kg	0.0975U ng/Kg
SL-154-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.115 ng/Kg	0.115U ng/Kg
SL-154-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDD	0.0588 ng/Kg	0.0588U ng/Kg
SL-154-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.0986 ng/Kg	0.0986U ng/Kg
SL-154-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDD	0.0768 ng/Kg	0.0768U ng/Kg
SL-154-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.143 ng/Kg	0.143U ng/Kg
SL-154-SA5A-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.112 ng/Kg	0.112U ng/Kg
SL-154-SA5A-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.146 ng/Kg	0.146U ng/Kg
SL-154-SA5A-SB-4.0-5.0(RES)	OCDD	0.868 ng/Kg	0.868U ng/Kg
SL-154-SA5A-SB-4.0-5.0(RES)	OCDF	0.321 ng/Kg	0.321U ng/Kg
SL-154-SA5A-SB-7.0-8.0(RES)	1,2,3,4,6,7,8-HPCDD	0.263 ng/Kg	0.263U ng/Kg
SL-154-SA5A-SB-7.0-8.0(RES)	1,2,3,4,6,7,8-HPCDF	0.154 ng/Kg	0.154U ng/Kg
SL-154-SA5A-SB-7.0-8.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0487 ng/Kg	0.0487U ng/Kg
SL-154-SA5A-SB-7.0-8.0(RES)	1,2,3,4,7,8-HxCDD	0.0189 ng/Kg	0.0189U ng/Kg
SL-154-SA5A-SB-7.0-8.0(RES)	1,2,3,4,7,8-HXCDF	0.0455 ng/Kg	0.0455U ng/Kg
SL-154-SA5A-SB-7.0-8.0(RES)	1,2,3,6,7,8-HXCDD	0.0206 ng/Kg	0.0206U ng/Kg
SL-154-SA5A-SB-7.0-8.0(RES)	1,2,3,6,7,8-HXCDF	0.0317 ng/Kg	0.0317U ng/Kg
SL-154-SA5A-SB-7.0-8.0(RES)	1,2,3,7,8,9-HXCDD	0.0206 ng/Kg	0.0206U ng/Kg
SL-154-SA5A-SB-7.0-8.0(RES)	1,2,3,7,8,9-HXCDF	0.0603 ng/Kg	0.0603U ng/Kg
SL-154-SA5A-SB-7.0-8.0(RES)	1,2,3,7,8-PECDD	0.0304 ng/Kg	0.0304U ng/Kg
SL-154-SA5A-SB-7.0-8.0(RES)	1,2,3,7,8-PECDF	0.0267 ng/Kg	0.0267U ng/Kg
SL-154-SA5A-SB-7.0-8.0(RES)	2,3,4,6,7,8-HXCDF	0.107 ng/Kg	0.107U ng/Kg
SL-154-SA5A-SB-7.0-8.0(RES)	2,3,4,7,8-PECDF	0.0624 ng/Kg	0.0624U ng/Kg
SL-154-SA5A-SB-7.0-8.0(RES)	OCDD	0.896 ng/Kg	0.896U ng/Kg
SL-154-SA5A-SB-7.0-8.0(RES)	OCDF	0.206 ng/Kg	0.206U ng/Kg
SL-156-SA5A-SB-3.0-4.0(RES)	1,2,3,7,8,9-HXCDF	0.196 ng/Kg	0.196U ng/Kg
SL-156-SA5A-SB-3.0-4.0(RES)	2,3,4,6,7,8-HXCDF	0.342 ng/Kg	0.342U ng/Kg
SL-156-SA5A-SB-3.0-4.0(RES)	2,3,4,7,8-PECDF	0.262 ng/Kg	0.262U ng/Kg
SL-258-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	1.57 ng/Kg	1.57U ng/Kg
SL-258-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.568 ng/Kg	0.568U ng/Kg
SL-258-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0963 ng/Kg	0.0963U ng/Kg
SL-258-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.152 ng/Kg	0.152U ng/Kg
SL-258-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDD	0.0838 ng/Kg	0.0838U ng/Kg
SL-258-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.0680 ng/Kg	0.0680U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX066 **Laboratory: LL**

EDD Filename: DX066_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-258-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDD	0.0687 ng/Kg	0.0687U ng/Kg
SL-258-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.116 ng/Kg	0.116U ng/Kg
SL-258-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDD	0.0569 ng/Kg	0.0569U ng/Kg
SL-258-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.0926 ng/Kg	0.0926U ng/Kg
SL-258-SA5A-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.112 ng/Kg	0.112U ng/Kg
SL-258-SA5A-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.118 ng/Kg	0.118U ng/Kg
SL-258-SA5A-SB-4.0-5.0(RES)	OCDF	0.900 ng/Kg	0.900U ng/Kg

Reporting Limit Outliers

Lab Reporting Batch ID: DX066 **Laboratory: LL**

EDD Filename: DX066_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1613B
Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB11-SA5A-SB-040511	1,2,3,4,6,7,8-HPCDD	JB	4.01	10.5	PQL	pg/L	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	3.70	10.5	PQL	pg/L	
	1,2,3,4,7,8,9-HPCDF	JB	0.773	10.5	PQL	pg/L	
	1,2,3,4,7,8-HxCDD	JB	0.284	10.5	PQL	pg/L	
	1,2,3,4,7,8-HXCDF	JBQ	0.667	10.5	PQL	pg/L	
	1,2,3,6,7,8-HXCDD	JB	0.628	10.5	PQL	pg/L	
	1,2,3,6,7,8-HXCDF	JB	0.779	10.5	PQL	pg/L	
	1,2,3,7,8,9-HXCDD	JBQ	0.425	10.5	PQL	pg/L	
	1,2,3,7,8,9-HXCDF	JB	0.531	10.5	PQL	pg/L	
	1,2,3,7,8-PECDD	JBQ	0.475	10.5	PQL	pg/L	
	1,2,3,7,8-PECDF	JBQ	0.362	10.5	PQL	pg/L	
	2,3,4,6,7,8-HXCDF	JB	1.86	10.5	PQL	pg/L	
	2,3,4,7,8-PECDF	JB	1.12	10.5	PQL	pg/L	
	2,3,7,8-TCDF	JBQ	0.124	2.11	PQL	pg/L	
	OCDD	JB	13.4	21.1	PQL	pg/L	
	OCDF	JB	2.68	21.1	PQL	pg/L	

Method: 1613B
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-071-SA5A-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JB	0.560	5.41	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JBQ	0.193	5.41	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JQ	0.0394	5.41	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.0571	5.41	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.0679	5.41	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0396	5.41	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.107	5.41	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.0803	5.41	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0324	5.41	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0760	5.41	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0495	5.41	PQL	ng/Kg	
	OCDD	JB	4.08	10.8	PQL	ng/Kg	
	OCDF	JB	0.240	10.8	PQL	ng/Kg	
SL-072-SA5A-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JB	0.413	5.71	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.177	5.71	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.260	5.71	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.0732	5.71	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.186	5.71	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0648	5.71	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.307	5.71	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.284	5.71	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0661	5.71	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0652	5.71	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0597	5.71	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0576	5.71	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.0255	1.14	PQL	ng/Kg	
	OCDD	JB	1.59	11.4	PQL	ng/Kg	
	OCDF	JBQ	0.396	11.4	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX066 **Laboratory: LL**

EDD Filename: DX066_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-075-SA5A-SB-2.5-3.5	1,2,3,4,6,7,8-HPCDD	JB	0.763	5.55	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JBQ	0.159	5.55	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0605	5.55	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JQ	0.0339	5.55	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0454	5.55	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.0726	5.55	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0511	5.55	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.0979	5.55	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.0750	5.55	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0876	5.55	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.0693	5.55	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.0279	1.11	PQL	ng/Kg	
	OCDD	JB	8.29	11.1	PQL	ng/Kg	
	OCDF	JB	0.337	11.1	PQL	ng/Kg	
SL-076-SA5A-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDF	JBQ	0.666	5.21	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JB	0.0759	5.21	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0575	5.21	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.108	5.21	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.324	5.21	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0529	5.21	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.183	5.21	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.0850	5.21	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0508	5.21	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.0425	5.21	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.0641	5.21	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.0564	5.21	PQL	ng/Kg	
	2,3,7,8-TCDD	JB	0.0203	1.04	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.0198	1.04	PQL	ng/Kg	
	OCDF	JB	2.63	10.4	PQL	ng/Kg	
SL-079-SA5A-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JB	1.09	5.48	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.267	5.48	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.0436	5.48	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0320	5.48	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0836	5.48	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.0775	5.48	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0528	5.48	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.109	5.48	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.100	5.48	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0489	5.48	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0508	5.48	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.151	5.48	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.0948	5.48	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0153	1.10	PQL	ng/Kg	
	OCDD	JB	7.80	11.0	PQL	ng/Kg	
	OCDF	JB	0.366	11.0	PQL	ng/Kg	
SL-080-SA5A-SB-3.0-4.0	1,2,3,4,6,7,8-HPCDF	JB	0.916	5.51	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JB	0.130	5.51	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	J	0.461	5.51	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.150	5.51	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	1.03	5.51	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.145	5.51	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.942	5.51	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.211	5.51	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.0929	5.51	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.146	5.51	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.110	5.51	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0256	1.10	PQL	ng/Kg	
	OCDF	JB	1.88	11.0	PQL	ng/Kg	

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Reporting Limit Outliers

Lab Reporting Batch ID: DX066 **Laboratory: LL**

EDD Filename: DX066_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-081-SA5A-SB-2.0-3.0	1,2,3,4,6,7,8-HPCDD	JB	4.11	5.48	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.387	5.48	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.0565	5.48	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JQ	0.0818	5.48	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.122	5.48	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.192	5.48	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0403	5.48	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.240	5.48	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.0643	5.48	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0372	5.48	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0430	5.48	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.106	5.48	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.119	5.48	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0301	1.10	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.0335	1.10	PQL	ng/Kg	
	OCDF	JB	0.614	11.0	PQL	ng/Kg	
SL-085-SA5A-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JBQ	0.381	5.57	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JBQ	0.153	5.57	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0723	5.57	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0432	5.57	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.0600	5.57	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0294	5.57	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.0875	5.57	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.0336	5.57	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0345	5.57	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0748	5.57	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0481	5.57	PQL	ng/Kg	
	OCDD	JBQ	0.878	11.1	PQL	ng/Kg	
	OCDF	JBQ	0.261	11.1	PQL	ng/Kg	
SL-087-SA5A-SB-2.0-3.0	1,2,3,4,6,7,8-HPCDD	JBQ	0.433	5.43	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JBQ	0.210	5.43	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.206	5.43	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JQ	0.0509	5.43	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0663	5.43	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0920	5.43	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.134	5.43	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.0795	5.43	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.0969	5.43	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.0834	5.43	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.0811	5.43	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.136	5.43	PQL	ng/Kg	
	OCDD	JB	0.744	10.9	PQL	ng/Kg	
	OCDF	JB	0.265	10.9	PQL	ng/Kg	
SL-088-SA5A-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JB	0.913	5.80	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JBQ	0.400	5.80	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0542	5.80	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JQ	0.0333	5.80	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.105	5.80	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.0874	5.80	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0630	5.80	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.0715	5.80	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.0650	5.80	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0890	5.80	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.115	5.80	PQL	ng/Kg	
	OCDD	JB	6.97	11.6	PQL	ng/Kg	
	OCDF	JB	0.636	11.6	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX066 **Laboratory: LL**

EDD Filename: DX066_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-089-SA5A-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JB	0.256	5.34	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JBQ	0.145	5.34	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0326	5.34	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0158	5.34	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.0592	5.34	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.0296	5.34	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0355	5.34	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.0354	5.34	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JBQ	0.0407	5.34	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0224	5.34	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0184	5.34	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0803	5.34	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.0809	5.34	PQL	ng/Kg	
	OCDD	JB	0.985	10.7	PQL	ng/Kg	
	OCDF	JBQ	0.192	10.7	PQL	ng/Kg	
SL-089-SA5A-SB-9.0-10.0	1,2,3,4,6,7,8-HPCDD	JB	1.24	6.36	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.306	6.36	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0841	6.36	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.140	6.36	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.108	6.36	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0866	6.36	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.136	6.36	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.148	6.36	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.0523	6.36	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.0505	6.36	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.138	6.36	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.141	6.36	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.0293	1.27	PQL	ng/Kg	
	OCDD	JB	10.9	12.7	PQL	ng/Kg	
	OCDF	JB	0.613	12.7	PQL	ng/Kg	
SL-094-SA5A-SB-4.0-5.0	1,2,3,4,7,8,9-HPCDF	JB	1.17	5.35	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JQ	1.49	5.35	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	1.99	5.35	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	3.70	5.35	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	1.77	5.35	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	2.83	5.35	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.615	5.35	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	1.31	5.35	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	1.17	5.35	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	2.72	5.35	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	2.19	5.35	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.268	1.07	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.928	1.07	PQL	ng/Kg	
SL-094-SA5A-SB-9.0-10.0	1,2,3,4,6,7,8-HPCDD	JB	0.544	5.31	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.210	5.31	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0639	5.31	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0832	5.31	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.0677	5.31	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0598	5.31	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.0859	5.31	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.0907	5.31	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.0371	5.31	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0342	5.31	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.110	5.31	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.0827	5.31	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.0158	1.06	PQL	ng/Kg	
	OCDD	JB	4.21	10.6	PQL	ng/Kg	
	OCDF	JB	0.246	10.6	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX066 **Laboratory: LL**

EDD Filename: DX066_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-151-SA5A-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JBQ	0.263	5.65	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.261	5.65	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0521	5.65	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0718	5.65	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.0332	5.65	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0502	5.65	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.0641	5.65	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.0438	5.65	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0195	5.65	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.0233	5.65	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.111	5.65	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.0843	5.65	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.0182	1.13	PQL	ng/Kg	
	OCDD	JB	1.02	11.3	PQL	ng/Kg	
	OCDF	JBQ	0.258	11.3	PQL	ng/Kg	
SL-154-SA5A-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JBQ	0.407	5.84	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.220	5.84	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0927	5.84	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JQ	0.0537	5.84	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0936	5.84	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.0975	5.84	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.115	5.84	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.0588	5.84	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.0986	5.84	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0768	5.84	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.143	5.84	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.112	5.84	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.146	5.84	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0344	1.17	PQL	ng/Kg	
	OCDD	JB	0.868	11.7	PQL	ng/Kg	
	OCDF	JB	0.321	11.7	PQL	ng/Kg	
SL-154-SA5A-SB-7.0-8.0	1,2,3,4,6,7,8-HPCDD	JB	0.263	5.89	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.154	5.89	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0487	5.89	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.0189	5.89	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.0455	5.89	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.0206	5.89	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0317	5.89	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.0206	5.89	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.0603	5.89	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0304	5.89	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0267	5.89	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.107	5.89	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0624	5.89	PQL	ng/Kg	
	OCDD	JB	0.896	11.8	PQL	ng/Kg	
	OCDF	JBQ	0.206	11.8	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX066 **Laboratory: LL**

EDD Filename: DX066_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-156-SA5A-SB-3.0-4.0	1,2,3,4,6,7,8-HPCDF	JB	3.99	5.55	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.553	5.55	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JQ	0.282	5.55	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.475	5.55	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.798	5.55	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.285	5.55	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.398	5.55	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JBQ	0.196	5.55	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.180	5.55	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.260	5.55	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.342	5.55	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.262	5.55	PQL	ng/Kg	
	OCDF	JB	8.59	11.1	PQL	ng/Kg	
SL-258-SA5A-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JB	1.57	5.95	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.568	5.95	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0963	5.95	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JQ	0.0489	5.95	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.152	5.95	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.0838	5.95	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0680	5.95	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.0687	5.95	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JBQ	0.116	5.95	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0569	5.95	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0926	5.95	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.112	5.95	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.118	5.95	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.0419	1.19	PQL	ng/Kg	
	OCDF	JB	0.900	11.9	PQL	ng/Kg	

SAMPLE DELIVERY GROUP

DX067

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
11-Apr-2011	SL-189-SA5A-SB-5.0-6.0	6255775	N	METHOD	1613B	III
11-Apr-2011	SL-189-SA5A-SB-8.5-9.5	6255776	N	METHOD	1613B	III
11-Apr-2011	SL-188-SA5A-SB-4.5-5.5	6255774	N	METHOD	1613B	III
11-Apr-2011	SL-186-SA5A-SB-3.5-4.5	6255770	N	METHOD	1613B	III
11-Apr-2011	SL-187-SA5A-SB-4.0-5.0	6255771	N	METHOD	1613B	III
11-Apr-2011	SL-187-SA5A-SB-4.0-5.0MS	6255772	MS	METHOD	1613B	III
11-Apr-2011	SL-187-SA5A-SB-4.0-5.0MSD	6255773	MSD	METHOD	1613B	III
11-Apr-2011	DUP-13-SA5A-QC-041111	6255769	FD	METHOD	1613B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DX067 **Laboratory: LL**

EDD Filename: DX067_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B ***Matrix:*** SO

Sample ID: DUP-13-SA5A-QC-041111 ***Collected:*** 4/11/2011 3:51:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.474	JB	0.0204	MDL	5.81	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.149	JB	0.0141	MDL	5.81	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0410	JBQ	0.0180	MDL	5.81	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0236	JBQ	0.0207	MDL	5.81	PQL	ng/Kg	UJ	B, FD
1,2,3,4,7,8-HXCDF	0.0648	JBQ	0.0234	MDL	5.81	PQL	ng/Kg	UJ	B, FD
1,2,3,6,7,8-HXCDD	0.208	JB	0.0199	MDL	5.81	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.0580	JBQ	0.0150	MDL	5.81	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.349	JB	0.0187	MDL	5.81	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.239	JBQ	0.0175	MDL	5.81	PQL	ng/Kg	UJ	B, FD
1,2,3,7,8-PECDD	0.0398	JB	0.0144	MDL	5.81	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0535	JBQ	0.00686	MDL	5.81	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0766	JB	0.0106	MDL	5.81	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.110	JBQ	0.00757	MDL	5.81	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0174	JBQ	0.0168	MDL	1.16	PQL	ng/Kg	UJ	B, FD
2,3,7,8-TCDF	0.0189	JBQ	0.0134	MDL	1.16	PQL	ng/Kg	UJ	B, FD
OCDD	2.36	JB	0.0248	MDL	11.6	PQL	ng/Kg	UJ	B, FD
OCDF	0.203	JBQ	0.0278	MDL	11.6	PQL	ng/Kg	U	B

Sample ID: SL-186-SA5A-SB-3.5-4.5 ***Collected:*** 4/11/2011 1:01:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.453	JB	0.0277	MDL	5.55	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.196	JB	0.0107	MDL	5.55	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0408	JB	0.0153	MDL	5.55	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0321	JBQ	0.0135	MDL	5.55	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.303	JB	0.0226	MDL	5.55	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.0429	JBQ	0.0120	MDL	5.55	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.477	JB	0.0214	MDL	5.55	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.333	JBQ	0.0137	MDL	5.55	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0639	JBQ	0.0177	MDL	5.55	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0641	JB	0.00815	MDL	5.55	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0464	JB	0.0123	MDL	5.55	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0558	JBQ	0.00850	MDL	5.55	PQL	ng/Kg	U	B
OCDD	3.38	JB	0.0345	MDL	11.1	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX067 **Laboratory: LL**

EDD Filename: DX067_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-186-SA5A-SB-3.5-4.5 **Collected:** 4/11/2011 1:01:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
OCDF	0.320	JBQ	0.0243	MDL	11.1	PQL	ng/Kg	U	B

Sample ID: SL-187-SA5A-SB-4.0-5.0 **Collected:** 4/11/2011 3:48:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.306	JB	0.0215	MDL	5.87	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.115	JB	0.0116	MDL	5.87	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0348	JBQ	0.0124	MDL	5.87	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0190	U	0.0190	MDL	5.87	PQL	ng/Kg	UJ	FD
1,2,3,4,7,8-HXCDF	0.0306	JBQ	0.0172	MDL	5.87	PQL	ng/Kg	UJ	B, FD
1,2,3,6,7,8-HXCDD	0.145	JB	0.0202	MDL	5.87	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0536	JBQ	0.0156	MDL	5.87	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.244	JB	0.0182	MDL	5.87	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.129	JB	0.0117	MDL	5.87	PQL	ng/Kg	UJ	B, FD
1,2,3,7,8-PECDD	0.0340	JBQ	0.0168	MDL	5.87	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0369	JBQ	0.00815	MDL	5.87	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0510	JBQ	0.0107	MDL	5.87	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0765	JBQ	0.00885	MDL	5.87	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0188	U	0.0188	MDL	1.17	PQL	ng/Kg	UJ	FD
2,3,7,8-TCDF	0.0169	U	0.0169	MDL	1.17	PQL	ng/Kg	UJ	FD
OCDD	1.33	JB	0.0335	MDL	11.7	PQL	ng/Kg	UJ	B, FD
OCDF	0.192	JB	0.0214	MDL	11.7	PQL	ng/Kg	U	B

Sample ID: SL-188-SA5A-SB-4.5-5.5 **Collected:** 4/11/2011 11:54:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.413	JB	0.0202	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.205	JB	0.0115	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0714	JBQ	0.0159	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0301	JBQ	0.0236	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.149	JB	0.0180	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.317	JBQ	0.0231	MDL	5.66	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.0633	JBQ	0.0162	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.456	JB	0.0227	MDL	5.66	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.429	JB	0.0178	MDL	5.66	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX067 **Laboratory: LL**

EDD Filename: DX067_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-188-SA5A-SB-4.5-5.5 **Collected:** 4/11/2011 11:54:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,7,8-PECDD	0.0930	JBQ	0.0184	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.110	JBQ	0.0110	MDL	5.66	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.101	JB	0.0155	MDL	5.66	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.143	JB	0.0111	MDL	5.66	PQL	ng/Kg	U	B
OCDD	2.12	JB	0.0257	MDL	11.3	PQL	ng/Kg	J	Z
OCDF	0.299	JB	0.0186	MDL	11.3	PQL	ng/Kg	U	B

Sample ID: SL-189-SA5A-SB-5.0-6.0 **Collected:** 4/11/2011 10:12:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	3.72	JB	0.0632	MDL	5.99	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.733	JB	0.0372	MDL	5.99	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.304	JBQ	0.0689	MDL	5.99	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.598	JB	0.106	MDL	5.99	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	1.31	JB	0.0592	MDL	5.99	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.625	JB	0.0724	MDL	5.99	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	1.05	JB	0.0465	MDL	5.99	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.972	JB	0.0511	MDL	5.99	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.344	JBQ	0.0247	MDL	5.99	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.317	JBQ	0.0117	MDL	5.99	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.554	JB	0.0316	MDL	5.99	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.389	JB	0.0116	MDL	5.99	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.173	JB	0.0223	MDL	1.20	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.124	JB	0.0207	MDL	1.20	PQL	ng/Kg	J	Z
OCDF	7.33	JB	0.0343	MDL	12.0	PQL	ng/Kg	J	Z

Sample ID: SL-189-SA5A-SB-8.5-9.5 **Collected:** 4/11/2011 10:23:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	1.55	JB	0.0255	MDL	5.73	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.194	JB	0.0248	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0929	JBQ	0.0473	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.123	JBQ	0.0408	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.795	JB	0.0485	MDL	5.73	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.175	JB	0.0348	MDL	5.73	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX067 **Laboratory: LL**

EDD Filename: DX067_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: **SL-189-SA5A-SB-8.5-9.5** ***Collected:*** **4/11/2011 10:23:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,7,8,9-HXCDD	0.884	JB	0.0469	MDL	5.73	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.629	JB	0.0285	MDL	5.73	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.108	JBQ	0.0203	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.127	JB	0.00919	MDL	5.73	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.183	JBQ	0.0259	MDL	5.73	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.186	JB	0.00919	MDL	5.73	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0277	JQ	0.0170	MDL	1.15	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.113	J	0.0141	MDL	1.15	PQL	ng/Kg	J	Z
OCDF	5.17	JB	0.0242	MDL	11.5	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DX067 **Laboratory: LL**

EDD Filename: DX067_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
	Sampling to Leaching Estimation
	Sampling to Leaching Rejection
*#	Professional Judgment
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Continuing Calibration Verification Percent Recovery Lower Estimation
C	Continuing Calibration Verification Percent Recovery Lower Rejection
C	Continuing Calibration Verification Percent Recovery Upper Estimation
C	Continuing Calibration Verification Percent Recovery Upper Rejection
C	Continuing Calibration Verification Relative Response Factor
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Relative Response Factor
C	Initial Calibration Verification Correlation Coefficient

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DX067 **Laboratory: LL**

EDD Filename: DX067_v1 **eQAPP Name: CDM_SSFL_110509**

C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Verification Percent Recovery Lower Estimation
C	Initial Calibration Verification Percent Recovery Lower Rejection
C	Initial Calibration Verification Percent Recovery Upper Estimation
C	Initial Calibration Verification Percent Recovery Upper Rejection
C	Initial Calibration Verification Relative Response Factor
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Laboratory Triplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination
F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DX067 **Laboratory: LL**

EDD Filename: DX067_v1 **eQAPP Name: CDM_SSFL_110509**

L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Laboratory Triplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Q	Matrix Spike Upper Rejection
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control Outlier Reports

DX067

Method Blank Outlier Report

Lab Reporting Batch ID: DX067 **Laboratory: LL**

EDD Filename: DX067_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLK1110B371312	4/25/2011 1:12:00 PM	1,2,3,4,6,7,8-HPCDD	0.214 ng/Kg	DUP-13-SA5A-QC-041111
		1,2,3,4,6,7,8-HPCDF	0.123 ng/Kg	SL-189-SA5A-SB-5.0-6.0
		1,2,3,4,7,8,9-HPCDF	0.0603 ng/Kg	
		1,2,3,4,7,8-HxCDD	0.0291 ng/Kg	
		1,2,3,4,7,8-HXCDF	0.0546 ng/Kg	
		1,2,3,6,7,8-HXCDD	0.0354 ng/Kg	
		1,2,3,6,7,8-HXCDF	0.0424 ng/Kg	
		1,2,3,7,8,9-HXCDD	0.0670 ng/Kg	
		1,2,3,7,8,9-HXCDF	0.0880 ng/Kg	
		1,2,3,7,8-PECDD	0.0378 ng/Kg	
		1,2,3,7,8-PECDF	0.0460 ng/Kg	
		2,3,4,6,7,8-HXCDF	0.0497 ng/Kg	
		2,3,4,7,8-PECDF	0.0785 ng/Kg	
		2,3,7,8-TCDD	0.0407 ng/Kg	
		2,3,7,8-TCDF	0.0156 ng/Kg	
		OCDD	0.583 ng/Kg	
		OCDF	0.155 ng/Kg	
BLK1180B371746	5/2/2011 5:46:00 PM	1,2,3,4,6,7,8-HPCDD	0.196 ng/Kg	SL-186-SA5A-SB-3.5-4.5
		1,2,3,4,6,7,8-HPCDF	0.123 ng/Kg	SL-187-SA5A-SB-4.0-5.0
		1,2,3,4,7,8,9-HPCDF	0.0591 ng/Kg	SL-188-SA5A-SB-4.5-5.5
		1,2,3,4,7,8-HxCDD	0.0344 ng/Kg	SL-189-SA5A-SB-8.5-9.5
		1,2,3,4,7,8-HXCDF	0.0551 ng/Kg	
		1,2,3,6,7,8-HXCDD	0.0404 ng/Kg	
		1,2,3,6,7,8-HXCDF	0.0487 ng/Kg	
		1,2,3,7,8,9-HXCDD	0.0363 ng/Kg	
		1,2,3,7,8,9-HXCDF	0.0825 ng/Kg	
		1,2,3,7,8-PECDD	0.0328 ng/Kg	
		1,2,3,7,8-PECDF	0.0530 ng/Kg	
		2,3,4,6,7,8-HXCDF	0.0527 ng/Kg	
		2,3,4,7,8-PECDF	0.0749 ng/Kg	
		OCDD	0.335 ng/Kg	
		OCDF	0.162 ng/Kg	

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
DUP-13-SA5A-QC-041111(RES)	1,2,3,4,6,7,8-HPCDD	0.474 ng/Kg	0.474U ng/Kg
DUP-13-SA5A-QC-041111(RES)	1,2,3,4,6,7,8-HPCDF	0.149 ng/Kg	0.149U ng/Kg
DUP-13-SA5A-QC-041111(RES)	1,2,3,4,7,8,9-HPCDF	0.0410 ng/Kg	0.0410U ng/Kg
DUP-13-SA5A-QC-041111(RES)	1,2,3,4,7,8-HxCDD	0.0236 ng/Kg	0.0236U ng/Kg
DUP-13-SA5A-QC-041111(RES)	1,2,3,4,7,8-HXCDF	0.0648 ng/Kg	0.0648U ng/Kg
DUP-13-SA5A-QC-041111(RES)	1,2,3,6,7,8-HXCDF	0.0580 ng/Kg	0.0580U ng/Kg
DUP-13-SA5A-QC-041111(RES)	1,2,3,7,8,9-HXCDF	0.239 ng/Kg	0.239U ng/Kg
DUP-13-SA5A-QC-041111(RES)	1,2,3,7,8-PECDD	0.0398 ng/Kg	0.0398U ng/Kg
DUP-13-SA5A-QC-041111(RES)	1,2,3,7,8-PECDF	0.0535 ng/Kg	0.0535U ng/Kg
DUP-13-SA5A-QC-041111(RES)	2,3,4,6,7,8-HXCDF	0.0766 ng/Kg	0.0766U ng/Kg
DUP-13-SA5A-QC-041111(RES)	2,3,4,7,8-PECDF	0.110 ng/Kg	0.110U ng/Kg
DUP-13-SA5A-QC-041111(RES)	2,3,7,8-TCDD	0.0174 ng/Kg	0.0174U ng/Kg
DUP-13-SA5A-QC-041111(RES)	2,3,7,8-TCDF	0.0189 ng/Kg	0.0189U ng/Kg
DUP-13-SA5A-QC-041111(RES)	OCDD	2.36 ng/Kg	2.36U ng/Kg
DUP-13-SA5A-QC-041111(RES)	OCDF	0.203 ng/Kg	0.203U ng/Kg
SL-186-SA5A-SB-3.5-4.5(RES)	1,2,3,4,6,7,8-HPCDD	0.453 ng/Kg	0.453U ng/Kg
SL-186-SA5A-SB-3.5-4.5(RES)	1,2,3,4,6,7,8-HPCDF	0.196 ng/Kg	0.196U ng/Kg
SL-186-SA5A-SB-3.5-4.5(RES)	1,2,3,4,7,8,9-HPCDF	0.0408 ng/Kg	0.0408U ng/Kg
SL-186-SA5A-SB-3.5-4.5(RES)	1,2,3,4,7,8-HXCDF	0.0321 ng/Kg	0.0321U ng/Kg

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Method Blank Outlier Report

Lab Reporting Batch ID: DX067 **Laboratory: LL**

EDD Filename: DX067_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-186-SA5A-SB-3.5-4.5(RES)	1,2,3,6,7,8-HXCDF	0.0429 ng/Kg	0.0429U ng/Kg
SL-186-SA5A-SB-3.5-4.5(RES)	1,2,3,7,8,9-HXCDF	0.333 ng/Kg	0.333U ng/Kg
SL-186-SA5A-SB-3.5-4.5(RES)	1,2,3,7,8-PECDD	0.0639 ng/Kg	0.0639U ng/Kg
SL-186-SA5A-SB-3.5-4.5(RES)	1,2,3,7,8-PECDF	0.0641 ng/Kg	0.0641U ng/Kg
SL-186-SA5A-SB-3.5-4.5(RES)	2,3,4,6,7,8-HXCDF	0.0464 ng/Kg	0.0464U ng/Kg
SL-186-SA5A-SB-3.5-4.5(RES)	2,3,4,7,8-PECDF	0.0558 ng/Kg	0.0558U ng/Kg
SL-186-SA5A-SB-3.5-4.5(RES)	OCDF	0.320 ng/Kg	0.320U ng/Kg
SL-187-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.306 ng/Kg	0.306U ng/Kg
SL-187-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.115 ng/Kg	0.115U ng/Kg
SL-187-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0348 ng/Kg	0.0348U ng/Kg
SL-187-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.0306 ng/Kg	0.0306U ng/Kg
SL-187-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDD	0.145 ng/Kg	0.145U ng/Kg
SL-187-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.0536 ng/Kg	0.0536U ng/Kg
SL-187-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.129 ng/Kg	0.129U ng/Kg
SL-187-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDD	0.0340 ng/Kg	0.0340U ng/Kg
SL-187-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.0369 ng/Kg	0.0369U ng/Kg
SL-187-SA5A-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.0510 ng/Kg	0.0510U ng/Kg
SL-187-SA5A-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.0765 ng/Kg	0.0765U ng/Kg
SL-187-SA5A-SB-4.0-5.0(RES)	OCDD	1.33 ng/Kg	1.33U ng/Kg
SL-187-SA5A-SB-4.0-5.0(RES)	OCDF	0.192 ng/Kg	0.192U ng/Kg
SL-188-SA5A-SB-4.5-5.5(RES)	1,2,3,4,6,7,8-HPCDD	0.413 ng/Kg	0.413U ng/Kg
SL-188-SA5A-SB-4.5-5.5(RES)	1,2,3,4,6,7,8-HPCDF	0.205 ng/Kg	0.205U ng/Kg
SL-188-SA5A-SB-4.5-5.5(RES)	1,2,3,4,7,8,9-HPCDF	0.0714 ng/Kg	0.0714U ng/Kg
SL-188-SA5A-SB-4.5-5.5(RES)	1,2,3,4,7,8-HxCDD	0.0301 ng/Kg	0.0301U ng/Kg
SL-188-SA5A-SB-4.5-5.5(RES)	1,2,3,4,7,8-HXCDF	0.149 ng/Kg	0.149U ng/Kg
SL-188-SA5A-SB-4.5-5.5(RES)	1,2,3,6,7,8-HXCDF	0.0633 ng/Kg	0.0633U ng/Kg
SL-188-SA5A-SB-4.5-5.5(RES)	1,2,3,7,8-PECDD	0.0930 ng/Kg	0.0930U ng/Kg
SL-188-SA5A-SB-4.5-5.5(RES)	1,2,3,7,8-PECDF	0.110 ng/Kg	0.110U ng/Kg
SL-188-SA5A-SB-4.5-5.5(RES)	2,3,4,6,7,8-HXCDF	0.101 ng/Kg	0.101U ng/Kg
SL-188-SA5A-SB-4.5-5.5(RES)	2,3,4,7,8-PECDF	0.143 ng/Kg	0.143U ng/Kg
SL-188-SA5A-SB-4.5-5.5(RES)	OCDF	0.299 ng/Kg	0.299U ng/Kg
SL-189-SA5A-SB-5.0-6.0(RES)	2,3,4,7,8-PECDF	0.389 ng/Kg	0.389U ng/Kg
SL-189-SA5A-SB-5.0-6.0(RES)	2,3,7,8-TCDD	0.173 ng/Kg	0.173U ng/Kg
SL-189-SA5A-SB-8.5-9.5(RES)	1,2,3,4,7,8,9-HPCDF	0.194 ng/Kg	0.194U ng/Kg
SL-189-SA5A-SB-8.5-9.5(RES)	1,2,3,4,7,8-HxCDD	0.0929 ng/Kg	0.0929U ng/Kg
SL-189-SA5A-SB-8.5-9.5(RES)	1,2,3,4,7,8-HXCDF	0.123 ng/Kg	0.123U ng/Kg
SL-189-SA5A-SB-8.5-9.5(RES)	1,2,3,6,7,8-HXCDF	0.175 ng/Kg	0.175U ng/Kg
SL-189-SA5A-SB-8.5-9.5(RES)	1,2,3,7,8-PECDD	0.108 ng/Kg	0.108U ng/Kg
SL-189-SA5A-SB-8.5-9.5(RES)	1,2,3,7,8-PECDF	0.127 ng/Kg	0.127U ng/Kg
SL-189-SA5A-SB-8.5-9.5(RES)	2,3,4,6,7,8-HXCDF	0.183 ng/Kg	0.183U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX067 **Laboratory: LL**

EDD Filename: DX067_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-189-SA5A-SB-8.5-9.5(RES)	2,3,4,7,8-PECDF	0.186 ng/Kg	0.186U ng/Kg

Field Duplicate RPD Report

Lab Reporting Batch ID: DX067 **Laboratory: LL**

EDD Filename: DX067_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 160.3M
Matrix: SO

Analyte	Concentration (%)		Sample RPD	eQAPP RPD	Flag
	SL-187-SA5A-SB-4.0-5.0	DUP-13-SA5A-QC-041111			
MOISTURE	15.3	15.4	1		No Qualifiers Applied

Method: 1613B
Matrix: SO

Analyte	Concentration (ng/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-187-SA5A-SB-4.0-5.0	DUP-13-SA5A-QC-041111			
1,2,3,4,6,7,8-HPCDD	0.306	0.474	43	50.00	No Qualifiers Applied
1,2,3,4,6,7,8-HPCDF	0.115	0.149	26	50.00	
1,2,3,4,7,8,9-HPCDF	0.0348	0.0410	16	50.00	
1,2,3,6,7,8-HXCDD	0.145	0.208	36	50.00	
1,2,3,6,7,8-HXCDF	0.0536	0.0580	8	50.00	
1,2,3,7,8,9-HXCDD	0.244	0.349	35	50.00	
1,2,3,7,8-PECDD	0.0340	0.0398	16	50.00	
1,2,3,7,8-PECDF	0.0369	0.0535	37	50.00	
2,3,4,6,7,8-HXCDF	0.0510	0.0766	40	50.00	
2,3,4,7,8-PECDF	0.0765	0.110	36	50.00	
OCDF	0.192	0.203	6	50.00	
1,2,3,4,7,8-HxCDD	5.87 U	0.0236	200	50.00	J(all detects) UJ(all non-detects)
1,2,3,4,7,8-HXCDF	0.0306	0.0648	72	50.00	
1,2,3,7,8,9-HXCDF	0.129	0.239	60	50.00	
2,3,7,8-TCDD	1.17 U	0.0174	200	50.00	
2,3,7,8-TCDF	1.17 U	0.0189	200	50.00	
OCDD	1.33	2.36	56	50.00	

Reporting Limit Outliers

Lab Reporting Batch ID: DX067 **Laboratory: LL**

EDD Filename: DX067_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-13-SA5A-QC-041111	1,2,3,4,6,7,8-HPCDD	JB	0.474	5.81	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.149	5.81	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0410	5.81	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0236	5.81	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0648	5.81	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.208	5.81	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0580	5.81	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.349	5.81	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.239	5.81	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.0398	5.81	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0535	5.81	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.0766	5.81	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.110	5.81	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0174	1.16	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.0189	1.16	PQL	ng/Kg	
	OCDD	JB	2.36	11.6	PQL	ng/Kg	
	OCDF	JBQ	0.203	11.6	PQL	ng/Kg	
SL-186-SA5A-SB-3.5-4.5	1,2,3,4,6,7,8-HPCDD	JB	0.453	5.55	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.196	5.55	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.0408	5.55	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0321	5.55	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.303	5.55	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0429	5.55	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.477	5.55	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.333	5.55	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0639	5.55	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.0641	5.55	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.0464	5.55	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0558	5.55	PQL	ng/Kg	
	OCDD	JB	3.38	11.1	PQL	ng/Kg	
	OCDF	JBQ	0.320	11.1	PQL	ng/Kg	
SL-187-SA5A-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JB	0.306	5.87	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.115	5.87	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0348	5.87	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0306	5.87	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.145	5.87	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0536	5.87	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.244	5.87	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.129	5.87	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0340	5.87	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0369	5.87	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0510	5.87	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0765	5.87	PQL	ng/Kg	
	OCDD	JB	1.33	11.7	PQL	ng/Kg	
	OCDF	JB	0.192	11.7	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX067 **Laboratory: LL**

EDD Filename: DX067_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-188-SA5A-SB-4.5-5.5	1,2,3,4,6,7,8-HPCDD	JB	0.413	5.66	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.205	5.66	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0714	5.66	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0301	5.66	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.149	5.66	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.317	5.66	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0633	5.66	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.456	5.66	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JB	0.429	5.66	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0930	5.66	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.110	5.66	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.101	5.66	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.143	5.66	PQL	ng/Kg	
	OCDD	JB	2.12	11.3	PQL	ng/Kg	
	OCDF	JB	0.299	11.3	PQL	ng/Kg	
SL-189-SA5A-SB-5.0-6.0	1,2,3,4,6,7,8-HPCDF	JB	3.72	5.99	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.733	5.99	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.304	5.99	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.598	5.99	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	1.31	5.99	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.625	5.99	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	1.05	5.99	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.972	5.99	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.344	5.99	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.317	5.99	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.554	5.99	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.389	5.99	PQL	ng/Kg	
	2,3,7,8-TCDD	JB	0.173	1.20	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.124	1.20	PQL	ng/Kg	
	OCDF	JB	7.33	12.0	PQL	ng/Kg	
SL-189-SA5A-SB-8.5-9.5	1,2,3,4,6,7,8-HPCDF	JB	1.55	5.73	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.194	5.73	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0929	5.73	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.123	5.73	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.795	5.73	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.175	5.73	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.884	5.73	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.629	5.73	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.108	5.73	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.127	5.73	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.183	5.73	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.186	5.73	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0277	1.15	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.113	1.15	PQL	ng/Kg	
	OCDF	JB	5.17	11.5	PQL	ng/Kg	

SAMPLE DELIVERY GROUP

DX069

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
12-Apr-2011	SL-018-SA8N-SS-0.0-0.5	6256884	N	METHOD	1613B	III
12-Apr-2011	SL-228-SA5A-SB-3.0-4.0	6256900	N	METHOD	1613B	III
12-Apr-2011	SL-016-SA8N-SS-0.0-0.5	6256883	N	METHOD	1613B	III
12-Apr-2011	SL-015-SA8N-SS-0.0-0.5	6256882	N	METHOD	1613B	III
12-Apr-2011	SL-227-SA5A-SB-3.0-4.0	6256899	N	METHOD	1613B	III
12-Apr-2011	SL-048-SA8N-SS-0.0-0.5	6256892	N	METHOD	1613B	III
12-Apr-2011	SL-012-SA8N-SS-0.0-0.5	6256881	N	METHOD	1613B	III
12-Apr-2011	SL-050-SA8N-SS-0.0-0.5	6256893	N	METHOD	1613B	III
12-Apr-2011	SL-019-SA8N-SS-0.0-0.5	6256885	N	METHOD	1613B	III
12-Apr-2011	SL-020-SA8N-SS-0.0-0.5	6256886	N	METHOD	1613B	III
12-Apr-2011	SL-207-SA5A-SB-3.0-4.0	6256898	N	METHOD	1613B	III
12-Apr-2011	SL-021-SA8N-SS-0.0-0.5	6256887	N	METHOD	1613B	III
12-Apr-2011	SL-047-SA8N-SS-0.0-0.5	6256891	N	METHOD	1613B	III
12-Apr-2011	SL-022-SA8N-SS-0.0-0.5	6256888	N	METHOD	1613B	III
12-Apr-2011	SL-023-SA8N-SS-0.0-0.5	6256889	N	METHOD	1613B	III
12-Apr-2011	SL-202-SA5A-SB-3.0-4.0	6256896	N	METHOD	1613B	III
12-Apr-2011	SL-036-SA8N-SS-0.0-0.5	6256890	N	METHOD	1613B	III
12-Apr-2011	SL-131-SA8N-SS-0.0-0.5	6256894	N	METHOD	1613B	III
12-Apr-2011	SL-206-SA5A-SB-4.0-5.0	6256897	N	METHOD	1613B	III
12-Apr-2011	EB01-SA8N-SS-041211	6256895	EB	METHOD	1613B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DX069 **Laboratory: LL**

EDD Filename: PrepDX069_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** AQ

Sample ID: EB01-SA8N-SS-041211 **Collected:** 4/12/2011 4:00:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	5.67	JB	0.347	MDL	10.4	PQL	pg/L	U	B
1,2,3,4,6,7,8-HPCDF	3.88	JB	0.187	MDL	10.4	PQL	pg/L	U	B
1,2,3,4,7,8,9-HPCDF	2.09	JBQ	0.217	MDL	10.4	PQL	pg/L	U	B
1,2,3,4,7,8-HxCDD	0.435	JBQ	0.197	MDL	10.4	PQL	pg/L	U	B
1,2,3,4,7,8-HXCDF	1.66	JB	0.212	MDL	10.4	PQL	pg/L	U	B
1,2,3,6,7,8-HXCDD	1.11	JBQ	0.200	MDL	10.4	PQL	pg/L	U	B
1,2,3,6,7,8-HXCDF	0.970	JBQ	0.190	MDL	10.4	PQL	pg/L	U	B
1,2,3,7,8,9-HXCDD	0.886	JBQ	0.189	MDL	10.4	PQL	pg/L	U	B
1,2,3,7,8,9-HXCDF	1.84	JBQ	0.188	MDL	10.4	PQL	pg/L	U	B
1,2,3,7,8-PECDD	0.642	JBQ	0.205	MDL	10.4	PQL	pg/L	U	B
1,2,3,7,8-PECDF	0.532	JBQ	0.119	MDL	10.4	PQL	pg/L	U	B
2,3,4,6,7,8-HXCDF	1.46	JB	0.163	MDL	10.4	PQL	pg/L	U	B
2,3,4,7,8-PECDF	1.11	JB	0.114	MDL	10.4	PQL	pg/L	U	B
2,3,7,8-TCDF	0.177	JBQ	0.139	MDL	2.09	PQL	pg/L	U	B
OCDD	15.2	JB	0.502	MDL	20.9	PQL	pg/L	U	B
OCDF	4.49	JBQ	0.384	MDL	20.9	PQL	pg/L	U	B

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-012-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 10:35:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	2.19	JB	0.0355	MDL	5.62	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.190	JBQ	0.0382	MDL	5.62	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.154	JBQ	0.0514	MDL	5.62	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	1.09	JB	0.0693	MDL	5.62	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.663	JB	0.0508	MDL	5.62	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.290	JB	0.0491	MDL	5.62	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.507	JB	0.0468	MDL	5.62	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.297	JB	0.0450	MDL	5.62	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.128	JBQ	0.0279	MDL	5.62	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	1.89	JB	0.0512	MDL	5.62	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.251	JB	0.0388	MDL	5.62	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX069 **Laboratory: LL**

EDD Filename: PrepDX069_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-012-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 10:35:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,3,4,7,8-PECDF	0.475	JB	0.0531	MDL	5.62	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0210	JBQ	0.0181	MDL	1.12	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.600	JB	0.170	MDL	1.12	PQL	ng/Kg	J	Z
OCDF	5.05	JB	0.0357	MDL	11.2	PQL	ng/Kg	J	Z

Sample ID: SL-015-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 9:35:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	5.02	JB	0.0745	MDL	5.71	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	1.65	JB	0.0606	MDL	5.71	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.149	JBQ	0.0635	MDL	5.71	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.120	JBQ	0.0428	MDL	5.71	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.818	JB	0.0685	MDL	5.71	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.349	JB	0.0421	MDL	5.71	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.233	JBQ	0.0498	MDL	5.71	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.405	JB	0.0385	MDL	5.71	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.336	JBQ	0.0454	MDL	5.71	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.158	JBQ	0.0489	MDL	5.71	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	1.83	JB	0.0687	MDL	5.71	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.230	JB	0.0393	MDL	5.71	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.537	JB	0.0667	MDL	5.71	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0413	JBQ	0.0349	MDL	1.14	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.229	JBQ	0.190	MDL	1.14	PQL	ng/Kg	J	Z
OCDF	6.95	JB	0.0791	MDL	11.4	PQL	ng/Kg	J	Z

Sample ID: SL-016-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 9:15:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	5.02	JB	0.0323	MDL	5.64	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.455	JB	0.0345	MDL	5.64	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.277	JBQ	0.0786	MDL	5.64	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	3.60	JB	0.129	MDL	5.64	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	1.75	JB	0.0749	MDL	5.64	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.904	JB	0.0952	MDL	5.64	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.986	JB	0.0659	MDL	5.64	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX069 **Laboratory: LL**

EDD Filename: PrepDX069_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-016-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 9:15:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,7,8,9-HXCDF	0.567	JBQ	0.0794	MDL	5.64	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.264	JBQ	0.0585	MDL	5.64	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.648	JB	0.0728	MDL	5.64	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	1.62	JBQ	0.0931	MDL	5.64	PQL	ng/Kg	J	Z

Sample ID: SL-018-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 9:00:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	2.35	JB	0.0512	MDL	5.77	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.167	JB	0.0546	MDL	5.77	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.137	JBQ	0.0632	MDL	5.77	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	1.16	JB	0.0921	MDL	5.77	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.687	JB	0.0592	MDL	5.77	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.296	JBQ	0.0632	MDL	5.77	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.545	JB	0.0506	MDL	5.77	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.262	JBQ	0.0537	MDL	5.77	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0676	JB	0.0319	MDL	5.77	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	2.32	JB	0.0683	MDL	5.77	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.260	JB	0.0469	MDL	5.77	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.614	JB	0.0742	MDL	5.77	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.913	JB	0.220	MDL	1.15	PQL	ng/Kg	J	Z
OCDF	6.40	JB	0.0482	MDL	11.5	PQL	ng/Kg	J	Z

Sample ID: SL-019-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 11:05:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	3.88	JB	0.0274	MDL	5.85	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.251	JB	0.0240	MDL	5.85	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.291	JB	0.0480	MDL	5.85	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	2.49	JB	0.104	MDL	5.85	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	1.22	JB	0.0440	MDL	5.85	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.586	JB	0.0743	MDL	5.85	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.745	JB	0.0380	MDL	5.85	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.361	JB	0.0547	MDL	5.85	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX069 **Laboratory: LL**

EDD Filename: PrepDX069_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: **SL-019-SA8N-SS-0.0-0.5** ***Collected:*** **4/12/2011 11:05:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,7,8-PECDD	0.167	JB	0.0324	MDL	5.85	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	5.83	JB	0.0565	MDL	5.85	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.373	JB	0.0479	MDL	5.85	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	1.09	JB	0.0603	MDL	5.85	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0198	JB	0.0139	MDL	1.17	PQL	ng/Kg	U	B

Sample ID: **SL-020-SA8N-SS-0.0-0.5** ***Collected:*** **4/12/2011 11:25:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	3.67	JB	0.0905	MDL	5.73	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.385	JBQ	0.122	MDL	5.73	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.186	JB	0.101	MDL	5.73	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	1.83	JB	0.111	MDL	5.73	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	1.02	JB	0.0973	MDL	5.73	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.467	JB	0.0856	MDL	5.73	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.646	JB	0.0872	MDL	5.73	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.296	JB	0.0916	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0970	JB	0.0631	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	5.14	JB	0.121	MDL	5.73	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.310	JB	0.0773	MDL	5.73	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	1.14	JB	0.114	MDL	5.73	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0303	JB	0.0296	MDL	1.15	PQL	ng/Kg	U	B

Sample ID: **SL-021-SA8N-SS-0.0-0.5** ***Collected:*** **4/12/2011 1:15:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	3.56	JB	0.122	MDL	5.44	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.258	JBQ	0.106	MDL	5.44	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.159	JB	0.0964	MDL	5.44	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	1.31	JBQ	0.120	MDL	5.44	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.829	JBQ	0.0899	MDL	5.44	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.234	JBQ	0.0838	MDL	5.44	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.509	JB	0.0715	MDL	5.44	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX069 **Laboratory: LL**

EDD Filename: PrepDX069_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: **SL-021-SA8N-SS-0.0-0.5** ***Collected:*** **4/12/2011 1:15:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,7,8,9-HXCDF	0.305	JB	0.0554	MDL	5.44	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.139	JBQ	0.0482	MDL	5.44	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	1.46	JB	0.0850	MDL	5.44	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.296	JB	0.0513	MDL	5.44	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.564	JBQ	0.0867	MDL	5.44	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	1.00	JB	0.254	MDL	1.09	PQL	ng/Kg	J	Z

Sample ID: **SL-022-SA8N-SS-0.0-0.5** ***Collected:*** **4/12/2011 1:50:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	5.13	JB	0.0721	MDL	5.74	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.412	JBQ	0.0828	MDL	5.74	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.369	JBQ	0.0987	MDL	5.74	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	1.72	JB	0.103	MDL	5.74	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.973	JB	0.0964	MDL	5.74	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.390	JBQ	0.0758	MDL	5.74	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.775	JB	0.0905	MDL	5.74	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.350	JB	0.0696	MDL	5.74	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.237	JBQ	0.0427	MDL	5.74	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	2.59	JB	0.0899	MDL	5.74	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.365	JB	0.0614	MDL	5.74	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.699	JB	0.0902	MDL	5.74	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0389	JBQ	0.0302	MDL	1.15	PQL	ng/Kg	U	B

Sample ID: **SL-023-SA8N-SS-0.0-0.5** ***Collected:*** **4/12/2011 2:10:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	0.647	JB	0.0727	MDL	5.81	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.916	JB	0.115	MDL	5.81	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	1.25	JB	0.0837	MDL	5.81	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	3.07	JB	0.110	MDL	5.81	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.723	JB	0.0672	MDL	5.81	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	1.82	JB	0.0961	MDL	5.81	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.553	JB	0.0609	MDL	5.81	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX069 **Laboratory: LL**

EDD Filename: PrepDX069_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: **SL-023-SA8N-SS-0.0-0.5** ***Collected:*** **4/12/2011 2:10:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,7,8-PECDD	0.531	JB	0.0422	MDL	5.81	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	1.05	JB	0.0531	MDL	5.81	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.911	JB	0.0566	MDL	5.81	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.815	JB	0.0609	MDL	5.81	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0760	JBQ	0.0230	MDL	1.16	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.797	JB	0.152	MDL	1.16	PQL	ng/Kg	J	Z

Sample ID: **SL-036-SA8N-SS-0.0-0.5** ***Collected:*** **4/12/2011 2:25:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	2.64	JB	0.0243	MDL	5.93	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.174	JB	0.0397	MDL	5.93	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.226	JB	0.0596	MDL	5.93	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.418	JB	0.0449	MDL	5.93	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.739	JB	0.0617	MDL	5.93	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.212	JB	0.0394	MDL	5.93	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.480	JB	0.0577	MDL	5.93	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.281	JBQ	0.0464	MDL	5.93	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.179	JB	0.0302	MDL	5.93	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.162	JB	0.0282	MDL	5.93	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.339	JB	0.0388	MDL	5.93	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.475	JB	0.0297	MDL	5.93	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0397	J	0.0190	MDL	1.19	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.316	J	0.0596	MDL	1.19	PQL	ng/Kg	J	Z
OCDF	5.47	JB	0.0386	MDL	11.9	PQL	ng/Kg	J	Z

Sample ID: **SL-047-SA8N-SS-0.0-0.5** ***Collected:*** **4/12/2011 1:30:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	2.85	JB	0.0216	MDL	5.83	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.154	JB	0.0308	MDL	5.83	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.151	JB	0.0564	MDL	5.83	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	1.04	JB	0.0487	MDL	5.83	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.485	JB	0.0584	MDL	5.83	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.167	JB	0.0417	MDL	5.83	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX069 **Laboratory: LL**

EDD Filename: PrepDX069_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: **SL-047-SA8N-SS-0.0-0.5** ***Collected:*** **4/12/2011 1:30:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,7,8,9-HXCDD	0.374	JB	0.0555	MDL	5.83	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.246	JB	0.0474	MDL	5.83	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.101	JBQ	0.0276	MDL	5.83	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.145	JB	0.0433	MDL	5.83	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.221	JB	0.0427	MDL	5.83	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.552	JB	0.0455	MDL	5.83	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.658	J	0.108	MDL	1.17	PQL	ng/Kg	J	Z
OCDF	10.2	JB	0.0377	MDL	11.7	PQL	ng/Kg	J	Z

Sample ID: **SL-048-SA8N-SS-0.0-0.5** ***Collected:*** **4/12/2011 10:15:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	4.14	JB	0.0407	MDL	6.29	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	1.77	JB	0.0263	MDL	6.29	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.127	JB	0.0300	MDL	6.29	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0971	JB	0.0335	MDL	6.29	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.718	JB	0.0483	MDL	6.29	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.351	JB	0.0333	MDL	6.29	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.140	JBQ	0.0408	MDL	6.29	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.370	JB	0.0316	MDL	6.29	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.230	JBQ	0.0339	MDL	6.29	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0929	JB	0.0239	MDL	6.29	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.378	JB	0.0344	MDL	6.29	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.209	JB	0.0299	MDL	6.29	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.431	JB	0.0363	MDL	6.29	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.669	J	0.0868	MDL	1.26	PQL	ng/Kg	J	Z
OCDF	7.83	JB	0.0435	MDL	12.6	PQL	ng/Kg	J	Z

Sample ID: **SL-050-SA8N-SS-0.0-0.5** ***Collected:*** **4/12/2011 10:45:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	1.83	JB	0.0335	MDL	5.84	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.113	JB	0.0437	MDL	5.84	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.118	JBQ	0.0366	MDL	5.84	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.684	JB	0.0480	MDL	5.84	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX069 **Laboratory: LL**

EDD Filename: PrepDX069_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: **SL-050-SA8N-SS-0.0-0.5** ***Collected:*** **4/12/2011 10:45:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,6,7,8-HXCDD	0.391	JBQ	0.0376	MDL	5.84	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.142	JBQ	0.0348	MDL	5.84	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.329	JBQ	0.0333	MDL	5.84	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.135	JBQ	0.0377	MDL	5.84	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0624	JB	0.0210	MDL	5.84	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.727	JBQ	0.0403	MDL	5.84	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.160	JB	0.0310	MDL	5.84	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.404	JB	0.0401	MDL	5.84	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.499	JB	0.104	MDL	1.17	PQL	ng/Kg	J	Z
OCDF	6.61	JB	0.0483	MDL	11.7	PQL	ng/Kg	J	Z

Sample ID: **SL-131-SA8N-SS-0.0-0.5** ***Collected:*** **4/12/2011 3:00:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	0.503	JB	0.0737	MDL	5.70	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.885	JB	0.165	MDL	5.70	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	1.61	JB	0.110	MDL	5.70	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	2.92	JB	0.173	MDL	5.70	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.619	JBQ	0.0918	MDL	5.70	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	1.85	JB	0.159	MDL	5.70	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.609	JB	0.0934	MDL	5.70	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	1.66	JB	0.111	MDL	5.70	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.697	JB	0.0820	MDL	5.70	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	1.27	JB	0.0994	MDL	5.70	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0516	JBQ	0.0351	MDL	1.14	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.442	JB	0.277	MDL	1.14	PQL	ng/Kg	J	Z

Sample ID: **SL-202-SA5A-SB-3.0-4.0** ***Collected:*** **4/12/2011 2:14:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	2.98	JB	0.0499	MDL	5.81	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.307	JBQ	0.0180	MDL	5.81	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0274	JBQ	0.0199	MDL	5.81	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0500	JBQ	0.0236	MDL	5.81	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0390	JBQ	0.0159	MDL	5.81	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX069 **Laboratory: LL**

EDD Filename: PrepDX069_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-202-SA5A-SB-3.0-4.0 **Collected:** 4/12/2011 2:14:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,6,7,8-HXCDD	0.171	JBQ	0.0228	MDL	5.81	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0420	JBQ	0.0115	MDL	5.81	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.300	JB	0.0208	MDL	5.81	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.0378	JB	0.0101	MDL	5.81	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0427	JBQ	0.0157	MDL	5.81	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0243	JBQ	0.00815	MDL	5.81	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0269	JBQ	0.00873	MDL	5.81	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0539	JB	0.00780	MDL	5.81	PQL	ng/Kg	U	B
OCDF	0.351	JB	0.0335	MDL	11.6	PQL	ng/Kg	U	B

Sample ID: SL-206-SA5A-SB-4.0-5.0 **Collected:** 4/12/2011 3:25:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.272	JB	0.0167	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.0725	JB	0.00745	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0183	JB	0.0124	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0371	JB	0.0113	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0258	JBQ	0.0118	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0197	JBQ	0.00813	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0581	JBQ	0.0107	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0388	JB	0.00905	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0321	JBQ	0.0137	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0481	JB	0.00664	MDL	5.73	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0197	JBQ	0.00756	MDL	5.73	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0489	JBQ	0.00722	MDL	5.73	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0183	JBQ	0.0103	MDL	1.15	PQL	ng/Kg	J	Z
OCDD	0.870	JB	0.0298	MDL	11.5	PQL	ng/Kg	U	B
OCDF	0.165	JB	0.0267	MDL	11.5	PQL	ng/Kg	U	B

Sample ID: SL-207-SA5A-SB-3.0-4.0 **Collected:** 4/12/2011 12:03:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.230	JBQ	0.0199	MDL	5.31	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.0278	JBQ	0.00801	MDL	5.31	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0146	JBQ	0.0104	MDL	5.31	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX069 **Laboratory: LL**

EDD Filename: PrepDX069_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: **SL-207-SA5A-SB-3.0-4.0** ***Collected:*** **4/12/2011 12:03:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8-HXCDF	0.0382	JBQ	0.0135	MDL	5.31	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0384	JB	0.0139	MDL	5.31	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0521	JBQ	0.00988	MDL	5.31	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0761	JBQ	0.0128	MDL	5.31	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0435	JBQ	0.00977	MDL	5.31	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0993	JBQ	0.0147	MDL	5.31	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.106	JB	0.00812	MDL	5.31	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0257	JB	0.00834	MDL	5.31	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0907	JBQ	0.00856	MDL	5.31	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0332	JB	0.0157	MDL	1.06	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0194	JBQ	0.0125	MDL	1.06	PQL	ng/Kg	J	Z
OCDD	0.624	JB	0.0293	MDL	10.6	PQL	ng/Kg	U	B
OCDF	0.0867	JB	0.0229	MDL	10.6	PQL	ng/Kg	U	B

Sample ID: **SL-227-SA5A-SB-3.0-4.0** ***Collected:*** **4/12/2011 10:13:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.552	JBQ	0.0293	MDL	5.72	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.0511	JB	0.0109	MDL	5.72	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0311	JBQ	0.0153	MDL	5.72	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0274	JBQ	0.0142	MDL	5.72	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0199	JBQ	0.0145	MDL	5.72	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0212	JBQ	0.0104	MDL	5.72	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0208	JBQ	0.0141	MDL	5.72	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0142	JBQ	0.0125	MDL	5.72	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0216	JBQ	0.0186	MDL	5.72	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0406	JBQ	0.0109	MDL	5.72	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0180	JBQ	0.0102	MDL	5.72	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0408	JBQ	0.0110	MDL	5.72	PQL	ng/Kg	U	B
OCDD	3.57	JB	0.0518	MDL	11.4	PQL	ng/Kg	J	Z
OCDF	0.121	JB	0.0281	MDL	11.4	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX069 **Laboratory: LL**

EDD Filename: PrepDX069_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: **SL-228-SA5A-SB-3.0-4.0** ***Collected:*** **4/12/2011 9:06:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	2.10	JB	0.0428	MDL	5.68	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.452	JB	0.0202	MDL	5.68	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0985	JB	0.0259	MDL	5.68	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0384	JBQ	0.0187	MDL	5.68	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.268	JB	0.0221	MDL	5.68	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.109	JB	0.0187	MDL	5.68	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0558	JBQ	0.0161	MDL	5.68	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.106	JB	0.0171	MDL	5.68	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0593	JBQ	0.0170	MDL	5.68	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0355	JBQ	0.0170	MDL	5.68	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.121	JB	0.0156	MDL	5.68	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0487	JB	0.0146	MDL	5.68	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0665	JBQ	0.0156	MDL	5.68	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0219	JBQ	0.0147	MDL	1.14	PQL	ng/Kg	U	B
OCDF	2.20	JB	0.0366	MDL	11.4	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX069 **Laboratory: LL**

EDD Filename: PrepDX069_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
	Sampling to Leaching Estimation
	Sampling to Leaching Rejection
*XI	Compound Quantitation and CRQL
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Continuing Calibration Verification Percent Recovery Lower Estimation
C	Continuing Calibration Verification Percent Recovery Lower Rejection
C	Continuing Calibration Verification Percent Recovery Upper Estimation
C	Continuing Calibration Verification Percent Recovery Upper Rejection
C	Continuing Calibration Verification Relative Response Factor
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Relative Response Factor
C	Initial Calibration Verification Correlation Coefficient

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DX069 **Laboratory: LL**

EDD Filename: PrepDX069_v1 **eQAPP Name: CDM_SSFL_110509**

C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Verification Percent Recovery Lower Estimation
C	Initial Calibration Verification Percent Recovery Lower Rejection
C	Initial Calibration Verification Percent Recovery Upper Estimation
C	Initial Calibration Verification Percent Recovery Upper Rejection
C	Initial Calibration Verification Relative Response Factor
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Laboratory Triplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination
F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DX069 **Laboratory: LL**

EDD Filename: PrepDX069_v1 **eQAPP Name: CDM_SSFL_110509**

L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Laboratory Triplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Q	Matrix Spike Upper Rejection
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control Outlier Reports

DX069

Method Blank Outlier Report

Lab Reporting Batch ID: DX069 **Laboratory: LL**

EDD Filename: PrepDX069_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **AQ**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLK1080B370125	4/24/2011 1:25:00 AM	1,2,3,4,6,7,8-HPCDD	7.94 pg/L	EB01-SA8N-SS-041211
		1,2,3,4,6,7,8-HPCDF	4.55 pg/L	
		1,2,3,4,7,8,9-HPCDF	2.38 pg/L	
		1,2,3,4,7,8-HxCDD	1.28 pg/L	
		1,2,3,4,7,8-HXCDF	1.50 pg/L	
		1,2,3,6,7,8-HXCDD	1.08 pg/L	
		1,2,3,6,7,8-HXCDF	1.21 pg/L	
		1,2,3,7,8,9-HXCDD	1.65 pg/L	
		1,2,3,7,8,9-HXCDF	1.98 pg/L	
		1,2,3,7,8-PECDD	0.899 pg/L	
		1,2,3,7,8-PECDF	0.844 pg/L	
		2,3,4,6,7,8-HXCDF	1.71 pg/L	
		2,3,4,7,8-PECDF	1.28 pg/L	
		2,3,7,8-TCDD	0.264 pg/L	
		2,3,7,8-TCDF	0.147 pg/L	
		OCDD	47.4 pg/L	
		OCDF	6.44 pg/L	

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
EB01-SA8N-SS-041211(RES)	1,2,3,4,6,7,8-HPCDD	5.67 pg/L	5.67U pg/L
EB01-SA8N-SS-041211(RES)	1,2,3,4,6,7,8-HPCDF	3.88 pg/L	3.88U pg/L
EB01-SA8N-SS-041211(RES)	1,2,3,4,7,8,9-HPCDF	2.09 pg/L	2.09U pg/L
EB01-SA8N-SS-041211(RES)	1,2,3,4,7,8-HxCDD	0.435 pg/L	0.435U pg/L
EB01-SA8N-SS-041211(RES)	1,2,3,4,7,8-HXCDF	1.66 pg/L	1.66U pg/L
EB01-SA8N-SS-041211(RES)	1,2,3,6,7,8-HXCDD	1.11 pg/L	1.11U pg/L
EB01-SA8N-SS-041211(RES)	1,2,3,6,7,8-HXCDF	0.970 pg/L	0.970U pg/L
EB01-SA8N-SS-041211(RES)	1,2,3,7,8,9-HXCDD	0.886 pg/L	0.886U pg/L
EB01-SA8N-SS-041211(RES)	1,2,3,7,8,9-HXCDF	1.84 pg/L	1.84U pg/L
EB01-SA8N-SS-041211(RES)	1,2,3,7,8-PECDD	0.642 pg/L	0.642U pg/L
EB01-SA8N-SS-041211(RES)	1,2,3,7,8-PECDF	0.532 pg/L	0.532U pg/L
EB01-SA8N-SS-041211(RES)	2,3,4,6,7,8-HXCDF	1.46 pg/L	1.46U pg/L
EB01-SA8N-SS-041211(RES)	2,3,4,7,8-PECDF	1.11 pg/L	1.11U pg/L
EB01-SA8N-SS-041211(RES)	2,3,7,8-TCDF	0.177 pg/L	0.177U pg/L
EB01-SA8N-SS-041211(RES)	OCDD	15.2 pg/L	15.2U pg/L
EB01-SA8N-SS-041211(RES)	OCDF	4.49 pg/L	4.49U pg/L

Method Blank Outlier Report

Lab Reporting Batch ID: DX069 **Laboratory: LL**

EDD Filename: PrepDX069_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLK1040B370309	4/22/2011 3:09:00 AM	2,3,7,8-TCDF	0.0903 ng/Kg	SL-012-SA8N-SS-0.0-0.5 SL-015-SA8N-SS-0.0-0.5 SL-016-SA8N-SS-0.0-0.5 SL-018-SA8N-SS-0.0-0.5 SL-019-SA8N-SS-0.0-0.5 SL-020-SA8N-SS-0.0-0.5 SL-021-SA8N-SS-0.0-0.5 SL-022-SA8N-SS-0.0-0.5 SL-023-SA8N-SS-0.0-0.5 SL-050-SA8N-SS-0.0-0.5 SL-131-SA8N-SS-0.0-0.5 SL-202-SA5A-SB-3.0-4.0 SL-206-SA5A-SB-4.0-5.0 SL-207-SA5A-SB-3.0-4.0 SL-227-SA5A-SB-3.0-4.0 SL-228-SA5A-SB-3.0-4.0
BLK1040B371258	4/18/2011 12:58:00 PM	1,2,3,4,6,7,8-HPCDD 1,2,3,4,6,7,8-HPCDF 1,2,3,4,7,8,9-HPCDF 1,2,3,4,7,8-HxCDD 1,2,3,4,7,8-HXCDF 1,2,3,6,7,8-HXCDD 1,2,3,6,7,8-HXCDF 1,2,3,7,8,9-HXCDD 1,2,3,7,8,9-HXCDF 1,2,3,7,8-PECDD 1,2,3,7,8-PECDF 2,3,4,6,7,8-HXCDF 2,3,4,7,8-PECDF 2,3,7,8-TCDD 2,3,7,8-TCDF OCDD OCDF	0.283 ng/Kg 0.142 ng/Kg 0.0718 ng/Kg 0.0164 ng/Kg 0.0381 ng/Kg 0.0350 ng/Kg 0.0395 ng/Kg 0.0407 ng/Kg 0.0772 ng/Kg 0.0215 ng/Kg 0.0278 ng/Kg 0.0547 ng/Kg 0.0682 ng/Kg 0.0224 ng/Kg 0.0259 ng/Kg 0.584 ng/Kg 0.198 ng/Kg	SL-012-SA8N-SS-0.0-0.5 SL-015-SA8N-SS-0.0-0.5 SL-016-SA8N-SS-0.0-0.5 SL-018-SA8N-SS-0.0-0.5 SL-019-SA8N-SS-0.0-0.5 SL-020-SA8N-SS-0.0-0.5 SL-021-SA8N-SS-0.0-0.5 SL-022-SA8N-SS-0.0-0.5 SL-023-SA8N-SS-0.0-0.5 SL-050-SA8N-SS-0.0-0.5 SL-131-SA8N-SS-0.0-0.5 SL-202-SA5A-SB-3.0-4.0 SL-206-SA5A-SB-4.0-5.0 SL-207-SA5A-SB-3.0-4.0 SL-227-SA5A-SB-3.0-4.0 SL-228-SA5A-SB-3.0-4.0
BLK1180B370615	5/3/2011 6:15:00 AM	1,2,3,4,6,7,8-HPCDD 1,2,3,4,6,7,8-HPCDF 1,2,3,4,7,8,9-HPCDF 1,2,3,4,7,8-HxCDD 1,2,3,4,7,8-HXCDF 1,2,3,6,7,8-HXCDD 1,2,3,6,7,8-HXCDF 1,2,3,7,8,9-HXCDD 1,2,3,7,8,9-HXCDF 1,2,3,7,8-PECDD 1,2,3,7,8-PECDF 2,3,4,6,7,8-HXCDF 2,3,4,7,8-PECDF OCDD OCDF	0.221 ng/Kg 0.104 ng/Kg 0.0661 ng/Kg 0.0208 ng/Kg 0.0521 ng/Kg 0.0353 ng/Kg 0.0335 ng/Kg 0.0254 ng/Kg 0.0904 ng/Kg 0.0182 ng/Kg 0.0263 ng/Kg 0.0685 ng/Kg 0.0537 ng/Kg 0.477 ng/Kg 0.210 ng/Kg	SL-036-SA8N-SS-0.0-0.5 SL-047-SA8N-SS-0.0-0.5 SL-048-SA8N-SS-0.0-0.5

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-012-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.190 ng/Kg	0.190U ng/Kg
SL-012-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.297 ng/Kg	0.297U ng/Kg
SL-012-SA8N-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.251 ng/Kg	0.251U ng/Kg
SL-012-SA8N-SS-0.0-0.5(RES)	2,3,7,8-TCDD	0.0210 ng/Kg	0.0210U ng/Kg
SL-015-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.149 ng/Kg	0.149U ng/Kg
SL-015-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.336 ng/Kg	0.336U ng/Kg

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Method Blank Outlier Report

Lab Reporting Batch ID: DX069 **Laboratory: LL**

EDD Filename: PrepDX069_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-015-SA8N-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.230 ng/Kg	0.230U ng/Kg
SL-015-SA8N-SS-0.0-0.5(RES)	2,3,7,8-TCDD	0.0413 ng/Kg	0.0413U ng/Kg
SL-018-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.167 ng/Kg	0.167U ng/Kg
SL-018-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.262 ng/Kg	0.262U ng/Kg
SL-018-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.0676 ng/Kg	0.0676U ng/Kg
SL-018-SA8N-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.260 ng/Kg	0.260U ng/Kg
SL-019-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.251 ng/Kg	0.251U ng/Kg
SL-019-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.361 ng/Kg	0.361U ng/Kg
SL-019-SA8N-SS-0.0-0.5(RES)	2,3,7,8-TCDD	0.0198 ng/Kg	0.0198U ng/Kg
SL-020-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.296 ng/Kg	0.296U ng/Kg
SL-020-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.0970 ng/Kg	0.0970U ng/Kg
SL-020-SA8N-SS-0.0-0.5(RES)	2,3,7,8-TCDD	0.0303 ng/Kg	0.0303U ng/Kg
SL-021-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.258 ng/Kg	0.258U ng/Kg
SL-021-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.305 ng/Kg	0.305U ng/Kg
SL-022-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.350 ng/Kg	0.350U ng/Kg
SL-022-SA8N-SS-0.0-0.5(RES)	2,3,7,8-TCDD	0.0389 ng/Kg	0.0389U ng/Kg
SL-023-SA8N-SS-0.0-0.5(RES)	2,3,7,8-TCDD	0.0760 ng/Kg	0.0760U ng/Kg
SL-036-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.174 ng/Kg	0.174U ng/Kg
SL-036-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.281 ng/Kg	0.281U ng/Kg
SL-036-SA8N-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.339 ng/Kg	0.339U ng/Kg
SL-047-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.154 ng/Kg	0.154U ng/Kg
SL-047-SA8N-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.167 ng/Kg	0.167U ng/Kg
SL-047-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.246 ng/Kg	0.246U ng/Kg
SL-047-SA8N-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.221 ng/Kg	0.221U ng/Kg
SL-048-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.127 ng/Kg	0.127U ng/Kg
SL-048-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.0971 ng/Kg	0.0971U ng/Kg
SL-048-SA8N-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.140 ng/Kg	0.140U ng/Kg
SL-048-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.230 ng/Kg	0.230U ng/Kg
SL-048-SA8N-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.209 ng/Kg	0.209U ng/Kg
SL-050-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.113 ng/Kg	0.113U ng/Kg
SL-050-SA8N-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.142 ng/Kg	0.142U ng/Kg
SL-050-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.135 ng/Kg	0.135U ng/Kg
SL-050-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.0624 ng/Kg	0.0624U ng/Kg
SL-050-SA8N-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.160 ng/Kg	0.160U ng/Kg
SL-131-SA8N-SS-0.0-0.5(RES)	2,3,7,8-TCDD	0.0516 ng/Kg	0.0516U ng/Kg
SL-202-SA5A-SB-3.0-4.0(RES)	1,2,3,4,6,7,8-HPCDF	0.307 ng/Kg	0.307U ng/Kg
SL-202-SA5A-SB-3.0-4.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0274 ng/Kg	0.0274U ng/Kg

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Method Blank Outlier Report

Lab Reporting Batch ID: DX069 **Laboratory: LL**

EDD Filename: PrepDX069_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-202-SA5A-SB-3.0-4.0(RES)	1,2,3,4,7,8-HxCDD	0.0500 ng/Kg	0.0500U ng/Kg
SL-202-SA5A-SB-3.0-4.0(RES)	1,2,3,4,7,8-HXCDF	0.0390 ng/Kg	0.0390U ng/Kg
SL-202-SA5A-SB-3.0-4.0(RES)	1,2,3,6,7,8-HXCDD	0.171 ng/Kg	0.171U ng/Kg
SL-202-SA5A-SB-3.0-4.0(RES)	1,2,3,6,7,8-HXCDF	0.0420 ng/Kg	0.0420U ng/Kg
SL-202-SA5A-SB-3.0-4.0(RES)	1,2,3,7,8,9-HXCDF	0.0378 ng/Kg	0.0378U ng/Kg
SL-202-SA5A-SB-3.0-4.0(RES)	1,2,3,7,8-PECDD	0.0427 ng/Kg	0.0427U ng/Kg
SL-202-SA5A-SB-3.0-4.0(RES)	1,2,3,7,8-PECDF	0.0243 ng/Kg	0.0243U ng/Kg
SL-202-SA5A-SB-3.0-4.0(RES)	2,3,4,6,7,8-HXCDF	0.0269 ng/Kg	0.0269U ng/Kg
SL-202-SA5A-SB-3.0-4.0(RES)	2,3,4,7,8-PECDF	0.0539 ng/Kg	0.0539U ng/Kg
SL-202-SA5A-SB-3.0-4.0(RES)	OCDF	0.351 ng/Kg	0.351U ng/Kg
SL-206-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.272 ng/Kg	0.272U ng/Kg
SL-206-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.0725 ng/Kg	0.0725U ng/Kg
SL-206-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0183 ng/Kg	0.0183U ng/Kg
SL-206-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.0371 ng/Kg	0.0371U ng/Kg
SL-206-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDD	0.0258 ng/Kg	0.0258U ng/Kg
SL-206-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.0197 ng/Kg	0.0197U ng/Kg
SL-206-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDD	0.0581 ng/Kg	0.0581U ng/Kg
SL-206-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.0388 ng/Kg	0.0388U ng/Kg
SL-206-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDD	0.0321 ng/Kg	0.0321U ng/Kg
SL-206-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.0481 ng/Kg	0.0481U ng/Kg
SL-206-SA5A-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.0197 ng/Kg	0.0197U ng/Kg
SL-206-SA5A-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.0489 ng/Kg	0.0489U ng/Kg
SL-206-SA5A-SB-4.0-5.0(RES)	OCDD	0.870 ng/Kg	0.870U ng/Kg
SL-206-SA5A-SB-4.0-5.0(RES)	OCDF	0.165 ng/Kg	0.165U ng/Kg
SL-207-SA5A-SB-3.0-4.0(RES)	1,2,3,4,6,7,8-HPCDD	0.230 ng/Kg	0.230U ng/Kg
SL-207-SA5A-SB-3.0-4.0(RES)	1,2,3,4,6,7,8-HPCDF	0.0278 ng/Kg	0.0278U ng/Kg
SL-207-SA5A-SB-3.0-4.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0146 ng/Kg	0.0146U ng/Kg
SL-207-SA5A-SB-3.0-4.0(RES)	1,2,3,4,7,8-HXCDF	0.0382 ng/Kg	0.0382U ng/Kg
SL-207-SA5A-SB-3.0-4.0(RES)	1,2,3,6,7,8-HXCDD	0.0384 ng/Kg	0.0384U ng/Kg
SL-207-SA5A-SB-3.0-4.0(RES)	1,2,3,6,7,8-HXCDF	0.0521 ng/Kg	0.0521U ng/Kg
SL-207-SA5A-SB-3.0-4.0(RES)	1,2,3,7,8,9-HXCDD	0.0761 ng/Kg	0.0761U ng/Kg
SL-207-SA5A-SB-3.0-4.0(RES)	1,2,3,7,8,9-HXCDF	0.0435 ng/Kg	0.0435U ng/Kg
SL-207-SA5A-SB-3.0-4.0(RES)	1,2,3,7,8-PECDD	0.0993 ng/Kg	0.0993U ng/Kg
SL-207-SA5A-SB-3.0-4.0(RES)	1,2,3,7,8-PECDF	0.106 ng/Kg	0.106U ng/Kg
SL-207-SA5A-SB-3.0-4.0(RES)	2,3,4,6,7,8-HXCDF	0.0257 ng/Kg	0.0257U ng/Kg
SL-207-SA5A-SB-3.0-4.0(RES)	2,3,4,7,8-PECDF	0.0907 ng/Kg	0.0907U ng/Kg
SL-207-SA5A-SB-3.0-4.0(RES)	2,3,7,8-TCDD	0.0332 ng/Kg	0.0332U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX069 **Laboratory: LL**

EDD Filename: PrepDX069_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-207-SA5A-SB-3.0-4.0(RES)	OCDD	0.624 ng/Kg	0.624U ng/Kg
SL-207-SA5A-SB-3.0-4.0(RES)	OCDF	0.0867 ng/Kg	0.0867U ng/Kg
SL-227-SA5A-SB-3.0-4.0(RES)	1,2,3,4,6,7,8-HPCDD	0.552 ng/Kg	0.552U ng/Kg
SL-227-SA5A-SB-3.0-4.0(RES)	1,2,3,4,6,7,8-HPCDF	0.0511 ng/Kg	0.0511U ng/Kg
SL-227-SA5A-SB-3.0-4.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0311 ng/Kg	0.0311U ng/Kg
SL-227-SA5A-SB-3.0-4.0(RES)	1,2,3,4,7,8-HXCDF	0.0274 ng/Kg	0.0274U ng/Kg
SL-227-SA5A-SB-3.0-4.0(RES)	1,2,3,6,7,8-HXCDD	0.0199 ng/Kg	0.0199U ng/Kg
SL-227-SA5A-SB-3.0-4.0(RES)	1,2,3,6,7,8-HXCDF	0.0212 ng/Kg	0.0212U ng/Kg
SL-227-SA5A-SB-3.0-4.0(RES)	1,2,3,7,8,9-HXCDD	0.0208 ng/Kg	0.0208U ng/Kg
SL-227-SA5A-SB-3.0-4.0(RES)	1,2,3,7,8,9-HXCDF	0.0142 ng/Kg	0.0142U ng/Kg
SL-227-SA5A-SB-3.0-4.0(RES)	1,2,3,7,8-PECDD	0.0216 ng/Kg	0.0216U ng/Kg
SL-227-SA5A-SB-3.0-4.0(RES)	1,2,3,7,8-PECDF	0.0406 ng/Kg	0.0406U ng/Kg
SL-227-SA5A-SB-3.0-4.0(RES)	2,3,4,6,7,8-HXCDF	0.0180 ng/Kg	0.0180U ng/Kg
SL-227-SA5A-SB-3.0-4.0(RES)	2,3,4,7,8-PECDF	0.0408 ng/Kg	0.0408U ng/Kg
SL-227-SA5A-SB-3.0-4.0(RES)	OCDF	0.121 ng/Kg	0.121U ng/Kg
SL-228-SA5A-SB-3.0-4.0(RES)	1,2,3,4,6,7,8-HPCDF	0.452 ng/Kg	0.452U ng/Kg
SL-228-SA5A-SB-3.0-4.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0985 ng/Kg	0.0985U ng/Kg
SL-228-SA5A-SB-3.0-4.0(RES)	1,2,3,4,7,8-HxCDD	0.0384 ng/Kg	0.0384U ng/Kg
SL-228-SA5A-SB-3.0-4.0(RES)	1,2,3,6,7,8-HXCDD	0.109 ng/Kg	0.109U ng/Kg
SL-228-SA5A-SB-3.0-4.0(RES)	1,2,3,6,7,8-HXCDF	0.0558 ng/Kg	0.0558U ng/Kg
SL-228-SA5A-SB-3.0-4.0(RES)	1,2,3,7,8,9-HXCDD	0.106 ng/Kg	0.106U ng/Kg
SL-228-SA5A-SB-3.0-4.0(RES)	1,2,3,7,8,9-HXCDF	0.0593 ng/Kg	0.0593U ng/Kg
SL-228-SA5A-SB-3.0-4.0(RES)	1,2,3,7,8-PECDD	0.0355 ng/Kg	0.0355U ng/Kg
SL-228-SA5A-SB-3.0-4.0(RES)	1,2,3,7,8-PECDF	0.121 ng/Kg	0.121U ng/Kg
SL-228-SA5A-SB-3.0-4.0(RES)	2,3,4,6,7,8-HXCDF	0.0487 ng/Kg	0.0487U ng/Kg
SL-228-SA5A-SB-3.0-4.0(RES)	2,3,4,7,8-PECDF	0.0665 ng/Kg	0.0665U ng/Kg
SL-228-SA5A-SB-3.0-4.0(RES)	2,3,7,8-TCDD	0.0219 ng/Kg	0.0219U ng/Kg

Reporting Limit Outliers

Lab Reporting Batch ID: DX069 **Laboratory: LL**

EDD Filename: DX069_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1613B
Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB01-SA8N-SS-041211	1,2,3,4,6,7,8-HPCDD	JB	5.67	10.4	PQL	pg/L	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	3.88	10.4	PQL	pg/L	
	1,2,3,4,7,8,9-HPCDF	JBQ	2.09	10.4	PQL	pg/L	
	1,2,3,4,7,8-HxCDD	JBQ	0.435	10.4	PQL	pg/L	
	1,2,3,4,7,8-HXCDF	JB	1.66	10.4	PQL	pg/L	
	1,2,3,6,7,8-HXCDD	JBQ	1.11	10.4	PQL	pg/L	
	1,2,3,6,7,8-HXCDF	JBQ	0.970	10.4	PQL	pg/L	
	1,2,3,7,8,9-HXCDD	JBQ	0.886	10.4	PQL	pg/L	
	1,2,3,7,8,9-HXCDF	JBQ	1.84	10.4	PQL	pg/L	
	1,2,3,7,8-PECDD	JBQ	0.642	10.4	PQL	pg/L	
	1,2,3,7,8-PECDF	JBQ	0.532	10.4	PQL	pg/L	
	2,3,4,6,7,8-HXCDF	JB	1.46	10.4	PQL	pg/L	
	2,3,4,7,8-PECDF	JB	1.11	10.4	PQL	pg/L	
	2,3,7,8-TCDF	JBQ	0.177	2.09	PQL	pg/L	
	OCDD	JB	15.2	20.9	PQL	pg/L	
	OCDF	JBQ	4.49	20.9	PQL	pg/L	

Method: 1613B
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-016-SA8N-SS-0.0-0.5	2,3,7,8-TCDF	B	1.69	1.13	PQL	ng/Kg	
SL-020-SA8N-SS-0.0-0.5	2,3,7,8-TCDF	B	1.22	1.15	PQL	ng/Kg	
SL-012-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	2.19	5.62	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JBQ	0.190	5.62	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.154	5.62	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	1.09	5.62	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.663	5.62	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.290	5.62	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.507	5.62	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.297	5.62	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.128	5.62	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	1.89	5.62	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.251	5.62	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.475	5.62	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0210	1.12	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.600	1.12	PQL	ng/Kg	
	OCDF	JB	5.05	11.2	PQL	ng/Kg	
SL-015-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDD	JB	5.02	5.71	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	1.65	5.71	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.149	5.71	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.120	5.71	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.818	5.71	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.349	5.71	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.233	5.71	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.405	5.71	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.336	5.71	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.158	5.71	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	1.83	5.71	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.230	5.71	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.537	5.71	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0413	1.14	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.229	1.14	PQL	ng/Kg	
	OCDF	JB	6.95	11.4	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX069 **Laboratory: LL**

EDD Filename: DX069_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-016-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	5.02	5.64	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JB	0.455	5.64	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.277	5.64	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	3.60	5.64	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	1.75	5.64	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.904	5.64	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.986	5.64	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.567	5.64	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.264	5.64	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.648	5.64	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	1.62	5.64	PQL	ng/Kg	
SL-018-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	2.35	5.77	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JB	0.167	5.77	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.137	5.77	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	1.16	5.77	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.687	5.77	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.296	5.77	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.545	5.77	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.262	5.77	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.0676	5.77	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	2.32	5.77	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.260	5.77	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.614	5.77	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.913	1.15	PQL	ng/Kg	
	OCDF	JB	6.40	11.5	PQL	ng/Kg	
SL-019-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	3.88	5.85	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JB	0.251	5.85	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.291	5.85	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	2.49	5.85	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	1.22	5.85	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.586	5.85	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.745	5.85	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.361	5.85	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.167	5.85	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	5.83	5.85	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.373	5.85	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	1.09	5.85	PQL	ng/Kg	
	2,3,7,8-TCDD	JB	0.0198	1.17	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	1.04	1.17	PQL	ng/Kg	
SL-020-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	3.67	5.73	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JBQ	0.385	5.73	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.186	5.73	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	1.83	5.73	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	1.02	5.73	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.467	5.73	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.646	5.73	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.296	5.73	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.0970	5.73	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	5.14	5.73	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.310	5.73	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	1.14	5.73	PQL	ng/Kg	
	2,3,7,8-TCDD	JB	0.0303	1.15	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX069 **Laboratory: LL**

EDD Filename: DX069_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-021-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	3.56	5.44	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.258	5.44	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.159	5.44	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	1.31	5.44	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.829	5.44	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.234	5.44	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.509	5.44	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JB	0.305	5.44	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.139	5.44	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	1.46	5.44	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.296	5.44	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.564	5.44	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	1.00	1.09	PQL	ng/Kg	
SL-022-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	5.13	5.74	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.412	5.74	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.369	5.74	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	1.72	5.74	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.973	5.74	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.390	5.74	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.775	5.74	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JB	0.350	5.74	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.237	5.74	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	2.59	5.74	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.365	5.74	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.699	5.74	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0389	1.15	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.530	1.15	PQL	ng/Kg	
SL-023-SA8N-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	0.647	5.81	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.916	5.81	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	1.25	5.81	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	3.07	5.81	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.723	5.81	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	1.82	5.81	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.553	5.81	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	0.531	5.81	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	1.05	5.81	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.911	5.81	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.815	5.81	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0760	1.16	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.797	1.16	PQL	ng/Kg	
SL-036-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	2.64	5.93	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.174	5.93	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.226	5.93	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.418	5.93	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.739	5.93	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.212	5.93	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.480	5.93	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.281	5.93	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	0.179	5.93	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.162	5.93	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.339	5.93	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.475	5.93	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.0397	1.19	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.316	1.19	PQL	ng/Kg	
	OCDF	JB	5.47	11.9	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX069 **Laboratory: LL**

EDD Filename: DX069_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-047-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	2.85	5.83	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JB	0.154	5.83	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.151	5.83	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	1.04	5.83	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.485	5.83	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.167	5.83	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.374	5.83	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.246	5.83	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.101	5.83	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.145	5.83	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.221	5.83	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.552	5.83	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.658	1.17	PQL	ng/Kg	
	OCDF	JB	10.2	11.7	PQL	ng/Kg	
SL-048-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDD	JB	4.14	6.29	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	1.77	6.29	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.127	6.29	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.0971	6.29	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.718	6.29	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.351	6.29	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.140	6.29	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.370	6.29	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.230	6.29	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.0929	6.29	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.378	6.29	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.209	6.29	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.431	6.29	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.669	1.26	PQL	ng/Kg	
	OCDF	JB	7.83	12.6	PQL	ng/Kg	
SL-050-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	1.83	5.84	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JB	0.113	5.84	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.118	5.84	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.684	5.84	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.391	5.84	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.142	5.84	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.329	5.84	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.135	5.84	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.0624	5.84	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.727	5.84	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.160	5.84	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.404	5.84	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.499	1.17	PQL	ng/Kg	
	OCDF	JB	6.61	11.7	PQL	ng/Kg	
SL-131-SA8N-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	0.503	5.70	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8-HxCDD	JB	0.885	5.70	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	1.61	5.70	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	2.92	5.70	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.619	5.70	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	1.85	5.70	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.609	5.70	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	1.66	5.70	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.697	5.70	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	1.27	5.70	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0516	1.14	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.442	1.14	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX069 **Laboratory: LL**

EDD Filename: DX069_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-202-SA5A-SB-3.0-4.0	1,2,3,4,6,7,8-HPCDD	JB	2.98	5.81	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JBQ	0.307	5.81	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0274	5.81	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0500	5.81	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0390	5.81	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.171	5.81	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0420	5.81	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.300	5.81	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.0378	5.81	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0427	5.81	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0243	5.81	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0269	5.81	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.0539	5.81	PQL	ng/Kg	
	OCDF	JB	0.351	11.6	PQL	ng/Kg	
SL-206-SA5A-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JB	0.272	5.73	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.0725	5.73	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.0183	5.73	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.0371	5.73	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.0258	5.73	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0197	5.73	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.0581	5.73	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.0388	5.73	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0321	5.73	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.0481	5.73	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0197	5.73	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0489	5.73	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.0183	1.15	PQL	ng/Kg	
	OCDD	JB	0.870	11.5	PQL	ng/Kg	
	OCDF	JB	0.165	11.5	PQL	ng/Kg	
SL-207-SA5A-SB-3.0-4.0	1,2,3,4,6,7,8-HPCDD	JBQ	0.230	5.31	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JBQ	0.0278	5.31	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0146	5.31	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0382	5.31	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.0384	5.31	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0521	5.31	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.0761	5.31	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.0435	5.31	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0993	5.31	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.106	5.31	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.0257	5.31	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0907	5.31	PQL	ng/Kg	
	2,3,7,8-TCDD	JB	0.0332	1.06	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.0194	1.06	PQL	ng/Kg	
	OCDD	JB	0.624	10.6	PQL	ng/Kg	
	OCDF	JB	0.0867	10.6	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX069 **Laboratory: LL**

EDD Filename: DX069_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-227-SA5A-SB-3.0-4.0	1,2,3,4,6,7,8-HPCDD	JBQ	0.552	5.72	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.0511	5.72	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0311	5.72	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0274	5.72	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.0199	5.72	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0212	5.72	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.0208	5.72	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.0142	5.72	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0216	5.72	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0406	5.72	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0180	5.72	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0408	5.72	PQL	ng/Kg	
	OCDD	JB	3.57	11.4	PQL	ng/Kg	
	OCDF	JB	0.121	11.4	PQL	ng/Kg	
SL-228-SA5A-SB-3.0-4.0	1,2,3,4,6,7,8-HPCDD	JB	2.10	5.68	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.452	5.68	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.0985	5.68	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0384	5.68	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.268	5.68	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.109	5.68	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0558	5.68	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.106	5.68	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.0593	5.68	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0355	5.68	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.121	5.68	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.0487	5.68	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0665	5.68	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0219	1.14	PQL	ng/Kg	
	OCDF	JB	2.20	11.4	PQL	ng/Kg	

SAMPLE DELIVERY GROUP

DX070

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
13-Apr-2011	SL-046-SA8N-SS-0.0-0.5	6257901	N	METHOD	1613B	III
13-Apr-2011	SL-204-SA5A-SB-4.0-5.0	6257906	N	METHOD	1613B	III
13-Apr-2011	SL-027-SA8N-SS-0.0-0.5	6257896	N	METHOD	1613B	III
13-Apr-2011	SL-027-SA8N-SS-0.0-0.5MS	6257897	MS	METHOD	1613B	III
13-Apr-2011	SL-027-SA8N-SS-0.0-0.5MSD	6257898	MSD	METHOD	1613B	III
13-Apr-2011	DUP02-SA8N-QC-041311	6257895	FD	METHOD	1613B	III
13-Apr-2011	SL-028-SA8N-SS-0.0-0.5	6257899	N	METHOD	1613B	III
13-Apr-2011	SL-205-SA5A-SB-4.0-5.0	6257907	N	METHOD	1613B	III
13-Apr-2011	SL-205-SA5A-SB-8.0-9.0	6257908	N	METHOD	1613B	III
13-Apr-2011	EB02-SA8N-SS-041311	6257902	EB	METHOD	1613B	III
13-Apr-2011	SL-032-SA8N-SS-0.0-0.5	6257900	N	METHOD	1613B	III
13-Apr-2011	SL-061-SA5A-SB-4.0-5.0	6257905	N	METHOD	1613B	III
13-Apr-2011	SL-060-SA5A-SB-4.0-5.0	6257903	N	METHOD	1613B	III
13-Apr-2011	SL-060-SA5A-SB-8.0-9.0	6257904	N	METHOD	1613B	III
18-Apr-2011	SL-085-SA8N-SS-0.0-0.5	6261712	N	METHOD	1613B	III
18-Apr-2011	SL-071-SA8N-SS-0.0-0.5	6261710	N	METHOD	1613B	III
18-Apr-2011	SL-057-SA8N-SS-0.0-0.5	6261709	N	METHOD	1613B	III
18-Apr-2011	SL-080-SA8N-SS-0.0-0.5	6261711	N	METHOD	1613B	III
18-Apr-2011	SL-056-SA8N-SS-0.0-0.5	6261708	N	METHOD	1613B	III
18-Apr-2011	EB05-SA8N-SS-041811	6261715	EB	METHOD	1613B	III
18-Apr-2011	SL-086-SA8N-SS-0.0-0.5	6261713	N	METHOD	1613B	III
18-Apr-2011	SL-132-SA8N-SS-0.0-0.5	6261714	N	METHOD	1613B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DX070 **Laboratory: LL**

EDD Filename: DX070_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **AQ**

Sample ID: **EB02-SA8N-SS-041311** ***Collected:*** **4/13/2011 12:15:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	4.31	JB	0.284	MDL	10.1	PQL	pg/L	U	B
1,2,3,4,6,7,8-HPCDF	2.52	JB	0.182	MDL	10.1	PQL	pg/L	U	B
1,2,3,4,7,8,9-HPCDF	1.17	JBQ	0.184	MDL	10.1	PQL	pg/L	U	B
1,2,3,4,7,8-HxCDD	0.476	JBQ	0.194	MDL	10.1	PQL	pg/L	U	B
1,2,3,4,7,8-HXCDF	0.639	JBQ	0.212	MDL	10.1	PQL	pg/L	U	B
1,2,3,6,7,8-HXCDD	0.418	JBQ	0.200	MDL	10.1	PQL	pg/L	U	B
1,2,3,6,7,8-HXCDF	0.677	JB	0.167	MDL	10.1	PQL	pg/L	U	B
1,2,3,7,8,9-HXCDF	1.20	JB	0.154	MDL	10.1	PQL	pg/L	U	B
1,2,3,7,8-PECDD	0.347	JBQ	0.215	MDL	10.1	PQL	pg/L	U	B
1,2,3,7,8-PECDF	0.276	JB	0.113	MDL	10.1	PQL	pg/L	U	B
2,3,4,6,7,8-HXCDF	0.998	JBQ	0.130	MDL	10.1	PQL	pg/L	U	B
2,3,4,7,8-PECDF	0.812	JBQ	0.0987	MDL	10.1	PQL	pg/L	U	B
OCDD	9.89	JBQ	0.437	MDL	20.3	PQL	pg/L	U	B
OCDF	3.58	JB	0.303	MDL	20.3	PQL	pg/L	U	B

Sample ID: **EB05-SA8N-SS-041811** ***Collected:*** **4/18/2011 12:00:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	2.93	JB	0.574	MDL	9.88	PQL	pg/L	U	B
1,2,3,4,6,7,8-HPCDF	2.04	JB	0.202	MDL	9.88	PQL	pg/L	U	B
1,2,3,4,7,8,9-HPCDF	0.733	JBQ	0.260	MDL	9.88	PQL	pg/L	U	B
1,2,3,4,7,8-HXCDF	0.271	JBQ	0.213	MDL	9.88	PQL	pg/L	U	B
1,2,3,6,7,8-HXCDD	0.533	JBQ	0.400	MDL	9.88	PQL	pg/L	U	B
1,2,3,6,7,8-HXCDF	0.447	JB	0.208	MDL	9.88	PQL	pg/L	U	B
1,2,3,7,8-PECDF	0.577	JBQ	0.204	MDL	9.88	PQL	pg/L	U	B
2,3,4,6,7,8-HXCDF	0.827	JB	0.208	MDL	9.88	PQL	pg/L	U	B
2,3,4,7,8-PECDF	0.948	JBQ	0.183	MDL	9.88	PQL	pg/L	U	B
OCDD	5.51	JBQ	0.654	MDL	19.8	PQL	pg/L	U	B
OCDF	1.33	JB	0.556	MDL	19.8	PQL	pg/L	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX070 **Laboratory: LL**

EDD Filename: DX070_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: DUP02-SA8N-QC-041311 *Collected:* 4/13/2011 10:15:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	7.56	B	0.0436	MDL	5.74	PQL	ng/Kg	J	FD
1,2,3,4,7,8,9-HPCDF	0.637	JB	0.0606	MDL	5.74	PQL	ng/Kg	J	Z, FD
1,2,3,4,7,8-HxCDD	0.823	JB	0.0469	MDL	5.74	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	1.59	JB	0.0441	MDL	5.74	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	3.10	JB	0.0478	MDL	5.74	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.665	JB	0.0321	MDL	5.74	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	2.28	JB	0.0448	MDL	5.74	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.270	J	0.0342	MDL	5.74	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	1.18	JB	0.0562	MDL	5.74	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.869	J	0.0363	MDL	5.74	PQL	ng/Kg	J	Z, FD
2,3,4,6,7,8-HXCDF	0.676	JB	0.0329	MDL	5.74	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.843	JB	0.0387	MDL	5.74	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.358	JQ	0.0363	MDL	1.15	PQL	ng/Kg	J	Z
OCDF	18.7	B	0.0331	MDL	11.5	PQL	ng/Kg	J	FD

Sample ID: SL-027-SA8N-SS-0.0-0.5 *Collected:* 4/13/2011 10:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	24.4	B	0.0614	MDL	5.77	PQL	ng/Kg	J	FD
1,2,3,4,7,8,9-HPCDF	1.65	JB	0.0781	MDL	5.77	PQL	ng/Kg	J	Z, FD
1,2,3,4,7,8-HxCDD	0.989	JB	0.0804	MDL	5.77	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	2.17	JB	0.0645	MDL	5.77	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	4.59	JB	0.0821	MDL	5.77	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	1.09	JB	0.0558	MDL	5.77	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	2.45	JB	0.0768	MDL	5.77	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.275	JBQ	0.0518	MDL	5.77	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	1.27	JB	0.0650	MDL	5.77	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.493	JB	0.0346	MDL	5.77	PQL	ng/Kg	J	Z, FD
2,3,4,6,7,8-HXCDF	0.966	JB	0.0430	MDL	5.77	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.993	JB	0.0368	MDL	5.77	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.434	J	0.0261	MDL	1.15	PQL	ng/Kg	J	Z
OCDD	866	B	0.0849	MDL	11.5	PQL	ng/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX070 **Laboratory: LL**

EDD Filename: DX070_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: **SL-027-SA8N-SS-0.0-0.5** ***Collected:*** **4/13/2011 10:10:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
OCDF	72.7	B	0.0396	MDL	11.5	PQL	ng/Kg	J	FD

Sample ID: **SL-028-SA8N-SS-0.0-0.5** ***Collected:*** **4/13/2011 10:30:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	2.36	JB	0.0886	MDL	5.93	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	5.22	JB	0.134	MDL	5.93	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	4.62	JB	0.0864	MDL	5.93	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	2.95	JB	0.0808	MDL	5.93	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	1.34	JB	0.0757	MDL	5.93	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	2.68	JB	0.0672	MDL	5.93	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	2.59	JB	0.0650	MDL	5.93	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	3.43	JB	0.0692	MDL	5.93	PQL	ng/Kg	J	Z
OCDD	5190	EB	0.203	MDL	11.9	PQL	ng/Kg	J	*XI

Sample ID: **SL-032-SA8N-SS-0.0-0.5** ***Collected:*** **4/13/2011 12:55:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	3.08	JB	0.0434	MDL	5.38	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	3.11	JB	0.0677	MDL	5.38	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	1.90	JB	0.0659	MDL	5.38	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	1.88	JB	0.0502	MDL	5.38	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.625	J	0.0373	MDL	5.38	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	2.09	JB	0.0771	MDL	5.38	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	1.98	J	0.0299	MDL	5.38	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	2.35	JB	0.0349	MDL	5.38	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	1.16	JB	0.0336	MDL	5.38	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.448	J	0.0653	MDL	1.08	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.963	J	0.0855	MDL	1.08	PQL	ng/Kg	J	Z

Sample ID: **SL-046-SA8N-SS-0.0-0.5** ***Collected:*** **4/13/2011 8:40:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	0.499	JB	0.0364	MDL	5.46	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX070 **Laboratory: LL**

EDD Filename: DX070_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-046-SA8N-SS-0.0-0.5 **Collected:** 4/13/2011 8:40:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8-HxCDD	0.458	JB	0.0445	MDL	5.46	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.623	JBQ	0.0323	MDL	5.46	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	1.14	JBQ	0.0468	MDL	5.46	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.454	JB	0.0262	MDL	5.46	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	1.01	JB	0.0436	MDL	5.46	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.285	J	0.0297	MDL	5.46	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.342	JBQ	0.0440	MDL	5.46	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.628	J	0.0329	MDL	5.46	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.561	JB	0.0283	MDL	5.46	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.500	JB	0.0362	MDL	5.46	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0715	JQ	0.0425	MDL	1.09	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.233	JQ	0.0830	MDL	1.09	PQL	ng/Kg	J	Z

Sample ID: SL-056-SA8N-SS-0.0-0.5 **Collected:** 4/18/2011 10:55:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	5.67	JB	0.0349	MDL	5.79	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	2.67	JB	0.0135	MDL	5.79	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.171	JB	0.0215	MDL	5.79	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.132	JB	0.0310	MDL	5.79	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.487	JB	0.0282	MDL	5.79	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.335	JB	0.0322	MDL	5.79	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.209	JB	0.0253	MDL	5.79	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.280	JBQ	0.0315	MDL	5.79	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.218	JB	0.0321	MDL	5.79	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.154	JBQ	0.0170	MDL	5.79	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	1.60	JB	0.0294	MDL	5.79	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.226	JBQ	0.0265	MDL	5.79	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.383	JB	0.0279	MDL	5.79	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0376	JBQ	0.0118	MDL	1.16	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.335	JB	0.0491	MDL	1.16	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DX070 **Laboratory: LL**

EDD Filename: DX070_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B ***Matrix:*** SO

Sample ID: SL-057-SA8N-SS-0.0-0.5 ***Collected:*** 4/18/2011 10:10:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	1.24	JB	0.0238	MDL	5.57	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	1.12	JB	0.0125	MDL	5.57	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.0725	JBQ	0.0196	MDL	5.57	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0198	JBQ	0.0146	MDL	5.57	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.388	JB	0.0208	MDL	5.57	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.0936	JBQ	0.0153	MDL	5.57	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.105	JBQ	0.0187	MDL	5.57	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.124	JBQ	0.0142	MDL	5.57	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0944	JBQ	0.0219	MDL	5.57	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0555	JBQ	0.0118	MDL	5.57	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	1.18	JB	0.0234	MDL	5.57	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.0925	JB	0.0187	MDL	5.57	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.195	JBQ	0.0225	MDL	5.57	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0146	JBQ	0.0104	MDL	1.11	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.133	JB	0.0451	MDL	1.11	PQL	ng/Kg	J	Z
OCDF	6.38	JB	0.0170	MDL	11.1	PQL	ng/Kg	J	Z

Sample ID: SL-060-SA5A-SB-4.0-5.0 ***Collected:*** 4/13/2011 4:05:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.419	JBQ	0.0306	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.0955	JBQ	0.0178	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0771	JBQ	0.0320	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0390	JBQ	0.0185	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0495	JBQ	0.0245	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0465	JB	0.0143	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.130	JBQ	0.0223	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0491	JB	0.0328	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0229	JQ	0.0130	MDL	5.66	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.0541	JBQ	0.0148	MDL	5.66	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0430	JBQ	0.0144	MDL	5.66	PQL	ng/Kg	U	B
OCDD	1.16	JB	0.0327	MDL	11.3	PQL	ng/Kg	U	B
OCDF	0.253	JBQ	0.0370	MDL	11.3	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX070 **Laboratory: LL**

EDD Filename: DX070_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: **SL-060-SA5A-SB-8.0-9.0** ***Collected:*** **4/13/2011 4:11:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.361	JB	0.0301	MDL	5.62	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.101	JB	0.0107	MDL	5.62	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0426	JBQ	0.0200	MDL	5.62	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0234	JBQ	0.0196	MDL	5.62	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0199	JB	0.0145	MDL	5.62	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0407	JB	0.0208	MDL	5.62	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0173	JBQ	0.0114	MDL	5.62	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0920	JBQ	0.0188	MDL	5.62	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0400	JQ	0.0150	MDL	5.62	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.0350	JQ	0.0118	MDL	5.62	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.0428	JBQ	0.0127	MDL	5.62	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0528	JBQ	0.0135	MDL	5.62	PQL	ng/Kg	U	B
OCDD	1.21	JB	0.0265	MDL	11.2	PQL	ng/Kg	U	B
OCDF	0.186	JB	0.0314	MDL	11.2	PQL	ng/Kg	U	B

Sample ID: **SL-061-SA5A-SB-4.0-5.0** ***Collected:*** **4/13/2011 2:28:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.374	JBQ	0.0269	MDL	5.69	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.140	JB	0.0113	MDL	5.69	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0407	JBQ	0.0219	MDL	5.69	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0316	JBQ	0.0219	MDL	5.69	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0525	JBQ	0.0162	MDL	5.69	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0528	JBQ	0.0232	MDL	5.69	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0626	JBQ	0.0130	MDL	5.69	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0689	JBQ	0.0227	MDL	5.69	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.128	J	0.0201	MDL	5.69	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.0637	JBQ	0.0293	MDL	5.69	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0718	JQ	0.0123	MDL	5.69	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.0555	JB	0.0141	MDL	5.69	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0892	JBQ	0.0141	MDL	5.69	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0557	JQ	0.0293	MDL	1.14	PQL	ng/Kg	J	Z
OCDD	2.00	JB	0.0263	MDL	11.4	PQL	ng/Kg	U	B
OCDF	0.235	JBQ	0.0376	MDL	11.4	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX070 **Laboratory: LL**

EDD Filename: DX070_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B ***Matrix:*** SO

Sample ID: SL-071-SA8N-SS-0.0-0.5 ***Collected:*** 4/18/2011 8:35:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	3.76	JB	0.0245	MDL	5.84	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	1.10	JB	0.0152	MDL	5.84	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.107	JB	0.0237	MDL	5.84	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.111	JB	0.0310	MDL	5.84	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.342	JB	0.0327	MDL	5.84	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.872	JB	0.0317	MDL	5.84	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.298	JB	0.0307	MDL	5.84	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	1.24	JB	0.0300	MDL	5.84	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.359	JB	0.0383	MDL	5.84	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.209	JB	0.0293	MDL	5.84	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.950	JB	0.0310	MDL	5.84	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.326	JB	0.0309	MDL	5.84	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.813	JB	0.0302	MDL	5.84	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0183	JB	0.0139	MDL	1.17	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.436	JB	0.0653	MDL	1.17	PQL	ng/Kg	J	Z
OCDF	1.93	JB	0.0239	MDL	11.7	PQL	ng/Kg	J	Z

Sample ID: SL-080-SA8N-SS-0.0-0.5 ***Collected:*** 4/18/2011 10:30:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	5.02	JB	0.0460	MDL	6.04	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	2.29	JB	0.0159	MDL	6.04	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.134	JBQ	0.0282	MDL	6.04	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.110	JB	0.0337	MDL	6.04	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.616	JB	0.0444	MDL	6.04	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.279	JBQ	0.0348	MDL	6.04	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.316	JB	0.0388	MDL	6.04	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.256	JB	0.0328	MDL	6.04	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.171	JBQ	0.0511	MDL	6.04	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0522	JBQ	0.0221	MDL	6.04	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	2.67	JB	0.0519	MDL	6.04	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.416	JB	0.0410	MDL	6.04	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.781	JB	0.0506	MDL	6.04	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.731	JB	0.108	MDL	1.21	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX070 **Laboratory: LL**

EDD Filename: DX070_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B *Matrix:* SO

Sample ID: SL-080-SA8N-SS-0.0-0.5 *Collected:* 4/18/2011 10:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
OCDF	10.0	JB	0.0320	MDL	12.1	PQL	ng/Kg	J	Z

Sample ID: SL-085-SA8N-SS-0.0-0.5 *Collected:* 4/18/2011 8:15:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	0.831	JB	0.0503	MDL	5.72	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.494	JB	0.0626	MDL	5.72	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	2.95	JB	0.0710	MDL	5.72	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	1.92	JB	0.0651	MDL	5.72	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	1.20	JB	0.0651	MDL	5.72	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	1.06	JB	0.0599	MDL	5.72	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.658	JB	0.0808	MDL	5.72	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.258	JB	0.0479	MDL	5.72	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.955	JB	0.0680	MDL	5.72	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	2.74	JB	0.0833	MDL	5.72	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0450	JBQ	0.0188	MDL	1.14	PQL	ng/Kg	U	B

Sample ID: SL-086-SA8N-SS-0.0-0.5 *Collected:* 4/18/2011 12:55:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	1.69	JB	0.0420	MDL	5.76	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	1.11	JB	0.0176	MDL	5.76	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.0752	JBQ	0.0279	MDL	5.76	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0296	JBQ	0.0196	MDL	5.76	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.254	JB	0.0247	MDL	5.76	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.122	JBQ	0.0207	MDL	5.76	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.151	JB	0.0226	MDL	5.76	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.143	JBQ	0.0188	MDL	5.76	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.108	JB	0.0275	MDL	5.76	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0413	JBQ	0.0173	MDL	5.76	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.268	JB	0.0153	MDL	5.76	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.155	JB	0.0231	MDL	5.76	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.226	JB	0.0147	MDL	5.76	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0774	JB	0.0276	MDL	1.15	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX070 **Laboratory: LL**

EDD Filename: DX070_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-086-SA8N-SS-0.0-0.5 **Collected:** 4/18/2011 12:55:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
OCDF	4.43	JB	0.0285	MDL	11.5	PQL	ng/Kg	J	Z

Sample ID: SL-132-SA8N-SS-0.0-0.5 **Collected:** 4/18/2011 2:00:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	3.43	JB	0.0235	MDL	5.39	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.268	JB	0.0359	MDL	5.39	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.249	JBQ	0.0476	MDL	5.39	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.634	JB	0.0392	MDL	5.39	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.916	JB	0.0497	MDL	5.39	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.300	JB	0.0364	MDL	5.39	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.700	JB	0.0464	MDL	5.39	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.379	JB	0.0432	MDL	5.39	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.147	JB	0.0245	MDL	5.39	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	2.65	JB	0.0461	MDL	5.39	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.238	JB	0.0340	MDL	5.39	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.505	JB	0.0417	MDL	5.39	PQL	ng/Kg	J	Z
OCDF	10.6	JjB	0.0249	MDL	10.8	PQL	ng/Kg	J	Z

Sample ID: SL-204-SA5A-SB-4.0-5.0 **Collected:** 4/13/2011 9:19:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.369	JBQ	0.0277	MDL	5.60	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.105	JBQ	0.0114	MDL	5.60	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0835	JB	0.0198	MDL	5.60	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0393	JBQ	0.0244	MDL	5.60	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0510	JBQ	0.0186	MDL	5.60	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0651	JBQ	0.0255	MDL	5.60	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0323	JBQ	0.0139	MDL	5.60	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0713	JB	0.0240	MDL	5.60	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0656	JQ	0.0181	MDL	5.60	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.0396	JBQ	0.0140	MDL	5.60	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0997	JBQ	0.0145	MDL	5.60	PQL	ng/Kg	U	B
OCDD	0.962	JB	0.0356	MDL	11.2	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX070 **Laboratory: LL**

EDD Filename: DX070_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-204-SA5A-SB-4.0-5.0 **Collected:** 4/13/2011 9:19:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
OCDF	0.122	JBQ	0.0410	MDL	11.2	PQL	ng/Kg	U	B

Sample ID: SL-205-SA5A-SB-4.0-5.0 **Collected:** 4/13/2011 11:14:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.830	JB	0.0239	MDL	5.63	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.185	JBQ	0.00686	MDL	5.63	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0538	JBQ	0.0143	MDL	5.63	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0429	JBQ	0.0126	MDL	5.63	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0195	JBQ	0.00973	MDL	5.63	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0590	JBQ	0.0186	MDL	5.63	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0420	J	0.0157	MDL	5.63	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.0137	JQ	0.00995	MDL	5.63	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.0459	JBQ	0.0110	MDL	5.63	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0590	JBQ	0.0114	MDL	5.63	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0251	JQ	0.0198	MDL	1.13	PQL	ng/Kg	J	Z
OCDD	5.19	JB	0.0219	MDL	11.3	PQL	ng/Kg	J	Z
OCDF	0.311	JBQ	0.0340	MDL	11.3	PQL	ng/Kg	U	B

Sample ID: SL-205-SA5A-SB-8.0-9.0 **Collected:** 4/13/2011 11:22:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.300	JB	0.0196	MDL	5.67	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.0864	JB	0.00641	MDL	5.67	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0623	JBQ	0.0123	MDL	5.67	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0252	JBQ	0.0164	MDL	5.67	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0334	JBQ	0.0136	MDL	5.67	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0156	JBQ	0.00916	MDL	5.67	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0411	JB	0.0166	MDL	5.67	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0654	JQ	0.0125	MDL	5.67	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.0188	JQ	0.00916	MDL	5.67	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.0359	JBQ	0.00871	MDL	5.67	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0540	JBQ	0.0105	MDL	5.67	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0182	JQ	0.0175	MDL	1.13	PQL	ng/Kg	J	Z
OCDD	0.724	JB	0.0168	MDL	11.3	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX070 **Laboratory: LL**

EDD Filename: DX070_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: **SL-205-SA5A-SB-8.0-9.0** ***Collected:*** **4/13/2011 11:22:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	*Lab Result*	*Lab Qual*	*DL*	*DL Type*	*RL*	*RL Type*	*Units*	*Data Review Qual*	*Reason Code*
OCDF	0.196	JBQ	0.0307	MDL	11.3	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX070 **Laboratory: LL**

EDD Filename: DX070_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
	Sampling to Leaching Estimation
	Sampling to Leaching Rejection
*XI	Compound Quantitation and CRQL
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Continuing Calibration Verification Percent Recovery Lower Estimation
C	Continuing Calibration Verification Percent Recovery Lower Rejection
C	Continuing Calibration Verification Percent Recovery Upper Estimation
C	Continuing Calibration Verification Percent Recovery Upper Rejection
C	Continuing Calibration Verification Relative Response Factor
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Relative Response Factor
C	Initial Calibration Verification Correlation Coefficient

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DX070 **Laboratory: LL**

EDD Filename: DX070_v1 **eQAPP Name: CDM_SSFL_110509**

C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Verification Percent Recovery Lower Estimation
C	Initial Calibration Verification Percent Recovery Lower Rejection
C	Initial Calibration Verification Percent Recovery Upper Estimation
C	Initial Calibration Verification Percent Recovery Upper Rejection
C	Initial Calibration Verification Relative Response Factor
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Laboratory Triplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination
F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DX070 **Laboratory: LL**

EDD Filename: DX070_v1 **eQAPP Name: CDM_SSFL_110509**

L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Laboratory Triplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Q	Matrix Spike Upper Rejection
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control Outlier Reports

DX070

Method Blank Outlier Report

Lab Reporting Batch ID: DX070 **Laboratory: LL**

EDD Filename: DX070_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **AQ**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLK1080B370125	4/24/2011 1:25:00 AM	1,2,3,4,6,7,8-HPCDD	7.94 pg/L	EB02-SA8N-SS-041311
		1,2,3,4,6,7,8-HPCDF	4.55 pg/L	
		1,2,3,4,7,8,9-HPCDF	2.38 pg/L	
		1,2,3,4,7,8-HxCDD	1.28 pg/L	
		1,2,3,4,7,8-HXCDF	1.50 pg/L	
		1,2,3,6,7,8-HXCDD	1.08 pg/L	
		1,2,3,6,7,8-HXCDF	1.21 pg/L	
		1,2,3,7,8,9-HXCDD	1.65 pg/L	
		1,2,3,7,8,9-HXCDF	1.98 pg/L	
		1,2,3,7,8-PECDD	0.899 pg/L	
		1,2,3,7,8-PECDF	0.844 pg/L	
		2,3,4,6,7,8-HXCDF	1.71 pg/L	
		2,3,4,7,8-PECDF	1.28 pg/L	
		2,3,7,8-TCDD	0.264 pg/L	
		2,3,7,8-TCDF	0.147 pg/L	
		OCDD	47.4 pg/L	
		OCDF	6.44 pg/L	
BLK1220B371437	5/4/2011 2:37:00 PM	1,2,3,4,6,7,8-HPCDD	4.37 pg/L	EB05-SA8N-SS-041811
		1,2,3,4,6,7,8-HPCDF	1.81 pg/L	
		1,2,3,4,7,8,9-HPCDF	0.983 pg/L	
		1,2,3,4,7,8-HxCDD	0.811 pg/L	
		1,2,3,4,7,8-HXCDF	0.812 pg/L	
		1,2,3,6,7,8-HXCDD	0.674 pg/L	
		1,2,3,6,7,8-HXCDF	0.817 pg/L	
		1,2,3,7,8,9-HXCDD	1.07 pg/L	
		1,2,3,7,8,9-HXCDF	0.969 pg/L	
		1,2,3,7,8-PECDD	0.428 pg/L	
		1,2,3,7,8-PECDF	0.992 pg/L	
		2,3,4,6,7,8-HXCDF	0.470 pg/L	
		2,3,4,7,8-PECDF	0.699 pg/L	
		2,3,7,8-TCDD	0.371 pg/L	
		OCDD	7.09 pg/L	
		OCDF	2.65 pg/L	

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
EB02-SA8N-SS-041311(RES)	1,2,3,4,6,7,8-HPCDD	4.31 pg/L	4.31U pg/L
EB02-SA8N-SS-041311(RES)	1,2,3,4,6,7,8-HPCDF	2.52 pg/L	2.52U pg/L
EB02-SA8N-SS-041311(RES)	1,2,3,4,7,8,9-HPCDF	1.17 pg/L	1.17U pg/L
EB02-SA8N-SS-041311(RES)	1,2,3,4,7,8-HxCDD	0.476 pg/L	0.476U pg/L
EB02-SA8N-SS-041311(RES)	1,2,3,4,7,8-HXCDF	0.639 pg/L	0.639U pg/L
EB02-SA8N-SS-041311(RES)	1,2,3,6,7,8-HXCDD	0.418 pg/L	0.418U pg/L
EB02-SA8N-SS-041311(RES)	1,2,3,6,7,8-HXCDF	0.677 pg/L	0.677U pg/L
EB02-SA8N-SS-041311(RES)	1,2,3,7,8,9-HXCDF	1.20 pg/L	1.20U pg/L
EB02-SA8N-SS-041311(RES)	1,2,3,7,8-PECDD	0.347 pg/L	0.347U pg/L
EB02-SA8N-SS-041311(RES)	1,2,3,7,8-PECDF	0.276 pg/L	0.276U pg/L
EB02-SA8N-SS-041311(RES)	2,3,4,6,7,8-HXCDF	0.998 pg/L	0.998U pg/L
EB02-SA8N-SS-041311(RES)	2,3,4,7,8-PECDF	0.812 pg/L	0.812U pg/L
EB02-SA8N-SS-041311(RES)	OCDD	9.89 pg/L	9.89U pg/L
EB02-SA8N-SS-041311(RES)	OCDF	3.58 pg/L	3.58U pg/L
EB05-SA8N-SS-041811(RES)	1,2,3,4,6,7,8-HPCDD	2.93 pg/L	2.93U pg/L
EB05-SA8N-SS-041811(RES)	1,2,3,4,6,7,8-HPCDF	2.04 pg/L	2.04U pg/L
EB05-SA8N-SS-041811(RES)	1,2,3,4,7,8,9-HPCDF	0.733 pg/L	0.733U pg/L
EB05-SA8N-SS-041811(RES)	1,2,3,4,7,8-HXCDF	0.271 pg/L	0.271U pg/L

Method Blank Outlier Report

Lab Reporting Batch ID: DX070 **Laboratory: LL**

EDD Filename: DX070_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **AQ**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
EB05-SA8N-SS-041811(RES)	1,2,3,6,7,8-HXCDD	0.533 pg/L	0.533U pg/L
EB05-SA8N-SS-041811(RES)	1,2,3,6,7,8-HXCDF	0.447 pg/L	0.447U pg/L
EB05-SA8N-SS-041811(RES)	1,2,3,7,8-PECDF	0.577 pg/L	0.577U pg/L
EB05-SA8N-SS-041811(RES)	2,3,4,6,7,8-HXCDF	0.827 pg/L	0.827U pg/L
EB05-SA8N-SS-041811(RES)	2,3,4,7,8-PECDF	0.948 pg/L	0.948U pg/L
EB05-SA8N-SS-041811(RES)	OCDD	5.51 pg/L	5.51U pg/L
EB05-SA8N-SS-041811(RES)	OCDF	1.33 pg/L	1.33U pg/L

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLK1050B370750	4/19/2011 7:50:00 AM	1,2,3,4,6,7,8-HPCDD	0.298 ng/Kg	DUP02-SA8N-QC-041311
		1,2,3,4,6,7,8-HPCDF	0.145 ng/Kg	SL-032-SA8N-SS-0.0-0.5
		1,2,3,4,7,8,9-HPCDF	0.0559 ng/Kg	SL-046-SA8N-SS-0.0-0.5
		1,2,3,4,7,8-HxCDD	0.0436 ng/Kg	SL-060-SA5A-SB-4.0-5.0
		1,2,3,4,7,8-HXCDF	0.0670 ng/Kg	SL-060-SA5A-SB-8.0-9.0
		1,2,3,6,7,8-HXCDD	0.0275 ng/Kg	SL-061-SA5A-SB-4.0-5.0
		1,2,3,6,7,8-HXCDF	0.0529 ng/Kg	SL-204-SA5A-SB-4.0-5.0
		1,2,3,7,8,9-HXCDD	0.0327 ng/Kg	SL-205-SA5A-SB-4.0-5.0
		1,2,3,7,8-PECDD	0.0471 ng/Kg	SL-205-SA5A-SB-8.0-9.0
		2,3,4,6,7,8-HXCDF	0.0595 ng/Kg	
		2,3,4,7,8-PECDF	0.0602 ng/Kg	
		OCDD	0.622 ng/Kg	
		OCDF	0.267 ng/Kg	
BLK1150B371141	4/28/2011 11:41:00 AM	1,2,3,4,6,7,8-HPCDD	0.231 ng/Kg	SL-056-SA8N-SS-0.0-0.5
		1,2,3,4,6,7,8-HPCDF	0.126 ng/Kg	SL-057-SA8N-SS-0.0-0.5
		1,2,3,4,7,8,9-HPCDF	0.0849 ng/Kg	SL-071-SA8N-SS-0.0-0.5
		1,2,3,4,7,8-HxCDD	0.0421 ng/Kg	SL-080-SA8N-SS-0.0-0.5
		1,2,3,4,7,8-HXCDF	0.0469 ng/Kg	SL-085-SA8N-SS-0.0-0.5
		1,2,3,6,7,8-HXCDD	0.0348 ng/Kg	SL-086-SA8N-SS-0.0-0.5
		1,2,3,6,7,8-HXCDF	0.0401 ng/Kg	SL-132-SA8N-SS-0.0-0.5
		1,2,3,7,8,9-HXCDD	0.0543 ng/Kg	
		1,2,3,7,8,9-HXCDF	0.0854 ng/Kg	
		1,2,3,7,8-PECDD	0.0571 ng/Kg	
		1,2,3,7,8-PECDF	0.0538 ng/Kg	
		2,3,4,6,7,8-HXCDF	0.0651 ng/Kg	
		2,3,4,7,8-PECDF	0.0593 ng/Kg	
		2,3,7,8-TCDD	0.0462 ng/Kg	
		2,3,7,8-TCDF	0.0227 ng/Kg	
		OCDD	0.458 ng/Kg	
		OCDF	0.215 ng/Kg	
BLK1150B371402	5/9/2011 2:02:00 PM	2,3,7,8-TCDF	0.0223 ng/Kg	SL-056-SA8N-SS-0.0-0.5
				SL-057-SA8N-SS-0.0-0.5
				SL-071-SA8N-SS-0.0-0.5
				SL-080-SA8N-SS-0.0-0.5
				SL-085-SA8N-SS-0.0-0.5
				SL-086-SA8N-SS-0.0-0.5
				SL-132-SA8N-SS-0.0-0.5

Method Blank Outlier Report

Lab Reporting Batch ID: DX070 **Laboratory: LL**

EDD Filename: DX070_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLK1180B370615	5/3/2011 6:15:00 AM	1,2,3,4,6,7,8-HPCDD	0.221 ng/Kg	SL-027-SA8N-SS-0.0-0.5
		1,2,3,4,6,7,8-HPCDF	0.104 ng/Kg	SL-028-SA8N-SS-0.0-0.5
		1,2,3,4,7,8,9-HPCDF	0.0661 ng/Kg	
		1,2,3,4,7,8-HxCDD	0.0208 ng/Kg	
		1,2,3,4,7,8-HXCDF	0.0521 ng/Kg	
		1,2,3,6,7,8-HXCDD	0.0353 ng/Kg	
		1,2,3,6,7,8-HXCDF	0.0335 ng/Kg	
		1,2,3,7,8,9-HXCDD	0.0254 ng/Kg	
		1,2,3,7,8,9-HXCDF	0.0904 ng/Kg	
		1,2,3,7,8-PECDD	0.0182 ng/Kg	
		1,2,3,7,8-PECDF	0.0263 ng/Kg	
		2,3,4,6,7,8-HXCDF	0.0685 ng/Kg	
		2,3,4,7,8-PECDF	0.0537 ng/Kg	
		OCDD	0.477 ng/Kg	
		OCDF	0.210 ng/Kg	

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-027-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.275 ng/Kg	0.275U ng/Kg
SL-056-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.171 ng/Kg	0.171U ng/Kg
SL-056-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.132 ng/Kg	0.132U ng/Kg
SL-056-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.218 ng/Kg	0.218U ng/Kg
SL-056-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.154 ng/Kg	0.154U ng/Kg
SL-056-SA8N-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.226 ng/Kg	0.226U ng/Kg
SL-056-SA8N-SS-0.0-0.5(RES)	2,3,7,8-TCDD	0.0376 ng/Kg	0.0376U ng/Kg
SL-057-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.0725 ng/Kg	0.0725U ng/Kg
SL-057-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.0198 ng/Kg	0.0198U ng/Kg
SL-057-SA8N-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDD	0.0936 ng/Kg	0.0936U ng/Kg
SL-057-SA8N-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.105 ng/Kg	0.105U ng/Kg
SL-057-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDD	0.124 ng/Kg	0.124U ng/Kg
SL-057-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.0944 ng/Kg	0.0944U ng/Kg
SL-057-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.0555 ng/Kg	0.0555U ng/Kg
SL-057-SA8N-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.0925 ng/Kg	0.0925U ng/Kg
SL-057-SA8N-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.195 ng/Kg	0.195U ng/Kg
SL-057-SA8N-SS-0.0-0.5(RES)	2,3,7,8-TCDD	0.0146 ng/Kg	0.0146U ng/Kg
SL-060-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.419 ng/Kg	0.419U ng/Kg
SL-060-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.0955 ng/Kg	0.0955U ng/Kg
SL-060-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0771 ng/Kg	0.0771U ng/Kg
SL-060-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.0390 ng/Kg	0.0390U ng/Kg
SL-060-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDD	0.0495 ng/Kg	0.0495U ng/Kg
SL-060-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.0465 ng/Kg	0.0465U ng/Kg
SL-060-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDD	0.130 ng/Kg	0.130U ng/Kg
SL-060-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDD	0.0491 ng/Kg	0.0491U ng/Kg
SL-060-SA5A-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.0541 ng/Kg	0.0541U ng/Kg
SL-060-SA5A-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.0430 ng/Kg	0.0430U ng/Kg
SL-060-SA5A-SB-4.0-5.0(RES)	OCDD	1.16 ng/Kg	1.16U ng/Kg
SL-060-SA5A-SB-4.0-5.0(RES)	OCDF	0.253 ng/Kg	0.253U ng/Kg
SL-060-SA5A-SB-8.0-9.0(RES)	1,2,3,4,6,7,8-HPCDD	0.361 ng/Kg	0.361U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX070 **Laboratory: LL**

EDD Filename: DX070_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-060-SA5A-SB-8.0-9.0(RES)	1,2,3,4,6,7,8-HPCDF	0.101 ng/Kg	0.101U ng/Kg
SL-060-SA5A-SB-8.0-9.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0426 ng/Kg	0.0426U ng/Kg
SL-060-SA5A-SB-8.0-9.0(RES)	1,2,3,4,7,8-HxCDD	0.0234 ng/Kg	0.0234U ng/Kg
SL-060-SA5A-SB-8.0-9.0(RES)	1,2,3,4,7,8-HXCDF	0.0199 ng/Kg	0.0199U ng/Kg
SL-060-SA5A-SB-8.0-9.0(RES)	1,2,3,6,7,8-HXCDD	0.0407 ng/Kg	0.0407U ng/Kg
SL-060-SA5A-SB-8.0-9.0(RES)	1,2,3,6,7,8-HXCDF	0.0173 ng/Kg	0.0173U ng/Kg
SL-060-SA5A-SB-8.0-9.0(RES)	1,2,3,7,8,9-HXCDD	0.0920 ng/Kg	0.0920U ng/Kg
SL-060-SA5A-SB-8.0-9.0(RES)	2,3,4,6,7,8-HXCDF	0.0428 ng/Kg	0.0428U ng/Kg
SL-060-SA5A-SB-8.0-9.0(RES)	2,3,4,7,8-PECDF	0.0528 ng/Kg	0.0528U ng/Kg
SL-060-SA5A-SB-8.0-9.0(RES)	OCDD	1.21 ng/Kg	1.21U ng/Kg
SL-060-SA5A-SB-8.0-9.0(RES)	OCDF	0.186 ng/Kg	0.186U ng/Kg
SL-061-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.374 ng/Kg	0.374U ng/Kg
SL-061-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.140 ng/Kg	0.140U ng/Kg
SL-061-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0407 ng/Kg	0.0407U ng/Kg
SL-061-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HxCDD	0.0316 ng/Kg	0.0316U ng/Kg
SL-061-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.0525 ng/Kg	0.0525U ng/Kg
SL-061-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDD	0.0528 ng/Kg	0.0528U ng/Kg
SL-061-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.0626 ng/Kg	0.0626U ng/Kg
SL-061-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDD	0.0689 ng/Kg	0.0689U ng/Kg
SL-061-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDD	0.0637 ng/Kg	0.0637U ng/Kg
SL-061-SA5A-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.0555 ng/Kg	0.0555U ng/Kg
SL-061-SA5A-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.0892 ng/Kg	0.0892U ng/Kg
SL-061-SA5A-SB-4.0-5.0(RES)	OCDD	2.00 ng/Kg	2.00U ng/Kg
SL-061-SA5A-SB-4.0-5.0(RES)	OCDF	0.235 ng/Kg	0.235U ng/Kg
SL-071-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.107 ng/Kg	0.107U ng/Kg
SL-071-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.111 ng/Kg	0.111U ng/Kg
SL-071-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.359 ng/Kg	0.359U ng/Kg
SL-071-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.209 ng/Kg	0.209U ng/Kg
SL-071-SA8N-SS-0.0-0.5(RES)	2,3,7,8-TCDD	0.0183 ng/Kg	0.0183U ng/Kg
SL-080-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.134 ng/Kg	0.134U ng/Kg
SL-080-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.110 ng/Kg	0.110U ng/Kg
SL-080-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDD	0.256 ng/Kg	0.256U ng/Kg
SL-080-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.171 ng/Kg	0.171U ng/Kg
SL-080-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.0522 ng/Kg	0.0522U ng/Kg
SL-085-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.258 ng/Kg	0.258U ng/Kg
SL-085-SA8N-SS-0.0-0.5(RES)	2,3,7,8-TCDD	0.0450 ng/Kg	0.0450U ng/Kg
SL-086-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.0752 ng/Kg	0.0752U ng/Kg
SL-086-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.0296 ng/Kg	0.0296U ng/Kg
SL-086-SA8N-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDD	0.122 ng/Kg	0.122U ng/Kg
SL-086-SA8N-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.151 ng/Kg	0.151U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX070 **Laboratory: LL**

EDD Filename: DX070_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-086-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDD	0.143 ng/Kg	0.143U ng/Kg
SL-086-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.108 ng/Kg	0.108U ng/Kg
SL-086-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.0413 ng/Kg	0.0413U ng/Kg
SL-086-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.268 ng/Kg	0.268U ng/Kg
SL-086-SA8N-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.155 ng/Kg	0.155U ng/Kg
SL-086-SA8N-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.226 ng/Kg	0.226U ng/Kg
SL-086-SA8N-SS-0.0-0.5(RES)	2,3,7,8-TCDF	0.0774 ng/Kg	0.0774U ng/Kg
SL-132-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.268 ng/Kg	0.268U ng/Kg
SL-132-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.379 ng/Kg	0.379U ng/Kg
SL-132-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.147 ng/Kg	0.147U ng/Kg
SL-132-SA8N-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.238 ng/Kg	0.238U ng/Kg
SL-204-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.369 ng/Kg	0.369U ng/Kg
SL-204-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.105 ng/Kg	0.105U ng/Kg
SL-204-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0835 ng/Kg	0.0835U ng/Kg
SL-204-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HxCDD	0.0393 ng/Kg	0.0393U ng/Kg
SL-204-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.0510 ng/Kg	0.0510U ng/Kg
SL-204-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDD	0.0651 ng/Kg	0.0651U ng/Kg
SL-204-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.0323 ng/Kg	0.0323U ng/Kg
SL-204-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDD	0.0713 ng/Kg	0.0713U ng/Kg
SL-204-SA5A-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.0396 ng/Kg	0.0396U ng/Kg
SL-204-SA5A-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.0997 ng/Kg	0.0997U ng/Kg
SL-204-SA5A-SB-4.0-5.0(RES)	OCDD	0.962 ng/Kg	0.962U ng/Kg
SL-204-SA5A-SB-4.0-5.0(RES)	OCDF	0.122 ng/Kg	0.122U ng/Kg
SL-205-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.830 ng/Kg	0.830U ng/Kg
SL-205-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.185 ng/Kg	0.185U ng/Kg
SL-205-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0538 ng/Kg	0.0538U ng/Kg
SL-205-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.0429 ng/Kg	0.0429U ng/Kg
SL-205-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.0195 ng/Kg	0.0195U ng/Kg
SL-205-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDD	0.0590 ng/Kg	0.0590U ng/Kg
SL-205-SA5A-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.0459 ng/Kg	0.0459U ng/Kg
SL-205-SA5A-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.0590 ng/Kg	0.0590U ng/Kg
SL-205-SA5A-SB-4.0-5.0(RES)	OCDF	0.311 ng/Kg	0.311U ng/Kg
SL-205-SA5A-SB-8.0-9.0(RES)	1,2,3,4,6,7,8-HPCDD	0.300 ng/Kg	0.300U ng/Kg
SL-205-SA5A-SB-8.0-9.0(RES)	1,2,3,4,6,7,8-HPCDF	0.0864 ng/Kg	0.0864U ng/Kg
SL-205-SA5A-SB-8.0-9.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0623 ng/Kg	0.0623U ng/Kg
SL-205-SA5A-SB-8.0-9.0(RES)	1,2,3,4,7,8-HxCDD	0.0252 ng/Kg	0.0252U ng/Kg
SL-205-SA5A-SB-8.0-9.0(RES)	1,2,3,4,7,8-HXCDF	0.0334 ng/Kg	0.0334U ng/Kg
SL-205-SA5A-SB-8.0-9.0(RES)	1,2,3,6,7,8-HXCDF	0.0156 ng/Kg	0.0156U ng/Kg
SL-205-SA5A-SB-8.0-9.0(RES)	1,2,3,7,8,9-HXCDD	0.0411 ng/Kg	0.0411U ng/Kg
SL-205-SA5A-SB-8.0-9.0(RES)	2,3,4,6,7,8-HXCDF	0.0359 ng/Kg	0.0359U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX070 **Laboratory: LL**

EDD Filename: DX070_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-205-SA5A-SB-8.0-9.0(RES)	2,3,4,7,8-PECDF	0.0540 ng/Kg	0.0540U ng/Kg
SL-205-SA5A-SB-8.0-9.0(RES)	OCDD	0.724 ng/Kg	0.724U ng/Kg
SL-205-SA5A-SB-8.0-9.0(RES)	OCDF	0.196 ng/Kg	0.196U ng/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DX070 **Laboratory: LL**

EDD Filename: DX070_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-027-SA8N-SS-0.0-0.5MSD (SL-027-SA8N-SS-0.0-0.5)	OCDD	-	-3	40.00-135.00	-	OCDD	J (all detects) R (all non-detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DX070 **Laboratory: LL**

EDD Filename: DX070_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1613B
Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB02-SA8N-SS-041311	1,2,3,4,6,7,8-HPCDD	JB	4.31	10.1	PQL	pg/L	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	2.52	10.1	PQL	pg/L	
	1,2,3,4,7,8,9-HPCDF	JBQ	1.17	10.1	PQL	pg/L	
	1,2,3,4,7,8-HxCDD	JBQ	0.476	10.1	PQL	pg/L	
	1,2,3,4,7,8-HXCDF	JBQ	0.639	10.1	PQL	pg/L	
	1,2,3,6,7,8-HXCDD	JBQ	0.418	10.1	PQL	pg/L	
	1,2,3,6,7,8-HXCDF	JB	0.677	10.1	PQL	pg/L	
	1,2,3,7,8,9-HXCDF	JB	1.20	10.1	PQL	pg/L	
	1,2,3,7,8-PECDD	JBQ	0.347	10.1	PQL	pg/L	
	1,2,3,7,8-PECDF	JB	0.276	10.1	PQL	pg/L	
	2,3,4,6,7,8-HXCDF	JBQ	0.998	10.1	PQL	pg/L	
	2,3,4,7,8-PECDF	JBQ	0.812	10.1	PQL	pg/L	
	OCDD	JBQ	9.89	20.3	PQL	pg/L	
	OCDF	JB	3.58	20.3	PQL	pg/L	
EB05-SA8N-SS-041811	1,2,3,4,6,7,8-HPCDD	JB	2.93	9.88	PQL	pg/L	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	2.04	9.88	PQL	pg/L	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.733	9.88	PQL	pg/L	
	1,2,3,4,7,8-HXCDF	JBQ	0.271	9.88	PQL	pg/L	
	1,2,3,6,7,8-HXCDD	JBQ	0.533	9.88	PQL	pg/L	
	1,2,3,6,7,8-HXCDF	JB	0.447	9.88	PQL	pg/L	
	1,2,3,7,8-PECDF	JBQ	0.577	9.88	PQL	pg/L	
	2,3,4,6,7,8-HXCDF	JB	0.827	9.88	PQL	pg/L	
	2,3,4,7,8-PECDF	JBQ	0.948	9.88	PQL	pg/L	
	OCDD	JBQ	5.51	19.8	PQL	pg/L	
	OCDF	JB	1.33	19.8	PQL	pg/L	

Method: 1613B
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP02-SA8N-QC-041311	2,3,7,8-TCDF		1.23	1.15	PQL	ng/Kg	
SL-027-SA8N-SS-0.0-0.5	2,3,7,8-TCDF		1.30	1.15	PQL	ng/Kg	
SL-028-SA8N-SS-0.0-0.5	2,3,7,8-TCDF		2.18	1.19	PQL	ng/Kg	
SL-085-SA8N-SS-0.0-0.5	2,3,7,8-TCDF	B	1.71	1.14	PQL	ng/Kg	
SL-132-SA8N-SS-0.0-0.5	2,3,7,8-TCDF	B	1.47	1.08	PQL	ng/Kg	
DUP02-SA8N-QC-041311	1,2,3,4,7,8,9-HPCDF	JB	0.637	5.74	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8-HxCDD	JB	0.823	5.74	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	1.59	5.74	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	3.10	5.74	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.665	5.74	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	2.28	5.74	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	J	0.270	5.74	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	1.18	5.74	PQL	ng/Kg	
	1,2,3,7,8-PECDF	J	0.869	5.74	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.676	5.74	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.843	5.74	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.358	1.15	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX070 **Laboratory: LL**

EDD Filename: DX070_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-027-SA8N-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	1.65	5.77	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8-HxCDD	JB	0.989	5.77	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	2.17	5.77	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	4.59	5.77	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	1.09	5.77	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	2.45	5.77	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.275	5.77	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	1.27	5.77	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.493	5.77	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.966	5.77	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.993	5.77	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.434	1.15	PQL	ng/Kg	
SL-028-SA8N-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	2.36	5.93	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8-HxCDD	JB	5.22	5.93	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	4.62	5.93	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	2.95	5.93	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	1.34	5.93	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	2.68	5.93	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	2.59	5.93	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	3.43	5.93	PQL	ng/Kg	
SL-032-SA8N-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	3.08	5.38	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8-HxCDD	JB	3.11	5.38	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	1.90	5.38	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	1.88	5.38	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	J	0.625	5.38	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	2.09	5.38	PQL	ng/Kg	
	1,2,3,7,8-PECDF	J	1.98	5.38	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	2.35	5.38	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	1.16	5.38	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.448	1.08	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.963	1.08	PQL	ng/Kg	
SL-046-SA8N-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	0.499	5.46	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8-HxCDD	JB	0.458	5.46	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.623	5.46	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	1.14	5.46	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.454	5.46	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	1.01	5.46	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	J	0.285	5.46	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.342	5.46	PQL	ng/Kg	
	1,2,3,7,8-PECDF	J	0.628	5.46	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.561	5.46	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.500	5.46	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0715	1.09	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.233	1.09	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX070 **Laboratory: LL**

EDD Filename: DX070_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-056-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDD	JB	5.67	5.79	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	2.67	5.79	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.171	5.79	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.132	5.79	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.487	5.79	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.335	5.79	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.209	5.79	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.280	5.79	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JB	0.218	5.79	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.154	5.79	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	1.60	5.79	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.226	5.79	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.383	5.79	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0376	1.16	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.335	1.16	PQL	ng/Kg	
SL-057-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDD	JB	1.24	5.57	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	1.12	5.57	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0725	5.57	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0198	5.57	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.388	5.57	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.0936	5.57	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.105	5.57	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.124	5.57	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JBQ	0.0944	5.57	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0555	5.57	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	1.18	5.57	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.0925	5.57	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.195	5.57	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0146	1.11	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.133	1.11	PQL	ng/Kg	
	OCDF	JB	6.38	11.1	PQL	ng/Kg	
SL-060-SA5A-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JBQ	0.419	5.66	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JBQ	0.0955	5.66	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0771	5.66	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0390	5.66	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.0495	5.66	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0465	5.66	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.130	5.66	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	0.0491	5.66	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JQ	0.0229	5.66	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0541	5.66	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0430	5.66	PQL	ng/Kg	
	OCDD	JB	1.16	11.3	PQL	ng/Kg	
	OCDF	JBQ	0.253	11.3	PQL	ng/Kg	
SL-060-SA5A-SB-8.0-9.0	1,2,3,4,6,7,8-HPCDD	JB	0.361	5.62	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.101	5.62	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0426	5.62	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0234	5.62	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.0199	5.62	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.0407	5.62	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0173	5.62	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDD	JBQ	0.0920	5.62	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JQ	0.0400	5.62	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JQ	0.0350	5.62	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0428	5.62	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0528	5.62	PQL	ng/Kg	
	OCDD	JB	1.21	11.2	PQL	ng/Kg	
	OCDF	JB	0.186	11.2	PQL	ng/Kg	

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Reporting Limit Outliers

Lab Reporting Batch ID: DX070 **Laboratory: LL**

EDD Filename: DX070_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-061-SA5A-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JBQ	0.374	5.69	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.140	5.69	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0407	5.69	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0316	5.69	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0525	5.69	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.0528	5.69	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0626	5.69	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.0689	5.69	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	J	0.128	5.69	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0637	5.69	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JQ	0.0718	5.69	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.0555	5.69	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0892	5.69	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0557	1.14	PQL	ng/Kg	
	OCDD	JB	2.00	11.4	PQL	ng/Kg	
	OCDF	JBQ	0.235	11.4	PQL	ng/Kg	
SL-071-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDD	JB	3.76	5.84	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	1.10	5.84	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.107	5.84	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.111	5.84	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.342	5.84	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.872	5.84	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.298	5.84	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	1.24	5.84	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.359	5.84	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.209	5.84	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.950	5.84	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.326	5.84	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.813	5.84	PQL	ng/Kg	
	2,3,7,8-TCDD	JB	0.0183	1.17	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.436	1.17	PQL	ng/Kg	
	OCDF	JB	1.93	11.7	PQL	ng/Kg	
SL-080-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDD	JB	5.02	6.04	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	2.29	6.04	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.134	6.04	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.110	6.04	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.616	6.04	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.279	6.04	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.316	6.04	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.256	6.04	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.171	6.04	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0522	6.04	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	2.67	6.04	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.416	6.04	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.781	6.04	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.731	1.21	PQL	ng/Kg	
	OCDF	JB	10.0	12.1	PQL	ng/Kg	
SL-085-SA8N-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	0.831	5.72	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8-HxCDD	JB	0.494	5.72	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	2.95	5.72	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	1.92	5.72	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	1.20	5.72	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	1.06	5.72	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.658	5.72	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.258	5.72	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.955	5.72	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	2.74	5.72	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0450	1.14	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX070 **Laboratory: LL**

EDD Filename: DX070_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-086-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDD	JB	1.69	5.76	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	1.11	5.76	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0752	5.76	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0296	5.76	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.254	5.76	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.122	5.76	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.151	5.76	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.143	5.76	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JB	0.108	5.76	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0413	5.76	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.268	5.76	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.155	5.76	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.226	5.76	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.0774	1.15	PQL	ng/Kg	
	OCDF	JB	4.43	11.5	PQL	ng/Kg	
SL-132-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	3.43	5.39	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.268	5.39	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.249	5.39	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.634	5.39	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.916	5.39	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.300	5.39	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.700	5.39	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JB	0.379	5.39	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.147	5.39	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	2.65	5.39	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.238	5.39	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.505	5.39	PQL	ng/Kg	
	OCDF	JB	10.6	10.8	PQL	ng/Kg	
SL-204-SA5A-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JBQ	0.369	5.60	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JBQ	0.105	5.60	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.0835	5.60	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0393	5.60	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0510	5.60	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.0651	5.60	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0323	5.60	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDD	JB	0.0713	5.60	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JQ	0.0656	5.60	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0396	5.60	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0997	5.60	PQL	ng/Kg	
	OCDD	JB	0.962	11.2	PQL	ng/Kg	
	OCDF	JBQ	0.122	11.2	PQL	ng/Kg	
SL-205-SA5A-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JB	0.830	5.63	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JBQ	0.185	5.63	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0538	5.63	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0429	5.63	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0195	5.63	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.0590	5.63	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	J	0.0420	5.63	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDF	JQ	0.0137	5.63	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0459	5.63	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0590	5.63	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0251	1.13	PQL	ng/Kg	
	OCDD	JB	5.19	11.3	PQL	ng/Kg	
	OCDF	JBQ	0.311	11.3	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX070 **Laboratory: LL**

EDD Filename: DX070_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	*Analyte*	*Lab Qual*	*Result*	*Reporting Limit*	*RL Type*	*Units*	*Flag*
SL-205-SA5A-SB-8.0-9.0	1,2,3,4,6,7,8-HPCDD	JB	0.300	5.67	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.0864	5.67	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0623	5.67	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0252	5.67	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0334	5.67	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0156	5.67	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.0411	5.67	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JQ	0.0654	5.67	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JQ	0.0188	5.67	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0359	5.67	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0540	5.67	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.0182	1.13	PQL	ng/Kg	
	OCDD	JB	0.724	11.3	PQL	ng/Kg	
	OCDF	JBQ	0.196	11.3	PQL	ng/Kg	

Field Duplicate RPD Report

Lab Reporting Batch ID: DX070 **Laboratory: LL**

EDD Filename: PrepDX070_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 160.3M
Matrix: SO

Analyte	Concentration (%)		Sample RPD	eQAPP RPD	Flag
	SL-027-SA8N-SS-0.0-0.5	DUP02-SA8N-QC-041311			
MOISTURE	15.2	14.9	2		No Qualifiers Applied

Method: 1613B
Matrix: SO

Analyte	Concentration (ng/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-027-SA8N-SS-0.0-0.5	DUP02-SA8N-QC-041311			
1,2,3,4,6,7,8-HPCDD	104	67.7	42	50.00	No Qualifiers Applied
1,2,3,4,7,8-HxCDD	0.989	0.823	18	50.00	
1,2,3,4,7,8-HXCDF	2.17	1.59	31	50.00	
1,2,3,6,7,8-HXCDD	4.59	3.10	39	50.00	
1,2,3,6,7,8-HXCDF	1.09	0.665	48	50.00	
1,2,3,7,8,9-HXCDD	2.45	2.28	7	50.00	
1,2,3,7,8,9-HXCDF	0.275	0.270	2	50.00	
1,2,3,7,8-PECDD	1.27	1.18	7	50.00	
2,3,4,6,7,8-HXCDF	0.966	0.676	35	50.00	
2,3,4,7,8-PECDF	0.993	0.843	16	50.00	
2,3,7,8-TCDD	0.434	0.358	19	50.00	
2,3,7,8-TCDF	1.43	1.24	14	50.00	
OCDD	866	523	49	50.00	
1,2,3,4,6,7,8-HPCDF	24.4	7.56	105	50.00	J(all detects)
1,2,3,4,7,8,9-HPCDF	1.65	0.637	89	50.00	
1,2,3,7,8-PECDF	0.493	0.869	55	50.00	
OCDF	72.7	18.7	118	50.00	

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

LDC #: 25907L

VALIDATION FINDINGS WORKSHEET

Compound Quantitation and Reported CRQLs

Reviewer: OR

2nd Reviewer: [illegible]

METHOD: HRGC/HRMS Dioxins/Dibenzofurans (EPA Method 1613B)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were the correct internal standard (IS), quantitation ions and relative response factors (RRF) used to quantitate the compound?

Y N N/A Compound quantitation and CRQLs were adjusted to reflect all sample dilutions and dry weight factors (if necessary).

#	Date	Sample ID	Finding	~~Associated Samples~~	Qualifications
		SL-028-SPGN-SS-0.005	OCDD >Cal Range		J/P

LDC #: 25907L

VALIDATION FINDINGS WORKSHEET
Overall Assessment of Data

Reviewer: QR
2nd Reviewer: [illegible]

METHOD: HRGC/HRMS Dioxins/Dibenzofurans (EPA Method 1613B)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

All available information pertaining to the data were reviewed using professional judgement to compliment the determination of the overall quality of the data.

(Y) N N/A Was the overall quality and usability of the data acceptable?

#	Date	Sample ID	Finding	~~Associated Samples~~ column	Qualifications
		DUP02-SA8N-QC-041311	2,3,7,8-TCDF	SP2331	R/A
		SL-027-SA8N-SS-0.0-0.5			
		SL-028-SA8N-SS-0.0-0.5			
		SL-085-SA8N-SS-0.0-0.5			
		SL-132-SA8N-SS-0.0-0.5			

Comments:

SAMPLE DELIVERY GROUP

DX071

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
14-Apr-2011	SL-130-SA8N-SS-0.0-0.5	6259079	N	METHOD	1613B	III
14-Apr-2011	SL-040-SA8N-SS-0.0-0.5	6259072	N	METHOD	1613B	III
14-Apr-2011	SL-078-SA8N-SS-0.0-0.5	6259073	N	METHOD	1613B	III
14-Apr-2011	SL-134-SA8N-SS-0.0-0.5	6259083	N	METHOD	1613B	III
14-Apr-2011	SL-091-SA8N-SS-0.0-0.5	6259078	N	METHOD	1613B	III
14-Apr-2011	SL-133-SA8N-SS-0.0-0.5	6259080	N	METHOD	1613B	III
14-Apr-2011	SL-133-SA8N-SS-0.0-0.5MS	6259081	MS	METHOD	1613B	III
14-Apr-2011	SL-133-SA8N-SS-0.0-0.5MSD	6259082	MSD	METHOD	1613B	III
14-Apr-2011	SL-082-SA8N-SS-0.0-0.5	6259075	N	METHOD	1613B	III
14-Apr-2011	SL-089-SA8N-SS-0.0-0.5	6259076	N	METHOD	1613B	III
14-Apr-2011	SL-079-SA8N-SS-0.0-0.5	6259074	N	METHOD	1613B	III
14-Apr-2011	SL-090-SA8N-SS-0.0-0.5	6259077	N	METHOD	1613B	III
18-Apr-2011	SL-032-SA5A-SB-3.0-4.0	6261716	N	METHOD	1613B	III
18-Apr-2011	SL-254-SA5A-SB-2.5-3.5	6261719	N	METHOD	1613B	III
18-Apr-2011	EB13-SA5A-SB-041811	6261720	EB	METHOD	1613B	III
18-Apr-2011	SL-174-SA5A-SB-2.0-3.0	6261718	N	METHOD	1613B	III
18-Apr-2011	SL-172-SA5A-SB-4.0-5.0	6261717	N	METHOD	1613B	III
19-Apr-2011	SL-075-SA8N-SS-0.0-0.5	6262845	N	METHOD	1613B	III
19-Apr-2011	SL-077-SA8N-SS-0.0-0.5	6262847	N	METHOD	1613B	III
19-Apr-2011	SL-092-SA8N-SS-0.0-0.5	6262848	N	METHOD	1613B	III
19-Apr-2011	SL-093-SA8N-SS-0.0-0.5	6262849	N	METHOD	1613B	III
19-Apr-2011	SL-076-SA8N-SS-0.0-0.5	6262846	N	METHOD	1613B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DX071 **Laboratory: LL**

EDD Filename: PrepDX071_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** AQ

Sample ID: EB13-SA5A-SB-041811 **Collected:** 4/18/2011 1:30:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	2.73	JB	0.365	MDL	9.91	PQL	pg/L	U	B
1,2,3,4,6,7,8-HPCDF	0.790	JBQ	0.162	MDL	9.91	PQL	pg/L	U	B
1,2,3,4,7,8,9-HPCDF	0.349	JBQ	0.215	MDL	9.91	PQL	pg/L	U	B
1,2,3,4,7,8-HxCDD	0.294	JBQ	0.275	MDL	9.91	PQL	pg/L	U	B
1,2,3,4,7,8-HXCDF	0.204	JBQ	0.124	MDL	9.91	PQL	pg/L	U	B
1,2,3,6,7,8-HXCDD	0.360	JBQ	0.289	MDL	9.91	PQL	pg/L	U	B
1,2,3,6,7,8-HXCDF	0.380	JB	0.119	MDL	9.91	PQL	pg/L	U	B
1,2,3,7,8,9-HXCDF	0.666	JB	0.134	MDL	9.91	PQL	pg/L	U	B
1,2,3,7,8-PECDF	0.195	JBQ	0.137	MDL	9.91	PQL	pg/L	U	B
2,3,4,6,7,8-HXCDF	0.410	JBQ	0.115	MDL	9.91	PQL	pg/L	U	B
2,3,4,7,8-PECDF	0.364	JB	0.129	MDL	9.91	PQL	pg/L	U	B
2,3,7,8-TCDF	0.269	J	0.198	MDL	1.98	PQL	pg/L	J	Z
OCDD	3.83	JB	0.448	MDL	19.8	PQL	pg/L	U	B
OCDF	1.12	JBQ	0.449	MDL	19.8	PQL	pg/L	U	B

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-032-SA5A-SB-3.0-4.0 **Collected:** 4/18/2011 9:14:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	2.26	JB	0.0351	MDL	5.73	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.273	JB	0.0114	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0586	JBQ	0.0191	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.115	JB	0.0191	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.128	JBQ	0.0141	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.174	JB	0.0194	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0936	JB	0.0126	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.162	JB	0.0183	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0966	JBQ	0.0167	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.157	JB	0.0177	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.179	JB	0.00939	MDL	5.73	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0959	JBQ	0.0130	MDL	5.73	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.153	JB	0.00869	MDL	5.73	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX071 **Laboratory: LL**

EDD Filename: PrepDX071_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: **SL-032-SA5A-SB-3.0-4.0** ***Collected:*** **4/18/2011 9:14:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,3,7,8-TCDD	0.0247	JBQ	0.0168	MDL	1.15	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0554	JBQ	0.0148	MDL	1.15	PQL	ng/Kg	U	B
OCDF	0.630	JB	0.0277	MDL	11.5	PQL	ng/Kg	U	B

Sample ID: **SL-040-SA8N-SS-0.0-0.5** ***Collected:*** **4/14/2011 10:00:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	2.67	JB	0.0495	MDL	5.38	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.264	JB	0.0521	MDL	5.38	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.183	JB	0.0746	MDL	5.38	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.119	JBQ	0.0718	MDL	5.38	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	1.03	JB	0.0731	MDL	5.38	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.279	JB	0.0580	MDL	5.38	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.769	JB	0.0686	MDL	5.38	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.442	JB	0.0512	MDL	5.38	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.157	JB	0.0325	MDL	5.38	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.374	JB	0.0358	MDL	5.38	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.379	JB	0.0474	MDL	5.38	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.624	JB	0.0338	MDL	5.38	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0349	JQ	0.0227	MDL	1.08	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.109	JQ	0.0635	MDL	1.08	PQL	ng/Kg	J	Z
OCDF	7.48	JB	0.0562	MDL	10.8	PQL	ng/Kg	J	Z

Sample ID: **SL-075-SA8N-SS-0.0-0.5** ***Collected:*** **4/19/2011 8:45:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	2.06	JB	0.0403	MDL	5.81	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.648	JB	0.0135	MDL	5.81	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.0787	JBQ	0.0302	MDL	5.81	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0504	JB	0.0198	MDL	5.81	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.336	JB	0.0233	MDL	5.81	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.117	JBQ	0.0204	MDL	5.81	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0763	JB	0.0193	MDL	5.81	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.128	JB	0.0196	MDL	5.81	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.130	JBQ	0.0272	MDL	5.81	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX071 **Laboratory: LL**

EDD Filename: PrepDX071_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-075-SA8N-SS-0.0-0.5 **Collected:** 4/19/2011 8:45:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,7,8-PECDD	0.0405	JBQ	0.0184	MDL	5.81	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	1.31	JB	0.0300	MDL	5.81	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.0862	JB	0.0224	MDL	5.81	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.273	JB	0.0326	MDL	5.81	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0840	JBQ	0.0771	MDL	1.16	PQL	ng/Kg	U	B
OCDF	2.31	JB	0.0391	MDL	11.6	PQL	ng/Kg	J	Z

Sample ID: SL-076-SA8N-SS-0.0-0.5 **Collected:** 4/19/2011 2:05:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	0.898	JB	0.0225	MDL	5.58	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.140	JBQ	0.0453	MDL	5.58	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.172	JB	0.0460	MDL	5.58	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	1.75	JB	0.0515	MDL	5.58	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.458	JB	0.0470	MDL	5.58	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.191	JB	0.0424	MDL	5.58	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.722	JB	0.0435	MDL	5.58	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.441	JB	0.0559	MDL	5.58	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.0896	JBQ	0.0343	MDL	5.58	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.936	JB	0.0560	MDL	5.58	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.146	JB	0.0425	MDL	5.58	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	1.06	JB	0.0547	MDL	5.58	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	1.15	B	0.152	MDL	1.12	PQL	ng/Kg	J	Z

Sample ID: SL-077-SA8N-SS-0.0-0.5 **Collected:** 4/19/2011 10:30:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	1.38	JB	0.0718	MDL	6.33	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	1.13	JB	0.0942	MDL	6.33	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	2.35	JB	0.0879	MDL	6.33	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	2.90	JB	0.0963	MDL	6.33	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.781	JB	0.0672	MDL	6.33	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	1.87	JB	0.0920	MDL	6.33	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.553	JB	0.0707	MDL	6.33	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX071 **Laboratory: LL**

EDD Filename: PrepDX071_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-077-SA8N-SS-0.0-0.5 **Collected:** 4/19/2011 10:30:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,7,8-PECDD	0.537	JB	0.0479	MDL	6.33	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.290	JB	0.0569	MDL	6.33	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.920	JB	0.0565	MDL	6.33	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	1.12	JB	0.0568	MDL	6.33	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0544	JBQ	0.0189	MDL	1.27	PQL	ng/Kg	U	B

Sample ID: SL-078-SA8N-SS-0.0-0.5 **Collected:** 4/14/2011 11:10:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	1.14	JB	0.0454	MDL	5.75	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.345	JB	0.0197	MDL	5.75	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.376	JB	0.0249	MDL	5.75	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.106	JB	0.0214	MDL	5.75	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0915	JB	0.0205	MDL	5.75	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.124	JB	0.0206	MDL	5.75	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0857	JB	0.0243	MDL	5.75	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0403	JBQ	0.0255	MDL	5.75	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.746	JB	0.0334	MDL	5.75	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.0607	JBQ	0.0198	MDL	5.75	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.211	JB	0.0328	MDL	5.75	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.130	JQ	0.0809	MDL	1.15	PQL	ng/Kg	J	Z
OCDD	10.6	JB	0.0542	MDL	11.5	PQL	ng/Kg	J	Z
OCDF	0.681	JBQ	0.0513	MDL	11.5	PQL	ng/Kg	U	B

Sample ID: SL-079-SA8N-SS-0.0-0.5 **Collected:** 4/14/2011 4:30:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	3.29	JB	0.0289	MDL	6.03	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.324	JB	0.0318	MDL	6.03	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.401	JB	0.0839	MDL	6.03	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.901	JB	0.0724	MDL	6.03	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	1.48	JB	0.0821	MDL	6.03	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.509	JB	0.0559	MDL	6.03	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	1.44	JB	0.0755	MDL	6.03	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX071 **Laboratory: LL**

EDD Filename: PrepDX071_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-079-SA8N-SS-0.0-0.5 **Collected:** 4/14/2011 4:30:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,7,8,9-HXCDF	0.785	JB	0.0481	MDL	6.03	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.350	JBQ	0.0386	MDL	6.03	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.610	JBQ	0.0358	MDL	6.03	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.535	JB	0.0450	MDL	6.03	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	1.15	JB	0.0368	MDL	6.03	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0453	J	0.0196	MDL	1.21	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.733	JQ	0.0874	MDL	1.21	PQL	ng/Kg	J	Z
OCDF	6.41	JB	0.0398	MDL	12.1	PQL	ng/Kg	J	Z

Sample ID: SL-082-SA8N-SS-0.0-0.5 **Collected:** 4/14/2011 3:35:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	3.31	JB	0.0287	MDL	5.51	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.380	JBQ	0.0345	MDL	5.51	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.303	JB	0.0769	MDL	5.51	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	3.63	JB	0.113	MDL	5.51	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	1.65	JB	0.0778	MDL	5.51	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.931	JB	0.0839	MDL	5.51	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	2.01	JB	0.0724	MDL	5.51	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.927	JB	0.0787	MDL	5.51	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.341	JB	0.0532	MDL	5.51	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.571	JB	0.0673	MDL	5.51	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	1.83	JB	0.0972	MDL	5.51	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0262	JQ	0.0233	MDL	1.10	PQL	ng/Kg	J	Z
OCDF	4.86	JB	0.0360	MDL	11.0	PQL	ng/Kg	J	Z

Sample ID: SL-089-SA8N-SS-0.0-0.5 **Collected:** 4/14/2011 4:10:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	4.15	JB	0.0427	MDL	5.83	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.653	JB	0.0233	MDL	5.83	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.0753	JBQ	0.0293	MDL	5.83	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0596	JB	0.0391	MDL	5.83	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0678	JBQ	0.0358	MDL	5.83	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX071 **Laboratory: LL**

EDD Filename: PrepDX071_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B ***Matrix:*** SO

Sample ID: SL-089-SA8N-SS-0.0-0.5 ***Collected:*** 4/14/2011 4:10:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,6,7,8-HXCDD	0.810	JB	0.0392	MDL	5.83	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.160	JBQ	0.0262	MDL	5.83	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	1.13	JB	0.0360	MDL	5.83	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	1.01	JB	0.0258	MDL	5.83	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.127	JB	0.0248	MDL	5.83	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.250	JB	0.0184	MDL	5.83	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.154	JB	0.0219	MDL	5.83	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.219	JB	0.0184	MDL	5.83	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0753	JQ	0.0281	MDL	1.17	PQL	ng/Kg	J	Z
OCDF	1.18	JB	0.0352	MDL	11.7	PQL	ng/Kg	J	Z

Sample ID: SL-090-SA8N-SS-0.0-0.5 ***Collected:*** 4/14/2011 4:45:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	2.43	JB	0.0370	MDL	5.91	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.132	JB	0.0269	MDL	5.91	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.144	JBQ	0.0457	MDL	5.91	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.146	JB	0.0534	MDL	5.91	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	1.28	JB	0.0400	MDL	5.91	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.259	JB	0.0372	MDL	5.91	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	1.52	JB	0.0346	MDL	5.91	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.798	JB	0.0233	MDL	5.91	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.217	JBQ	0.0251	MDL	5.91	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.247	JBQ	0.0160	MDL	5.91	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.208	JB	0.0200	MDL	5.91	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.395	JB	0.0167	MDL	5.91	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0196	J	0.0134	MDL	1.18	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.172	JQ	0.0338	MDL	1.18	PQL	ng/Kg	J	Z
OCDF	3.33	JB	0.0219	MDL	11.8	PQL	ng/Kg	J	Z

Sample ID: SL-091-SA8N-SS-0.0-0.5 ***Collected:*** 4/14/2011 2:50:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	1.97	JB	0.0438	MDL	5.94	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.191	JBQ	0.0305	MDL	5.94	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX071 **Laboratory: LL**

EDD Filename: PrepDX071_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-091-SA8N-SS-0.0-0.5 **Collected:** 4/14/2011 2:50:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8-HxCDD	0.186	JBQ	0.0749	MDL	5.94	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	1.88	JB	0.118	MDL	5.94	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.898	JB	0.0662	MDL	5.94	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.313	JB	0.0823	MDL	5.94	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.977	JB	0.0511	MDL	5.94	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.462	JB	0.0470	MDL	5.94	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.166	JBQ	0.0271	MDL	5.94	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	1.59	JB	0.0465	MDL	5.94	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.370	JB	0.0408	MDL	5.94	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	1.18	JB	0.0532	MDL	5.94	PQL	ng/Kg	J	Z
OCDF	3.22	JB	0.0415	MDL	11.9	PQL	ng/Kg	J	Z

Sample ID: SL-092-SA8N-SS-0.0-0.5 **Collected:** 4/19/2011 1:35:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	2.82	JB	0.0382	MDL	5.57	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.734	JB	0.0184	MDL	5.57	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.0930	JB	0.0372	MDL	5.57	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0858	JB	0.0415	MDL	5.57	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.483	JB	0.0372	MDL	5.57	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.519	JB	0.0434	MDL	5.57	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.171	JBQ	0.0323	MDL	5.57	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.715	JBQ	0.0414	MDL	5.57	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.295	JB	0.0436	MDL	5.57	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.138	JBQ	0.0251	MDL	5.57	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.462	JB	0.0357	MDL	5.57	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.242	JB	0.0345	MDL	5.57	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.709	JB	0.0356	MDL	5.57	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.457	JB	0.0813	MDL	1.11	PQL	ng/Kg	J	Z
OCDF	1.25	JBQ	0.0427	MDL	11.1	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX071 **Laboratory: LL**

EDD Filename: PrepDX071_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B *Matrix:* SO

Sample ID: SL-093-SA8N-SS-0.0-0.5 *Collected:* 4/19/2011 1:55:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	5.39	JB	0.0345	MDL	5.65	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	1.42	JB	0.0166	MDL	5.65	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.159	JBQ	0.0334	MDL	5.65	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.158	JB	0.0505	MDL	5.65	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	1.32	JB	0.0561	MDL	5.65	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.859	JB	0.0520	MDL	5.65	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.464	JB	0.0470	MDL	5.65	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.898	JB	0.0494	MDL	5.65	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.307	JB	0.0647	MDL	5.65	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.274	JB	0.0462	MDL	5.65	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	2.64	JB	0.0603	MDL	5.65	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.431	JB	0.0514	MDL	5.65	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	1.79	JB	0.0593	MDL	5.65	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0429	JBQ	0.0208	MDL	1.13	PQL	ng/Kg	U	B
OCDF	2.52	JB	0.0355	MDL	11.3	PQL	ng/Kg	J	Z

Sample ID: SL-130-SA8N-SS-0.0-0.5 *Collected:* 4/14/2011 9:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	1.92	JB	0.0383	MDL	5.85	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.811	JB	0.0775	MDL	5.85	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	2.41	JB	0.0907	MDL	5.85	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	4.32	JB	0.0761	MDL	5.85	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.782	JB	0.0709	MDL	5.85	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	1.55	JB	0.0682	MDL	5.85	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	1.21	JB	0.0535	MDL	5.85	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.388	JB	0.0392	MDL	5.85	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	1.95	JB	0.0577	MDL	5.85	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	1.08	JB	0.0489	MDL	5.85	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	1.02	JB	0.0539	MDL	5.85	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0931	JQ	0.0168	MDL	1.17	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	1.05	J	0.167	MDL	1.17	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX071 **Laboratory: LL**

EDD Filename: PrepDX071_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-133-SA8N-SS-0.0-0.5 **Collected:** 4/14/2011 3:20:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	1.04	JB	0.0550	MDL	5.83	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.857	JB	0.0882	MDL	5.83	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	4.98	JB	0.0937	MDL	5.83	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	2.13	JB	0.0912	MDL	5.83	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	1.36	J	0.0883	MDL	5.83	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	1.64	JB	0.0869	MDL	5.83	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	1.17	JB	0.0993	MDL	5.83	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.699	JB	0.111	MDL	5.83	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	3.96	JB	0.198	MDL	5.83	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	1.40	JB	0.0872	MDL	5.83	PQL	ng/Kg	J	Z
OCDD	493	B	0.0722	MDL	11.7	PQL	ng/Kg	J	Q, Q

Sample ID: SL-134-SA8N-SS-0.0-0.5 **Collected:** 4/14/2011 2:05:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	5.58	JB	0.0482	MDL	5.61	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.632	JB	0.0498	MDL	5.61	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.425	JB	0.0797	MDL	5.61	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	1.88	JB	0.117	MDL	5.61	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	1.70	JB	0.0776	MDL	5.61	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.608	JB	0.0854	MDL	5.61	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	1.89	JB	0.0694	MDL	5.61	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	1.04	JB	0.0661	MDL	5.61	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.343	JBQ	0.0412	MDL	5.61	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	1.00	JB	0.0485	MDL	5.61	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.564	JB	0.0579	MDL	5.61	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.800	JB	0.0465	MDL	5.61	PQL	ng/Kg	J	Z
OCDF	10.1	JB	0.0463	MDL	11.2	PQL	ng/Kg	J	Z

Sample ID: SL-172-SA5A-SB-4.0-5.0 **Collected:** 4/18/2011 3:45:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.442	JBQ	0.0224	MDL	6.00	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX071 **Laboratory: LL**

EDD Filename: PrepDX071_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B *Matrix:* SO

Sample ID: SL-172-SA5A-SB-4.0-5.0 *Collected:* 4/18/2011 3:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	0.194	JB	0.00998	MDL	6.00	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.188	JB	0.0191	MDL	6.00	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.139	JB	0.0195	MDL	6.00	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.247	JB	0.0175	MDL	6.00	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.209	JB	0.0202	MDL	6.00	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.206	JBQ	0.0151	MDL	6.00	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.207	JB	0.0195	MDL	6.00	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.254	JB	0.0202	MDL	6.00	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.243	JBQ	0.0160	MDL	6.00	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.245	JB	0.00793	MDL	6.00	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.193	JB	0.0169	MDL	6.00	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.289	JB	0.00853	MDL	6.00	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0920	JBQ	0.0166	MDL	1.20	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0648	JBQ	0.0120	MDL	1.20	PQL	ng/Kg	U	B
OCDD	1.37	JB	0.0260	MDL	12.0	PQL	ng/Kg	U	B
OCDF	0.280	JB	0.0237	MDL	12.0	PQL	ng/Kg	U	B

Sample ID: SL-174-SA5A-SB-2.0-3.0 *Collected:* 4/18/2011 3:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.206	JB	0.0158	MDL	5.50	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.0984	JBQ	0.00501	MDL	5.50	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0695	JBQ	0.0105	MDL	5.50	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0202	JBQ	0.0131	MDL	5.50	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0393	JBQ	0.00934	MDL	5.50	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0701	JB	0.0135	MDL	5.50	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0602	JB	0.00779	MDL	5.50	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0863	JB	0.0132	MDL	5.50	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0851	JB	0.0109	MDL	5.50	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0432	JBQ	0.0126	MDL	5.50	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0405	JBQ	0.00634	MDL	5.50	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0459	JBQ	0.00879	MDL	5.50	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0699	JB	0.00701	MDL	5.50	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0179	JBQ	0.0148	MDL	1.10	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX071 **Laboratory: LL**

EDD Filename: PrepDX071_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B ***Matrix:*** SO

Sample ID: SL-174-SA5A-SB-2.0-3.0 ***Collected:*** 4/18/2011 3:05:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,3,7,8-TCDF	0.0245	JBQ	0.0116	MDL	1.10	PQL	ng/Kg	U	B
OCDD	0.459	JB	0.0196	MDL	11.0	PQL	ng/Kg	U	B
OCDF	0.148	JBQ	0.0240	MDL	11.0	PQL	ng/Kg	U	B

Sample ID: SL-254-SA5A-SB-2.5-3.5 ***Collected:*** 4/18/2011 12:45:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.298	JBQ	0.0195	MDL	5.54	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.0799	JBQ	0.00624	MDL	5.54	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0615	JBQ	0.0139	MDL	5.54	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0344	JB	0.00914	MDL	5.54	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0294	JB	0.0134	MDL	5.54	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0179	JB	0.00758	MDL	5.54	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0584	JBQ	0.0126	MDL	5.54	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0546	JB	0.0111	MDL	5.54	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0241	JB	0.00814	MDL	5.54	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0276	JBQ	0.00825	MDL	5.54	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0414	JBQ	0.00825	MDL	5.54	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0237	JBQ	0.0176	MDL	1.11	PQL	ng/Kg	U	B
OCDD	2.03	JB	0.0278	MDL	11.1	PQL	ng/Kg	U	B
OCDF	0.157	JBQ	0.0254	MDL	11.1	PQL	ng/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DX071 **Laboratory: LL**

EDD Filename: PrepDX071_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
	Sampling to Leaching Estimation
	Sampling to Leaching Rejection
*#	Professional Judgment
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Continuing Calibration Verification Percent Recovery Lower Estimation
C	Continuing Calibration Verification Percent Recovery Lower Rejection
C	Continuing Calibration Verification Percent Recovery Upper Estimation
C	Continuing Calibration Verification Percent Recovery Upper Rejection
C	Continuing Calibration Verification Relative Response Factor
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Relative Response Factor
C	Initial Calibration Verification Correlation Coefficient

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DX071 **Laboratory: LL**

EDD Filename: PrepDX071_v1 **eQAPP Name: CDM_SSFL_110509**

C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Verification Percent Recovery Lower Estimation
C	Initial Calibration Verification Percent Recovery Lower Rejection
C	Initial Calibration Verification Percent Recovery Upper Estimation
C	Initial Calibration Verification Percent Recovery Upper Rejection
C	Initial Calibration Verification Relative Response Factor
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Laboratory Triplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination
F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DX071 **Laboratory: LL**

EDD Filename: PrepDX071_v1 **eQAPP Name: CDM_SSFL_110509**

L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Laboratory Triplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Q	Matrix Spike Upper Rejection
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control Outlier Reports

DX071

Method Blank Outlier Report

Lab Reporting Batch ID: DX071 **Laboratory: LL**

EDD Filename: PrepDX071_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **AQ**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLK1220B371437	5/4/2011 2:37:00 PM	1,2,3,4,6,7,8-HPCDD	4.37 pg/L	EB13-SA5A-SB-041811
		1,2,3,4,6,7,8-HPCDF	1.81 pg/L	
		1,2,3,4,7,8,9-HPCDF	0.983 pg/L	
		1,2,3,4,7,8-HxCDD	0.811 pg/L	
		1,2,3,4,7,8-HXCDF	0.812 pg/L	
		1,2,3,6,7,8-HXCDD	0.674 pg/L	
		1,2,3,6,7,8-HXCDF	0.817 pg/L	
		1,2,3,7,8,9-HXCDD	1.07 pg/L	
		1,2,3,7,8,9-HXCDF	0.969 pg/L	
		1,2,3,7,8-PECDD	0.428 pg/L	
		1,2,3,7,8-PECDF	0.992 pg/L	
		2,3,4,6,7,8-HXCDF	0.470 pg/L	
		2,3,4,7,8-PECDF	0.699 pg/L	
		2,3,7,8-TCDD	0.371 pg/L	
		OCDD	7.09 pg/L	
		OCDF	2.65 pg/L	

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
EB13-SA5A-SB-041811(RES)	1,2,3,4,6,7,8-HPCDD	2.73 pg/L	2.73U pg/L
EB13-SA5A-SB-041811(RES)	1,2,3,4,6,7,8-HPCDF	0.790 pg/L	0.790U pg/L
EB13-SA5A-SB-041811(RES)	1,2,3,4,7,8,9-HPCDF	0.349 pg/L	0.349U pg/L
EB13-SA5A-SB-041811(RES)	1,2,3,4,7,8-HxCDD	0.294 pg/L	0.294U pg/L
EB13-SA5A-SB-041811(RES)	1,2,3,4,7,8-HXCDF	0.204 pg/L	0.204U pg/L
EB13-SA5A-SB-041811(RES)	1,2,3,6,7,8-HXCDD	0.360 pg/L	0.360U pg/L
EB13-SA5A-SB-041811(RES)	1,2,3,6,7,8-HXCDF	0.380 pg/L	0.380U pg/L
EB13-SA5A-SB-041811(RES)	1,2,3,7,8,9-HXCDF	0.666 pg/L	0.666U pg/L
EB13-SA5A-SB-041811(RES)	1,2,3,7,8-PECDF	0.195 pg/L	0.195U pg/L
EB13-SA5A-SB-041811(RES)	2,3,4,6,7,8-HXCDF	0.410 pg/L	0.410U pg/L
EB13-SA5A-SB-041811(RES)	2,3,4,7,8-PECDF	0.364 pg/L	0.364U pg/L
EB13-SA5A-SB-041811(RES)	OCDD	3.83 pg/L	3.83U pg/L
EB13-SA5A-SB-041811(RES)	OCDF	1.12 pg/L	1.12U pg/L

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLK1080B370308	4/29/2011 3:08:00 AM	2,3,7,8-TCDF	0.0304 ng/Kg	SL-040-SA8N-SS-0.0-0.5
				SL-078-SA8N-SS-0.0-0.5
				SL-079-SA8N-SS-0.0-0.5
				SL-082-SA8N-SS-0.0-0.5
				SL-089-SA8N-SS-0.0-0.5
				SL-090-SA8N-SS-0.0-0.5
				SL-091-SA8N-SS-0.0-0.5
				SL-130-SA8N-SS-0.0-0.5
				SL-134-SA8N-SS-0.0-0.5

Method Blank Outlier Report

Lab Reporting Batch ID: DX071 **Laboratory: LL**

EDD Filename: PrepDX071_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLK1080B371740	4/22/2011 5:40:00 PM	1,2,3,4,6,7,8-HPCDD	0.251 ng/Kg	SL-040-SA8N-SS-0.0-0.5
		1,2,3,4,6,7,8-HPCDF	0.0712 ng/Kg	SL-078-SA8N-SS-0.0-0.5
		1,2,3,4,7,8,9-HPCDF	0.0462 ng/Kg	SL-079-SA8N-SS-0.0-0.5
		1,2,3,4,7,8-HxCDD	0.0149 ng/Kg	SL-082-SA8N-SS-0.0-0.5
		1,2,3,4,7,8-HXCDF	0.0294 ng/Kg	SL-089-SA8N-SS-0.0-0.5
		1,2,3,6,7,8-HXCDD	0.0308 ng/Kg	SL-090-SA8N-SS-0.0-0.5
		1,2,3,6,7,8-HXCDF	0.0156 ng/Kg	SL-091-SA8N-SS-0.0-0.5
		1,2,3,7,8,9-HXCDD	0.0253 ng/Kg	SL-130-SA8N-SS-0.0-0.5
		1,2,3,7,8,9-HXCDF	0.0308 ng/Kg	SL-134-SA8N-SS-0.0-0.5
		1,2,3,7,8-PECDD	0.0250 ng/Kg	
		1,2,3,7,8-PECDF	0.0222 ng/Kg	
		2,3,4,6,7,8-HXCDF	0.0256 ng/Kg	
		2,3,4,7,8-PECDF	0.0491 ng/Kg	
		OCDD	0.502 ng/Kg	
		OCDF	0.149 ng/Kg	
BLK1150B371141	4/28/2011 11:41:00 AM	1,2,3,4,6,7,8-HPCDD	0.231 ng/Kg	SL-032-SA5A-SB-3.0-4.0
		1,2,3,4,6,7,8-HPCDF	0.126 ng/Kg	SL-075-SA8N-SS-0.0-0.5
		1,2,3,4,7,8,9-HPCDF	0.0849 ng/Kg	SL-076-SA8N-SS-0.0-0.5
		1,2,3,4,7,8-HxCDD	0.0421 ng/Kg	SL-077-SA8N-SS-0.0-0.5
		1,2,3,4,7,8-HXCDF	0.0469 ng/Kg	SL-092-SA8N-SS-0.0-0.5
		1,2,3,6,7,8-HXCDD	0.0348 ng/Kg	SL-093-SA8N-SS-0.0-0.5
		1,2,3,6,7,8-HXCDF	0.0401 ng/Kg	SL-172-SA5A-SB-4.0-5.0
		1,2,3,7,8,9-HXCDD	0.0543 ng/Kg	SL-174-SA5A-SB-2.0-3.0
		1,2,3,7,8,9-HXCDF	0.0854 ng/Kg	SL-254-SA5A-SB-2.5-3.5
		1,2,3,7,8-PECDD	0.0571 ng/Kg	
		1,2,3,7,8-PECDF	0.0538 ng/Kg	
		2,3,4,6,7,8-HXCDF	0.0651 ng/Kg	
		2,3,4,7,8-PECDF	0.0593 ng/Kg	
		2,3,7,8-TCDD	0.0462 ng/Kg	
		2,3,7,8-TCDF	0.0227 ng/Kg	
		OCDD	0.458 ng/Kg	
		OCDF	0.215 ng/Kg	
BLK1150B371402	5/9/2011 2:02:00 PM	2,3,7,8-TCDF	0.0223 ng/Kg	SL-032-SA5A-SB-3.0-4.0
				SL-075-SA8N-SS-0.0-0.5
				SL-076-SA8N-SS-0.0-0.5
				SL-077-SA8N-SS-0.0-0.5
				SL-092-SA8N-SS-0.0-0.5
				SL-093-SA8N-SS-0.0-0.5
				SL-172-SA5A-SB-4.0-5.0
				SL-174-SA5A-SB-2.0-3.0
				SL-254-SA5A-SB-2.5-3.5
BLK1220B370536	5/10/2011 5:36:00 AM	2,3,7,8-TCDF	0.0340 ng/Kg	SL-133-SA8N-SS-0.0-0.5
BLK1220B371838	5/4/2011 6:38:00 PM	1,2,3,4,6,7,8-HPCDD	0.160 ng/Kg	SL-133-SA8N-SS-0.0-0.5
		1,2,3,4,6,7,8-HPCDF	0.0552 ng/Kg	
		1,2,3,4,7,8,9-HPCDF	0.0327 ng/Kg	
		1,2,3,4,7,8-HxCDD	0.0176 ng/Kg	
		1,2,3,4,7,8-HXCDF	0.0299 ng/Kg	
		1,2,3,6,7,8-HXCDD	0.0563 ng/Kg	
		1,2,3,7,8,9-HXCDD	0.0395 ng/Kg	
		1,2,3,7,8,9-HXCDF	0.0587 ng/Kg	
		1,2,3,7,8-PECDD	0.0291 ng/Kg	
		1,2,3,7,8-PECDF	0.0402 ng/Kg	
		2,3,4,6,7,8-HXCDF	0.0330 ng/Kg	
		2,3,4,7,8-PECDF	0.0477 ng/Kg	
		2,3,7,8-TCDF	0.0138 ng/Kg	
		OCDD	0.283 ng/Kg	
		OCDF	0.0855 ng/Kg	

Method Blank Outlier Report

Lab Reporting Batch ID: DX071 **Laboratory: LL**

EDD Filename: PrepDX071_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-032-SA5A-SB-3.0-4.0(RES)	1,2,3,4,6,7,8-HPCDF	0.273 ng/Kg	0.273U ng/Kg
SL-032-SA5A-SB-3.0-4.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0586 ng/Kg	0.0586U ng/Kg
SL-032-SA5A-SB-3.0-4.0(RES)	1,2,3,4,7,8-HxCDD	0.115 ng/Kg	0.115U ng/Kg
SL-032-SA5A-SB-3.0-4.0(RES)	1,2,3,4,7,8-HXCDF	0.128 ng/Kg	0.128U ng/Kg
SL-032-SA5A-SB-3.0-4.0(RES)	1,2,3,6,7,8-HXCDD	0.174 ng/Kg	0.174U ng/Kg
SL-032-SA5A-SB-3.0-4.0(RES)	1,2,3,6,7,8-HXCDF	0.0936 ng/Kg	0.0936U ng/Kg
SL-032-SA5A-SB-3.0-4.0(RES)	1,2,3,7,8,9-HXCDD	0.162 ng/Kg	0.162U ng/Kg
SL-032-SA5A-SB-3.0-4.0(RES)	1,2,3,7,8,9-HXCDF	0.0966 ng/Kg	0.0966U ng/Kg
SL-032-SA5A-SB-3.0-4.0(RES)	1,2,3,7,8-PECDD	0.157 ng/Kg	0.157U ng/Kg
SL-032-SA5A-SB-3.0-4.0(RES)	1,2,3,7,8-PECDF	0.179 ng/Kg	0.179U ng/Kg
SL-032-SA5A-SB-3.0-4.0(RES)	2,3,4,6,7,8-HXCDF	0.0959 ng/Kg	0.0959U ng/Kg
SL-032-SA5A-SB-3.0-4.0(RES)	2,3,4,7,8-PECDF	0.153 ng/Kg	0.153U ng/Kg
SL-032-SA5A-SB-3.0-4.0(RES)	2,3,7,8-TCDD	0.0247 ng/Kg	0.0247U ng/Kg
SL-032-SA5A-SB-3.0-4.0(RES)	2,3,7,8-TCDF	0.0554 ng/Kg	0.0554U ng/Kg
SL-032-SA5A-SB-3.0-4.0(RES)	OCDF	0.630 ng/Kg	0.630U ng/Kg
SL-040-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.119 ng/Kg	0.119U ng/Kg
SL-075-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.0787 ng/Kg	0.0787U ng/Kg
SL-075-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.0504 ng/Kg	0.0504U ng/Kg
SL-075-SA8N-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDD	0.117 ng/Kg	0.117U ng/Kg
SL-075-SA8N-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.0763 ng/Kg	0.0763U ng/Kg
SL-075-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDD	0.128 ng/Kg	0.128U ng/Kg
SL-075-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.130 ng/Kg	0.130U ng/Kg
SL-075-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.0405 ng/Kg	0.0405U ng/Kg
SL-075-SA8N-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.0862 ng/Kg	0.0862U ng/Kg
SL-075-SA8N-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.273 ng/Kg	0.273U ng/Kg
SL-075-SA8N-SS-0.0-0.5(RES)	2,3,7,8-TCDF	0.0840 ng/Kg	0.0840U ng/Kg
SL-076-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.140 ng/Kg	0.140U ng/Kg
SL-076-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.172 ng/Kg	0.172U ng/Kg
SL-076-SA8N-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.191 ng/Kg	0.191U ng/Kg
SL-076-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.0896 ng/Kg	0.0896U ng/Kg
SL-076-SA8N-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.146 ng/Kg	0.146U ng/Kg
SL-077-SA8N-SS-0.0-0.5(RES)	2,3,7,8-TCDD	0.0544 ng/Kg	0.0544U ng/Kg
SL-078-SA8N-SS-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDD	1.14 ng/Kg	1.14U ng/Kg
SL-078-SA8N-SS-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDF	0.345 ng/Kg	0.345U ng/Kg
SL-078-SA8N-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDD	0.106 ng/Kg	0.106U ng/Kg
SL-078-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDD	0.124 ng/Kg	0.124U ng/Kg
SL-078-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.0857 ng/Kg	0.0857U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX071 **Laboratory: LL**

EDD Filename: PrepDX071_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-078-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.0403 ng/Kg	0.0403U ng/Kg
SL-078-SA8N-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.0607 ng/Kg	0.0607U ng/Kg
SL-078-SA8N-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.211 ng/Kg	0.211U ng/Kg
SL-078-SA8N-SS-0.0-0.5(RES)	OCDF	0.681 ng/Kg	0.681U ng/Kg
SL-089-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.0753 ng/Kg	0.0753U ng/Kg
SL-089-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.0596 ng/Kg	0.0596U ng/Kg
SL-089-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.0678 ng/Kg	0.0678U ng/Kg
SL-089-SA8N-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.219 ng/Kg	0.219U ng/Kg
SL-090-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.132 ng/Kg	0.132U ng/Kg
SL-090-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.146 ng/Kg	0.146U ng/Kg
SL-091-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.191 ng/Kg	0.191U ng/Kg
SL-092-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.0930 ng/Kg	0.0930U ng/Kg
SL-092-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.0858 ng/Kg	0.0858U ng/Kg
SL-092-SA8N-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.171 ng/Kg	0.171U ng/Kg
SL-092-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.295 ng/Kg	0.295U ng/Kg
SL-092-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.138 ng/Kg	0.138U ng/Kg
SL-092-SA8N-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.242 ng/Kg	0.242U ng/Kg
SL-093-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.159 ng/Kg	0.159U ng/Kg
SL-093-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.158 ng/Kg	0.158U ng/Kg
SL-093-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.307 ng/Kg	0.307U ng/Kg
SL-093-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.274 ng/Kg	0.274U ng/Kg
SL-093-SA8N-SS-0.0-0.5(RES)	2,3,7,8-TCDD	0.0429 ng/Kg	0.0429U ng/Kg
SL-172-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.442 ng/Kg	0.442U ng/Kg
SL-172-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.194 ng/Kg	0.194U ng/Kg
SL-172-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.188 ng/Kg	0.188U ng/Kg
SL-172-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HxCDD	0.139 ng/Kg	0.139U ng/Kg
SL-172-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDD	0.207 ng/Kg	0.207U ng/Kg
SL-172-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.254 ng/Kg	0.254U ng/Kg
SL-172-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDD	0.243 ng/Kg	0.243U ng/Kg
SL-172-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.245 ng/Kg	0.245U ng/Kg
SL-172-SA5A-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.193 ng/Kg	0.193U ng/Kg
SL-172-SA5A-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.289 ng/Kg	0.289U ng/Kg
SL-172-SA5A-SB-4.0-5.0(RES)	2,3,7,8-TCDD	0.0920 ng/Kg	0.0920U ng/Kg
SL-172-SA5A-SB-4.0-5.0(RES)	2,3,7,8-TCDF	0.0648 ng/Kg	0.0648U ng/Kg
SL-172-SA5A-SB-4.0-5.0(RES)	OCDD	1.37 ng/Kg	1.37U ng/Kg
SL-172-SA5A-SB-4.0-5.0(RES)	OCDF	0.280 ng/Kg	0.280U ng/Kg
SL-174-SA5A-SB-2.0-3.0(RES)	1,2,3,4,6,7,8-HPCDD	0.206 ng/Kg	0.206U ng/Kg

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Method Blank Outlier Report

Lab Reporting Batch ID: DX071 **Laboratory: LL**

EDD Filename: PrepDX071_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-174-SA5A-SB-2.0-3.0(RES)	1,2,3,4,6,7,8-HPCDF	0.0984 ng/Kg	0.0984U ng/Kg
SL-174-SA5A-SB-2.0-3.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0695 ng/Kg	0.0695U ng/Kg
SL-174-SA5A-SB-2.0-3.0(RES)	1,2,3,4,7,8-HxCDD	0.0202 ng/Kg	0.0202U ng/Kg
SL-174-SA5A-SB-2.0-3.0(RES)	1,2,3,4,7,8-HXCDF	0.0393 ng/Kg	0.0393U ng/Kg
SL-174-SA5A-SB-2.0-3.0(RES)	1,2,3,6,7,8-HXCDD	0.0701 ng/Kg	0.0701U ng/Kg
SL-174-SA5A-SB-2.0-3.0(RES)	1,2,3,6,7,8-HXCDF	0.0602 ng/Kg	0.0602U ng/Kg
SL-174-SA5A-SB-2.0-3.0(RES)	1,2,3,7,8,9-HXCDD	0.0863 ng/Kg	0.0863U ng/Kg
SL-174-SA5A-SB-2.0-3.0(RES)	1,2,3,7,8,9-HXCDF	0.0851 ng/Kg	0.0851U ng/Kg
SL-174-SA5A-SB-2.0-3.0(RES)	1,2,3,7,8-PECDD	0.0432 ng/Kg	0.0432U ng/Kg
SL-174-SA5A-SB-2.0-3.0(RES)	1,2,3,7,8-PECDF	0.0405 ng/Kg	0.0405U ng/Kg
SL-174-SA5A-SB-2.0-3.0(RES)	2,3,4,6,7,8-HXCDF	0.0459 ng/Kg	0.0459U ng/Kg
SL-174-SA5A-SB-2.0-3.0(RES)	2,3,4,7,8-PECDF	0.0699 ng/Kg	0.0699U ng/Kg
SL-174-SA5A-SB-2.0-3.0(RES)	2,3,7,8-TCDD	0.0179 ng/Kg	0.0179U ng/Kg
SL-174-SA5A-SB-2.0-3.0(RES)	2,3,7,8-TCDF	0.0245 ng/Kg	0.0245U ng/Kg
SL-174-SA5A-SB-2.0-3.0(RES)	OCDD	0.459 ng/Kg	0.459U ng/Kg
SL-174-SA5A-SB-2.0-3.0(RES)	OCDF	0.148 ng/Kg	0.148U ng/Kg
SL-254-SA5A-SB-2.5-3.5(RES)	1,2,3,4,6,7,8-HPCDD	0.298 ng/Kg	0.298U ng/Kg
SL-254-SA5A-SB-2.5-3.5(RES)	1,2,3,4,6,7,8-HPCDF	0.0799 ng/Kg	0.0799U ng/Kg
SL-254-SA5A-SB-2.5-3.5(RES)	1,2,3,4,7,8,9-HPCDF	0.0615 ng/Kg	0.0615U ng/Kg
SL-254-SA5A-SB-2.5-3.5(RES)	1,2,3,4,7,8-HXCDF	0.0344 ng/Kg	0.0344U ng/Kg
SL-254-SA5A-SB-2.5-3.5(RES)	1,2,3,6,7,8-HXCDD	0.0294 ng/Kg	0.0294U ng/Kg
SL-254-SA5A-SB-2.5-3.5(RES)	1,2,3,6,7,8-HXCDF	0.0179 ng/Kg	0.0179U ng/Kg
SL-254-SA5A-SB-2.5-3.5(RES)	1,2,3,7,8,9-HXCDD	0.0584 ng/Kg	0.0584U ng/Kg
SL-254-SA5A-SB-2.5-3.5(RES)	1,2,3,7,8,9-HXCDF	0.0546 ng/Kg	0.0546U ng/Kg
SL-254-SA5A-SB-2.5-3.5(RES)	1,2,3,7,8-PECDF	0.0241 ng/Kg	0.0241U ng/Kg
SL-254-SA5A-SB-2.5-3.5(RES)	2,3,4,6,7,8-HXCDF	0.0276 ng/Kg	0.0276U ng/Kg
SL-254-SA5A-SB-2.5-3.5(RES)	2,3,4,7,8-PECDF	0.0414 ng/Kg	0.0414U ng/Kg
SL-254-SA5A-SB-2.5-3.5(RES)	2,3,7,8-TCDD	0.0237 ng/Kg	0.0237U ng/Kg
SL-254-SA5A-SB-2.5-3.5(RES)	OCDD	2.03 ng/Kg	2.03U ng/Kg
SL-254-SA5A-SB-2.5-3.5(RES)	OCDF	0.157 ng/Kg	0.157U ng/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DX071 **Laboratory: LL**

EDD Filename: DX071_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-133-SA8N-SS-0.0-0.5MSD (SL-133-SA8N-SS-0.0-0.5)	OCDD	-	314	40.00-135.00	44 (20.00)	OCDD	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DX071 **Laboratory: LL**

EDD Filename: DX071_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1613B
Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB13-SA5A-SB-041811	1,2,3,4,6,7,8-HPCDD	JB	2.73	9.91	PQL	pg/L	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JBQ	0.790	9.91	PQL	pg/L	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.349	9.91	PQL	pg/L	
	1,2,3,4,7,8-HxCDD	JBQ	0.294	9.91	PQL	pg/L	
	1,2,3,4,7,8-HXCDF	JBQ	0.204	9.91	PQL	pg/L	
	1,2,3,6,7,8-HXCDD	JBQ	0.360	9.91	PQL	pg/L	
	1,2,3,6,7,8-HXCDF	JB	0.380	9.91	PQL	pg/L	
	1,2,3,7,8,9-HXCDF	JB	0.666	9.91	PQL	pg/L	
	1,2,3,7,8-PECDF	JBQ	0.195	9.91	PQL	pg/L	
	2,3,4,6,7,8-HXCDF	JBQ	0.410	9.91	PQL	pg/L	
	2,3,4,7,8-PECDF	JB	0.364	9.91	PQL	pg/L	
	2,3,7,8-TCDF	J	0.269	1.98	PQL	pg/L	
	OCDD	JB	3.83	19.8	PQL	pg/L	
	OCDF	JBQ	1.12	19.8	PQL	pg/L	

Method: 1613B
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-082-SA8N-SS-0.0-0.5	2,3,7,8-TCDF	B	16.4	1.10	PQL	ng/Kg	
SL-091-SA8N-SS-0.0-0.5	2,3,7,8-TCDF	B	3.88	1.19	PQL	ng/Kg	
SL-133-SA8N-SS-0.0-0.5	2,3,7,8-TCDF	B	5.78	1.17	PQL	ng/Kg	
SL-032-SA5A-SB-3.0-4.0	1,2,3,4,6,7,8-HPCDD	JB	2.26	5.73	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.273	5.73	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0586	5.73	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.115	5.73	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.128	5.73	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.174	5.73	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0936	5.73	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.162	5.73	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.0966	5.73	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.157	5.73	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.179	5.73	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0959	5.73	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.153	5.73	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0247	1.15	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.0554	1.15	PQL	ng/Kg	
	OCDF	JB	0.630	11.5	PQL	ng/Kg	
SL-040-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	2.67	5.38	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JB	0.264	5.38	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.183	5.38	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.119	5.38	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	1.03	5.38	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.279	5.38	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.769	5.38	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.442	5.38	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.157	5.38	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.374	5.38	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.379	5.38	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.624	5.38	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0349	1.08	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.109	1.08	PQL	ng/Kg	
	OCDF	JB	7.48	10.8	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX071 **Laboratory: LL**

EDD Filename: DX071_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-075-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDD	JB	2.06	5.81	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.648	5.81	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0787	5.81	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.0504	5.81	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.336	5.81	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.117	5.81	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0763	5.81	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.128	5.81	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.130	5.81	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0405	5.81	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	1.31	5.81	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.0862	5.81	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.273	5.81	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.0840	1.16	PQL	ng/Kg	
	OCDF	JB	2.31	11.6	PQL	ng/Kg	
SL-076-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	0.898	5.58	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JBQ	0.140	5.58	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.172	5.58	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	1.75	5.58	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.458	5.58	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.191	5.58	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.722	5.58	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.441	5.58	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0896	5.58	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.936	5.58	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.146	5.58	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	1.06	5.58	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.691	1.12	PQL	ng/Kg	
	OCDF	JB	1.60	11.2	PQL	ng/Kg	
SL-077-SA8N-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	1.38	6.33	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8-HxCDD	JB	1.13	6.33	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	2.35	6.33	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	2.90	6.33	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.781	6.33	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	1.87	6.33	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.553	6.33	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.537	6.33	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.290	6.33	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.920	6.33	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	1.12	6.33	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0544	1.27	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.754	1.27	PQL	ng/Kg	
SL-078-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDD	JB	1.14	5.75	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.345	5.75	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.376	5.75	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.106	5.75	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0915	5.75	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.124	5.75	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.0857	5.75	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0403	5.75	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.746	5.75	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0607	5.75	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.211	5.75	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.130	1.15	PQL	ng/Kg	
	OCDD	JB	10.6	11.5	PQL	ng/Kg	
	OCDF	JBQ	0.681	11.5	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX071 **Laboratory: LL**

EDD Filename: DX071_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-079-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	3.29	6.03	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.324	6.03	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.401	6.03	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.901	6.03	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	1.48	6.03	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.509	6.03	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	1.44	6.03	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.785	6.03	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.350	6.03	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.610	6.03	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.535	6.03	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	1.15	6.03	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.0453	1.21	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.733	1.21	PQL	ng/Kg	
	OCDF	JB	6.41	12.1	PQL	ng/Kg	
SL-082-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	3.31	5.51	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.380	5.51	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.303	5.51	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	3.63	5.51	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	1.65	5.51	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.931	5.51	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	2.01	5.51	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JB	0.927	5.51	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.341	5.51	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.571	5.51	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	1.83	5.51	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0262	1.10	PQL	ng/Kg	
	OCDF	JB	4.86	11.0	PQL	ng/Kg	
SL-089-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDD	JB	4.15	5.83	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.653	5.83	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0753	5.83	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.0596	5.83	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0678	5.83	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.810	5.83	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.160	5.83	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	1.13	5.83	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JB	1.01	5.83	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.127	5.83	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.250	5.83	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.154	5.83	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.219	5.83	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.0753	1.17	PQL	ng/Kg	
	OCDF	JB	1.18	11.7	PQL	ng/Kg	
SL-090-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	2.43	5.91	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.132	5.91	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.144	5.91	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.146	5.91	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	1.28	5.91	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.259	5.91	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	1.52	5.91	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.798	5.91	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.217	5.91	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.247	5.91	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.208	5.91	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.395	5.91	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.0196	1.18	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.172	1.18	PQL	ng/Kg	
	OCDF	JB	3.33	11.8	PQL	ng/Kg	

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Reporting Limit Outliers

Lab Reporting Batch ID: DX071 **Laboratory: LL**

EDD Filename: DX071_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-091-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	1.97	5.94	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.191	5.94	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.186	5.94	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	1.88	5.94	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.898	5.94	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.313	5.94	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.977	5.94	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JB	0.462	5.94	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.166	5.94	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	1.59	5.94	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.370	5.94	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	1.18	5.94	PQL	ng/Kg	
	OCDF	JB	3.22	11.9	PQL	ng/Kg	
SL-092-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDD	JB	2.82	5.57	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.734	5.57	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.0930	5.57	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.0858	5.57	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.483	5.57	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.519	5.57	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.171	5.57	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.715	5.57	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JB	0.295	5.57	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.138	5.57	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.462	5.57	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.242	5.57	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.709	5.57	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.457	1.11	PQL	ng/Kg	
	OCDF	JBQ	1.25	11.1	PQL	ng/Kg	
SL-093-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDD	JB	5.39	5.65	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	1.42	5.65	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.159	5.65	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.158	5.65	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	1.32	5.65	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.859	5.65	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.464	5.65	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.898	5.65	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.307	5.65	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	0.274	5.65	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	2.64	5.65	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.431	5.65	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	1.79	5.65	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0429	1.13	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.698	1.13	PQL	ng/Kg	
	OCDF	JB	2.52	11.3	PQL	ng/Kg	
SL-130-SA8N-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	1.92	5.85	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.811	5.85	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	2.41	5.85	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	4.32	5.85	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.782	5.85	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	1.55	5.85	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	1.21	5.85	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	0.388	5.85	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	1.95	5.85	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	1.08	5.85	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	1.02	5.85	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0931	1.17	PQL	ng/Kg	
	2,3,7,8-TCDF	J	1.05	1.17	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX071 **Laboratory: LL**

EDD Filename: DX071_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-133-SA8N-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	1.04	5.83	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8-HxCDD	JB	0.857	5.83	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	4.98	5.83	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	2.13	5.83	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	J	1.36	5.83	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	1.64	5.83	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	1.17	5.83	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.699	5.83	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	3.96	5.83	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	1.40	5.83	PQL	ng/Kg	
SL-134-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	5.58	5.61	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JB	0.632	5.61	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.425	5.61	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	1.88	5.61	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	1.70	5.61	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.608	5.61	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	1.89	5.61	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	1.04	5.61	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.343	5.61	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	1.00	5.61	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.564	5.61	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.800	5.61	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.875	1.12	PQL	ng/Kg	
	OCDF	JB	10.1	11.2	PQL	ng/Kg	
SL-172-SA5A-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JBQ	0.442	6.00	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.194	6.00	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.188	6.00	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.139	6.00	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.247	6.00	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.209	6.00	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.206	6.00	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.207	6.00	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.254	6.00	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.243	6.00	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.245	6.00	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.193	6.00	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.289	6.00	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0920	1.20	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.0648	1.20	PQL	ng/Kg	
	OCDD	JB	1.37	12.0	PQL	ng/Kg	
	OCDF	JB	0.280	12.0	PQL	ng/Kg	
SL-174-SA5A-SB-2.0-3.0	1,2,3,4,6,7,8-HPCDD	JB	0.206	5.50	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JBQ	0.0984	5.50	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0695	5.50	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0202	5.50	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0393	5.50	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.0701	5.50	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0602	5.50	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.0863	5.50	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.0851	5.50	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0432	5.50	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0405	5.50	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0459	5.50	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.0699	5.50	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0179	1.10	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.0245	1.10	PQL	ng/Kg	
	OCDD	JB	0.459	11.0	PQL	ng/Kg	
	OCDF	JBQ	0.148	11.0	PQL	ng/Kg	

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Reporting Limit Outliers

Lab Reporting Batch ID: DX071 **Laboratory: LL**

EDD Filename: DX071_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-254-SA5A-SB-2.5-3.5	1,2,3,4,6,7,8-HPCDD	JBQ	0.298	5.54	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JBQ	0.0799	5.54	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0615	5.54	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.0344	5.54	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.0294	5.54	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0179	5.54	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.0584	5.54	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.0546	5.54	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.0241	5.54	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0276	5.54	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0414	5.54	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0237	1.11	PQL	ng/Kg	
	OCDD	JB	2.03	11.1	PQL	ng/Kg	
	OCDF	JBQ	0.157	11.1	PQL	ng/Kg	

SAMPLE DELIVERY GROUP

DX072

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
14-Apr-2011	SL-058-SA5A-SB-3.0-4.0	6259105	N	METHOD	1613B	IV
14-Apr-2011	SL-058-SA5A-SB-3.0-4.0MS	6259106	MS	METHOD	1613B	IV
14-Apr-2011	SL-058-SA5A-SB-3.0-4.0MSD	6259107	MSD	METHOD	1613B	IV
14-Apr-2011	DUP14-SA5A-QC-041411	6259104	FD	METHOD	1613B	IV
14-Apr-2011	SL-059-SA5A-SB-3.0-4.0	6259108	N	METHOD	1613B	IV
14-Apr-2011	SL-065-SA5A-SB-4.0-5.0	6259109	N	METHOD	1613B	IV
14-Apr-2011	SL-242-SA5A-SB-2.5-3.5	6259110	N	METHOD	1613B	IV
15-Apr-2011	SL-141-SA8N-SS-0.0-0.5	6260141	N	METHOD	1613B	IV
15-Apr-2011	SL-062-SA8N-SS-0.0-0.5	6260139	N	METHOD	1613B	IV
15-Apr-2011	SL-052-SA5A-SB-4.0-5.0	6260144	N	METHOD	1613B	IV
15-Apr-2011	SL-067-SA8N-SS-0.0-0.5	6260140	N	METHOD	1613B	IV
15-Apr-2011	SL-243-SA5A-SB-4.0-5.0	6260145	N	METHOD	1613B	IV
15-Apr-2011	SL-044-SA5A-SB-3.0-4.0	6260143	N	METHOD	1613B	IV
15-Apr-2011	SL-041-SA5A-SB-4.0-5.0	6260142	N	METHOD	1613B	IV
19-Apr-2011	SL-135-SA8N-SS-0.0-0.5	6262855	N	METHOD	1613B	IV
19-Apr-2011	SL-122-SA8N-SS-0.0-0.5	6262854	N	METHOD	1613B	IV
19-Apr-2011	SL-095-SA8N-SS-0.0-0.5	6262851	N	METHOD	1613B	IV
19-Apr-2011	SL-094-SA8N-SS-0.0-0.5	6262850	N	METHOD	1613B	IV
19-Apr-2011	SL-096-SA8N-SS-0.0-0.5	6262852	N	METHOD	1613B	IV
19-Apr-2011	SL-097-SA8N-SS-0.0-0.5	6262853	N	METHOD	1613B	IV

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DX072 **Laboratory: LL**

EDD Filename: DX072_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B ***Matrix:*** SO

Sample ID: DUP14-SA5A-QC-041411 ***Collected:*** 4/14/2011 10:16:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.326	JBQ	0.0382	MDL	5.46	PQL	ng/Kg	UJ	B, FD
1,2,3,4,6,7,8-HPCDF	0.365	JB	0.0200	MDL	5.46	PQL	ng/Kg	UJ	B, FD
1,2,3,4,7,8,9-HPCDF	0.278	JB	0.0425	MDL	5.46	PQL	ng/Kg	UJ	B, FD
1,2,3,4,7,8-HxCDD	0.197	JB	0.0335	MDL	5.46	PQL	ng/Kg	J	Z, FD
1,2,3,4,7,8-HXCDF	0.221	JB	0.0341	MDL	5.46	PQL	ng/Kg	UJ	B, FD
1,2,3,6,7,8-HXCDD	0.256	JBQ	0.0359	MDL	5.46	PQL	ng/Kg	J	Z, FD
1,2,3,6,7,8-HXCDF	0.193	JB	0.0271	MDL	5.46	PQL	ng/Kg	UJ	B, FD
1,2,3,7,8,9-HXCDD	0.218	JB	0.0350	MDL	5.46	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.267	JB	0.0371	MDL	5.46	PQL	ng/Kg	UJ	B, FD
1,2,3,7,8-PECDD	0.270	J	0.0480	MDL	5.46	PQL	ng/Kg	J	Z, FD
1,2,3,7,8-PECDF	0.317	JBQ	0.0155	MDL	5.46	PQL	ng/Kg	J	Z, FD
2,3,4,6,7,8-HXCDF	0.212	JB	0.0263	MDL	5.46	PQL	ng/Kg	UJ	B, FD
2,3,4,7,8-PECDF	0.309	JB	0.0195	MDL	5.46	PQL	ng/Kg	UJ	B, FD
2,3,7,8-TCDD	0.0705	JB	0.0317	MDL	1.09	PQL	ng/Kg	UJ	B, FD
2,3,7,8-TCDF	0.240	JBQ	0.0337	MDL	1.09	PQL	ng/Kg	J	Z, FD
OCDD	0.851	JB	0.0356	MDL	10.9	PQL	ng/Kg	UJ	B, FD
OCDF	0.569	JB	0.0621	MDL	10.9	PQL	ng/Kg	UJ	B, FD

Sample ID: SL-041-SA5A-SB-4.0-5.0 ***Collected:*** 4/15/2011 3:38:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.215	JB	0.0169	MDL	5.56	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.0612	JB	0.00643	MDL	5.56	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0429	JBQ	0.00958	MDL	5.56	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0147	JBQ	0.0115	MDL	5.56	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0158	JBQ	0.00947	MDL	5.56	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0223	JBQ	0.0114	MDL	5.56	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0217	JB	0.00688	MDL	5.56	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0525	JBQ	0.0101	MDL	5.56	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0736	JB	0.00744	MDL	5.56	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0196	JBQ	0.0131	MDL	5.56	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0184	JBQ	0.00643	MDL	5.56	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0441	JBQ	0.00564	MDL	5.56	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0436	JBQ	0.00609	MDL	5.56	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX072 **Laboratory: LL**

EDD Filename: DX072_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-041-SA5A-SB-4.0-5.0 **Collected:** 4/15/2011 3:38:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
OCDD	0.675	JB	0.0233	MDL	11.1	PQL	ng/Kg	U	B
OCDF	0.127	JBQ	0.0195	MDL	11.1	PQL	ng/Kg	U	B

Sample ID: SL-044-SA5A-SB-3.0-4.0 **Collected:** 4/15/2011 12:27:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.539	JBQ	0.0232	MDL	5.53	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.142	JBQ	0.00755	MDL	5.53	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0955	JB	0.0117	MDL	5.53	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0352	JB	0.0134	MDL	5.53	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0494	JB	0.00932	MDL	5.53	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0531	JB	0.0137	MDL	5.53	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0374	JBQ	0.00744	MDL	5.53	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0697	JB	0.0127	MDL	5.53	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.119	JB	0.00888	MDL	5.53	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0404	JBQ	0.0133	MDL	5.53	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0280	JB	0.00644	MDL	5.53	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0621	JB	0.00733	MDL	5.53	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0796	JB	0.00633	MDL	5.53	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0124	JBQ	0.00943	MDL	1.11	PQL	ng/Kg	U	B
OCDD	4.24	JB	0.0307	MDL	11.1	PQL	ng/Kg	J	Z
OCDF	0.302	JBQ	0.0226	MDL	11.1	PQL	ng/Kg	U	B

Sample ID: SL-052-SA5A-SB-4.0-5.0 **Collected:** 4/15/2011 9:34:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.267	JB	0.0158	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.0599	JBQ	0.00610	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0368	JBQ	0.00932	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0117	JBQ	0.0105	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0148	JBQ	0.00898	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0217	JB	0.0106	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0109	JBQ	0.00633	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0302	JB	0.00978	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0130	JBQ	0.00541	MDL	5.73	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX072 **Laboratory: LL**

EDD Filename: DX072_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-052-SA5A-SB-4.0-5.0 **Collected:** 4/15/2011 9:34:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,3,4,6,7,8-HXCDF	0.0366	JB	0.00621	MDL	5.73	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0494	JB	0.00575	MDL	5.73	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0180	JBQ	0.00944	MDL	1.15	PQL	ng/Kg	U	B
OCDD	0.654	JB	0.0231	MDL	11.5	PQL	ng/Kg	U	B
OCDF	0.122	JB	0.0183	MDL	11.5	PQL	ng/Kg	U	B

Sample ID: SL-058-SA5A-SB-3.0-4.0 **Collected:** 4/14/2011 10:09:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.726	JB	0.0355	MDL	5.43	PQL	ng/Kg	UJ	B, FD
1,2,3,4,6,7,8-HPCDF	0.142	JBQ	0.0149	MDL	5.43	PQL	ng/Kg	UJ	B, FD
1,2,3,4,7,8,9-HPCDF	0.0704	JBQ	0.0207	MDL	5.43	PQL	ng/Kg	UJ	B, FD
1,2,3,4,7,8-HxCDD	0.0422	JB	0.0171	MDL	5.43	PQL	ng/Kg	UJ	B, FD
1,2,3,4,7,8-HXCDF	0.0426	JB	0.0102	MDL	5.43	PQL	ng/Kg	UJ	B, FD
1,2,3,6,7,8-HXCDD	0.146	JB	0.0178	MDL	5.43	PQL	ng/Kg	UJ	B, FD
1,2,3,6,7,8-HXCDF	0.0569	JB	0.00967	MDL	5.43	PQL	ng/Kg	UJ	B, FD
1,2,3,7,8,9-HXCDD	0.257	JBQ	0.0168	MDL	5.43	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.157	JB	0.0107	MDL	5.43	PQL	ng/Kg	UJ	B, FD
1,2,3,7,8-PECDD	0.0805	JBQ	0.0152	MDL	5.43	PQL	ng/Kg	UJ	B, FD
1,2,3,7,8-PECDF	0.0758	JBQ	0.00736	MDL	5.43	PQL	ng/Kg	UJ	B, FD
2,3,4,6,7,8-HXCDF	0.0542	JBQ	0.00956	MDL	5.43	PQL	ng/Kg	UJ	B, FD
2,3,4,7,8-PECDF	0.0681	JBQ	0.00736	MDL	5.43	PQL	ng/Kg	UJ	B, FD
2,3,7,8-TCDD	0.0326	JBQ	0.0138	MDL	1.09	PQL	ng/Kg	UJ	B, FD
2,3,7,8-TCDF	0.0124	U	0.0124	MDL	1.09	PQL	ng/Kg	UJ	FD
OCDD	12.1	B	0.0265	MDL	10.9	PQL	ng/Kg	J	FD
OCDF	0.236	JBQ	0.0252	MDL	10.9	PQL	ng/Kg	UJ	B, FD

Sample ID: SL-059-SA5A-SB-3.0-4.0 **Collected:** 4/14/2011 11:06:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.383	JBQ	0.0184	MDL	5.59	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.137	JB	0.00755	MDL	5.59	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.164	JBQ	0.0127	MDL	5.59	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0476	JBQ	0.0153	MDL	5.59	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0586	JBQ	0.0147	MDL	5.59	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX072 **Laboratory: LL**

EDD Filename: DX072_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-059-SA5A-SB-3.0-4.0 **Collected:** 4/14/2011 11:06:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,6,7,8-HXCDD	0.125	JBQ	0.0158	MDL	5.59	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0647	JB	0.0113	MDL	5.59	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.298	JB	0.0148	MDL	5.59	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.277	JB	0.0151	MDL	5.59	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.148	JBQ	0.0142	MDL	5.59	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.126	JB	0.00722	MDL	5.59	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.161	JBQ	0.0115	MDL	5.59	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.145	JB	0.00755	MDL	5.59	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0309	JB	0.0135	MDL	1.12	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0304	JB	0.0126	MDL	1.12	PQL	ng/Kg	U	B
OCDD	0.827	JB	0.0257	MDL	11.2	PQL	ng/Kg	U	B
OCDF	0.346	JB	0.0244	MDL	11.2	PQL	ng/Kg	U	B

Sample ID: SL-062-SA8N-SS-0.0-0.5 **Collected:** 4/15/2011 9:05:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	1.56	JB	0.0421	MDL	5.67	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	1.60	JB	0.0207	MDL	5.67	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.0542	JBQ	0.0269	MDL	5.67	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0468	JBQ	0.0195	MDL	5.67	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.445	JB	0.0338	MDL	5.67	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.108	JB	0.0192	MDL	5.67	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0803	JBQ	0.0225	MDL	5.67	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.141	JB	0.0170	MDL	5.67	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.117	JB	0.0211	MDL	5.67	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0401	JBQ	0.0165	MDL	5.67	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.331	JB	0.0225	MDL	5.67	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.133	JBQ	0.0167	MDL	5.67	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.188	JB	0.0261	MDL	5.67	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.120	JBQ	0.0644	MDL	1.13	PQL	ng/Kg	J	Z
OCDF	6.87	JB	0.0378	MDL	11.3	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX072 **Laboratory: LL**

EDD Filename: DX072_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-065-SA5A-SB-4.0-5.0 ***Collected:*** 4/14/2011 12:58:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.320	JB	0.0176	MDL	5.50	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.126	JB	0.00736	MDL	5.50	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0726	JBQ	0.0136	MDL	5.50	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0214	JBQ	0.0130	MDL	5.50	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0211	JBQ	0.0111	MDL	5.50	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0432	JBQ	0.0135	MDL	5.50	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0303	JBQ	0.00892	MDL	5.50	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0653	JB	0.0127	MDL	5.50	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0650	JBQ	0.0120	MDL	5.50	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0232	JBQ	0.0151	MDL	5.50	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0354	JB	0.00691	MDL	5.50	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0752	JBQ	0.00948	MDL	5.50	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0749	JB	0.00747	MDL	5.50	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0167	JBQ	0.0143	MDL	1.10	PQL	ng/Kg	U	B
OCDD	0.952	JB	0.0265	MDL	11.0	PQL	ng/Kg	U	B
OCDF	0.217	JBQ	0.0244	MDL	11.0	PQL	ng/Kg	U	B

Sample ID: SL-067-SA8N-SS-0.0-0.5 ***Collected:*** 4/15/2011 10:35:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	4.73	JB	0.0384	MDL	5.98	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	2.01	JB	0.0209	MDL	5.98	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.140	JBQ	0.0338	MDL	5.98	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0647	JB	0.0228	MDL	5.98	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.584	JB	0.0357	MDL	5.98	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.253	JB	0.0235	MDL	5.98	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.138	JBQ	0.0250	MDL	5.98	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.170	JB	0.0220	MDL	5.98	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.125	JB	0.0310	MDL	5.98	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0557	JB	0.0185	MDL	5.98	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.621	JB	0.0332	MDL	5.98	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.162	JB	0.0245	MDL	5.98	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.282	JB	0.0330	MDL	5.98	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.198	JB	0.0909	MDL	1.20	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX072 **Laboratory: LL**

EDD Filename: DX072_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B ***Matrix:*** SO

Sample ID: SL-067-SA8N-SS-0.0-0.5 ***Collected:*** 4/15/2011 10:35:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
OCDF	9.02	JB	0.0262	MDL	12.0	PQL	ng/Kg	J	Z

Sample ID: SL-094-SA8N-SS-0.0-0.5 ***Collected:*** 4/19/2011 3:15:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	2.63	JB	0.0283	MDL	5.35	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.484	JB	0.0125	MDL	5.35	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0852	JB	0.0256	MDL	5.35	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.135	JBQ	0.0275	MDL	5.35	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.296	JB	0.0201	MDL	5.35	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.344	JB	0.0277	MDL	5.35	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.150	JB	0.0166	MDL	5.35	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.467	JB	0.0272	MDL	5.35	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.575	JB	0.0219	MDL	5.35	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.184	JB	0.0179	MDL	5.35	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.276	JB	0.0125	MDL	5.35	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.139	JBQ	0.0169	MDL	5.35	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.268	JB	0.0128	MDL	5.35	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0256	JB	0.0119	MDL	1.07	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.125	JB	0.0213	MDL	1.07	PQL	ng/Kg	J	Z
OCDF	1.02	JB	0.0310	MDL	10.7	PQL	ng/Kg	U	B

Sample ID: SL-095-SA8N-SS-0.0-0.5 ***Collected:*** 4/19/2011 3:00:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	2.68	JB	0.0325	MDL	5.63	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.458	JB	0.0130	MDL	5.63	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0642	JBQ	0.0310	MDL	5.63	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0722	JBQ	0.0300	MDL	5.63	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.240	JB	0.0213	MDL	5.63	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.295	JB	0.0313	MDL	5.63	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.0967	JB	0.0175	MDL	5.63	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.388	JB	0.0303	MDL	5.63	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.339	JBQ	0.0255	MDL	5.63	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0993	JBQ	0.0183	MDL	5.63	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX072 **Laboratory: LL**

EDD Filename: DX072_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-095-SA8N-SS-0.0-0.5 **Collected:** 4/19/2011 3:00:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,7,8-PECDF	0.170	JBQ	0.0128	MDL	5.63	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.121	JB	0.0181	MDL	5.63	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.222	JB	0.0128	MDL	5.63	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0146	JBQ	0.0128	MDL	1.13	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.103	JBQ	0.0215	MDL	1.13	PQL	ng/Kg	U	B
OCDF	0.955	JB	0.0337	MDL	11.3	PQL	ng/Kg	U	B

Sample ID: SL-096-SA8N-SS-0.0-0.5 **Collected:** 4/19/2011 3:25:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	2.87	JB	0.0408	MDL	5.32	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.547	JB	0.0162	MDL	5.32	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.104	JB	0.0353	MDL	5.32	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0704	JBQ	0.0306	MDL	5.32	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.337	JBQ	0.0251	MDL	5.32	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.335	JB	0.0316	MDL	5.32	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.0833	JBQ	0.0205	MDL	5.32	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.428	JB	0.0302	MDL	5.32	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.459	JB	0.0286	MDL	5.32	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.172	JB	0.0150	MDL	5.32	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.113	JB	0.0221	MDL	5.32	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.281	JB	0.0159	MDL	5.32	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.106	JB	0.0287	MDL	1.06	PQL	ng/Kg	U	B
OCDF	1.21	JB	0.0431	MDL	10.6	PQL	ng/Kg	J	Z

Sample ID: SL-097-SA8N-SS-0.0-0.5 **Collected:** 4/19/2011 3:40:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	3.09	JB	0.0396	MDL	5.72	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.620	JB	0.0183	MDL	5.72	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0972	JB	0.0311	MDL	5.72	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0670	JBQ	0.0352	MDL	5.72	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.333	JB	0.0292	MDL	5.72	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.481	JB	0.0359	MDL	5.72	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.104	JBQ	0.0255	MDL	5.72	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX072 **Laboratory: LL**

EDD Filename: DX072_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-097-SA8N-SS-0.0-0.5 **Collected:** 4/19/2011 3:40:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,7,8,9-HXCDD	0.714	JB	0.0345	MDL	5.72	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.804	JB	0.0307	MDL	5.72	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.0953	JB	0.0247	MDL	5.72	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.213	JB	0.0181	MDL	5.72	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.114	JB	0.0228	MDL	5.72	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.206	JB	0.0185	MDL	5.72	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.136	JBQ	0.0261	MDL	1.14	PQL	ng/Kg	J	Z
OCDF	1.42	JB	0.0407	MDL	11.4	PQL	ng/Kg	J	Z

Sample ID: SL-122-SA8N-SS-0.0-0.5 **Collected:** 4/19/2011 1:15:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	2.88	JB	0.0316	MDL	5.19	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.760	JB	0.0153	MDL	5.19	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.191	JB	0.0289	MDL	5.19	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.132	JB	0.0266	MDL	5.19	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.315	JB	0.0252	MDL	5.19	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.236	JB	0.0273	MDL	5.19	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.179	JB	0.0224	MDL	5.19	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.353	JBQ	0.0262	MDL	5.19	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.246	JB	0.0304	MDL	5.19	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.176	JBQ	0.0416	MDL	5.19	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.323	JB	0.0181	MDL	5.19	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.248	JBQ	0.0248	MDL	5.19	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.483	JB	0.0222	MDL	5.19	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0549	JBQ	0.0223	MDL	1.04	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.363	JB	0.0433	MDL	1.04	PQL	ng/Kg	J	Z
OCDF	1.14	JB	0.0338	MDL	10.4	PQL	ng/Kg	U	B

Sample ID: SL-135-SA8N-SS-0.0-0.5 **Collected:** 4/19/2011 9:15:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	1.08	JB	0.00941	MDL	5.42	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.133	JBQ	0.0176	MDL	5.42	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.168	JB	0.0231	MDL	5.42	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX072 **Laboratory: LL**

EDD Filename: DX072_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-135-SA8N-SS-0.0-0.5 *Collected:* 4/19/2011 9:15:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8-HXCDF	0.251	JB	0.0177	MDL	5.42	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.561	JB	0.0239	MDL	5.42	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.151	JB	0.0154	MDL	5.42	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.543	JB	0.0212	MDL	5.42	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.251	JB	0.0198	MDL	5.42	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.199	JB	0.0312	MDL	5.42	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.753	JB	0.0144	MDL	5.42	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.140	JBQ	0.0164	MDL	5.42	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.351	JB	0.0165	MDL	5.42	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.113	JB	0.0364	MDL	1.08	PQL	ng/Kg	U	B
OCDF	2.80	JB	0.0247	MDL	10.8	PQL	ng/Kg	J	Z

Sample ID: SL-141-SA8N-SS-0.0-0.5 *Collected:* 4/15/2011 8:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	3.01	JB	0.0386	MDL	5.68	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	1.51	JB	0.0180	MDL	5.68	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.0749	JB	0.0279	MDL	5.68	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0676	JBQ	0.0323	MDL	5.68	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.485	JB	0.0302	MDL	5.68	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.141	JB	0.0325	MDL	5.68	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0877	JB	0.0205	MDL	5.68	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.197	JB	0.0288	MDL	5.68	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.118	JBQ	0.0224	MDL	5.68	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0451	JBQ	0.0192	MDL	5.68	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.758	JB	0.0261	MDL	5.68	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.121	JBQ	0.0167	MDL	5.68	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.205	JBQ	0.0288	MDL	5.68	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.144	JBQ	0.0740	MDL	1.14	PQL	ng/Kg	J	Z
OCDF	6.09	JB	0.0360	MDL	11.4	PQL	ng/Kg	J	Z

Sample ID: SL-242-SA5A-SB-2.5-3.5 *Collected:* 4/14/2011 3:54:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.726	JB	0.0251	MDL	5.66	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX072 **Laboratory: LL**

EDD Filename: DX072_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-242-SA5A-SB-2.5-3.5 **Collected:** 4/14/2011 3:54:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	0.232	JB	0.0140	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0702	JBQ	0.0156	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0259	JBQ	0.0148	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0546	JBQ	0.0207	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0489	JB	0.0133	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0538	JB	0.0135	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0838	JB	0.0119	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0581	JB	0.0109	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0273	JBQ	0.0140	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0269	JB	0.00566	MDL	5.66	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0600	JBQ	0.00855	MDL	5.66	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0501	JB	0.00624	MDL	5.66	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0138	JBQ	0.0124	MDL	1.13	PQL	ng/Kg	U	B
OCDD	6.93	JB	0.0330	MDL	11.3	PQL	ng/Kg	J	Z
OCDF	0.728	JB	0.0341	MDL	11.3	PQL	ng/Kg	U	B

Sample ID: SL-243-SA5A-SB-4.0-5.0 **Collected:** 4/15/2011 10:46:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.266	JBQ	0.0174	MDL	5.70	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.0883	JB	0.00630	MDL	5.70	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0223	JBQ	0.00882	MDL	5.70	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0140	JBQ	0.00974	MDL	5.70	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0209	JB	0.0110	MDL	5.70	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.00788	JBQ	0.00664	MDL	5.70	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0197	JB	0.0105	MDL	5.70	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0450	JB	0.00710	MDL	5.70	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0307	JBQ	0.00596	MDL	5.70	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0559	JB	0.00607	MDL	5.70	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0189	JB	0.00974	MDL	1.14	PQL	ng/Kg	U	B
OCDD	1.19	JB	0.0278	MDL	11.4	PQL	ng/Kg	U	B
OCDF	0.206	JB	0.0188	MDL	11.4	PQL	ng/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DX072 **Laboratory: LL**

EDD Filename: DX072_v1 **eQAPP Name: CDM_SSFL_110509**

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX072 **Laboratory: LL**

EDD Filename: DX072_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
	Sampling to Leaching Estimation
	Sampling to Leaching Rejection
*#	Professional Judgment
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Continuing Calibration Verification Percent Recovery Lower Estimation
C	Continuing Calibration Verification Percent Recovery Lower Rejection
C	Continuing Calibration Verification Percent Recovery Upper Estimation
C	Continuing Calibration Verification Percent Recovery Upper Rejection
C	Continuing Calibration Verification Relative Response Factor
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Relative Response Factor
C	Initial Calibration Verification Correlation Coefficient

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DX072 **Laboratory: LL**

EDD Filename: DX072_v1 **eQAPP Name: CDM_SSFL_110509**

C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Verification Percent Recovery Lower Estimation
C	Initial Calibration Verification Percent Recovery Lower Rejection
C	Initial Calibration Verification Percent Recovery Upper Estimation
C	Initial Calibration Verification Percent Recovery Upper Rejection
C	Initial Calibration Verification Relative Response Factor
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Laboratory Triplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination
F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DX072 **Laboratory: LL**

EDD Filename: DX072_v1 **eQAPP Name: CDM_SSFL_110509**

L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Laboratory Triplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Q	Matrix Spike Upper Rejection
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control Outlier Reports

DX072

Method Blank Outlier Report

Lab Reporting Batch ID: DX072 **Laboratory: LL**

EDD Filename: DX072_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLK1080B371256	4/23/2011 12:56:00 PM	1,2,3,4,6,7,8-HPCDD	0.194 ng/Kg	SL-041-SA5A-SB-4.0-5.0
		1,2,3,4,6,7,8-HPCDF	0.0892 ng/Kg	SL-044-SA5A-SB-3.0-4.0
		1,2,3,4,7,8,9-HPCDF	0.0492 ng/Kg	SL-052-SA5A-SB-4.0-5.0
		1,2,3,4,7,8-HxCDD	0.0288 ng/Kg	SL-059-SA5A-SB-3.0-4.0
		1,2,3,4,7,8-HXCDF	0.0844 ng/Kg	SL-062-SA8N-SS-0.0-0.5
		1,2,3,6,7,8-HXCDD	0.0367 ng/Kg	SL-065-SA5A-SB-4.0-5.0
		1,2,3,6,7,8-HXCDF	0.0439 ng/Kg	SL-067-SA8N-SS-0.0-0.5
		1,2,3,7,8,9-HXCDD	0.0531 ng/Kg	SL-141-SA8N-SS-0.0-0.5
		1,2,3,7,8,9-HXCDF	0.0731 ng/Kg	SL-242-SA5A-SB-2.5-3.5
		1,2,3,7,8-PECDD	0.0354 ng/Kg	SL-243-SA5A-SB-4.0-5.0
		1,2,3,7,8-PECDF	0.0353 ng/Kg	
		2,3,4,6,7,8-HXCDF	0.0328 ng/Kg	
		2,3,4,7,8-PECDF	0.0901 ng/Kg	
		2,3,7,8-TCDD	0.0284 ng/Kg	
		2,3,7,8-TCDF	0.0112 ng/Kg	
		OCDD	0.428 ng/Kg	
		OCDF	0.158 ng/Kg	
BLK1150B371141	4/28/2011 11:41:00 AM	1,2,3,4,6,7,8-HPCDD	0.231 ng/Kg	SL-094-SA8N-SS-0.0-0.5
		1,2,3,4,6,7,8-HPCDF	0.126 ng/Kg	SL-095-SA8N-SS-0.0-0.5
		1,2,3,4,7,8,9-HPCDF	0.0849 ng/Kg	SL-096-SA8N-SS-0.0-0.5
		1,2,3,4,7,8-HxCDD	0.0421 ng/Kg	SL-097-SA8N-SS-0.0-0.5
		1,2,3,4,7,8-HXCDF	0.0469 ng/Kg	
		1,2,3,6,7,8-HXCDD	0.0348 ng/Kg	
		1,2,3,6,7,8-HXCDF	0.0401 ng/Kg	
		1,2,3,7,8,9-HXCDD	0.0543 ng/Kg	
		1,2,3,7,8,9-HXCDF	0.0854 ng/Kg	
		1,2,3,7,8-PECDD	0.0571 ng/Kg	
		1,2,3,7,8-PECDF	0.0538 ng/Kg	
		2,3,4,6,7,8-HXCDF	0.0651 ng/Kg	
		2,3,4,7,8-PECDF	0.0593 ng/Kg	
		2,3,7,8-TCDD	0.0462 ng/Kg	
		2,3,7,8-TCDF	0.0227 ng/Kg	
		OCDD	0.458 ng/Kg	
		OCDF	0.215 ng/Kg	
BLK1160B370229	4/28/2011 2:29:00 AM	1,2,3,4,6,7,8-HPCDD	0.211 ng/Kg	SL-122-SA8N-SS-0.0-0.5
		1,2,3,4,6,7,8-HPCDF	0.221 ng/Kg	SL-135-SA8N-SS-0.0-0.5
		1,2,3,4,7,8,9-HPCDF	0.0916 ng/Kg	
		1,2,3,4,7,8-HxCDD	0.0389 ng/Kg	
		1,2,3,4,7,8-HXCDF	0.0838 ng/Kg	
		1,2,3,6,7,8-HXCDD	0.0462 ng/Kg	
		1,2,3,6,7,8-HXCDF	0.0727 ng/Kg	
		1,2,3,7,8,9-HXCDD	0.0481 ng/Kg	
		1,2,3,7,8,9-HXCDF	0.0641 ng/Kg	
		1,2,3,7,8-PECDD	0.0569 ng/Kg	
		1,2,3,7,8-PECDF	0.0631 ng/Kg	
		2,3,4,6,7,8-HXCDF	0.0953 ng/Kg	
		2,3,4,7,8-PECDF	0.117 ng/Kg	
		2,3,7,8-TCDD	0.0319 ng/Kg	
		2,3,7,8-TCDF	0.0540 ng/Kg	
		OCDD	0.517 ng/Kg	
		OCDF	0.277 ng/Kg	

Method Blank Outlier Report

Lab Reporting Batch ID: DX072 **Laboratory: LL**

EDD Filename: DX072_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLK1160B371604	4/28/2011 4:04:00 PM	1,2,3,4,6,7,8-HPCDD	0.247 ng/Kg	DUP14-SA5A-QC-041411
		1,2,3,4,6,7,8-HPCDF	0.149 ng/Kg	
		1,2,3,4,7,8,9-HPCDF	0.0979 ng/Kg	
		1,2,3,4,7,8-HxCDD	0.0285 ng/Kg	
		1,2,3,4,7,8-HXCDF	0.0658 ng/Kg	
		1,2,3,6,7,8-HXCDD	0.0370 ng/Kg	
		1,2,3,6,7,8-HXCDF	0.0601 ng/Kg	
		1,2,3,7,8,9-HXCDD	0.0614 ng/Kg	
		1,2,3,7,8,9-HXCDF	0.0973 ng/Kg	
		1,2,3,7,8-PECDF	0.0555 ng/Kg	
		2,3,4,6,7,8-HXCDF	0.104 ng/Kg	
		2,3,4,7,8-PECDF	0.0640 ng/Kg	
		2,3,7,8-TCDD	0.0262 ng/Kg	
		2,3,7,8-TCDF	0.0380 ng/Kg	
		OCDD	0.449 ng/Kg	
		OCDF	0.273 ng/Kg	
BLK1220B370705	5/5/2011 7:05:00 AM	1,2,3,4,6,7,8-HPCDD	0.173 ng/Kg	SL-058-SA5A-SB-3.0-4.0
		1,2,3,4,6,7,8-HPCDF	0.0881 ng/Kg	
		1,2,3,4,7,8,9-HPCDF	0.0487 ng/Kg	
		1,2,3,4,7,8-HxCDD	0.0242 ng/Kg	
		1,2,3,4,7,8-HXCDF	0.0612 ng/Kg	
		1,2,3,6,7,8-HXCDD	0.0426 ng/Kg	
		1,2,3,6,7,8-HXCDF	0.0458 ng/Kg	
		1,2,3,7,8,9-HXCDD	0.0398 ng/Kg	
		1,2,3,7,8,9-HXCDF	0.0821 ng/Kg	
		1,2,3,7,8-PECDD	0.0512 ng/Kg	
		1,2,3,7,8-PECDF	0.0563 ng/Kg	
		2,3,4,6,7,8-HXCDF	0.0520 ng/Kg	
		2,3,4,7,8-PECDF	0.0781 ng/Kg	
		2,3,7,8-TCDD	0.0183 ng/Kg	
		OCDD	0.359 ng/Kg	
		OCDF	0.148 ng/Kg	

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
DUP14-SA5A-QC-041411(RES)	1,2,3,4,6,7,8-HPCDD	0.326 ng/Kg	0.326U ng/Kg
DUP14-SA5A-QC-041411(RES)	1,2,3,4,6,7,8-HPCDF	0.365 ng/Kg	0.365U ng/Kg
DUP14-SA5A-QC-041411(RES)	1,2,3,4,7,8,9-HPCDF	0.278 ng/Kg	0.278U ng/Kg
DUP14-SA5A-QC-041411(RES)	1,2,3,4,7,8-HXCDF	0.221 ng/Kg	0.221U ng/Kg
DUP14-SA5A-QC-041411(RES)	1,2,3,6,7,8-HXCDF	0.193 ng/Kg	0.193U ng/Kg
DUP14-SA5A-QC-041411(RES)	1,2,3,7,8,9-HXCDD	0.218 ng/Kg	0.218U ng/Kg
DUP14-SA5A-QC-041411(RES)	1,2,3,7,8,9-HXCDF	0.267 ng/Kg	0.267U ng/Kg
DUP14-SA5A-QC-041411(RES)	2,3,4,6,7,8-HXCDF	0.212 ng/Kg	0.212U ng/Kg
DUP14-SA5A-QC-041411(RES)	2,3,4,7,8-PECDF	0.309 ng/Kg	0.309U ng/Kg
DUP14-SA5A-QC-041411(RES)	2,3,7,8-TCDD	0.0705 ng/Kg	0.0705U ng/Kg
DUP14-SA5A-QC-041411(RES)	OCDD	0.851 ng/Kg	0.851U ng/Kg
DUP14-SA5A-QC-041411(RES)	OCDF	0.569 ng/Kg	0.569U ng/Kg
SL-041-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.215 ng/Kg	0.215U ng/Kg
SL-041-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.0612 ng/Kg	0.0612U ng/Kg
SL-041-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0429 ng/Kg	0.0429U ng/Kg
SL-041-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HxCDD	0.0147 ng/Kg	0.0147U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX072 **Laboratory: LL**

EDD Filename: DX072_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-041-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.0158 ng/Kg	0.0158U ng/Kg
SL-041-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDD	0.0223 ng/Kg	0.0223U ng/Kg
SL-041-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.0217 ng/Kg	0.0217U ng/Kg
SL-041-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDD	0.0525 ng/Kg	0.0525U ng/Kg
SL-041-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.0736 ng/Kg	0.0736U ng/Kg
SL-041-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDD	0.0196 ng/Kg	0.0196U ng/Kg
SL-041-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.0184 ng/Kg	0.0184U ng/Kg
SL-041-SA5A-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.0441 ng/Kg	0.0441U ng/Kg
SL-041-SA5A-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.0436 ng/Kg	0.0436U ng/Kg
SL-041-SA5A-SB-4.0-5.0(RES)	OCDD	0.675 ng/Kg	0.675U ng/Kg
SL-041-SA5A-SB-4.0-5.0(RES)	OCDF	0.127 ng/Kg	0.127U ng/Kg
SL-044-SA5A-SB-3.0-4.0(RES)	1,2,3,4,6,7,8-HPCDD	0.539 ng/Kg	0.539U ng/Kg
SL-044-SA5A-SB-3.0-4.0(RES)	1,2,3,4,6,7,8-HPCDF	0.142 ng/Kg	0.142U ng/Kg
SL-044-SA5A-SB-3.0-4.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0955 ng/Kg	0.0955U ng/Kg
SL-044-SA5A-SB-3.0-4.0(RES)	1,2,3,4,7,8-HxCDD	0.0352 ng/Kg	0.0352U ng/Kg
SL-044-SA5A-SB-3.0-4.0(RES)	1,2,3,4,7,8-HXCDF	0.0494 ng/Kg	0.0494U ng/Kg
SL-044-SA5A-SB-3.0-4.0(RES)	1,2,3,6,7,8-HXCDD	0.0531 ng/Kg	0.0531U ng/Kg
SL-044-SA5A-SB-3.0-4.0(RES)	1,2,3,6,7,8-HXCDF	0.0374 ng/Kg	0.0374U ng/Kg
SL-044-SA5A-SB-3.0-4.0(RES)	1,2,3,7,8,9-HXCDD	0.0697 ng/Kg	0.0697U ng/Kg
SL-044-SA5A-SB-3.0-4.0(RES)	1,2,3,7,8,9-HXCDF	0.119 ng/Kg	0.119U ng/Kg
SL-044-SA5A-SB-3.0-4.0(RES)	1,2,3,7,8-PECDD	0.0404 ng/Kg	0.0404U ng/Kg
SL-044-SA5A-SB-3.0-4.0(RES)	1,2,3,7,8-PECDF	0.0280 ng/Kg	0.0280U ng/Kg
SL-044-SA5A-SB-3.0-4.0(RES)	2,3,4,6,7,8-HXCDF	0.0621 ng/Kg	0.0621U ng/Kg
SL-044-SA5A-SB-3.0-4.0(RES)	2,3,4,7,8-PECDF	0.0796 ng/Kg	0.0796U ng/Kg
SL-044-SA5A-SB-3.0-4.0(RES)	2,3,7,8-TCDF	0.0124 ng/Kg	0.0124U ng/Kg
SL-044-SA5A-SB-3.0-4.0(RES)	OCDF	0.302 ng/Kg	0.302U ng/Kg
SL-052-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.267 ng/Kg	0.267U ng/Kg
SL-052-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.0599 ng/Kg	0.0599U ng/Kg
SL-052-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0368 ng/Kg	0.0368U ng/Kg
SL-052-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HxCDD	0.0117 ng/Kg	0.0117U ng/Kg
SL-052-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.0148 ng/Kg	0.0148U ng/Kg
SL-052-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDD	0.0217 ng/Kg	0.0217U ng/Kg
SL-052-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.0109 ng/Kg	0.0109U ng/Kg
SL-052-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDD	0.0302 ng/Kg	0.0302U ng/Kg
SL-052-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.0130 ng/Kg	0.0130U ng/Kg
SL-052-SA5A-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.0366 ng/Kg	0.0366U ng/Kg
SL-052-SA5A-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.0494 ng/Kg	0.0494U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX072 **Laboratory: LL**

EDD Filename: DX072_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-052-SA5A-SB-4.0-5.0(RES)	2,3,7,8-TCDF	0.0180 ng/Kg	0.0180U ng/Kg
SL-052-SA5A-SB-4.0-5.0(RES)	OCDD	0.654 ng/Kg	0.654U ng/Kg
SL-052-SA5A-SB-4.0-5.0(RES)	OCDF	0.122 ng/Kg	0.122U ng/Kg
SL-058-SA5A-SB-3.0-4.0(RES)	1,2,3,4,6,7,8-HPCDD	0.726 ng/Kg	0.726U ng/Kg
SL-058-SA5A-SB-3.0-4.0(RES)	1,2,3,4,6,7,8-HPCDF	0.142 ng/Kg	0.142U ng/Kg
SL-058-SA5A-SB-3.0-4.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0704 ng/Kg	0.0704U ng/Kg
SL-058-SA5A-SB-3.0-4.0(RES)	1,2,3,4,7,8-HxCDD	0.0422 ng/Kg	0.0422U ng/Kg
SL-058-SA5A-SB-3.0-4.0(RES)	1,2,3,4,7,8-HXCDF	0.0426 ng/Kg	0.0426U ng/Kg
SL-058-SA5A-SB-3.0-4.0(RES)	1,2,3,6,7,8-HXCDD	0.146 ng/Kg	0.146U ng/Kg
SL-058-SA5A-SB-3.0-4.0(RES)	1,2,3,6,7,8-HXCDF	0.0569 ng/Kg	0.0569U ng/Kg
SL-058-SA5A-SB-3.0-4.0(RES)	1,2,3,7,8,9-HXCDF	0.157 ng/Kg	0.157U ng/Kg
SL-058-SA5A-SB-3.0-4.0(RES)	1,2,3,7,8-PECDD	0.0805 ng/Kg	0.0805U ng/Kg
SL-058-SA5A-SB-3.0-4.0(RES)	1,2,3,7,8-PECDF	0.0758 ng/Kg	0.0758U ng/Kg
SL-058-SA5A-SB-3.0-4.0(RES)	2,3,4,6,7,8-HXCDF	0.0542 ng/Kg	0.0542U ng/Kg
SL-058-SA5A-SB-3.0-4.0(RES)	2,3,4,7,8-PECDF	0.0681 ng/Kg	0.0681U ng/Kg
SL-058-SA5A-SB-3.0-4.0(RES)	2,3,7,8-TCDD	0.0326 ng/Kg	0.0326U ng/Kg
SL-058-SA5A-SB-3.0-4.0(RES)	OCDF	0.236 ng/Kg	0.236U ng/Kg
SL-059-SA5A-SB-3.0-4.0(RES)	1,2,3,4,6,7,8-HPCDD	0.383 ng/Kg	0.383U ng/Kg
SL-059-SA5A-SB-3.0-4.0(RES)	1,2,3,4,6,7,8-HPCDF	0.137 ng/Kg	0.137U ng/Kg
SL-059-SA5A-SB-3.0-4.0(RES)	1,2,3,4,7,8,9-HPCDF	0.164 ng/Kg	0.164U ng/Kg
SL-059-SA5A-SB-3.0-4.0(RES)	1,2,3,4,7,8-HxCDD	0.0476 ng/Kg	0.0476U ng/Kg
SL-059-SA5A-SB-3.0-4.0(RES)	1,2,3,4,7,8-HXCDF	0.0586 ng/Kg	0.0586U ng/Kg
SL-059-SA5A-SB-3.0-4.0(RES)	1,2,3,6,7,8-HXCDD	0.125 ng/Kg	0.125U ng/Kg
SL-059-SA5A-SB-3.0-4.0(RES)	1,2,3,6,7,8-HXCDF	0.0647 ng/Kg	0.0647U ng/Kg
SL-059-SA5A-SB-3.0-4.0(RES)	1,2,3,7,8,9-HXCDF	0.277 ng/Kg	0.277U ng/Kg
SL-059-SA5A-SB-3.0-4.0(RES)	1,2,3,7,8-PECDD	0.148 ng/Kg	0.148U ng/Kg
SL-059-SA5A-SB-3.0-4.0(RES)	1,2,3,7,8-PECDF	0.126 ng/Kg	0.126U ng/Kg
SL-059-SA5A-SB-3.0-4.0(RES)	2,3,4,6,7,8-HXCDF	0.161 ng/Kg	0.161U ng/Kg
SL-059-SA5A-SB-3.0-4.0(RES)	2,3,4,7,8-PECDF	0.145 ng/Kg	0.145U ng/Kg
SL-059-SA5A-SB-3.0-4.0(RES)	2,3,7,8-TCDD	0.0309 ng/Kg	0.0309U ng/Kg
SL-059-SA5A-SB-3.0-4.0(RES)	2,3,7,8-TCDF	0.0304 ng/Kg	0.0304U ng/Kg
SL-059-SA5A-SB-3.0-4.0(RES)	OCDD	0.827 ng/Kg	0.827U ng/Kg
SL-059-SA5A-SB-3.0-4.0(RES)	OCDF	0.346 ng/Kg	0.346U ng/Kg
SL-062-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.0542 ng/Kg	0.0542U ng/Kg
SL-062-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.0468 ng/Kg	0.0468U ng/Kg
SL-062-SA8N-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDD	0.108 ng/Kg	0.108U ng/Kg
SL-062-SA8N-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.0803 ng/Kg	0.0803U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX072 **Laboratory: LL**

EDD Filename: DX072_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-062-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDD	0.141 ng/Kg	0.141U ng/Kg
SL-062-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.117 ng/Kg	0.117U ng/Kg
SL-062-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.0401 ng/Kg	0.0401U ng/Kg
SL-062-SA8N-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.133 ng/Kg	0.133U ng/Kg
SL-062-SA8N-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.188 ng/Kg	0.188U ng/Kg
SL-065-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.320 ng/Kg	0.320U ng/Kg
SL-065-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.126 ng/Kg	0.126U ng/Kg
SL-065-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0726 ng/Kg	0.0726U ng/Kg
SL-065-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HxCDD	0.0214 ng/Kg	0.0214U ng/Kg
SL-065-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.0211 ng/Kg	0.0211U ng/Kg
SL-065-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDD	0.0432 ng/Kg	0.0432U ng/Kg
SL-065-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.0303 ng/Kg	0.0303U ng/Kg
SL-065-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDD	0.0653 ng/Kg	0.0653U ng/Kg
SL-065-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.0650 ng/Kg	0.0650U ng/Kg
SL-065-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDD	0.0232 ng/Kg	0.0232U ng/Kg
SL-065-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.0354 ng/Kg	0.0354U ng/Kg
SL-065-SA5A-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.0752 ng/Kg	0.0752U ng/Kg
SL-065-SA5A-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.0749 ng/Kg	0.0749U ng/Kg
SL-065-SA5A-SB-4.0-5.0(RES)	2,3,7,8-TCDD	0.0167 ng/Kg	0.0167U ng/Kg
SL-065-SA5A-SB-4.0-5.0(RES)	OCDD	0.952 ng/Kg	0.952U ng/Kg
SL-065-SA5A-SB-4.0-5.0(RES)	OCDF	0.217 ng/Kg	0.217U ng/Kg
SL-067-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.140 ng/Kg	0.140U ng/Kg
SL-067-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.0647 ng/Kg	0.0647U ng/Kg
SL-067-SA8N-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.138 ng/Kg	0.138U ng/Kg
SL-067-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDD	0.170 ng/Kg	0.170U ng/Kg
SL-067-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.125 ng/Kg	0.125U ng/Kg
SL-067-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.0557 ng/Kg	0.0557U ng/Kg
SL-067-SA8N-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.162 ng/Kg	0.162U ng/Kg
SL-067-SA8N-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.282 ng/Kg	0.282U ng/Kg
SL-094-SA8N-SS-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDF	0.484 ng/Kg	0.484U ng/Kg
SL-094-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.0852 ng/Kg	0.0852U ng/Kg
SL-094-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.135 ng/Kg	0.135U ng/Kg
SL-094-SA8N-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.150 ng/Kg	0.150U ng/Kg
SL-094-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.184 ng/Kg	0.184U ng/Kg
SL-094-SA8N-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.139 ng/Kg	0.139U ng/Kg
SL-094-SA8N-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.268 ng/Kg	0.268U ng/Kg
SL-094-SA8N-SS-0.0-0.5(RES)	2,3,7,8-TCDD	0.0256 ng/Kg	0.0256U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX072 **Laboratory: LL**

EDD Filename: DX072_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-094-SA8N-SS-0.0-0.5(RES)	OCDF	1.02 ng/Kg	1.02U ng/Kg
SL-095-SA8N-SS-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDF	0.458 ng/Kg	0.458U ng/Kg
SL-095-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.0642 ng/Kg	0.0642U ng/Kg
SL-095-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.0722 ng/Kg	0.0722U ng/Kg
SL-095-SA8N-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.0967 ng/Kg	0.0967U ng/Kg
SL-095-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.339 ng/Kg	0.339U ng/Kg
SL-095-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.0993 ng/Kg	0.0993U ng/Kg
SL-095-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.170 ng/Kg	0.170U ng/Kg
SL-095-SA8N-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.121 ng/Kg	0.121U ng/Kg
SL-095-SA8N-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.222 ng/Kg	0.222U ng/Kg
SL-095-SA8N-SS-0.0-0.5(RES)	2,3,7,8-TCDD	0.0146 ng/Kg	0.0146U ng/Kg
SL-095-SA8N-SS-0.0-0.5(RES)	2,3,7,8-TCDF	0.103 ng/Kg	0.103U ng/Kg
SL-095-SA8N-SS-0.0-0.5(RES)	OCDF	0.955 ng/Kg	0.955U ng/Kg
SL-096-SA8N-SS-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDF	0.547 ng/Kg	0.547U ng/Kg
SL-096-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.104 ng/Kg	0.104U ng/Kg
SL-096-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.0704 ng/Kg	0.0704U ng/Kg
SL-096-SA8N-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.0833 ng/Kg	0.0833U ng/Kg
SL-096-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.172 ng/Kg	0.172U ng/Kg
SL-096-SA8N-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.113 ng/Kg	0.113U ng/Kg
SL-096-SA8N-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.281 ng/Kg	0.281U ng/Kg
SL-096-SA8N-SS-0.0-0.5(RES)	2,3,7,8-TCDF	0.106 ng/Kg	0.106U ng/Kg
SL-097-SA8N-SS-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDF	0.620 ng/Kg	0.620U ng/Kg
SL-097-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.0972 ng/Kg	0.0972U ng/Kg
SL-097-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.0670 ng/Kg	0.0670U ng/Kg
SL-097-SA8N-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.104 ng/Kg	0.104U ng/Kg
SL-097-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.0953 ng/Kg	0.0953U ng/Kg
SL-097-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.213 ng/Kg	0.213U ng/Kg
SL-097-SA8N-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.114 ng/Kg	0.114U ng/Kg
SL-097-SA8N-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.206 ng/Kg	0.206U ng/Kg
SL-122-SA8N-SS-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDF	0.760 ng/Kg	0.760U ng/Kg
SL-122-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.191 ng/Kg	0.191U ng/Kg
SL-122-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.132 ng/Kg	0.132U ng/Kg
SL-122-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.315 ng/Kg	0.315U ng/Kg
SL-122-SA8N-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.179 ng/Kg	0.179U ng/Kg
SL-122-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.246 ng/Kg	0.246U ng/Kg
SL-122-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.176 ng/Kg	0.176U ng/Kg
SL-122-SA8N-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.248 ng/Kg	0.248U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX072 **Laboratory: LL**

EDD Filename: DX072_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-122-SA8N-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.483 ng/Kg	0.483U ng/Kg
SL-122-SA8N-SS-0.0-0.5(RES)	2,3,7,8-TCDD	0.0549 ng/Kg	0.0549U ng/Kg
SL-122-SA8N-SS-0.0-0.5(RES)	OCDF	1.14 ng/Kg	1.14U ng/Kg
SL-135-SA8N-SS-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDF	1.08 ng/Kg	1.08U ng/Kg
SL-135-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.133 ng/Kg	0.133U ng/Kg
SL-135-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.168 ng/Kg	0.168U ng/Kg
SL-135-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.251 ng/Kg	0.251U ng/Kg
SL-135-SA8N-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.151 ng/Kg	0.151U ng/Kg
SL-135-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.251 ng/Kg	0.251U ng/Kg
SL-135-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.199 ng/Kg	0.199U ng/Kg
SL-135-SA8N-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.140 ng/Kg	0.140U ng/Kg
SL-135-SA8N-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.351 ng/Kg	0.351U ng/Kg
SL-135-SA8N-SS-0.0-0.5(RES)	2,3,7,8-TCDF	0.113 ng/Kg	0.113U ng/Kg
SL-141-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.0749 ng/Kg	0.0749U ng/Kg
SL-141-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.0676 ng/Kg	0.0676U ng/Kg
SL-141-SA8N-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDD	0.141 ng/Kg	0.141U ng/Kg
SL-141-SA8N-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.0877 ng/Kg	0.0877U ng/Kg
SL-141-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDD	0.197 ng/Kg	0.197U ng/Kg
SL-141-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.118 ng/Kg	0.118U ng/Kg
SL-141-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.0451 ng/Kg	0.0451U ng/Kg
SL-141-SA8N-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.121 ng/Kg	0.121U ng/Kg
SL-141-SA8N-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.205 ng/Kg	0.205U ng/Kg
SL-242-SA5A-SB-2.5-3.5(RES)	1,2,3,4,6,7,8-HPCDD	0.726 ng/Kg	0.726U ng/Kg
SL-242-SA5A-SB-2.5-3.5(RES)	1,2,3,4,6,7,8-HPCDF	0.232 ng/Kg	0.232U ng/Kg
SL-242-SA5A-SB-2.5-3.5(RES)	1,2,3,4,7,8,9-HPCDF	0.0702 ng/Kg	0.0702U ng/Kg
SL-242-SA5A-SB-2.5-3.5(RES)	1,2,3,4,7,8-HxCDD	0.0259 ng/Kg	0.0259U ng/Kg
SL-242-SA5A-SB-2.5-3.5(RES)	1,2,3,4,7,8-HXCDF	0.0546 ng/Kg	0.0546U ng/Kg
SL-242-SA5A-SB-2.5-3.5(RES)	1,2,3,6,7,8-HXCDD	0.0489 ng/Kg	0.0489U ng/Kg
SL-242-SA5A-SB-2.5-3.5(RES)	1,2,3,6,7,8-HXCDF	0.0538 ng/Kg	0.0538U ng/Kg
SL-242-SA5A-SB-2.5-3.5(RES)	1,2,3,7,8,9-HXCDD	0.0838 ng/Kg	0.0838U ng/Kg
SL-242-SA5A-SB-2.5-3.5(RES)	1,2,3,7,8,9-HXCDF	0.0581 ng/Kg	0.0581U ng/Kg
SL-242-SA5A-SB-2.5-3.5(RES)	1,2,3,7,8-PECDD	0.0273 ng/Kg	0.0273U ng/Kg
SL-242-SA5A-SB-2.5-3.5(RES)	1,2,3,7,8-PECDF	0.0269 ng/Kg	0.0269U ng/Kg
SL-242-SA5A-SB-2.5-3.5(RES)	2,3,4,6,7,8-HXCDF	0.0600 ng/Kg	0.0600U ng/Kg
SL-242-SA5A-SB-2.5-3.5(RES)	2,3,4,7,8-PECDF	0.0501 ng/Kg	0.0501U ng/Kg
SL-242-SA5A-SB-2.5-3.5(RES)	2,3,7,8-TCDD	0.0138 ng/Kg	0.0138U ng/Kg
SL-242-SA5A-SB-2.5-3.5(RES)	OCDF	0.728 ng/Kg	0.728U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX072 **Laboratory: LL**

EDD Filename: DX072_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-243-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.266 ng/Kg	0.266U ng/Kg
SL-243-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.0883 ng/Kg	0.0883U ng/Kg
SL-243-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0223 ng/Kg	0.0223U ng/Kg
SL-243-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.0140 ng/Kg	0.0140U ng/Kg
SL-243-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDD	0.0209 ng/Kg	0.0209U ng/Kg
SL-243-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.00788 ng/Kg	0.00788U ng/Kg
SL-243-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDD	0.0197 ng/Kg	0.0197U ng/Kg
SL-243-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.0450 ng/Kg	0.0450U ng/Kg
SL-243-SA5A-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.0307 ng/Kg	0.0307U ng/Kg
SL-243-SA5A-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.0559 ng/Kg	0.0559U ng/Kg
SL-243-SA5A-SB-4.0-5.0(RES)	2,3,7,8-TCDF	0.0189 ng/Kg	0.0189U ng/Kg
SL-243-SA5A-SB-4.0-5.0(RES)	OCDD	1.19 ng/Kg	1.19U ng/Kg
SL-243-SA5A-SB-4.0-5.0(RES)	OCDF	0.206 ng/Kg	0.206U ng/Kg

Field Duplicate RPD Report

Lab Reporting Batch ID: DX072 **Laboratory: LL**

EDD Filename: DX072_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 160.3M
Matrix: SO

Analyte	Concentration (%)		Sample RPD	eQAPP RPD	Flag
	SL-058-SA5A-SB-3.0-4.0	DUP14-SA5A-QC-041411			
MOISTURE	9.0	8.6	5		No Qualifiers Applied

Method: 1613B
Matrix: SO

Analyte	Concentration (ng/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-058-SA5A-SB-3.0-4.0	DUP14-SA5A-QC-041411			
1,2,3,7,8,9-HXCDD	0.257	0.218	16	50.00	No Qualifiers Applied
1,2,3,4,6,7,8-HPCDD	0.726	0.326	76	50.00	J(all detects) UJ(all non-detects)
1,2,3,4,6,7,8-HPCDF	0.142	0.365	88	50.00	
1,2,3,4,7,8,9-HPCDF	0.0704	0.278	119	50.00	
1,2,3,4,7,8-HxCDD	0.0422	0.197	129	50.00	
1,2,3,4,7,8-HXCDF	0.0426	0.221	135	50.00	
1,2,3,6,7,8-HXCDD	0.146	0.256	55	50.00	
1,2,3,6,7,8-HXCDF	0.0569	0.193	109	50.00	
1,2,3,7,8,9-HXCDF	0.157	0.267	52	50.00	
1,2,3,7,8-PECDD	0.0805	0.270	108	50.00	
1,2,3,7,8-PECDF	0.0758	0.317	123	50.00	
2,3,4,6,7,8-HXCDF	0.0542	0.212	119	50.00	
2,3,4,7,8-PECDF	0.0681	0.309	128	50.00	
2,3,7,8-TCDD	0.0326	0.0705	74	50.00	
2,3,7,8-TCDF	1.09 U	0.240	200	50.00	
OCDD	12.1	0.851	174	50.00	
OCDF	0.236	0.569	83	50.00	

Reporting Limit Outliers

Lab Reporting Batch ID: DX072 **Laboratory: LL**

EDD Filename: DX072_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP14-SA5A-QC-041411	1,2,3,4,6,7,8-HPCDD	JBQ	0.326	5.46	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.365	5.46	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.278	5.46	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.197	5.46	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.221	5.46	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.256	5.46	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.193	5.46	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.218	5.46	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.267	5.46	PQL	ng/Kg	
	1,2,3,7,8-PECDD	J	0.270	5.46	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.317	5.46	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.212	5.46	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.309	5.46	PQL	ng/Kg	
	2,3,7,8-TCDD	JB	0.0705	1.09	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.240	1.09	PQL	ng/Kg	
	OCDD	JB	0.851	10.9	PQL	ng/Kg	
	OCDF	JB	0.569	10.9	PQL	ng/Kg	
SL-041-SA5A-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JB	0.215	5.56	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.0612	5.56	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0429	5.56	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0147	5.56	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0158	5.56	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.0223	5.56	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0217	5.56	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.0525	5.56	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.0736	5.56	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0196	5.56	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0184	5.56	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0441	5.56	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0436	5.56	PQL	ng/Kg	
	OCDD	JB	0.675	11.1	PQL	ng/Kg	
	OCDF	JBQ	0.127	11.1	PQL	ng/Kg	
SL-044-SA5A-SB-3.0-4.0	1,2,3,4,6,7,8-HPCDD	JBQ	0.539	5.53	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JBQ	0.142	5.53	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.0955	5.53	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.0352	5.53	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.0494	5.53	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.0531	5.53	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0374	5.53	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.0697	5.53	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.119	5.53	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0404	5.53	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.0280	5.53	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.0621	5.53	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.0796	5.53	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.0124	1.11	PQL	ng/Kg	
	OCDD	JB	4.24	11.1	PQL	ng/Kg	
	OCDF	JBQ	0.302	11.1	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX072 **Laboratory: LL**

EDD Filename: DX072_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-052-SA5A-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JB	0.267	5.73	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JBQ	0.0599	5.73	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0368	5.73	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0117	5.73	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0148	5.73	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.0217	5.73	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0109	5.73	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.0302	5.73	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0130	5.73	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.0366	5.73	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.0494	5.73	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.0180	1.15	PQL	ng/Kg	
	OCDD	JB	0.654	11.5	PQL	ng/Kg	
	OCDF	JB	0.122	11.5	PQL	ng/Kg	
SL-058-SA5A-SB-3.0-4.0	1,2,3,4,6,7,8-HPCDD	JB	0.726	5.43	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JBQ	0.142	5.43	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0704	5.43	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.0422	5.43	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.0426	5.43	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.146	5.43	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0569	5.43	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.257	5.43	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.157	5.43	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0805	5.43	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0758	5.43	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0542	5.43	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0681	5.43	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0326	1.09	PQL	ng/Kg	
	OCDF	JBQ	0.236	10.9	PQL	ng/Kg	
SL-059-SA5A-SB-3.0-4.0	1,2,3,4,6,7,8-HPCDD	JBQ	0.383	5.59	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.137	5.59	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.164	5.59	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0476	5.59	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0586	5.59	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.125	5.59	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0647	5.59	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.298	5.59	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.277	5.59	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.148	5.59	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.126	5.59	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.161	5.59	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.145	5.59	PQL	ng/Kg	
	2,3,7,8-TCDD	JB	0.0309	1.12	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.0304	1.12	PQL	ng/Kg	
	OCDD	JB	0.827	11.2	PQL	ng/Kg	
	OCDF	JB	0.346	11.2	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX072 **Laboratory: LL**

EDD Filename: DX072_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-062-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDD	JB	1.56	5.67	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	1.60	5.67	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0542	5.67	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0468	5.67	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.445	5.67	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.108	5.67	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0803	5.67	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.141	5.67	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JB	0.117	5.67	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0401	5.67	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.331	5.67	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.133	5.67	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.188	5.67	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.120	1.13	PQL	ng/Kg	
	OCDF	JB	6.87	11.3	PQL	ng/Kg	
SL-065-SA5A-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JB	0.320	5.50	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.126	5.50	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0726	5.50	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0214	5.50	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0211	5.50	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.0432	5.50	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0303	5.50	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.0653	5.50	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.0650	5.50	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.0232	5.50	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.0354	5.50	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0752	5.50	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.0749	5.50	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0167	1.10	PQL	ng/Kg	
	OCDD	JB	0.952	11.0	PQL	ng/Kg	
	OCDF	JBQ	0.217	11.0	PQL	ng/Kg	
SL-067-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDD	JB	4.73	5.98	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	2.01	5.98	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.140	5.98	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.0647	5.98	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.584	5.98	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.253	5.98	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.138	5.98	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.170	5.98	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JB	0.125	5.98	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.0557	5.98	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.621	5.98	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.162	5.98	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.282	5.98	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.198	1.20	PQL	ng/Kg	
	OCDF	JB	9.02	12.0	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX072 **Laboratory: LL**

EDD Filename: DX072_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-094-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDD	JB	2.63	5.35	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.484	5.35	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.0852	5.35	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.135	5.35	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.296	5.35	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.344	5.35	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.150	5.35	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.467	5.35	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.575	5.35	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.184	5.35	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.276	5.35	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.139	5.35	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.268	5.35	PQL	ng/Kg	
	2,3,7,8-TCDD	JB	0.0256	1.07	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.125	1.07	PQL	ng/Kg	
	OCDF	JB	1.02	10.7	PQL	ng/Kg	
SL-095-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDD	JB	2.68	5.63	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.458	5.63	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0642	5.63	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0722	5.63	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.240	5.63	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.295	5.63	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0967	5.63	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.388	5.63	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.339	5.63	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0993	5.63	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.170	5.63	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.121	5.63	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.222	5.63	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0146	1.13	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.103	1.13	PQL	ng/Kg	
	OCDF	JB	0.955	11.3	PQL	ng/Kg	
SL-096-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDD	JB	2.87	5.32	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.547	5.32	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.104	5.32	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0704	5.32	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.337	5.32	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.335	5.32	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0833	5.32	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.428	5.32	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.459	5.32	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.172	5.32	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.113	5.32	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.281	5.32	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.106	1.06	PQL	ng/Kg	
	OCDF	JB	1.21	10.6	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX072 **Laboratory: LL**

EDD Filename: DX072_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-097-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDD	JB	3.09	5.72	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.620	5.72	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.0972	5.72	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0670	5.72	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.333	5.72	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.481	5.72	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.104	5.72	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.714	5.72	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.804	5.72	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.0953	5.72	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.213	5.72	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.114	5.72	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.206	5.72	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.136	1.14	PQL	ng/Kg	
	OCDF	JB	1.42	11.4	PQL	ng/Kg	
SL-122-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDD	JB	2.88	5.19	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.760	5.19	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.191	5.19	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.132	5.19	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.315	5.19	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.236	5.19	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.179	5.19	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.353	5.19	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.246	5.19	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.176	5.19	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.323	5.19	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.248	5.19	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.483	5.19	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0549	1.04	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.363	1.04	PQL	ng/Kg	
	OCDF	JB	1.14	10.4	PQL	ng/Kg	
SL-135-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	1.08	5.42	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JBQ	0.133	5.42	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.168	5.42	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.251	5.42	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.561	5.42	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.151	5.42	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.543	5.42	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.251	5.42	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.199	5.42	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.753	5.42	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.140	5.42	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.351	5.42	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.113	1.08	PQL	ng/Kg	
	OCDF	JB	2.80	10.8	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX072 **Laboratory: LL**

EDD Filename: DX072_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-141-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDD	JB	3.01	5.68	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	1.51	5.68	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.0749	5.68	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0676	5.68	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.485	5.68	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.141	5.68	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0877	5.68	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.197	5.68	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.118	5.68	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0451	5.68	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.758	5.68	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.121	5.68	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.205	5.68	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.144	1.14	PQL	ng/Kg	
	OCDF	JB	6.09	11.4	PQL	ng/Kg	
SL-242-SA5A-SB-2.5-3.5	1,2,3,4,6,7,8-HPCDD	JB	0.726	5.66	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.232	5.66	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0702	5.66	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0259	5.66	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0546	5.66	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.0489	5.66	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0538	5.66	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.0838	5.66	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.0581	5.66	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0273	5.66	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.0269	5.66	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0600	5.66	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.0501	5.66	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0138	1.13	PQL	ng/Kg	
	OCDD	JB	6.93	11.3	PQL	ng/Kg	
	OCDF	JB	0.728	11.3	PQL	ng/Kg	
SL-243-SA5A-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JBQ	0.266	5.70	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.0883	5.70	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0223	5.70	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0140	5.70	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.0209	5.70	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.00788	5.70	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.0197	5.70	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.0450	5.70	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0307	5.70	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.0559	5.70	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.0189	1.14	PQL	ng/Kg	
	OCDD	JB	1.19	11.4	PQL	ng/Kg	
	OCDF	JB	0.206	11.4	PQL	ng/Kg	

Enclosure II

EPA Level IV Validation Reports

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	April 14 through April 19, 2011
LDC Report Date:	August 10, 2011
Matrix:	Soil
Parameters:	Dioxins/Dibenzofurans
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DX072

Sample Identification

DUP14-SA5A-QC-041411
SL-058-SA5A-SB-3.0-4.0
SL-059-SA5A-SB-3.0-4.0
SL-065-SA5A-SB-4.0-5.0
SL-242-SA5A-SB-2.5-3.5
SL-062-SA8N-SS-0.0-0.5
SL-067-SA8N-SS-0.0-0.5
SL-141-SA8N-SS-0.0-0.5
SL-041-SA5A-SB-4.0-5.0
SL-044-SA5A-SB-3.0-4.0
SL-052-SA5A-SB-4.0-5.0
SL-243-SA5A-SB-4.0-5.0
SL-094-SA8N-SS-0.0-0.5
SL-095-SA8N-SS-0.0-0.5
SL-096-SA8N-SS-0.0-0.5
SL-097-SA8N-SS-0.0-0.5
SL-122-SA8N-SS-0.0-0.5
SL-135-SA8N-SS-0.0-0.5
SL-058-SA5A-SB-3.0-4.0MS
SL-058-SA5A-SB-3.0-4.0MSD

Introduction

This data review covers 20 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA Method 1613B for Polychlorinated Dioxins/Dibenzofurans.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and the USEPA Contract Laboratory Program National Functional Guidelines for Polychlorinated Dioxins/Dibenzofurans Data Review (September 2005).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. HRGC/HRMS Instrument Performance Check

Instrument performance was checked at the required daily frequency.

The chromatographic resolution between 2,3,7,8-TCDD and the peaks representing any other unlabeled TCDD isomers was resolved with a valley of less than or equal to 25%.

PFK and static resolving power were within validation criteria.

III. Initial Calibration

A five point initial calibration was performed as required by the method.

Percent relative standard deviations (%RSD) were less than or equal to 20.0% for unlabeled compounds and less than or equal to 35.0% for labeled compounds.

The ion abundance ratios for all PCDDs and PCDFs were within validation criteria.

The minimum S/N ratio was greater than or equal to 10 for each unlabeled compound and labeled compound.

IV. Routine Calibration (Continuing)

Routine calibration was performed at the required frequencies.

All of the routine calibration percent differences (%D) between the initial calibration RRF and the routine calibration RRF were within QC limits.

The ion abundance ratios for all PCDDs and PCDFs were within validation criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polychlorinated dioxin/dibenzofuran contaminants were found in the method blanks with the following exceptions:

Method Blank ID	Extraction Date	Compound	Concentration	Associated Samples
BLK108002	4/18/11	2,3,7,8-TCDF	0.0112 ng/Kg	SL-059-SA5A-SB-3.0-4.0
		2,3,7,8-TCDD	0.0284 ng/Kg	SL-065-SA5A-SB-4.0-5.0
		1,2,3,7,8-PeCDF	0.0353 ng/Kg	SL-242-SA5A-SB-2.5-3.5
		2,3,4,7,8-PeCDF	0.0901 ng/Kg	SL-062-SA8N-SS-0.0-0.5
		1,2,3,7,8-PeCDD	0.0354 ng/Kg	SL-067-SA8N-SS-0.0-0.5
		1,2,3,4,7,8-HxCDF	0.0844 ng/Kg	SL-141-SA8N-SS-0.0-0.5
		1,2,3,6,7,8-HxCDF	0.0439 ng/Kg	SL-041-SA5A-SB-4.0-5.0
		2,3,4,6,7,8-HxCDF	0.0328 ng/Kg	SL-044-SA5A-SB-3.0-4.0
		1,2,3,4,7,8-HxCDD	0.0288 ng/Kg	SL-052-SA5A-SB-4.0-5.0
		1,2,3,6,7,8-HxCDD	0.0367 ng/Kg	SL-243-SA5A-SB-4.0-5.0
		1,2,3,7,8,9-HxCDD	0.0531 ng/Kg	
		1,2,3,7,8,9-HxCDF	0.0731 ng/Kg	
		1,2,3,4,6,7,8-HpCDF	0.0892 ng/Kg	
		1,2,3,4,6,7,8-HpCDD	0.194 ng/Kg	
		1,2,3,4,7,8,9-HpCDF	0.0492 ng/Kg	
		OCDD	0.428 ng/Kg	
		OCDF	0.158 ng/Kg	
BLK115002	4/25/11	2,3,7,8-TCDF	0.0227 ng/Kg	SL-094-SA8N-SS-0.0-0.5
		2,3,7,8-TCDD	0.0462 ng/Kg	SL-095-SA8N-SS-0.0-0.5
		1,2,3,7,8-PeCDF	0.0538 ng/Kg	SL-096-SA8N-SS-0.0-0.5
		2,3,4,7,8-PeCDF	0.0593 ng/Kg	SL-097-SA8N-SS-0.0-0.5
		1,2,3,7,8-PeCDD	0.0571 ng/Kg	
		1,2,3,4,7,8-HxCDF	0.0469 ng/Kg	
		1,2,3,6,7,8-HxCDF	0.0401 ng/Kg	
		2,3,4,6,7,8-HxCDF	0.0651 ng/Kg	
		1,2,3,4,7,8-HxCDD	0.0421 ng/Kg	
		1,2,3,6,7,8-HxCDD	0.0348 ng/Kg	
		1,2,3,7,8,9-HxCDD	0.0543 ng/Kg	
		1,2,3,7,8,9-HxCDF	0.0854 ng/Kg	
		1,2,3,4,6,7,8-HpCDF	0.126 ng/Kg	
		1,2,3,4,6,7,8-HpCDD	0.231 ng/Kg	
		1,2,3,4,7,8,9-HpCDF	0.0849 ng/Kg	
		OCDD	0.458 ng/Kg	
		OCDF	0.215 ng/Kg	
BLK122003	5/26/11	2,3,7,8-TCDD	0.0183 ng/Kg	SL-058-SA5A-SB-3.0-4.0
		1,2,3,7,8-PeCDF	0.0563 ng/Kg	
		2,3,4,7,8-PeCDF	0.0781 ng/Kg	
		1,2,3,7,8-PeCDD	0.0512 ng/Kg	
		1,2,3,4,7,8-HxCDF	0.0612 ng/Kg	
		1,2,3,6,7,8-HxCDF	0.0458 ng/Kg	
		2,3,4,6,7,8-HxCDF	0.0520 ng/Kg	
		1,2,3,4,7,8-HxCDD	0.0242 ng/Kg	
		1,2,3,6,7,8-HxCDD	0.0426 ng/Kg	
		1,2,3,7,8,9-HxCDD	0.0398 ng/Kg	
		1,2,3,7,8,9-HxCDF	0.0821 ng/Kg	
		1,2,3,4,6,7,8-HpCDF	0.0881 ng/Kg	
		1,2,3,4,6,7,8-HpCDD	0.173 ng/Kg	
		1,2,3,4,7,8,9-HpCDF	0.0487 ng/Kg	
		OCDD	0.359 ng/Kg	
		OCDF	0.148 ng/Kg	

Method Blank ID	Extraction Date	Compound	Concentration	Associated Samples
BLK116001	4/26/11	2,3,7,8-TCDF	0.0540 ng/Kg	SL-122-SA8N-SS-0.0-0.5
		2,3,7,8-TCDD	0.0319 ng/Kg	SL-135-SA8N-SS-0.0-0.5
		1,2,3,7,8-PeCDF	0.0631 ng/Kg	
		2,3,4,7,8-PeCDF	0.117 ng/Kg	
		1,2,3,7,8-PeCDD	0.0569 ng/Kg	
		1,2,3,4,7,8-HxCDF	0.0838 ng/Kg	
		1,2,3,6,7,8-HxCDF	0.0727 ng/Kg	
		2,3,4,6,7,8-HxCDF	0.0953 ng/Kg	
		1,2,3,4,7,8-HxCDD	0.0389 ng/Kg	
		1,2,3,6,7,8-HxCDD	0.0462 ng/Kg	
		1,2,3,7,8,9-HxCDD	0.0481 ng/Kg	
		1,2,3,7,8,9-HxCDF	0.0641 ng/Kg	
		1,2,3,4,6,7,8-HpCDF	0.221 ng/Kg	
		1,2,3,4,6,7,8-HpCDD	0.211 ng/Kg	
		1,2,3,4,7,8,9-HpCDF	0.0916 ng/Kg	
		OCDD	0.517 ng/Kg	
		OCDF	0.277 ng/Kg	
BLK116002	4/26/11	2,3,7,8-TCDF	0.0380 ng/Kg	DUP14-SA5A-QC-041411
		2,3,7,8-TCDD	0.0262 ng/Kg	
		1,2,3,7,8-PeCDF	0.0555 ng/Kg	
		2,3,4,7,8-PeCDF	0.0640 ng/Kg	
		1,2,3,4,7,8-HxCDF	0.0658 ng/Kg	
		1,2,3,6,7,8-HxCDF	0.0601 ng/Kg	
		2,3,4,6,7,8-HxCDF	0.104 ng/Kg	
		1,2,3,4,7,8-HxCDD	0.0285 ng/Kg	
		1,2,3,6,7,8-HxCDD	0.0370 ng/Kg	
		1,2,3,7,8,9-HxCDD	0.0614 ng/Kg	
		1,2,3,7,8,9-HxCDF	0.0973 ng/Kg	
		1,2,3,4,6,7,8-HpCDF	0.149 ng/Kg	
		1,2,3,4,6,7,8-HpCDD	0.247 ng/Kg	
		1,2,3,4,7,8,9-HpCDF	0.0979 ng/Kg	
		OCDD	0.449 ng/Kg	
		OCDF	0.273 ng/Kg	

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated method blanks with the following exceptions:

Sample	Compound	Reported Concentration	Modified Final Concentration
SL-059-SA5A-SB-3.0-4.0	2,3,7,8-TCDF	0.0304 ng/Kg	0.0304U ng/Kg
	2,3,7,8-TCDD	0.0309 ng/Kg	0.0309U ng/Kg
	1,2,3,7,8-PeCDF	0.126 ng/Kg	0.126U ng/Kg
	2,3,4,7,8-PeCDF	0.145 ng/Kg	0.145U ng/Kg
	1,2,3,7,8-PeCDD	0.148 ng/Kg	0.148U ng/Kg
	1,2,3,4,7,8-HxCDF	0.0586 ng/Kg	0.0586U ng/Kg
	1,2,3,6,7,8-HxCDF	0.0647 ng/Kg	0.0647U ng/Kg
	2,3,4,6,7,8-HxCDF	0.161 ng/Kg	0.161U ng/Kg
	1,2,3,4,7,8-HxCDD	0.0476 ng/Kg	0.0476U ng/Kg
	1,2,3,6,7,8-HxCDD	0.125 ng/Kg	0.125U ng/Kg
	1,2,3,7,8,9-HxCDD	0.298 ng/Kg	0.298U ng/Kg
	1,2,3,7,8,9-HxCDF	0.277 ng/Kg	0.277U ng/Kg
	1,2,3,4,6,7,8-HpCDF	0.137 ng/Kg	0.137U ng/Kg
	1,2,3,4,6,7,8-HpCDD	0.383 ng/Kg	0.383U ng/Kg
	1,2,3,4,7,8,9-HpCDF	0.164 ng/Kg	0.164U ng/Kg
	OCDD	0.827 ng/Kg	0.827U ng/Kg
	OCDF	0.346 ng/Kg	0.346U ng/Kg

Sample	Compound	Reported Concentration	Modified Final Concentration
SL-065-SA5A-SB-4.0-5.0	2,3,7,8-TCDD	0.0167 ng/Kg	0.0167U ng/Kg
	1,2,3,7,8-PeCDF	0.0354 ng/Kg	0.0354U ng/Kg
	2,3,4,7,8-PeCDF	0.0749 ng/Kg	0.0749U ng/Kg
	1,2,3,7,8-PeCDD	0.0232 ng/Kg	0.0232U ng/Kg
	1,2,3,4,7,8-HxCDF	0.0211 ng/Kg	0.0211U ng/Kg
	1,2,3,6,7,8-HxCDF	0.0303 ng/Kg	0.0303U ng/Kg
	2,3,4,6,7,8-HxCDF	0.0752 ng/Kg	0.0752U ng/Kg
	1,2,3,4,7,8-HxCDD	0.0214 ng/Kg	0.0214U ng/Kg
	1,2,3,6,7,8-HxCDD	0.0432 ng/Kg	0.0432U ng/Kg
	1,2,3,7,8,9-HxCDD	0.0653 ng/Kg	0.0653U ng/Kg
	1,2,3,7,8,9-HxCDF	0.0650 ng/Kg	0.0650U ng/Kg
	1,2,3,4,6,7,8-HpCDF	0.126 ng/Kg	0.126U ng/Kg
	1,2,3,4,6,7,8-HpCDD	0.320 ng/Kg	0.320U ng/Kg
	1,2,3,4,7,8,9-HpCDF	0.0726 ng/Kg	0.0726U ng/Kg
	OCDD	0.952 ng/Kg	0.952U ng/Kg
	OCDF	0.217 ng/Kg	0.217U ng/Kg
SL-242-SA5A-SB-2.5-3.5	2,3,7,8-TCDD	0.0138 ng/Kg	0.0138U ng/Kg
	1,2,3,7,8-PeCDF	0.0269 ng/Kg	0.0269U ng/Kg
	2,3,4,7,8-PeCDF	0.0501 ng/Kg	0.0501U ng/Kg
	1,2,3,7,8-PeCDD	0.0273 ng/Kg	0.0273U ng/Kg
	1,2,3,4,7,8-HxCDF	0.0546 ng/Kg	0.0546U ng/Kg
	1,2,3,6,7,8-HxCDF	0.0538 ng/Kg	0.0538U ng/Kg
	2,3,4,6,7,8-HxCDF	0.0600 ng/Kg	0.0600U ng/Kg
	1,2,3,4,7,8-HxCDD	0.0259 ng/Kg	0.0259U ng/Kg
	1,2,3,6,7,8-HxCDD	0.0489 ng/Kg	0.0489U ng/Kg
	1,2,3,7,8,9-HxCDD	0.0838 ng/Kg	0.0838U ng/Kg
	1,2,3,7,8,9-HxCDF	0.0581 ng/Kg	0.0581U ng/Kg
	1,2,3,4,6,7,8-HpCDF	0.232 ng/Kg	0.232U ng/Kg
	1,2,3,4,6,7,8-HpCDD	0.726 ng/Kg	0.726U ng/Kg
	1,2,3,4,7,8,9-HpCDF	0.0702 ng/Kg	0.0702U ng/Kg
	OCDF	0.728 ng/Kg	0.728U ng/Kg
SL-062-SA8N-SS-0.0-0.5	2,3,4,7,8-PeCDF	0.188 ng/Kg	0.188U ng/Kg
	1,2,3,7,8-PeCDD	0.0401 ng/Kg	0.0401U ng/Kg
	1,2,3,6,7,8-HxCDF	0.0803 ng/Kg	0.0803U ng/Kg
	2,3,4,6,7,8-HxCDF	0.133 ng/Kg	0.133U ng/Kg
	1,2,3,4,7,8-HxCDD	0.0468 ng/Kg	0.0468U ng/Kg
	1,2,3,6,7,8-HxCDD	0.108 ng/Kg	0.108U ng/Kg
	1,2,3,7,8,9-HxCDD	0.141 ng/Kg	0.141U ng/Kg
	1,2,3,7,8,9-HxCDF	0.117 ng/Kg	0.117U ng/Kg
	1,2,3,4,7,8,9-HpCDF	0.0542 ng/Kg	0.0542U ng/Kg
SL-067-SA8N-SS-0.0-0.5	2,3,4,7,8-PeCDF	0.282 ng/Kg	0.282U ng/Kg
	1,2,3,7,8-PeCDD	0.0557 ng/Kg	0.0557U ng/Kg
	1,2,3,6,7,8-HxCDF	0.138 ng/Kg	0.138U ng/Kg
	2,3,4,6,7,8-HxCDF	0.162 ng/Kg	0.162U ng/Kg
	1,2,3,4,7,8-HxCDD	0.0647 ng/Kg	0.0647U ng/Kg
	1,2,3,7,8,9-HxCDD	0.170 ng/Kg	0.170U ng/Kg
	1,2,3,7,8,9-HxCDF	0.125 ng/kg	0.125U ng/Kg
	1,2,3,4,7,8,9-HpCDF	0.140 ng/Kg	0.140U ng/Kg
SL-141-SA8N-SS-0.0-0.5	2,3,4,7,8-PeCDF	0.205 ng/Kg	0.205U ng/Kg
	1,2,3,7,8-PeCDD	0.0451 ng/Kg	0.0451U ng/Kg
	1,2,3,6,7,8-HxCDF	0.0877 ng/Kg	0.0877U ng/Kg
	2,3,4,6,7,8-HxCDF	0.121 ng/Kg	0.121U ng/Kg
	1,2,3,4,7,8-HxCDD	0.0676 ng/Kg	0.0676U ng/Kg
	1,2,3,6,7,8-HxCDD	0.141 ng/Kg	0.141U ng/Kg
	1,2,3,7,8,9-HxCDD	0.197 ng/Kg	0.197U ng/Kg
	1,2,3,7,8,9-HxCDF	0.118 ng/Kg	0.118U ng/Kg
	1,2,3,4,7,8,9-HpCDF	0.0749 ng/Kg	0.0749U ng/Kg

Sample	Compound	Reported Concentration	Modified Final Concentration
SL-041-SA5A-SB-4.0-5.0	1,2,3,7,8-PeCDF	0.0184 ng/Kg	0.0184U ng/Kg
	2,3,4,7,8-PeCDF	0.0436 ng/Kg	0.0436U ng/Kg
	1,2,3,7,8-PeCDD	0.0196 ng/Kg	0.0196U ng/Kg
	1,2,3,4,7,8-HxCDF	0.0158 ng/Kg	0.0158U ng/Kg
	1,2,3,6,7,8-HxCDF	0.0217 ng/Kg	0.0217U ng/Kg
	2,3,4,6,7,8-HxCDF	0.0441 ng/Kg	0.0441U ng/Kg
	1,2,3,4,7,8-HxCDD	0.0147 ng/Kg	0.0147U ng/Kg
	1,2,3,6,7,8-HxCDD	0.0223 ng/Kg	0.0223U ng/Kg
	1,2,3,7,8,9-HxCDD	0.0525 ng/Kg	0.0525U ng/Kg
	1,2,3,7,8,9-HxCDF	0.0736 ng/Kg	0.0736U ng/Kg
	1,2,3,4,6,7,8-HpCDF	0.0612 ng/Kg	0.0612U ng/Kg
	1,2,3,4,6,7,8-HpCDD	0.215 ng/Kg	0.215U ng/Kg
	1,2,3,4,7,8,9-HpCDF	0.0429 ng/Kg	0.0429U ng/Kg
	OCDD	0.675 ng/Kg	0.675U ng/Kg
	OCDF	0.127 ng/Kg	0.127U ng/Kg
SL-044-SA5A-SB-3.0-4.0	2,3,7,8-TCDF	0.0124 ng/Kg	0.0124U ng/Kg
	1,2,3,7,8-PeCDF	0.0280 ng/Kg	0.0280U ng/Kg
	2,3,4,7,8-PeCDF	0.0796 ng/Kg	0.0796U ng/Kg
	1,2,3,7,8-PeCDD	0.0404 ng/Kg	0.0404U ng/Kg
	1,2,3,4,7,8-HxCDF	0.0494 ng/Kg	0.0494U ng/Kg
	1,2,3,6,7,8-HxCDF	0.0374 ng/Kg	0.0374U ng/Kg
	2,3,4,6,7,8-HxCDF	0.0621 ng/Kg	0.0621U ng/Kg
	1,2,3,4,7,8-HxCDD	0.0352 ng/Kg	0.0352U ng/Kg
	1,2,3,6,7,8-HxCDD	0.0531 ng/Kg	0.0531U ng/Kg
	1,2,3,7,8,9-HxCDD	0.0697 ng/Kg	0.0697U ng/Kg
	1,2,3,7,8,9-HxCDF	0.119 ng/Kg	0.119U ng/Kg
	1,2,3,4,6,7,8-HpCDF	0.142 ng/Kg	0.142U ng/Kg
	1,2,3,4,6,7,8-HpCDD	0.539 ng/Kg	0.539U ng/Kg
	1,2,3,4,7,8,9-HpCDF	0.0955 ng/Kg	0.0955U ng/Kg
	OCDF	0.302 ng/Kg	0.302U ng/Kg
SL-052-SA5A-SB-4.0-5.0	2,3,7,8-TCDF	0.0180 ng/Kg	0.0180U ng/Kg
	1,2,3,7,8-PeCDF	0.0130 ng/Kg	0.0130U ng/Kg
	2,3,4,7,8-PeCDF	0.0494 ng/Kg	0.0494U ng/Kg
	1,2,3,4,7,8-HxCDF	0.0148 ng/Kg	0.0148U ng/Kg
	1,2,3,6,7,8-HxCDF	0.0109 ng/Kg	0.0109U ng/Kg
	2,3,4,6,7,8-HxCDF	0.0366 ng/Kg	0.0366U ng/Kg
	1,2,3,4,7,8-HxCDD	0.0117 ng/Kg	0.0117U ng/Kg
	1,2,3,6,7,8-HxCDD	0.0217 ng/Kg	0.0217U ng/Kg
	1,2,3,7,8,9-HxCDD	0.0302 ng/Kg	0.0302U ng/Kg
	1,2,3,4,6,7,8-HpCDF	0.0599 ng/Kg	0.0599U ng/Kg
	1,2,3,4,6,7,8-HpCDD	0.267 ng/Kg	0.267U ng/Kg
	1,2,3,4,7,8,9-HpCDF	0.0368 ng/Kg	0.0368U ng/Kg
	OCDD	0.654 ng/Kg	0.654U ng/Kg
	OCDF	0.122 ng/Kg	0.122U ng/Kg
SL-243-SA5A-SB-4.0-5.0	2,3,7,8-TCDF	0.0189 ng/Kg	0.0189U ng/Kg
	2,3,4,7,8-PeCDF	0.0559 ng/Kg	0.0559U ng/Kg
	1,2,3,4,7,8-HxCDF	0.0140 ng/Kg	0.0140U ng/Kg
	1,2,3,6,7,8-HxCDF	0.00788 ng/Kg	0.00788U ng/Kg
	2,3,4,6,7,8-HxCDF	0.0307 ng/Kg	0.0307U ng/Kg
	1,2,3,6,7,8-HxCDD	0.0209 ng/Kg	0.0209U ng/Kg
	1,2,3,7,8,9-HxCDD	0.0197 ng/Kg	0.0197U ng/Kg
	1,2,3,7,8,9-HxCDF	0.0450 ng/Kg	0.0450U ng/Kg
	1,2,3,4,6,7,8-HpCDF	0.0833 ng/Kg	0.0833U ng/Kg
	1,2,3,4,6,7,8-HpCDD	0.266 ng/Kg	0.266U ng/Kg
	1,2,3,4,7,8,9-HpCDF	0.0223 ng/Kg	0.0223U ng/Kg
	OCDD	1.19 ng/Kg	1.19U ng/Kg
	OCDF	0.206 ng/Kg	0.206U ng/Kg

Sample	Compound	Reported Concentration	Modified Final Concentration
SL-094-SA8N-SS-0.0-0.5	2,3,7,8-TCDD	0.0256 ng/Kg	0.0256U ng/Kg
	2,3,4,7,8-PeCDF	0.268 ng/Kg	0.268U ng/Kg
	1,2,3,7,8-PeCDD	0.184 ng/Kg	0.184U ng/Kg
	1,2,3,6,7,8-HxCDF	0.150 ng/Kg	0.150U ng/Kg
	2,3,4,6,7,8-HxCDF	0.139 ng/Kg	0.139U ng/Kg
	1,2,3,4,7,8-HxCDD	0.135 ng/Kg	0.135U ng/Kg
	1,2,3,4,6,7,8-HpCDF	0.484 ng/Kg	0.484U ng/Kg
	1,2,3,4,7,8,9-HpCDF	0.0852 ng/Kg	0.0852U ng/Kg
	OCDF	1.02 ng/Kg	1.02U ng/Kg
SL-095-SA8N-SS-0.0-0.5	2,3,7,8-TCDF	0.103 ng/Kg	0.103U ng/Kg
	2,3,7,8-TCDD	0.0146 ng/Kg	0.0146U ng/Kg
	1,2,3,7,8-PeCDF	0.170 ng/Kg	0.170U ng/Kg
	2,3,4,7,8-PeCDF	0.222 ng/Kg	0.222U ng/Kg
	1,2,3,7,8-PeCDD	0.0993 ng/Kg	0.0993U ng/Kg
	1,2,3,6,7,8-HxCDF	0.0967 ng/Kg	0.0967U ng/Kg
	2,3,4,6,7,8-HxCDF	0.121 ng/Kg	0.121U ng/Kg
	1,2,3,4,7,8-HxCDD	0.0722 ng/Kg	0.0722U ng/Kg
	1,2,3,7,8,9-HxCDF	0.339 ng/Kg	0.339U ng/Kg
	1,2,3,4,6,7,8-HpCDF	0.458 ng/Kg	0.458U ng/Kg
	1,2,3,4,7,8,9-HpCDF	0.0642 ng/Kg	0.0642U ng/Kg
	OCDF	0.955 ng/Kg	0.955U ng/Kg
SL-096-SA8N-SS-0.0-0.5	2,3,7,8-TCDF	0.106 ng/Kg	0.106U ng/Kg
	1,2,3,7,8-PeCDF	0.172 ng/Kg	0.172U ng/Kg
	2,3,4,7,8-PeCDF	0.281 ng/Kg	0.281U ng/Kg
	1,2,3,6,7,8-HxCDF	0.0833 ng/Kg	0.0833U ng/Kg
	2,3,4,6,7,8-HxCDF	0.113 ng/Kg	0.113U ng/Kg
	1,2,3,4,7,8-HxCDD	0.0704 ng/Kg	0.0704U ng/Kg
	1,2,3,4,6,7,8-HpCDF	0.547 ng/Kg	0.547U ng/Kg
	1,2,3,4,7,8,9-HpCDF	0.104 ng/Kg	0.104U ng/Kg
SL-097-SA8N-SS-0.0-0.5	1,2,3,7,8-PeCDF	0.213 ng/Kg	0.213U ng/Kg
	2,3,4,7,8-PeCDF	0.206 ng/Kg	0.206U ng/Kg
	1,2,3,7,8-PeCDD	0.0953 ng/Kg	0.0953U ng/Kg
	1,2,3,6,7,8-HxCDF	0.104 ng/Kg	0.104U ng/Kg
	2,3,4,6,7,8-HxCDF	0.114 ng/Kg	0.114U ng/Kg
	1,2,3,4,7,8-HxCDD	0.0670 ng/Kg	0.0670U ng/Kg
	1,2,3,4,6,7,8-HpCDF	0.620 ng/Kg	0.620U ng/Kg
	1,2,3,4,7,8,9-HpCDF	0.0972 ng/Kg	0.0972U ng/Kg
SL-058-SA5A-SB-3.0-4.0	2,3,7,8-TCDD	0.0326 ng/Kg	0.0326U ng/Kg
	1,2,3,7,8-PeCDF	0.0758 ng/Kg	0.0758U ng/Kg
	2,3,4,7,8-PeCDF	0.0681 ng/Kg	0.0681U ng/Kg
	1,2,3,7,8-PeCDD	0.0805 ng/Kg	0.0805U ng/Kg
	1,2,3,4,7,8-HxCDF	0.0426 ng/Kg	0.0426U ng/Kg
	1,2,3,6,7,8-HxCDF	0.0569 ng/Kg	0.0569U ng/Kg
	2,3,4,6,7,8-HxCDF	0.0542 ng/Kg	0.0542U ng/Kg
	1,2,3,4,7,8-HxCDD	0.0422 ng/Kg	0.0422U ng/Kg
	1,2,3,6,7,8-HxCDD	0.146 ng/Kg	0.146U ng/Kg
	1,2,3,7,8,9-HxCDF	0.157 ng/Kg	0.157U ng/Kg
	1,2,3,4,6,7,8-HpCDF	0.142 ng/Kg	0.142U ng/Kg
	1,2,3,4,6,7,8-HpCDD	0.726 ng/Kg	0.726U ng/Kg
	1,2,3,4,7,8,9-HpCDF	0.0704 ng/Kg	0.0704U ng/Kg
	OCDF	0.236 ng/Kg	0.236U ng/Kg

Sample	Compound	Reported Concentration	Modified Final Concentration
SL-122-SA8N-SS-0.0-0.5	2,3,7,8-TCDD	0.0549 ng/Kg	0.0549U ng/Kg
	2,3,4,7,8-PeCDF	0.483 ng/Kg	0.483U ng/Kg
	1,2,3,7,8-PeCDD	0.176 ng/Kg	0.176U ng/Kg
	1,2,3,4,7,8-HxCDF	0.315 ng/Kg	0.315U ng/Kg
	1,2,3,6,7,8-HxCDF	0.179 ng/Kg	0.179U ng/Kg
	2,3,4,6,7,8-HxCDF	0.248 ng/Kg	0.248U ng/Kg
	1,2,3,4,7,8-HxCDD	0.132 ng/Kg	0.132U ng/Kg
	1,2,3,7,8,9-HxCDF	0.246 ng/Kg	0.246U ng/Kg
	1,2,3,4,6,7,8-HpCDF	0.760 ng/Kg	0.760U ng/Kg
	1,2,3,4,7,8,9-HpCDF	0.191 ng/Kg	0.191U ng/Kg
	OCDF	1.14 ng/Kg	1.14U ng/Kg
SL-135-SA8N-SS-0.0-0.5	2,3,7,8-TCDF	0.113 ng/Kg	0.113U ng/Kg
	2,3,4,7,8-PeCDF	0.3514 ng/Kg	0.3514U ng/Kg
	1,2,3,7,8-PeCDD	0.199 ng/Kg	0.199U ng/Kg
	1,2,3,4,7,8-HxCDF	0.251 ng/Kg	0.251U ng/Kg
	1,2,3,6,7,8-HxCDF	0.151 ng/Kg	0.151U ng/Kg
	2,3,4,6,7,8-HxCDF	0.140 ng/Kg	0.140U ng/Kg
	1,2,3,4,7,8-HxCDD	0.168 ng/Kg	0.168U ng/Kg
	1,2,3,7,8,9-HxCDF	0.251 ng/Kg	0.251U ng/Kg
	1,2,3,4,6,7,8-HpCDF	1.08 ng/Kg	1.08U ng/Kg
	1,2,3,4,7,8,9-HpCDF	0.133 ng/Kg	0.133U ng/Kg
DUP14-SA5A-QC-041411	2,3,7,8-TCDD	0.0705 ng/Kg	0.0705U ng/Kg
	2,3,4,7,8-PeCDF	0.309 ng/Kg	0.309U ng/Kg
	1,2,3,4,7,8-HxCDF	0.221 ng/Kg	0.221U ng/Kg
	1,2,3,6,7,8-HxCDF	0.193 ng/Kg	0.193U ng/Kg
	2,3,4,6,7,8-HxCDF	0.212 ng/Kg	0.212U ng/Kg
	1,2,3,7,8,9-HxCDD	0.218 ng/Kg	0.218U ng/Kg
	1,2,3,7,8,9-HxCDF	0.267 ng/Kg	0.267U ng/Kg
	1,2,3,4,6,7,8-HpCDF	0.365 ng/Kg	0.365U ng/Kg
	1,2,3,4,6,7,8-HpCDD	0.326 ng/Kg	0.326U ng/Kg
	1,2,3,4,7,8,9-HpCDF	0.278 ng/Kg	0.278U ng/Kg
	OCDD	0.851 ng/Kg	0.851U ng/Kg
	OCDF	0.569 ng/Kg	0.569U ng/Kg

No field blanks were identified in this SDG.

VI. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. The percent recoveries (%R) were within the QC limits.

VIII. Regional Quality Assurance and Quality Control

Not applicable.

IX. Internal Standards

All internal standard recoveries were within QC limits.

X. Target Compound Identifications

All target compound identifications were within validation criteria.

XI. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DX072	All compounds reported below the RL.	J (all detects)	A

XII. System Performance

The system performance was acceptable.

XIII. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XIV. Field Duplicates

Samples DUP14-SA5A-QC-041411 and SL-058-SA5A-SB-3.0-4.0 were identified as field duplicates. No polychlorinated dioxins/dibenzofurans were detected in any of the samples with the following exceptions:

Compound	Concentration (ng/Kg)		RPD (Limits)	Flags	A or P
	DUP14-SA5A-QC-041411	SL-058-SA5A-SB-3.0-4.0			
2,3,7,8-TCDD	0.0705	0.0326	74 (≤50)	J (all detects)	A
1,2,3,7,8-PeCDD	0.270	0.0805	108 (≤50)	J (all detects)	A
1,2,3,4,7,8-HxCDD	0.197	0.0422	129 (≤50)	J (all detects)	A
1,2,3,6,7,8-HxCDD	0.256	0.146	55 (≤50)	J (all detects)	A
1,2,3,7,8,9-HxCDD	0.218	0.257	16 (≤50)	-	-

Compound	Concentration (ng/Kg)		RPD (Limits)	Flags	A or P
	DUP14-SA5A-QC-041411	SL-058-SA5A-SB-3.0-4.0			
1,2,3,4,6,7,8-HpCDD	0.326	0.726	76 (≤50)	J (all detects)	A
OCDD	0.851	12.1	174 (≤50)	J (all detects)	A
2,3,7,8-TCDF	0.240	0.0124U	200 (≤50)	J (all detects) UJ (all non-detects)	A
1,2,3,7,8-PeCDF	0.317	0.0758	123 (≤50)	J (all detects)	A
2,3,4,7,8-PeCDF	0.309	0.0681	128 (≤50)	J (all detects)	A
1,2,3,4,7,8-HxCDF	0.221	0.0426	135 (≤50)	J (all detects)	A
1,2,3,6,7,8-HxCDF	0.193	0.0569	109 (≤50)	J (all detects)	A
1,2,3,7,8,9-HxCDF	0.267	0.157	52 (≤50)	J (all detects)	A
2,3,4,6,7,8-HxCDF	0.212	0.0542	119 (≤50)	J (all detects)	A
1,2,3,4,6,7,8-HpCDF	0.365	0.142	88 (≤50)	J (all detects)	A
1,2,3,4,7,8,9-HpCDF	0.278	0.0704	119 (≤50)	J (all detects)	A
OCDF	0.569	0.236	83 (≤50)	J (all detects)	A

Santa Susana Field Laboratory
Dioxins/Dibenzofurans - Data Qualification Summary - SDG DX072

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DX072	DUP14-SA5A-QC-041411 SL-058-SA5A-SB-3.0-4.0 SL-059-SA5A-SB-3.0-4.0 SL-065-SA5A-SB-4.0-5.0 SL-242-SA5A-SB-2.5-3.5 SL-062-SA8N-SS-0.0-0.5 SL-067-SA8N-SS-0.0-0.5 SL-141-SA8N-SS-0.0-0.5 SL-041-SA5A-SB-4.0-5.0 SL-044-SA5A-SB-3.0-4.0 SL-052-SA5A-SB-4.0-5.0 SL-243-SA5A-SB-4.0-5.0 SL-094-SA8N-SS-0.0-0.5 SL-095-SA8N-SS-0.0-0.5 SL-096-SA8N-SS-0.0-0.5 SL-097-SA8N-SS-0.0-0.5 SL-122-SA8N-SS-0.0-0.5 SL-135-SA8N-SS-0.0-0.5	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)
DX072	DUP14-SA5A-QC-041411 SL-058-SA5A-SB-3.0-4.0	2,3,7,8-TCDD 1,2,3,7,8-PeCDD 1,2,3,4,7,8-HxCDD 1,2,3,6,7,8-HxCDD 1,2,3,4,6,7,8-HpCDD OCDD 1,2,3,7,8-PeCDF 2,3,4,7,8-PeCDF 1,2,3,4,7,8-HxCDF 1,2,3,6,7,8-HxCDF 1,2,3,7,8,9-HxCDF 2,3,4,6,7,8-HxCDF 1,2,3,4,6,7,8-HpCDF 1,2,3,4,7,8,9-HpCDF OCDF	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	A	Field duplicates (RPD) (FD)
DX072	DUP14-SA5A-QC-041411 SL-058-SA5A-SB-3.0-4.0	2,3,7,8-TCDF	J (all detects) UJ (all non-detects)	A	Field duplicates (RPD) (FD)

Santa Susana Field Laboratory
Dioxins/Dibenzofurans - Laboratory Blank Data Qualification Summary - SDG DX072

SDG	Sample	Compound	Modified Final Concentration	A or P	Code
DX072	SL-059-SA5A-SB-3.0-4.0	2,3,7,8-TCDF	0.0304U ng/Kg	A	B
		2,3,7,8-TCDD	0.0309U ng/Kg		
		1,2,3,7,8-PeCDF	0.126U ng/Kg		
		2,3,4,7,8-PeCDF	0.145U ng/Kg		
		1,2,3,7,8-PeCDD	0.148U ng/Kg		
		1,2,3,4,7,8-HxCDF	0.0586U ng/Kg		
		1,2,3,6,7,8-HxCDF	0.0647U ng/Kg		
		2,3,4,6,7,8-HxCDF	0.161U ng/Kg		
		1,2,3,4,7,8-HxCDD	0.0476U ng/Kg		
		1,2,3,6,7,8-HxCDD	0.125U ng/Kg		
		1,2,3,7,8,9-HxCDD	0.298U ng/Kg		
		1,2,3,7,8,9-HxCDF	0.277U ng/Kg		
		1,2,3,4,6,7,8-HpCDF	0.137U ng/Kg		
		1,2,3,4,6,7,8-HpCDD	0.383U ng/Kg		
		1,2,3,4,7,8,9-HpCDF	0.164U ng/Kg		
		OCDD	0.827U ng/Kg		
		OCDF	0.346U ng/Kg		
DX072	SL-065-SA5A-SB-4.0-5.0	2,3,7,8-TCDD	0.0167U ng/Kg	A	B
		1,2,3,7,8-PeCDF	0.0354U ng/Kg		
		2,3,4,7,8-PeCDF	0.0749U ng/Kg		
		1,2,3,7,8-PeCDD	0.0232U ng/Kg		
		1,2,3,4,7,8-HxCDF	0.0211U ng/Kg		
		1,2,3,6,7,8-HxCDF	0.0303U ng/Kg		
		2,3,4,6,7,8-HxCDF	0.0752U ng/Kg		
		1,2,3,4,7,8-HxCDD	0.0214U ng/Kg		
		1,2,3,6,7,8-HxCDD	0.0432U ng/Kg		
		1,2,3,7,8,9-HxCDD	0.0653U ng/Kg		
		1,2,3,7,8,9-HxCDF	0.0650U ng/Kg		
		1,2,3,4,6,7,8-HpCDF	0.126U ng/Kg		
		1,2,3,4,6,7,8-HpCDD	0.320U ng/Kg		
		1,2,3,4,7,8,9-HpCDF	0.0726U ng/Kg		
		OCDD	0.952U ng/Kg		
		OCDF	0.217U ng/Kg		
DX072	SL-242-SA5A-SB-2.5-3.5	2,3,7,8-TCDD	0.0138U ng/Kg	A	B
		1,2,3,7,8-PeCDF	0.0269U ng/Kg		
		2,3,4,7,8-PeCDF	0.0501U ng/Kg		
		1,2,3,7,8-PeCDD	0.0273U ng/Kg		
		1,2,3,4,7,8-HxCDF	0.0546U ng/Kg		
		1,2,3,6,7,8-HxCDF	0.0538U ng/Kg		
		2,3,4,6,7,8-HxCDF	0.0600U ng/Kg		
		1,2,3,4,7,8-HxCDD	0.0259U ng/Kg		
		1,2,3,6,7,8-HxCDD	0.0489U ng/Kg		
		1,2,3,7,8,9-HxCDD	0.0838U ng/Kg		
		1,2,3,7,8,9-HxCDF	0.0581U ng/Kg		
		1,2,3,4,6,7,8-HpCDF	0.232U ng/Kg		
		1,2,3,4,6,7,8-HpCDD	0.726U ng/Kg		
		1,2,3,4,7,8,9-HpCDF	0.0702U ng/Kg		
		OCDF	0.728U ng/Kg		
DX072	SL-062-SA8N-SS-0.0-0.5	2,3,4,7,8-PeCDF	0.188U ng/Kg	A	B
		1,2,3,7,8-PeCDD	0.0401U ng/Kg		
		1,2,3,6,7,8-HxCDF	0.0803U ng/Kg		
		2,3,4,6,7,8-HxCDF	0.133U ng/Kg		
		1,2,3,4,7,8-HxCDD	0.0468U ng/Kg		
		1,2,3,6,7,8-HxCDD	0.108U ng/Kg		
		1,2,3,7,8,9-HxCDD	0.141U ng/Kg		
		1,2,3,7,8,9-HxCDF	0.117U ng/Kg		
		1,2,3,4,7,8,9-HpCDF	0.0542U ng/Kg		

SDG	Sample	Compound	Modified Final Concentration	A or P	Code
DX072	SL-067-SA8N-SS-0.0-0.5	2,3,4,7,8-PeCDF 1,2,3,7,8-PeCDD 1,2,3,6,7,8-HxCDF 2,3,4,6,7,8-HxCDF 1,2,3,4,7,8-HxCDD 1,2,3,7,8,9-HxCDD 1,2,3,7,8,9-HxCDF 1,2,3,4,7,8,9-HpCDF	0.282U ng/Kg 0.0557U ng/Kg 0.138U ng/Kg 0.162U ng/Kg 0.0647U ng/Kg 0.170U ng/Kg 0.125U ng/Kg 0.140U ng/Kg	A	B
DX072	SL-141-SA8N-SS-0.0-0.5	2,3,4,7,8-PeCDF 1,2,3,7,8-PeCDD 1,2,3,6,7,8-HxCDF 2,3,4,6,7,8-HxCDF 1,2,3,4,7,8-HxCDD 1,2,3,6,7,8-HxCDD 1,2,3,7,8,9-HxCDD 1,2,3,7,8,9-HxCDF 1,2,3,4,7,8,9-HpCDF	0.205U ng/Kg 0.0451U ng/Kg 0.0877U ng/Kg 0.121U ng/Kg 0.0676U ng/Kg 0.141U ng/Kg 0.197U ng/Kg 0.118U ng/Kg 0.0749U ng/Kg	A	B
DX072	SL-041-SA5A-SB-4.0-5.0	1,2,3,7,8-PeCDF 2,3,4,7,8-PeCDF 1,2,3,7,8-PeCDD 1,2,3,4,7,8-HxCDF 1,2,3,6,7,8-HxCDF 2,3,4,6,7,8-HxCDF 1,2,3,4,7,8-HxCDD 1,2,3,6,7,8-HxCDD 1,2,3,7,8,9-HxCDD 1,2,3,7,8,9-HxCDF 1,2,3,4,6,7,8-HpCDF 1,2,3,4,6,7,8-HpCDD 1,2,3,4,7,8,9-HpCDF OCDD OCDF	0.0184U ng/Kg 0.0436U ng/Kg 0.0196U ng/Kg 0.0158U ng/Kg 0.0217U ng/Kg 0.0441U ng/Kg 0.0147U ng/Kg 0.0223U ng/Kg 0.0525U ng/Kg 0.0736U ng/Kg 0.0612U ng/Kg 0.215U ng/Kg 0.0429U ng/Kg 0.675U ng/Kg 0.127U ng/Kg	A	B
DX072	SL-044-SA5A-SB-3.0-4.0	2,3,7,8-TCDF 1,2,3,7,8-PeCDF 2,3,4,7,8-PeCDF 1,2,3,7,8-PeCDD 1,2,3,4,7,8-HxCDF 1,2,3,6,7,8-HxCDF 2,3,4,6,7,8-HxCDF 1,2,3,4,7,8-HxCDD 1,2,3,6,7,8-HxCDD 1,2,3,7,8,9-HxCDD 1,2,3,7,8,9-HxCDF 1,2,3,4,6,7,8-HpCDF 1,2,3,4,6,7,8-HpCDD 1,2,3,4,7,8,9-HpCDF OCDF	0.0124U ng/Kg 0.0280U ng/Kg 0.0796U ng/Kg 0.0404U ng/Kg 0.0494U ng/Kg 0.0374U ng/Kg 0.0621U ng/Kg 0.0352U ng/Kg 0.0531U ng/Kg 0.0697U ng/Kg 0.119U ng/Kg 0.142U ng/Kg 0.539U ng/Kg 0.0955U ng/Kg 0.302U ng/Kg	A	B

SDG	Sample	Compound	Modified Final Concentration	A or P	Code
DX072	SL-052-SA5A-SB-4.0-5.0	2,3,7,8-TCDF 1,2,3,7,8-PeCDF 2,3,4,7,8-PeCDF 1,2,3,4,7,8-HxCDF 1,2,3,6,7,8-HxCDF 2,3,4,6,7,8-HxCDF 1,2,3,4,7,8-HxCDD 1,2,3,6,7,8-HxCDD 1,2,3,7,8,9-HxCDD 1,2,3,4,6,7,8-HpCDF 1,2,3,4,6,7,8-HpCDD 1,2,3,4,7,8,9-HpCDF OCDD OCDF	0.0180U ng/Kg 0.0130U ng/Kg 0.0494U ng/Kg 0.0148U ng/Kg 0.0109U ng/Kg 0.0366U ng/Kg 0.0117U ng/Kg 0.0217U ng/Kg 0.0302U ng/Kg 0.0599U ng/Kg 0.267U ng/Kg 0.0368U ng/Kg 0.654U ng/Kg 0.122U ng/Kg	A	B
DX072	SL-243-SA5A-SB-4.0-5.0	2,3,7,8-TCDF 2,3,4,7,8-PeCDF 1,2,3,4,7,8-HxCDF 1,2,3,6,7,8-HxCDF 2,3,4,6,7,8-HxCDF 1,2,3,6,7,8-HxCDD 1,2,3,7,8,9-HxCDD 1,2,3,7,8,9-HxCDF 1,2,3,4,6,7,8-HpCDF 1,2,3,4,6,7,8-HpCDD 1,2,3,4,7,8,9-HpCDF OCDD OCDF	0.0189U ng/Kg 0.0559U ng/Kg 0.0140U ng/Kg 0.00788U ng/Kg 0.0307U ng/Kg 0.0209U ng/Kg 0.0197U ng/Kg 0.0450U ng/Kg 0.0833U ng/Kg 0.266U ng/Kg 0.0223U ng/Kg 1.19U ng/Kg 0.206U ng/Kg	A	B
DX072	SL-094-SA8N-SS-0.0-0.5	2,3,7,8-TCDD 2,3,4,7,8-PeCDF 1,2,3,7,8-PeCDD 1,2,3,6,7,8-HxCDF 2,3,4,6,7,8-HxCDF 1,2,3,4,7,8-HxCDD 1,2,3,4,6,7,8-HpCDF 1,2,3,4,7,8,9-HpCDF OCDF	0.0256U ng/Kg 0.268U ng/Kg 0.184U ng/Kg 0.150U ng/Kg 0.139U ng/Kg 0.135U ng/Kg 0.484U ng/Kg 0.0852U ng/Kg 1.02U ng/Kg	A	B
DX072	SL-095-SA8N-SS-0.0-0.5	2,3,7,8-TCDF 2,3,7,8-TCDD 1,2,3,7,8-PeCDF 2,3,4,7,8-PeCDF 1,2,3,7,8-PeCDD 1,2,3,6,7,8-HxCDF 2,3,4,6,7,8-HxCDF 1,2,3,4,7,8-HxCDD 1,2,3,7,8,9-HxCDF 1,2,3,4,6,7,8-HpCDF 1,2,3,4,7,8,9-HpCDF OCDF	0.103U ng/Kg 0.0146U ng/Kg 0.170U ng/Kg 0.222U ng/Kg 0.0993U ng/Kg 0.0967U ng/Kg 0.121U ng/Kg 0.0722U ng/Kg 0.339U ng/Kg 0.458U ng/Kg 0.0642U ng/Kg 0.955U ng/Kg	A	B
DX072	SL-096-SA8N-SS-0.0-0.5	2,3,7,8-TCDF 1,2,3,7,8-PeCDF 2,3,4,7,8-PeCDF 1,2,3,6,7,8-HxCDF 2,3,4,6,7,8-HxCDF 1,2,3,4,7,8-HxCDD 1,2,3,4,6,7,8-HpCDF 1,2,3,4,7,8,9-HpCDF	0.106U ng/Kg 0.172U ng/Kg 0.281U ng/Kg 0.0833U ng/Kg 0.113U ng/Kg 0.0704U ng/Kg 0.547U ng/Kg 0.104U ng/Kg	A	B

SDG	Sample	Compound	Modified Final Concentration	A or P	Code
DX072	SL-097-SA8N-SS-0.0-0.5	1,2,3,7,8-PeCDF 2,3,4,7,8-PeCDF 1,2,3,7,8-PeCDD 1,2,3,6,7,8-HxCDF 2,3,4,6,7,8-HxCDF 1,2,3,4,7,8-HxCDD 1,2,3,4,6,7,8-HpCDF 1,2,3,4,7,8,9-HpCDF	0.213U ng/Kg 0.206U ng/Kg 0.0953U ng/Kg 0.104U ng/Kg 0.114U ng/Kg 0.0670U ng/Kg 0.620U ng/Kg 0.0972U ng/Kg	A	B
DX072	SL-058-SA5A-SB-3.0-4.0	2,3,7,8-TCDD 1,2,3,7,8-PeCDF 2,3,4,7,8-PeCDF 1,2,3,7,8-PeCDD 1,2,3,4,7,8-HxCDF 1,2,3,6,7,8-HxCDF 2,3,4,6,7,8-HxCDF 1,2,3,4,7,8-HxCDD 1,2,3,6,7,8-HxCDD 1,2,3,7,8,9-HxCDF 1,2,3,4,6,7,8-HpCDF 1,2,3,4,6,7,8-HpCDD 1,2,3,4,7,8,9-HpCDF OCDF	0.0326U ng/Kg 0.0758U ng/Kg 0.0681U ng/Kg 0.0805U ng/Kg 0.0426U ng/Kg 0.0569U ng/Kg 0.0542U ng/Kg 0.0422U ng/Kg 0.146U ng/Kg 0.157U ng/Kg 0.142U ng/Kg 0.726U ng/Kg 0.0704U ng/Kg 0.236U ng/Kg	A	B
DX072	SL-122-SA8N-SS-0.0-0.5	2,3,7,8-TCDD 2,3,4,7,8-PeCDF 1,2,3,7,8-PeCDD 1,2,3,4,7,8-HxCDF 1,2,3,6,7,8-HxCDF 2,3,4,6,7,8-HxCDF 1,2,3,4,7,8-HxCDD 1,2,3,7,8,9-HxCDF 1,2,3,4,6,7,8-HpCDF 1,2,3,4,7,8,9-HpCDF OCDF	0.0549U ng/Kg 0.483U ng/Kg 0.176U ng/Kg 0.315U ng/Kg 0.179U ng/Kg 0.248U ng/Kg 0.132U ng/Kg 0.246U ng/Kg 0.760U ng/Kg 0.191U ng/Kg 1.14U ng/Kg	A	B
DX072	SL-135-SA8N-SS-0.0-0.5	2,3,7,8-TCDF 2,3,4,7,8-PeCDF 1,2,3,7,8-PeCDD 1,2,3,4,7,8-HxCDF 1,2,3,6,7,8-HxCDF 2,3,4,6,7,8-HxCDF 1,2,3,4,7,8-HxCDD 1,2,3,7,8,9-HxCDF 1,2,3,4,6,7,8-HpCDF 1,2,3,4,7,8,9-HpCDF	0.113U ng/Kg 0.3514U ng/Kg 0.199U ng/Kg 0.251U ng/Kg 0.151U ng/Kg 0.140U ng/Kg 0.168U ng/Kg 0.251U ng/Kg 1.08U ng/Kg 0.133U ng/Kg	A	B
DX072	DUP14-SA5A-QC-041411	2,3,7,8-TCDD 2,3,4,7,8-PeCDF 1,2,3,4,7,8-HxCDF 1,2,3,6,7,8-HxCDF 2,3,4,6,7,8-HxCDF 1,2,3,7,8,9-HxCDD 1,2,3,7,8,9-HxCDF 1,2,3,4,6,7,8-HpCDF 1,2,3,4,6,7,8-HpCDD 1,2,3,4,7,8,9-HpCDF OCDD OCDF	0.0705U ng/Kg 0.309U ng/Kg 0.221U ng/Kg 0.193U ng/Kg 0.212U ng/Kg 0.218U ng/Kg 0.267U ng/Kg 0.365U ng/Kg 0.326U ng/Kg 0.278U ng/Kg 0.851U ng/Kg 0.569U ng/Kg	A	B

Santa Susana Field Laboratory
Dioxins/Dibenzofurans - Field Blank Data Qualification Summary - SDG DX072

No Sample Data Qualified in this SDG

LDC #: 25907N21 **VALIDATION COMPLETENESS WORKSHEET** Date: 8/5/11
SDG #: DX072 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: HRGC/HRMS Dioxins/Dibenzofurans (EPA Method 1613B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 4/14 - 4/19/11
II.	HRGC/HRMS Instrument performance check	A	
III.	Initial calibration	A	20/35%
IV.	Routine calibration/~~ICV~~	A	QC limits
V.	Blanks	SW	
VI.	Matrix spike/Matrix spike duplicates	A	
VII.	Laboratory control samples	A	LCS
VIII.	Regional quality assurance and quality control	N	
IX.	Internal standards	A	
X.	Target compound identifications	A	
XI.	Compound quantitation and CRQLs	A	
XII.	System performance	A	
XIII.	Overall assessment of data	A	
XIV.	Field duplicates	SW	D= 1+2
XV.	Field blanks	N	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: Soil

1 4	DUP14-SA5A-QC-041411	11	SL-052-SA5A-SB-4.0-5.0	21 1	BLK108002	31	
2 5	SL-058-SA5A-SB-3.0-4.0	12	SL-2~~5~~3-SA5A-SB-4.0-5.0 4	22 2	BLK115002	32	
3	SL-059-SA5A-SB-3.0-4.0	13 2	SL-094-SA8N-SS-0.0-0.5	23 3	BLK116001	33	
4	SL-065-SA5A-SB-4.0-5.0	14 2	SL-095-SA8N-SS-0.0-0.5	24 4	BLK116002	34	
5	SL-242-SA5A-SB-2.5-3.5	15 2	SL-096-SA8N-SS-0.0-0.5	25 5	BLK122003	35	
6	SL-062-SA8N-SS-0.0-0.5	16 2	SL-097-SA8N-SS-0.0-0.5	26		36	
7	SL-067-SA8N-SS-0.0-0.5	17 3	SL-122-SA8N-SS-0.0-0.5	27		37	
8	SL-141-SA8N-SS-0.0-0.5	18 3	SL-135-SA8N-SS-0.0-0.5	28		38	
9	SL-041-SA5A-SB-4.0-5.0	19 5	SL-058-SA5A-SB-3.0-4.0MS	29		39	
10	SL-044-SA5A-SB-3.0-4.0	20 5	SL-058-SA5A-SB-3.0-4.0MSD	30		40	

Notes:

LDC #: 25907H21

VALIDATION FINDINGS CHECKLIST

Reviewer: [illegible]
2nd Reviewer: [illegible]

Method: Dioxins/Dibenzofurans (EPA SW 846 Method 1613B)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. GC/MS Instrument performance check				
Was PFK exact mass 380.9760 verified?	✓			
Were the retention time windows established for all homologues?	✓			
Was the chromatographic resolution between 2,3,7,8-TCDD and peaks representing any other unlabeled TCDD isomers ≤ 25% ?	✓			
Is the static resolving power at least 10,000 (10% valley definition)?	✓			
Was the mass resolution adequately check with PFK?	✓			
Was the presence of 1,2,8,9-TCDD and 1,3,4,6,8-PeCDF verified?	✓			
III. Initial calibration				
Was the initial calibration performed at 5 concentration levels?	✓			
Were all percent relative standard deviations (%RSD) ≤ 20% for unlabeled compounds and ≤ 35% for labeled compounds ?	✓			
Did all calibration standards meet the Ion Abundance Ratio criteria?	✓			
Was the signal to noise ratio for each target compound ≥ 2.5 and for each recovery and internal standard ≥ 10?	✓			
IV. Continuing calibration				
Was a routine calibration performed at the beginning and end of each 12 hour period?	✓			
Were all the concentrations for the unlabeled compounds and labeled compounds within the QC limits (Method 1613B, Table 6)?	✓			
Did all routine calibration standards meet the Ion Abundance Ratio criteria?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank performed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet?	✓			
VI. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?	✓			
VII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			

LDC #: 25907N21

VALIDATION FINDINGS CHECKLIST

Reviewer: R
2nd Reviewer: A

Validation Area	Yes	No	NA	Findings/Comments
VIII. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
IX. Internal standards				
Were internal standard recoveries within the 25-150% criteria?	✓			
Was the minimum S/N ratio of all internal standard peaks ≥ 10?	✓			
X. Target compound identification				
For 2,3,7,8 substituted congeners with associated labeled standards, were the retention times of the two quantitation peaks within -1 to 3 sec. of the RT of the labeled standard?	✓			
For 2,3,7,8 substituted congeners without associated labeled standards, were the relative retention times of the two quantitation peaks within 0.005 time units of the RRT measured in the routine calibration?	✓			
For non-2,3,7,8 substituted congeners, were the retention times of the two quantitation peaks within RT established in the performance check solution?	✓			
Did compound spectra contain all characteristic ions listed in the table attached?	✓			
Was the Ion Abundance Ratio for the two quantitation ions within criteria?	✗	✓		EMPC
Was the signal to noise ratio for each target compound and labeled standard ≥ 2.5?	✓			
Does the maximum intensity of each specified characteristic ion coincide within ± 2 seconds (includes labeled standards)?	✓			
For PCDF identification, was any signal (S/N ≥ 2.5, at ± seconds RT) detected in the corresponding PCDPE channel?		✓		
Was an acceptable lock mass recorded and monitored?	✓			
XI. Compound quantitation/CRQLs				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	✓			
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.		✓		
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.	✓			
Target compounds were detected in the field duplicates.	✓			
XV. Field blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

VALIDATION FINDINGS WORKSHEET

METHOD: HRGC/HRMS Dioxins/Dibenzofurans (EPA Method 1613B)

A. 2,3,7,8-TCDD	F. 1,2,3,4,6,7,8-HpCDD	K. 1,2,3,4,7,8-HxCDF	P. 1,2,3,4,7,8,9-HpCDF	U. Total HpCDD
B. 1,2,3,7,8-PeCDD	G. OCDD	L. 1,2,3,6,7,8-HxCDF	Q. OCDF	V. Total TCDF
C. 1,2,3,4,7,8-HxCDD	H. 2,3,7,8-TCDF	M. 2,3,4,6,7,8-HxCDF	R. Total TCDD	W. Total PeCDF
D. 1,2,3,6,7,8-HxCDD	I. 1,2,3,7,8-PeCDF	N. 1,2,3,7,8,9-HxCDF	S. Total PeCDD	X. Total HxCDF
E. 1,2,3,7,8,9-HxCDD	J. 2,3,4,7,8-PeCDF	O. 1,2,3,4,6,7,8-HpCDF	T. Total HxCDD	Y. Total HpCDF

LDC #: 25907N21

VALIDATION FINDINGS WORKSHEET
Blanks

Reviewer:
2nd Reviewer:

METHOD: HRGC/HRMS Dioxins/Dibenzofurans (EPA Method 1613B)
Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were all samples associated with a method blank?
Y N N/A Was a method blank performed for each matrix and whenever a sample extraction was performed?
Y N N/A Was the method blank contaminated?

Blank extraction date: 4/18/11 **Blank analysis date:** 4/23/11
Conc. units: ng/Kg **Associated samples:** 3-12 (UB)

Compound	Blank ID	Sample Identification								
	BLK108002	5x	3	4	5	6	7	8	9	10
H	0.0112*	0.056	0.0304							0.0124*
A	0.0284*	0.142	0.0309	0.0167*	0.0138*					
I	0.0353	0.1765	0.126	0.0354	0.0269				0.0184*	0.0280
J	0.0901*	0.4505	0.145	0.0749	0.0501	0.188	0.282	0.205*	0.0436*	0.0796
B	0.0354	0.177	0.148*	0.0232*	0.0273*	0.0401*	0.0557	0.0451*	0.0196*	0.0404*
K	0.0844	0.422	0.0586*	0.0211*	0.0546*				0.0158*	0.0494
L	0.0439*	0.2195	0.0647	0.0303*	0.0538	0.0803*	0.138*	0.0877	0.0217	0.0374*
M	0.0328*	0.164	0.161*	0.0752*	0.0600*	0.133*	0.162	0.121*	0.0441*	0.0621
C	0.0288*	0.144	0.0476*	0.0214*	0.0259*	0.0468*	0.0647	0.0676*	0.0147*	0.0352
D	0.0367*	0.1835	0.125*	0.0432*	0.0489	0.108		0.141	0.0223	0.0531
E	0.0531*	0.2655	0.298	0.0653	0.0838	0.141	0.170	0.197	0.0525*	0.0697
N	0.0731	0.3655	0.277	0.0650*	0.0581	0.117	0.125	0.118*	0.0736	0.119
O	0.0892	0.446	0.137	0.126	0.232				0.0612	0.142*
F	0.194	0.97	0.383*	0.320	0.726				0.215	0.539*
P	0.0492*	0.246	0.164*	0.0726*	0.0702*	0.0542*	0.140*	0.0749	0.0429*	0.0955
G	0.428	2.14	0.827	0.952					0.675	
Q	0.158	0.79	0.346	0.217*	0.728				0.127*	0.302*

*EMPC

others ND or >5x

LDC #: 25907N21

VALIDATION FINDINGS WORKSHEET
Blanks

Reviewer: N
2nd Reviewer: C

METHOD: HRGC/HRMS Dioxins/Dibenzofurans (EPA Method 1613B)

cont'd

Compound	Blank ID	Sample Identification								
	BLK108002	5x	11	12						
H	0.0112*	0.056	0.0180*	0.0189						
A	0.0284*	0.142								
I	0.0353	0.1765	0.0130*							
J	0.0901*	0.4505	0.0494	0.0559						
B	0.0354	0.177								
K	0.0844	0.422	0.0148*	0.0140*						
L	0.0439*	0.2195	0.0109*	0.00788*						
M	0.0328*	0.164	0.0366	0.0307*						
C	0.0288*	0.144	0.0117*							
D	0.0367*	0.1835	0.0217	0.0209						
E	0.0531*	0.2655	0.0302	0.0197						
N	0.0731	0.3655		0.0450						
O	0.0892	0.446	0.0599*	0.0883						
F	0.194	0.97	0.267	0.266*						
P	0.0492*	0.246	0.0368*	0.0223*						
G	0.428	2.14	0.654	1.19						
Q	0.158	0.79	0.122	0.206						

LDC #: 25907N21

VALIDATION FINDINGS WORKSHEET
Blanks

Reviewer:
2nd Reviewer:

METHOD: HRGC/HRMS Dioxins/Dibenzofurans (EPA Method 1613B)

Blank extraction date: 4/25/11 **Blank analysis date:** 4/28/11
Conc. units: ng/Kg Associated Samples: 13-16 (UB)

Compound	Blank ID	Sample Identification								
	BLK115002	5x	13	14	15	16				
H	0.0227	0.1135		0.103*	0.106					
A	0.0462	0.231	0.0256	0.0146*						
I	0.0538	0.269		0.170*	0.172	0.213				
J	0.0593*	0.2965	0.268	0.222	0.281	0.206				
B	0.0571	0.2855	0.184	0.0993*		0.0953				
K	0.0469	0.2345								
L	0.0401	0.2005	0.150	0.0967	0.0833*	0.104*				
M	0.0651	0.3255	0.139*	0.121	0.113	0.114				
C	0.0421	0.2105	0.135*	0.0722*	0.0704*	0.0670*				
D	0.0348*	0.174								
E	0.0543	0.2715								
N	0.0854	0.427		0.339*						
O	0.126*	0.63	0.484	0.458	0.547	0.620				
F	0.231*	1.155								
P	0.0849*	0.4245	0.0852	0.0642*	0.104	0.0972				
G	0.458	2.29								
Q	0.215	1.075	1.02	0.955						

LDC #: 25907N21

VALIDATION FINDINGS WORKSHEET
Blanks

Reviewer:
2nd Reviewer:

METHOD: HRGC/HRMS Dioxins/Dibenzofurans (EPA Method 1613B)

Blank extraction date: 5/26/11 **Blank analysis date:** 5/58/11
Conc. units: ng/Kg Associated Samples: 2 (UB)

Compound	Blank ID	Sample Identification								
	BLK122003	5x	2							
A	0.0183*	0.0915	0.0326*							
I	0.0563	0.2815	0.0758*							
J	0.0781	0.3905	0.0681*							
B	0.0512	0.256	0.0805*							
K	0.0612	0.306	0.0426							
L	0.0458*	0.229	0.0569							
M	0.0520	0.26	0.0542*							
C	0.0242*	0.121	0.0422							
D	0.0426*	0.213	0.146							
E	0.0398	0.199								
N	0.0821*	0.4105	0.157							
O	0.0881*	0.4405	0.142*							
F	0.173	0.865	0.726							
P	0.0487	0.2435	0.0704*							
G	0.359	1.795								
Q	0.148*	0.74	0.236*							

LDC #: 25907N21

VALIDATION FINDINGS WORKSHEET
Blanks

Reviewer: n
2nd Reviewer: ✓

METHOD: HRGC/HRMS Dioxins/Dibenzofurans (EPA Method 1613B)

Blank extraction date: 4/26/11 **Blank analysis date:** 4/28/11
Conc. units: ng/Kg Associated Samples: 17-18 (UB)

Compound	Blank ID	Sample Identification								
	BLK116001	5x	17	18						
H	0.0540*	0.27		0.113						
A	0.0319*	0.1595	0.0549*							
I	0.0631	0.3155								
J	0.117	0.585	0.483	0.3514						
B	0.0569	0.2845	0.176*	0.199						
K	0.0838	0.419	0.315	0.251						
L	0.0727	0.3635	0.179	0.151						
M	0.0953	0.4765	0.248*	0.140*						
C	0.0389*	0.1945	0.132	0.168						
D	0.0462	0.231								
E	0.0481*	0.2405								
N	0.0641	0.3205	0.246	0.251						
O	0.221	1.105	0.760	1.08						
F	0.211*	1.055								
P	0.0916	0.458	0.191	0.133*						
G	0.517	2.585								
Q	0.277*	1.385	1.14							

LDC #: 25907N21

VALIDATION FINDINGS WORKSHEET
Blanks

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: HRGC/HRMS Dioxins/Dibenzofurans (EPA Method 1613B)

Blank extraction date: 4/26/11 **Blank analysis date:** 4/28/11
Conc. units: ng/Kg Associated Samples: 1 (UB)

Compound	Blank ID	Sample Identification								
	BLK116002	5x	1							
H	0.0380*	0.19								
A	0.0262*	0.131	0.0705							
I	0.0555*	0.2775								
J	0.0640*	0.32	0.309							
K	0.0658*	0.329	0.221							
L	0.0601*	0.3005	0.193							
M	0.104	0.52	0.212							
C	0.0285*	0.1425								
D	0.0370*	0.185								
E	0.0614*	0.307	0.218							
N	0.0973*	0.4865	0.267							
O	0.149	0.745	0.365							
F	0.247*	1.235	0.326*							
P	0.0979	0.4895	0.278							
G	0.449	2.245	0.851							
Q	0.273*	1.365	0.569							

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
All contaminants within five times the method blank concentration were qualified as not detected, "U".

LDC:25795N21

VALIDATION FINDINGS WORKSHEET
Field Duplicates

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: HRGC/MS Dioxins/dibenzofurans EPA Method 1613B

Y N NA Were field duplicate pairs identified in this SDG?
Y N NA Were target analytes detected in the field duplicate pairs?

Analyte	Concentration (ng/Kg) 1	Concentration (ng/Kg) 2	RPD ≤50		Qual Parent only
A	0.0705	0.0326*	74		Jdets/A (FD)
B	0.270	0.0805*	108		
C	0.197	0.0422	129		
D	0.256*	0.146	55		
E	0.218	0.257*	16		
F	0.326*	0.726	76		Jdets/A (FD)
G	0.851	12.1	174		
H	0.240*	0.0124U	200		J/UJ/A (FD)
I	0.317*	0.0758*	123		Jdets/A (FD)
J	0.309	0.0681*	128		
K	0.221	0.0426	135		
L	0.193	0.0569	109		
N	0.267	0.157	52		
M	0.212	0.0542*	119		
O	0.365	0.142*	88		
P	0.278	0.0704*	119		
Q	0.569	0.236*	83		

LDC #: 25907N21

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: SK
2nd Reviewer: A

METHOD: HRGC/HRMS Dioxins/Dibenzofurans (EPA Method 1613B)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

RRF = $(A_x)(C_{is})/(A_{is})(C_x)$ — A_x = Area of compound, A_{is} = Area of associated internal standard
average RRF = sum of the RRFs/number of standards — C_x = Concentration of compound, C_{is} = Concentration of internal standard
%RSD = 100 * (S/X) — S = Standard deviation of the RRFs, X = Mean of the RRFs

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Reported Average RRF (initial)	Recalculated Average RRF (initial)	Reported RRF (CS3 std)	Recalculated RRF (CS3 std)	Reported %RSD	Recalculated %RSD
1	ICAL	4/12/11	2,3,7,8-TCDF (^{13}C-2,3,7,8-TCDF)	1.022	1.022	1.034	1.034	2.87	2.86
	DF17280		2,3,7,8-TCDD (^{13}C-2,3,7,8-TCDD)	1.213	1.213	1.200	1.200	6.40	6.41
			1,2,3,6,7,8-HxCDD (^{13}C-1,2,3,6,7,8-HxCDD)	0.974	0.974	0.987	0.987	3.75	3.75
			1,2,3,4,6,7,8-HpCDD (^{13}C-1,2,4,6,7,8,-HpCDD)	1.058	1.058	1.069	1.069	2.62	2.61
			OCDF (^{13}C-OCDF)	0.946	0.946	0.956	0.956	3.09	3.11
2	ICAL	4/12/11	2,3,7,8-TCDF (^{13}C-2,3,7,8-TCDF)	1.043	1.043	1.036	1.036	4.08	4.10
	DF17611		2,3,7,8-TCDD (^{13}C-2,3,7,8-TCDD)	1.167	1.167	1.191	1.191	2.91	2.90
			1,2,3,6,7,8-HxCDD (^{13}C-1,2,3,6,7,8-HxCDD)	0.971	0.971	1.015	1.015	4.19	4.19
			1,2,3,4,6,7,8-HpCDD (^{13}C-1,2,4,6,7,8,-HpCDD)	1.069	1.069	1.087	1.087	4.00	4.00
			OCDF (^{13}C-OCDF)	1.016	1.016	1.027	1.027	0.94	0.94
3			2,3,7,8-TCDF (^{13}C-2,3,7,8-TCDF)						
			2,3,7,8-TCDD (^{13}C-2,3,7,8-TCDD)						
			1,2,3,6,7,8-HxCDD (^{13}C-1,2,3,6,7,8-HxCDD)						
			1,2,3,4,6,7,8-HpCDD (^{13}C-1,2,4,6,7,8,-HpCDD)						
			OCDF (^{13}C-OCDF)						

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25907N21

VALIDATION FINDINGS WORKSHEET
Routine Calibration Results Verification

Reviewer: 2
2nd Reviewer: C

METHOD: HRGC/HRMS Dioxins/Dibenzofurans (EPA Method 1613B)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
RRF = $(A_x)(C_{is})/(A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Average RRF (initial)	Reported ~~RRF~~ Conc (CC)	Recalculated ~~RRF~~ Conc (CC)	Reported %R	Recalculated %R
1	11APR23-02	4/23/11	2,3,7,8-TCDF (^{13}C-2,3,7,8-TCDF)	1.022	10.31	10.31	103	103
			2,3,7,8-TCDD (^{13}C-2,3,7,8-TCDD)	1.213	9.62	9.62	96	96
			1,2,3,6,7,8-HxCDD (^{13}C-1,2,3,6,7,8-HxCDD)	0.974	52.08	52.10	104	104
			1,2,3,4,6,7,8-HpCDD (^{13}C-1,2,4,6,7,8,-HpCDD)	1.058	51.89	51.89	104	104
			OCDF (^{13}C-OCDF)	0.946	107.10	107.0	107	107
2	11APR23-15	4/23/11	2,3,7,8-TCDF (^{13}C-2,3,7,8-TCDF)	1.022	10.22	10.22	102	102
			2,3,7,8-TCDD (^{13}C-2,3,7,8-TCDD)	1.213	9.59	9.59	96	96
			1,2,3,6,7,8-HxCDD (^{13}C-1,2,3,6,7,8-HxCDD)	0.974	51.78	51.80	104	104
			1,2,3,4,6,7,8-HpCDD (^{13}C-1,2,4,6,7,8,-HpCDD)	1.058	51.41	51.40	103	103
			OCDF (^{13}C-OCDF)	0.946	106.49	106.43	106	106
3	11APR28-02	4/28/11	2,3,7,8-TCDF (^{13}C-2,3,7,8-TCDF)	1.022	9.93	9.93	99	99
			2,3,7,8-TCDD (^{13}C-2,3,7,8-TCDD)	1.213	9.62	9.61	96	96
			1,2,3,6,7,8-HxCDD (^{13}C-1,2,3,6,7,8-HxCDD)	0.974	50.20	50.22	100	100
			1,2,3,4,6,7,8-HpCDD (^{13}C-1,2,4,6,7,8,-HpCDD)	1.058	50.12	50.11	100	100
			OCDF (^{13}C-OCDF)	0.946	101.86	101.81	102	102

Comments: Refer to Routine Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25907N21

VALIDATION FINDINGS WORKSHEET
Routine Calibration Results Verification

Reviewer: K
2nd Reviewer: C

METHOD: HRGC/HRMS Dioxins/Dibenzofurans (EPA Method 1613B)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
RRF = $(A_x)(C_{is})/(A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Average RRF (initial)	Reported Conc ~~RRF~~ (CC)	Recalculated Conc ~~RRF~~ (CC)	Reported %R	Recalculated %R
1	11APR28-15	4/28/11	2,3,7,8-TCDF (^{13}C-2,3,7,8-TCDF)	1.022	9.91	9.91	99	99
			2,3,7,8-TCDD (^{13}C-2,3,7,8-TCDD)	1.213	9.74	9.73	97	97
			1,2,3,6,7,8-HxCDD (^{13}C-1,2,3,6,7,8-HxCDD)	0.974	50.22	50.24	100	100
			1,2,3,4,6,7,8-HpCDD (^{13}C-1,2,4,6,7,8,-HpCDD)	1.058	50.15	50.13	100	100
			OCDF (^{13}C-OCDF)	0.946	101.55	101.50	102	102
2	11APR29-02	4/29/11	2,3,7,8-TCDF (^{13}C-2,3,7,8-TCDF)	1.022	9.94	9.94	99	99
			2,3,7,8-TCDD (^{13}C-2,3,7,8-TCDD)	1.213	9.51	9.51	95	95
			1,2,3,6,7,8-HxCDD (^{13}C-1,2,3,6,7,8-HxCDD)	0.974	50.19	50.20	100	100
			1,2,3,4,6,7,8-HpCDD (^{13}C-1,2,4,6,7,8,-HpCDD)	1.058	50.23	50.22	100	100
			OCDF (^{13}C-OCDF)	0.946	100.97	100.92	101	101
3	11MAY04-15	5/5/11	2,3,7,8-TCDF (^{13}C-2,3,7,8-TCDF)	1.022	9.70	9.70	97	97
			2,3,7,8-TCDD (^{13}C-2,3,7,8-TCDD)	1.213	9.50	9.50	95	95
			1,2,3,6,7,8-HxCDD (^{13}C-1,2,3,6,7,8-HxCDD)	0.974	49.53	49.54	99	99
			1,2,3,4,6,7,8-HpCDD (^{13}C-1,2,4,6,7,8,-HpCDD)	1.058	49.31	49.30	99	99
			OCDF (^{13}C-OCDF)	0.946	98.59	98.54	99	99

Comments: Refer to Routine Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25907N21

VALIDATION FINDINGS WORKSHEET
Routine Calibration Results Verification

Reviewer: R
2nd Reviewer: A

METHOD: HRGC/HRMS Dioxins/Dibenzofurans (EPA Method 1613B)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
RRF = $(A_x)(C_{is})/(A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Average RRF (initial)	Reported ~~RRF~~ conc (CC)	Recalculated ~~RRF~~ conc (CC)	Reported %R	Recalculated %R
1	11APR27-02	4/27/11	2,3,7,8-TCDF (^{13}C-2,3,7,8-TCDF)	1.043	9.56	9.51	96	96
			2,3,7,8-TCDD (^{13}C-2,3,7,8-TCDD)	1.167	9.69	9.69	97	97
			1,2,3,6,7,8-HxCDD (^{13}C-1,2,3,6,7,8-HxCDD)	0.971	49.95	49.95	100	100
			1,2,3,4,6,7,8-HpCDD (^{13}C-1,2,4,6,7,8,-HpCDD)	1.069	48.13	48.14	96	96
			OCDF (^{13}C-OCDF)	1.016	93.08	93.04	93	93
2	11APR27-16	4/28/11	2,3,7,8-TCDF (^{13}C-2,3,7,8-TCDF)	1.043	9.20	9.20	92	92
			2,3,7,8-TCDD (^{13}C-2,3,7,8-TCDD)	1.167	9.75	9.75	98	98
			1,2,3,6,7,8-HxCDD (^{13}C-1,2,3,6,7,8-HxCDD)	0.971	48.61	48.62	97	97
			1,2,3,4,6,7,8-HpCDD (^{13}C-1,2,4,6,7,8,-HpCDD)	1.069	48.29	48.30	97	97
			OCDF (^{13}C-OCDF)	1.016	91.15	91.11	91	91
3			2,3,7,8-TCDF (^{13}C-2,3,7,8-TCDF)					
			2,3,7,8-TCDD (^{13}C-2,3,7,8-TCDD)					
			1,2,3,6,7,8-HxCDD (^{13}C-1,2,3,6,7,8-HxCDD)					
			1,2,3,4,6,7,8-HpCDD (^{13}C-1,2,4,6,7,8,-HpCDD)					
			OCDF (^{13}C-OCDF)					

Comments: Refer to Routine Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25907N21

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Reviewer: SC
2nd Reviewer: A

METHOD: HRGC/HRMS Dioxins/Dibenzofurans (EPA Method 1613B)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SSR - SR)/SA Where: SSR = Spiked sample result, SR = Sample result
SA = Spike added

RPD = I MSR - MSDR I * 2/(MSR + MSDR) MSR = Matrix spike percent recovery MSDR = Matrix spike duplicate percent recovery

MS/MSD samples: 19/20

Compound	Spike Added (ng/kg)		Sample Concentration (ng/kg)	Spiked Sample Concentration (ng/kg)		Matrix Spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		Reported RPD	Recalculated RPD
	MS	MSD	------	MS	MSD	Reported	Recalc.	Reported	Recalc.	----	----
2,3,7,8-TCDD	21.9	21.9	0.0326	21.5	21.6	98	98	98	98	1	0
1,2,3,7,8-PeCDD	110	110	0.0805	111	112	101	101	102	103	1	1
1,2,3,4,7,8-HxCDD	↓	↓	0.0422	113	113	103	103	104	103	1	0
1,2,3,4,7,8,9-HpCDF			0.0704	114	112	104	104	102	102	2	2
OCDF	219	219	0.236	226	223	103	103	102	102	1	1

Comments: Refer to Matrix Spike/Matrix Spike Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25907N21

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample Results Verification

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC/MS Dioxins/Dibenzofurans (EPA Method 1613B)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratoy control sample and laboratory control sample duplicate (if applicable) were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * SSC/SA Where: SSC = Spiked sample concentration
SA = Spike added

RPD = I LCS - LCSD I * 2/(LCS + LCSD) LCS = Laboraotry control sample percent recovery LCSD = Laboratory control sample duplicate percent recovery

LCS ID: OPR108002

Compound	Spike Added (ng/kg)		Spiked Sample Concentration (ng/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
2,3,7,8-TCDD	20		19.6		98	98				
1,2,3,7,8-PeCDD	100		105		105	105				
1,2,3,4,7,8-HxCDD	↓		109		109	109				
1,2,3,4,7,8,9-HpCDF			111		111	111				
OCDF	200		223		111	111				

Comments: Refer to Laboratory Control Sample findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25907A21

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer:
2nd reviewer:

METHOD: HRGC/HRMS Dioxins/Dibenzofurans (EPA Method 1613B)

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(DF)}{(A_{is})(RRF)(V_o)(\%S)}$

A_x = Area of the characteristic ion (EICP) for the compound to be measured

A_{is} = Area of the characteristic ion (EICP) for the specific internal standard

I_s = Amount of internal standard added in nanograms (ng)

V_o = Volume or weight of sample extract in milliliters (ml) or grams (g).

RRF = Relative Response Factor (average) from the initial calibration

Df = Dilution Factor.

%S = Percent solids, applicable to soil and solid matrices only.

Example:

Sample I.D. 1, A:

Conc. = $\frac{(634)(2000)(1)}{(1683693)(1.167)(10)(0.914)}$

= 0.0706 ng/kg

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification

SAMPLE DELIVERY GROUP

DX073

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
19-Apr-2011	SL-171-SA5A-SB-2.0-3.0	6262862	N	METHOD	1613B	III
19-Apr-2011	SL-140-SA8N-SS-0.0-0.5	6262860	N	METHOD	1613B	III
19-Apr-2011	SL-138-SA8N-SS-0.0-0.5	6262856	N	METHOD	1613B	III
19-Apr-2011	SL-138-SA8N-SS-0.0-0.5MS	6262857	MS	METHOD	1613B	III
19-Apr-2011	SL-138-SA8N-SS-0.0-0.5MSD	6262858	MSD	METHOD	1613B	III
19-Apr-2011	DUP04-SA8N-QC-041911	6262861	FD	METHOD	1613B	III
19-Apr-2011	SL-127-SA5A-SB-2.0-3.0	6262864	N	METHOD	1613B	III
19-Apr-2011	SL-139-SA8N-SS-0.0-0.5	6262859	N	METHOD	1613B	III
19-Apr-2011	EB06-SA8N-SS-041911	6262865	EB	METHOD	1613B	III
19-Apr-2011	SL-126-SA5A-SB-4.0-5.0	6262863	N	METHOD	1613B	III
25-Apr-2011	SL-036-SA8N-SB-4.0-5.0	6268208	N	METHOD	1613B	III
25-Apr-2011	SL-036-SA8N-SB-9.0-10.0	6268209	N	METHOD	1613B	III
26-Apr-2011	SL-027-SA8N-SB-4.0-5.0	6269641	N	METHOD	1613B	III
26-Apr-2011	SL-027-SA8N-SB-9.0-10.0	6269642	N	METHOD	1613B	III
26-Apr-2011	SL-028-SA8N-SB-4.0-5.0	6269643	N	METHOD	1613B	III
26-Apr-2011	SL-028-SA8N-SB-9.0-10.0	6269644	N	METHOD	1613B	III
27-Apr-2011	FB07-SA8N-QC-042711	6270793	FB	METHOD	1613B	III
27-Apr-2011	SL-032-SA8N-SB-4.0-5.0	6270791	N	METHOD	1613B	III
27-Apr-2011	SL-032-SA8N-SB-9.0-10.0	6270792	N	METHOD	1613B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DX073 **Laboratory: LL**

EDD Filename: DX073_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B ***Matrix:*** AQ

Sample ID: EB06-SA8N-SS-041911 ***Collected:*** 4/19/2011 12:00:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	2.73	JB	0.523	MDL	10.1	PQL	pg/L	U	B
1,2,3,4,6,7,8-HPCDF	1.22	JB	0.186	MDL	10.1	PQL	pg/L	U	B
1,2,3,4,7,8,9-HPCDF	0.646	JBQ	0.243	MDL	10.1	PQL	pg/L	U	B
1,2,3,4,7,8-HxCDD	0.713	JB	0.337	MDL	10.1	PQL	pg/L	U	B
1,2,3,4,7,8-HXCDF	0.574	JB	0.218	MDL	10.1	PQL	pg/L	U	B
1,2,3,6,7,8-HXCDD	0.437	JBQ	0.351	MDL	10.1	PQL	pg/L	U	B
1,2,3,6,7,8-HXCDF	0.451	JB	0.208	MDL	10.1	PQL	pg/L	U	B
1,2,3,7,8,9-HXCDD	0.473	JBQ	0.344	MDL	10.1	PQL	pg/L	U	B
1,2,3,7,8,9-HXCDF	0.588	JB	0.251	MDL	10.1	PQL	pg/L	U	B
1,2,3,7,8-PECDD	0.499	JBQ	0.408	MDL	10.1	PQL	pg/L	U	B
1,2,3,7,8-PECDF	0.286	JBQ	0.211	MDL	10.1	PQL	pg/L	U	B
2,3,4,6,7,8-HXCDF	0.488	JBQ	0.192	MDL	10.1	PQL	pg/L	U	B
2,3,4,7,8-PECDF	0.646	JB	0.201	MDL	10.1	PQL	pg/L	U	B
OCDD	4.69	JB	0.688	MDL	20.1	PQL	pg/L	U	B
OCDF	1.70	JB	0.660	MDL	20.1	PQL	pg/L	U	B

Sample ID: FB07-SA8N-QC-042711 ***Collected:*** 4/27/2011 1:30:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	1.87	JBQ	0.284	MDL	10.6	PQL	pg/L	U	B
1,2,3,4,6,7,8-HPCDF	1.25	JB	0.147	MDL	10.6	PQL	pg/L	U	B
1,2,3,4,7,8,9-HPCDF	0.498	JBQ	0.173	MDL	10.6	PQL	pg/L	U	B
1,2,3,4,7,8-HXCDF	0.401	JBQ	0.158	MDL	10.6	PQL	pg/L	U	B
1,2,3,6,7,8-HXCDF	0.385	JBQ	0.152	MDL	10.6	PQL	pg/L	U	B
1,2,3,7,8,9-HXCDD	0.423	JBQ	0.229	MDL	10.6	PQL	pg/L	U	B
1,2,3,7,8-PECDF	0.217	JBQ	0.134	MDL	10.6	PQL	pg/L	U	B
2,3,4,6,7,8-HXCDF	0.515	JB	0.130	MDL	10.6	PQL	pg/L	U	B
2,3,4,7,8-PECDF	0.456	JB	0.127	MDL	10.6	PQL	pg/L	U	B
OCDD	4.47	JB	0.435	MDL	21.3	PQL	pg/L	U	B
OCDF	1.29	JB	0.335	MDL	21.3	PQL	pg/L	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX073 **Laboratory: LL**

EDD Filename: DX073_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: DUP04-SA8N-QC-041911 **Collected:** 4/19/2011 11:05:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	3.27	JB	0.0332	MDL	5.43	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.682	JB	0.0206	MDL	5.43	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0801	JBQ	0.0353	MDL	5.43	PQL	ng/Kg	UJ	B, FD
1,2,3,4,7,8-HxCDD	0.106	JB	0.0421	MDL	5.43	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.258	JB	0.0285	MDL	5.43	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.477	JB	0.0428	MDL	5.43	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.160	JBQ	0.0246	MDL	5.43	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.549	JB	0.0412	MDL	5.43	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.263	JBQ	0.0307	MDL	5.43	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.111	JB	0.0242	MDL	5.43	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.274	JB	0.0191	MDL	5.43	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.176	JBQ	0.0234	MDL	5.43	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.464	JB	0.0188	MDL	5.43	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0165	JBQ	0.0151	MDL	1.09	PQL	ng/Kg	UJ	B, FD
2,3,7,8-TCDF	0.215	JBQ	0.0365	MDL	1.09	PQL	ng/Kg	J	Z
OCDF	0.997	JB	0.0315	MDL	10.9	PQL	ng/Kg	U	B

Sample ID: SL-027-SA8N-SB-4.0-5.0 **Collected:** 4/26/2011 10:54:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.242	JB	0.0178	MDL	5.74	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.0976	JB	0.00962	MDL	5.74	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.128	JBQ	0.0146	MDL	5.74	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0454	JB	0.0134	MDL	5.74	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0712	JB	0.0116	MDL	5.74	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0482	JBQ	0.0141	MDL	5.74	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0640	JB	0.0107	MDL	5.74	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0734	JBQ	0.0131	MDL	5.74	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.132	JBQ	0.0121	MDL	5.74	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0774	JBQ	0.0151	MDL	5.74	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0788	JB	0.00776	MDL	5.74	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0731	JBQ	0.0109	MDL	5.74	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0982	JBQ	0.00765	MDL	5.74	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0252	JBQ	0.0152	MDL	1.15	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX073 **Laboratory: LL**

EDD Filename: DX073_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: **SL-027-SA8N-SB-4.0-5.0** ***Collected:*** **4/26/2011 10:54:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
OCDD	0.657	JB	0.0256	MDL	11.5	PQL	ng/Kg	U	B
OCDF	0.219	JBQ	0.0212	MDL	11.5	PQL	ng/Kg	U	B

Sample ID: **SL-027-SA8N-SB-9.0-10.0** ***Collected:*** **4/26/2011 11:01:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	1.27	JB	0.0371	MDL	5.69	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.0938	JBQ	0.0136	MDL	5.69	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0526	JBQ	0.0219	MDL	5.69	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0324	JBQ	0.0155	MDL	5.69	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0563	JBQ	0.00949	MDL	5.69	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0515	JB	0.0155	MDL	5.69	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0373	JB	0.00800	MDL	5.69	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0566	JB	0.0153	MDL	5.69	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0479	JB	0.00983	MDL	5.69	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0567	JB	0.0145	MDL	5.69	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0589	JB	0.00731	MDL	5.69	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0336	JBQ	0.00857	MDL	5.69	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0655	JBQ	0.00766	MDL	5.69	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0188	J	0.0122	MDL	1.14	PQL	ng/Kg	J	Z
OCDF	0.257	JBQ	0.0360	MDL	11.4	PQL	ng/Kg	U	B

Sample ID: **SL-028-SA8N-SB-4.0-5.0** ***Collected:*** **4/26/2011 12:19:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.215	JB	0.0169	MDL	5.80	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.0681	JB	0.00776	MDL	5.80	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0545	JBQ	0.0124	MDL	5.80	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0362	JBQ	0.0124	MDL	5.80	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0471	JB	0.00859	MDL	5.80	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0524	JB	0.0128	MDL	5.80	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0532	JB	0.00765	MDL	5.80	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0474	JB	0.0122	MDL	5.80	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0516	JB	0.00894	MDL	5.80	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0693	JB	0.0151	MDL	5.80	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX073 **Laboratory: LL**

EDD Filename: DX073_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-028-SA8N-SB-4.0-5.0 **Collected:** 4/26/2011 12:19:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,7,8-PECDF	0.0783	JBQ	0.00694	MDL	5.80	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0549	JB	0.00788	MDL	5.80	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.105	JBQ	0.00694	MDL	5.80	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0203	JQ	0.0124	MDL	1.16	PQL	ng/Kg	J	Z
OCDD	0.571	JB	0.0275	MDL	11.6	PQL	ng/Kg	U	B
OCDF	0.115	JBQ	0.0279	MDL	11.6	PQL	ng/Kg	U	B

Sample ID: SL-028-SA8N-SB-9.0-10.0 **Collected:** 4/26/2011 12:28:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.259	JBQ	0.0195	MDL	5.51	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.0533	JBQ	0.00779	MDL	5.51	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0329	JBQ	0.0113	MDL	5.51	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0223	JBQ	0.0131	MDL	5.51	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0435	JBQ	0.00801	MDL	5.51	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0213	JBQ	0.0135	MDL	5.51	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0249	JBQ	0.00734	MDL	5.51	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0428	JB	0.0133	MDL	5.51	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0392	JBQ	0.00823	MDL	5.51	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0485	JBQ	0.0152	MDL	5.51	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0599	JBQ	0.00701	MDL	5.51	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0327	JB	0.00779	MDL	5.51	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0817	JB	0.00723	MDL	5.51	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0159	JBQ	0.0152	MDL	1.10	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0244	J	0.0154	MDL	1.10	PQL	ng/Kg	J	Z
OCDD	1.31	JB	0.0310	MDL	11.0	PQL	ng/Kg	U	B
OCDF	0.121	JB	0.0189	MDL	11.0	PQL	ng/Kg	U	B

Sample ID: SL-032-SA8N-SB-4.0-5.0 **Collected:** 4/27/2011 3:19:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	3.10	JB	0.0399	MDL	5.91	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.539	JB	0.0209	MDL	5.91	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.0983	JB	0.0353	MDL	5.91	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0873	JBQ	0.0214	MDL	5.91	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX073 **Laboratory: LL**

EDD Filename: DX073_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-032-SA8N-SB-4.0-5.0 **Collected:** 4/27/2011 3:19:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8-HXCDF	0.103	JBQ	0.0200	MDL	5.91	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.196	JB	0.0223	MDL	5.91	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0877	JBQ	0.0171	MDL	5.91	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.114	JBQ	0.0205	MDL	5.91	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.112	JB	0.0217	MDL	5.91	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.110	JB	0.0148	MDL	5.91	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.101	JB	0.00806	MDL	5.91	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.102	JB	0.0188	MDL	5.91	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.111	JB	0.00841	MDL	5.91	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0213	JBQ	0.0152	MDL	1.18	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0172	JQ	0.0154	MDL	1.18	PQL	ng/Kg	J	Z
OCDF	1.21	JB	0.0390	MDL	11.8	PQL	ng/Kg	J	Z

Sample ID: SL-032-SA8N-SB-9.0-10.0 **Collected:** 4/27/2011 3:26:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	1.37	JB	0.0252	MDL	5.97	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.164	JB	0.0357	MDL	5.97	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.149	JB	0.0397	MDL	5.97	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.161	JB	0.0384	MDL	5.97	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.487	JB	0.0418	MDL	5.97	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.185	JB	0.0345	MDL	5.97	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.243	JB	0.0387	MDL	5.97	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.142	JB	0.0418	MDL	5.97	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.217	JBQ	0.0285	MDL	5.97	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.323	JB	0.0116	MDL	5.97	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.172	JBQ	0.0361	MDL	5.97	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.265	JB	0.0125	MDL	5.97	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0449	JB	0.0197	MDL	1.19	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0386	JQ	0.0199	MDL	1.19	PQL	ng/Kg	J	Z
OCDF	3.30	JB	0.0353	MDL	11.9	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX073 **Laboratory: LL**

EDD Filename: DX073_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: **SL-036-SA8N-SB-4.0-5.0** ***Collected:*** **4/25/2011 11:14:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.289	JB	0.0234	MDL	5.85	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.142	JB	0.0146	MDL	5.85	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0604	JBQ	0.0221	MDL	5.85	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0454	JBQ	0.0181	MDL	5.85	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0718	JBQ	0.0133	MDL	5.85	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.123	JB	0.0185	MDL	5.85	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0796	JB	0.0122	MDL	5.85	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.249	JB	0.0176	MDL	5.85	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.297	JB	0.0153	MDL	5.85	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.111	JBQ	0.0205	MDL	5.85	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.177	JB	0.0101	MDL	5.85	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0532	JB	0.0124	MDL	5.85	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.124	JB	0.00953	MDL	5.85	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0560	JBQ	0.0189	MDL	1.17	PQL	ng/Kg	U	B
OCDD	1.25	JB	0.0368	MDL	11.7	PQL	ng/Kg	U	B
OCDF	0.172	JBQ	0.0286	MDL	11.7	PQL	ng/Kg	U	B

Sample ID: **SL-036-SA8N-SB-9.0-10.0** ***Collected:*** **4/25/2011 11:18:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.291	JB	0.0271	MDL	6.10	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.0910	JB	0.00969	MDL	6.10	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0222	JBQ	0.0173	MDL	6.10	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0198	JB	0.0139	MDL	6.10	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0326	JBQ	0.00894	MDL	6.10	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0288	JBQ	0.0140	MDL	6.10	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0457	JB	0.00807	MDL	6.10	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0335	JBQ	0.0134	MDL	6.10	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0288	JB	0.0108	MDL	6.10	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0621	JBQ	0.0158	MDL	6.10	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0641	JBQ	0.00807	MDL	6.10	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0336	JBQ	0.00845	MDL	6.10	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0759	JB	0.00807	MDL	6.10	PQL	ng/Kg	U	B
OCDD	1.41	JB	0.0334	MDL	12.2	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX073 **Laboratory: LL**

EDD Filename: DX073_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-036-SA8N-SB-9.0-10.0 **Collected:** 4/25/2011 11:18:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
OCDF	0.194	JB	0.0297	MDL	12.2	PQL	ng/Kg	U	B

Sample ID: SL-126-SA5A-SB-4.0-5.0 **Collected:** 4/19/2011 12:27:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.440	JBQ	0.0273	MDL	5.80	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.289	JB	0.0157	MDL	5.80	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.165	JBQ	0.0220	MDL	5.80	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.165	JBQ	0.0178	MDL	5.80	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.218	JB	0.0201	MDL	5.80	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.169	JB	0.0186	MDL	5.80	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.214	JB	0.0177	MDL	5.80	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.171	JB	0.0176	MDL	5.80	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.192	JB	0.0199	MDL	5.80	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.279	JB	0.0193	MDL	5.80	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.327	JB	0.0101	MDL	5.80	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.183	JB	0.0152	MDL	5.80	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.293	JB	0.00988	MDL	5.80	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0757	JB	0.0179	MDL	1.16	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0702	JBQ	0.0136	MDL	1.16	PQL	ng/Kg	U	B
OCDD	2.87	JB	0.0308	MDL	11.6	PQL	ng/Kg	J	Z
OCDF	0.346	JB	0.0276	MDL	11.6	PQL	ng/Kg	U	B

Sample ID: SL-127-SA5A-SB-2.0-3.0 **Collected:** 4/19/2011 11:17:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	0.649	JBQ	0.0464	MDL	5.55	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.627	JB	0.0720	MDL	5.55	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.836	JB	0.0535	MDL	5.55	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	1.10	JB	0.0755	MDL	5.55	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.553	JB	0.0488	MDL	5.55	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	1.03	JB	0.0700	MDL	5.55	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.625	JB	0.0540	MDL	5.55	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.529	JB	0.0255	MDL	5.55	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.569	JB	0.0148	MDL	5.55	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX073 **Laboratory: LL**

EDD Filename: DX073_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-127-SA5A-SB-2.0-3.0 **Collected:** 4/19/2011 11:17:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,3,4,6,7,8-HXCDF	0.524	JB	0.0433	MDL	5.55	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.543	JB	0.0149	MDL	5.55	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.144	JBQ	0.0187	MDL	1.11	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.158	JB	0.0202	MDL	1.11	PQL	ng/Kg	J	Z
OCDF	10.9	JB	0.0478	MDL	11.1	PQL	ng/Kg	J	Z

Sample ID: SL-138-SA8N-SS-0.0-0.5 **Collected:** 4/19/2011 11:00:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	3.55	JB	0.0343	MDL	5.42	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.804	JB	0.0209	MDL	5.42	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.134	JBQ	0.0329	MDL	5.42	PQL	ng/Kg	UJ	B, FD
1,2,3,4,7,8-HxCDD	0.117	JB	0.0477	MDL	5.42	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.225	JB	0.0309	MDL	5.42	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.490	JBQ	0.0488	MDL	5.42	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.186	JB	0.0276	MDL	5.42	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.556	JB	0.0480	MDL	5.42	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.298	JB	0.0350	MDL	5.42	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.130	JBQ	0.0234	MDL	5.42	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.352	JB	0.0202	MDL	5.42	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.229	JB	0.0273	MDL	5.42	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.448	JB	0.0184	MDL	5.42	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0464	JBQ	0.0172	MDL	1.08	PQL	ng/Kg	UJ	B, FD
2,3,7,8-TCDF	0.231	JB	0.0390	MDL	1.08	PQL	ng/Kg	J	Z
OCDF	1.29	JB	0.0329	MDL	10.8	PQL	ng/Kg	U	B

Sample ID: SL-139-SA8N-SS-0.0-0.5 **Collected:** 4/19/2011 11:25:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	3.17	JB	0.0343	MDL	5.22	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.666	JBQ	0.0206	MDL	5.22	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.139	JB	0.0341	MDL	5.22	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.133	JB	0.0354	MDL	5.22	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.176	JB	0.0261	MDL	5.22	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.403	JB	0.0369	MDL	5.22	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX073 **Laboratory: LL**

EDD Filename: DX073_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-139-SA8N-SS-0.0-0.5 **Collected:** 4/19/2011 11:25:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,6,7,8-HXCDF	0.155	JB	0.0236	MDL	5.22	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.544	JB	0.0351	MDL	5.22	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.276	JB	0.0336	MDL	5.22	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.137	JB	0.0200	MDL	5.22	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.236	JB	0.0143	MDL	5.22	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.190	JB	0.0261	MDL	5.22	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.286	JB	0.0138	MDL	5.22	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0236	JBQ	0.0147	MDL	1.04	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0910	JB	0.0259	MDL	1.04	PQL	ng/Kg	U	B
OCDF	1.16	JB	0.0376	MDL	10.4	PQL	ng/Kg	U	B

Sample ID: SL-140-SA8N-SS-0.0-0.5 **Collected:** 4/19/2011 9:45:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	0.753	JB	0.0736	MDL	5.72	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	4.49	JB	0.0791	MDL	5.72	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	1.06	JB	0.0431	MDL	5.72	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	5.04	JB	0.0817	MDL	5.72	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.683	JB	0.0391	MDL	5.72	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	4.17	JB	0.0793	MDL	5.72	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.532	JB	0.0519	MDL	5.72	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	1.33	JB	0.148	MDL	5.72	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.744	JB	0.0331	MDL	5.72	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.582	JB	0.0410	MDL	5.72	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.819	JB	0.0332	MDL	5.72	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.188	JBQ	0.0427	MDL	1.14	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.393	JB	0.0883	MDL	1.14	PQL	ng/Kg	J	Z
OCDF	11.2	JB	0.0586	MDL	11.4	PQL	ng/Kg	J	Z

Sample ID: SL-171-SA5A-SB-2.0-3.0 **Collected:** 4/19/2011 9:42:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.259	JB	0.0203	MDL	5.98	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.102	JBQ	0.0113	MDL	5.98	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0696	JB	0.0162	MDL	5.98	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX073 **Laboratory: LL**

EDD Filename: DX073_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: **SL-171-SA5A-SB-2.0-3.0** ***Collected:*** **4/19/2011 9:42:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8-HxCDD	0.0573	JBQ	0.0218	MDL	5.98	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0614	JBQ	0.0130	MDL	5.98	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0791	JB	0.0227	MDL	5.98	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0601	J	0.0118	MDL	5.98	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.141	JBQ	0.0218	MDL	5.98	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.131	JBQ	0.0136	MDL	5.98	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0819	JB	0.0203	MDL	5.98	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0743	JBQ	0.0107	MDL	5.98	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0658	JB	0.0117	MDL	5.98	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.104	JB	0.0109	MDL	5.98	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0220	JBQ	0.0170	MDL	1.20	PQL	ng/Kg	U	B
OCDD	0.884	JB	0.0318	MDL	12.0	PQL	ng/Kg	U	B
OCDF	0.194	JB	0.0239	MDL	12.0	PQL	ng/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DX073 **Laboratory: LL**

EDD Filename: DX073_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
	Sampling to Leaching Estimation
	Sampling to Leaching Rejection
*#	Professional Judgment
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Continuing Calibration Verification Percent Recovery Lower Estimation
C	Continuing Calibration Verification Percent Recovery Lower Rejection
C	Continuing Calibration Verification Percent Recovery Upper Estimation
C	Continuing Calibration Verification Percent Recovery Upper Rejection
C	Continuing Calibration Verification Relative Response Factor
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Relative Response Factor
C	Initial Calibration Verification Correlation Coefficient

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DX073 **Laboratory: LL**

EDD Filename: DX073_v1 **eQAPP Name: CDM_SSFL_110509**

C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Verification Percent Recovery Lower Estimation
C	Initial Calibration Verification Percent Recovery Lower Rejection
C	Initial Calibration Verification Percent Recovery Upper Estimation
C	Initial Calibration Verification Percent Recovery Upper Rejection
C	Initial Calibration Verification Relative Response Factor
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Laboratory Triplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination
F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DX073 **Laboratory: LL**

EDD Filename: DX073_v1 **eQAPP Name: CDM_SSFL_110509**

L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Laboratory Triplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Q	Matrix Spike Upper Rejection
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control Outlier Reports

DX073

Method Blank Outlier Report

Lab Reporting Batch ID: DX073 **Laboratory: LL**

EDD Filename: DX073_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **AQ**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLK1220B371437	5/4/2011 2:37:00 PM	1,2,3,4,6,7,8-HPCDD	4.37 pg/L	EB06-SA8N-SS-041911
		1,2,3,4,6,7,8-HPCDF	1.81 pg/L	FB07-SA8N-QC-042711
		1,2,3,4,7,8,9-HPCDF	0.983 pg/L	
		1,2,3,4,7,8-HxCDD	0.811 pg/L	
		1,2,3,4,7,8-HXCDF	0.812 pg/L	
		1,2,3,6,7,8-HXCDD	0.674 pg/L	
		1,2,3,6,7,8-HXCDF	0.817 pg/L	
		1,2,3,7,8,9-HXCDD	1.07 pg/L	
		1,2,3,7,8,9-HXCDF	0.969 pg/L	
		1,2,3,7,8-PECDD	0.428 pg/L	
		1,2,3,7,8-PECDF	0.992 pg/L	
		2,3,4,6,7,8-HXCDF	0.470 pg/L	
		2,3,4,7,8-PECDF	0.699 pg/L	
		2,3,7,8-TCDD	0.371 pg/L	
		OCDD	7.09 pg/L	
		OCDF	2.65 pg/L	

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
EB06-SA8N-SS-041911(RES)	1,2,3,4,6,7,8-HPCDD	2.73 pg/L	2.73U pg/L
EB06-SA8N-SS-041911(RES)	1,2,3,4,6,7,8-HPCDF	1.22 pg/L	1.22U pg/L
EB06-SA8N-SS-041911(RES)	1,2,3,4,7,8,9-HPCDF	0.646 pg/L	0.646U pg/L
EB06-SA8N-SS-041911(RES)	1,2,3,4,7,8-HxCDD	0.713 pg/L	0.713U pg/L
EB06-SA8N-SS-041911(RES)	1,2,3,4,7,8-HXCDF	0.574 pg/L	0.574U pg/L
EB06-SA8N-SS-041911(RES)	1,2,3,6,7,8-HXCDD	0.437 pg/L	0.437U pg/L
EB06-SA8N-SS-041911(RES)	1,2,3,6,7,8-HXCDF	0.451 pg/L	0.451U pg/L
EB06-SA8N-SS-041911(RES)	1,2,3,7,8,9-HXCDD	0.473 pg/L	0.473U pg/L
EB06-SA8N-SS-041911(RES)	1,2,3,7,8,9-HXCDF	0.588 pg/L	0.588U pg/L
EB06-SA8N-SS-041911(RES)	1,2,3,7,8-PECDD	0.499 pg/L	0.499U pg/L
EB06-SA8N-SS-041911(RES)	1,2,3,7,8-PECDF	0.286 pg/L	0.286U pg/L
EB06-SA8N-SS-041911(RES)	2,3,4,6,7,8-HXCDF	0.488 pg/L	0.488U pg/L
EB06-SA8N-SS-041911(RES)	2,3,4,7,8-PECDF	0.646 pg/L	0.646U pg/L
EB06-SA8N-SS-041911(RES)	OCDD	4.69 pg/L	4.69U pg/L
EB06-SA8N-SS-041911(RES)	OCDF	1.70 pg/L	1.70U pg/L
FB07-SA8N-QC-042711(RES)	1,2,3,4,6,7,8-HPCDD	1.87 pg/L	1.87U pg/L
FB07-SA8N-QC-042711(RES)	1,2,3,4,6,7,8-HPCDF	1.25 pg/L	1.25U pg/L
FB07-SA8N-QC-042711(RES)	1,2,3,4,7,8,9-HPCDF	0.498 pg/L	0.498U pg/L
FB07-SA8N-QC-042711(RES)	1,2,3,4,7,8-HXCDF	0.401 pg/L	0.401U pg/L
FB07-SA8N-QC-042711(RES)	1,2,3,6,7,8-HXCDF	0.385 pg/L	0.385U pg/L
FB07-SA8N-QC-042711(RES)	1,2,3,7,8,9-HXCDD	0.423 pg/L	0.423U pg/L
FB07-SA8N-QC-042711(RES)	1,2,3,7,8-PECDF	0.217 pg/L	0.217U pg/L
FB07-SA8N-QC-042711(RES)	2,3,4,6,7,8-HXCDF	0.515 pg/L	0.515U pg/L
FB07-SA8N-QC-042711(RES)	2,3,4,7,8-PECDF	0.456 pg/L	0.456U pg/L
FB07-SA8N-QC-042711(RES)	OCDD	4.47 pg/L	4.47U pg/L
FB07-SA8N-QC-042711(RES)	OCDF	1.29 pg/L	1.29U pg/L

Method Blank Outlier Report

Lab Reporting Batch ID: DX073 **Laboratory: LL**

EDD Filename: DX073_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLK1170B371237	4/29/2011 12:37:00 PM	1,2,3,4,6,7,8-HPCDD	0.222 ng/Kg	DUP04-SA8N-QC-041911
		1,2,3,4,6,7,8-HPCDF	0.145 ng/Kg	SL-036-SA8N-SB-4.0-5.0
		1,2,3,4,7,8,9-HPCDF	0.108 ng/Kg	SL-036-SA8N-SB-9.0-10.0
		1,2,3,4,7,8-HxCDD	0.0460 ng/Kg	SL-126-SA5A-SB-4.0-5.0
		1,2,3,4,7,8-HXCDF	0.0592 ng/Kg	SL-127-SA5A-SB-2.0-3.0
		1,2,3,6,7,8-HXCDD	0.0426 ng/Kg	SL-138-SA8N-SS-0.0-0.5
		1,2,3,6,7,8-HXCDF	0.0417 ng/Kg	SL-139-SA8N-SS-0.0-0.5
		1,2,3,7,8,9-HXCDD	0.0546 ng/Kg	SL-140-SA8N-SS-0.0-0.5
		1,2,3,7,8,9-HXCDF	0.0964 ng/Kg	
		1,2,3,7,8-PECDD	0.0524 ng/Kg	
		1,2,3,7,8-PECDF	0.0492 ng/Kg	
		2,3,4,6,7,8-HXCDF	0.0597 ng/Kg	
		2,3,4,7,8-PECDF	0.0795 ng/Kg	
		2,3,7,8-TCDD	0.0430 ng/Kg	
		2,3,7,8-TCDF	0.0189 ng/Kg	
		OCDD	0.573 ng/Kg	
		OCDF	0.266 ng/Kg	
BLK1220B370705	5/5/2011 7:05:00 AM	1,2,3,4,6,7,8-HPCDD	0.173 ng/Kg	SL-027-SA8N-SB-4.0-5.0
		1,2,3,4,6,7,8-HPCDF	0.0881 ng/Kg	SL-027-SA8N-SB-9.0-10.0
		1,2,3,4,7,8,9-HPCDF	0.0487 ng/Kg	SL-028-SA8N-SB-4.0-5.0
		1,2,3,4,7,8-HxCDD	0.0242 ng/Kg	SL-028-SA8N-SB-9.0-10.0
		1,2,3,4,7,8-HXCDF	0.0612 ng/Kg	SL-032-SA8N-SB-4.0-5.0
		1,2,3,6,7,8-HXCDD	0.0426 ng/Kg	SL-032-SA8N-SB-9.0-10.0
		1,2,3,6,7,8-HXCDF	0.0458 ng/Kg	
		1,2,3,7,8,9-HXCDD	0.0398 ng/Kg	
		1,2,3,7,8,9-HXCDF	0.0821 ng/Kg	
		1,2,3,7,8-PECDD	0.0512 ng/Kg	
		1,2,3,7,8-PECDF	0.0563 ng/Kg	
		2,3,4,6,7,8-HXCDF	0.0520 ng/Kg	
		2,3,4,7,8-PECDF	0.0781 ng/Kg	
		2,3,7,8-TCDD	0.0183 ng/Kg	
		OCDD	0.359 ng/Kg	
		OCDF	0.148 ng/Kg	
BLK1220B371838	5/4/2011 6:38:00 PM	1,2,3,4,6,7,8-HPCDD	0.160 ng/Kg	SL-171-SA5A-SB-2.0-3.0
		1,2,3,4,6,7,8-HPCDF	0.0552 ng/Kg	
		1,2,3,4,7,8,9-HPCDF	0.0327 ng/Kg	
		1,2,3,4,7,8-HxCDD	0.0176 ng/Kg	
		1,2,3,4,7,8-HXCDF	0.0299 ng/Kg	
		1,2,3,6,7,8-HXCDD	0.0563 ng/Kg	
		1,2,3,7,8,9-HXCDD	0.0395 ng/Kg	
		1,2,3,7,8,9-HXCDF	0.0587 ng/Kg	
		1,2,3,7,8-PECDD	0.0291 ng/Kg	
		1,2,3,7,8-PECDF	0.0402 ng/Kg	
		2,3,4,6,7,8-HXCDF	0.0330 ng/Kg	
		2,3,4,7,8-PECDF	0.0477 ng/Kg	
		2,3,7,8-TCDF	0.0138 ng/Kg	
		OCDD	0.283 ng/Kg	
		OCDF	0.0855 ng/Kg	

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
DUP04-SA8N-QC-041911(RES)	1,2,3,4,6,7,8-HPCDF	0.682 ng/Kg	0.682U ng/Kg
DUP04-SA8N-QC-041911(RES)	1,2,3,4,7,8,9-HPCDF	0.0801 ng/Kg	0.0801U ng/Kg
DUP04-SA8N-QC-041911(RES)	1,2,3,4,7,8-HxCDD	0.106 ng/Kg	0.106U ng/Kg
DUP04-SA8N-QC-041911(RES)	1,2,3,4,7,8-HXCDF	0.258 ng/Kg	0.258U ng/Kg
DUP04-SA8N-QC-041911(RES)	1,2,3,6,7,8-HXCDF	0.160 ng/Kg	0.160U ng/Kg
DUP04-SA8N-QC-041911(RES)	1,2,3,7,8,9-HXCDF	0.263 ng/Kg	0.263U ng/Kg
DUP04-SA8N-QC-041911(RES)	1,2,3,7,8-PECDD	0.111 ng/Kg	0.111U ng/Kg
DUP04-SA8N-QC-041911(RES)	2,3,4,6,7,8-HXCDF	0.176 ng/Kg	0.176U ng/Kg
DUP04-SA8N-QC-041911(RES)	2,3,7,8-TCDD	0.0165 ng/Kg	0.0165U ng/Kg

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Method Blank Outlier Report

Lab Reporting Batch ID: DX073 **Laboratory: LL**

EDD Filename: DX073_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
DUP04-SA8N-QC-041911(RES)	OCDF	0.997 ng/Kg	0.997U ng/Kg
SL-027-SA8N-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.242 ng/Kg	0.242U ng/Kg
SL-027-SA8N-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.0976 ng/Kg	0.0976U ng/Kg
SL-027-SA8N-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.128 ng/Kg	0.128U ng/Kg
SL-027-SA8N-SB-4.0-5.0(RES)	1,2,3,4,7,8-HxCDD	0.0454 ng/Kg	0.0454U ng/Kg
SL-027-SA8N-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.0712 ng/Kg	0.0712U ng/Kg
SL-027-SA8N-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDD	0.0482 ng/Kg	0.0482U ng/Kg
SL-027-SA8N-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.0640 ng/Kg	0.0640U ng/Kg
SL-027-SA8N-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDD	0.0734 ng/Kg	0.0734U ng/Kg
SL-027-SA8N-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.132 ng/Kg	0.132U ng/Kg
SL-027-SA8N-SB-4.0-5.0(RES)	1,2,3,7,8-PECDD	0.0774 ng/Kg	0.0774U ng/Kg
SL-027-SA8N-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.0788 ng/Kg	0.0788U ng/Kg
SL-027-SA8N-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.0731 ng/Kg	0.0731U ng/Kg
SL-027-SA8N-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.0982 ng/Kg	0.0982U ng/Kg
SL-027-SA8N-SB-4.0-5.0(RES)	2,3,7,8-TCDD	0.0252 ng/Kg	0.0252U ng/Kg
SL-027-SA8N-SB-4.0-5.0(RES)	OCDD	0.657 ng/Kg	0.657U ng/Kg
SL-027-SA8N-SB-4.0-5.0(RES)	OCDF	0.219 ng/Kg	0.219U ng/Kg
SL-027-SA8N-SB-9.0-10.0(RES)	1,2,3,4,6,7,8-HPCDF	0.0938 ng/Kg	0.0938U ng/Kg
SL-027-SA8N-SB-9.0-10.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0526 ng/Kg	0.0526U ng/Kg
SL-027-SA8N-SB-9.0-10.0(RES)	1,2,3,4,7,8-HxCDD	0.0324 ng/Kg	0.0324U ng/Kg
SL-027-SA8N-SB-9.0-10.0(RES)	1,2,3,4,7,8-HXCDF	0.0563 ng/Kg	0.0563U ng/Kg
SL-027-SA8N-SB-9.0-10.0(RES)	1,2,3,6,7,8-HXCDD	0.0515 ng/Kg	0.0515U ng/Kg
SL-027-SA8N-SB-9.0-10.0(RES)	1,2,3,6,7,8-HXCDF	0.0373 ng/Kg	0.0373U ng/Kg
SL-027-SA8N-SB-9.0-10.0(RES)	1,2,3,7,8,9-HXCDD	0.0566 ng/Kg	0.0566U ng/Kg
SL-027-SA8N-SB-9.0-10.0(RES)	1,2,3,7,8,9-HXCDF	0.0479 ng/Kg	0.0479U ng/Kg
SL-027-SA8N-SB-9.0-10.0(RES)	1,2,3,7,8-PECDD	0.0567 ng/Kg	0.0567U ng/Kg
SL-027-SA8N-SB-9.0-10.0(RES)	1,2,3,7,8-PECDF	0.0589 ng/Kg	0.0589U ng/Kg
SL-027-SA8N-SB-9.0-10.0(RES)	2,3,4,6,7,8-HXCDF	0.0336 ng/Kg	0.0336U ng/Kg
SL-027-SA8N-SB-9.0-10.0(RES)	2,3,4,7,8-PECDF	0.0655 ng/Kg	0.0655U ng/Kg
SL-027-SA8N-SB-9.0-10.0(RES)	OCDF	0.257 ng/Kg	0.257U ng/Kg
SL-028-SA8N-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.215 ng/Kg	0.215U ng/Kg
SL-028-SA8N-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.0681 ng/Kg	0.0681U ng/Kg
SL-028-SA8N-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0545 ng/Kg	0.0545U ng/Kg
SL-028-SA8N-SB-4.0-5.0(RES)	1,2,3,4,7,8-HxCDD	0.0362 ng/Kg	0.0362U ng/Kg
SL-028-SA8N-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.0471 ng/Kg	0.0471U ng/Kg
SL-028-SA8N-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDD	0.0524 ng/Kg	0.0524U ng/Kg
SL-028-SA8N-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.0532 ng/Kg	0.0532U ng/Kg
SL-028-SA8N-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDD	0.0474 ng/Kg	0.0474U ng/Kg
SL-028-SA8N-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.0516 ng/Kg	0.0516U ng/Kg
SL-028-SA8N-SB-4.0-5.0(RES)	1,2,3,7,8-PECDD	0.0693 ng/Kg	0.0693U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX073 **Laboratory: LL**

EDD Filename: DX073_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-028-SA8N-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.0783 ng/Kg	0.0783U ng/Kg
SL-028-SA8N-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.0549 ng/Kg	0.0549U ng/Kg
SL-028-SA8N-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.105 ng/Kg	0.105U ng/Kg
SL-028-SA8N-SB-4.0-5.0(RES)	OCDD	0.571 ng/Kg	0.571U ng/Kg
SL-028-SA8N-SB-4.0-5.0(RES)	OCDF	0.115 ng/Kg	0.115U ng/Kg
SL-028-SA8N-SB-9.0-10.0(RES)	1,2,3,4,6,7,8-HPCDD	0.259 ng/Kg	0.259U ng/Kg
SL-028-SA8N-SB-9.0-10.0(RES)	1,2,3,4,6,7,8-HPCDF	0.0533 ng/Kg	0.0533U ng/Kg
SL-028-SA8N-SB-9.0-10.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0329 ng/Kg	0.0329U ng/Kg
SL-028-SA8N-SB-9.0-10.0(RES)	1,2,3,4,7,8-HxCDD	0.0223 ng/Kg	0.0223U ng/Kg
SL-028-SA8N-SB-9.0-10.0(RES)	1,2,3,4,7,8-HXCDF	0.0435 ng/Kg	0.0435U ng/Kg
SL-028-SA8N-SB-9.0-10.0(RES)	1,2,3,6,7,8-HXCDD	0.0213 ng/Kg	0.0213U ng/Kg
SL-028-SA8N-SB-9.0-10.0(RES)	1,2,3,6,7,8-HXCDF	0.0249 ng/Kg	0.0249U ng/Kg
SL-028-SA8N-SB-9.0-10.0(RES)	1,2,3,7,8,9-HXCDD	0.0428 ng/Kg	0.0428U ng/Kg
SL-028-SA8N-SB-9.0-10.0(RES)	1,2,3,7,8,9-HXCDF	0.0392 ng/Kg	0.0392U ng/Kg
SL-028-SA8N-SB-9.0-10.0(RES)	1,2,3,7,8-PECDD	0.0485 ng/Kg	0.0485U ng/Kg
SL-028-SA8N-SB-9.0-10.0(RES)	1,2,3,7,8-PECDF	0.0599 ng/Kg	0.0599U ng/Kg
SL-028-SA8N-SB-9.0-10.0(RES)	2,3,4,6,7,8-HXCDF	0.0327 ng/Kg	0.0327U ng/Kg
SL-028-SA8N-SB-9.0-10.0(RES)	2,3,4,7,8-PECDF	0.0817 ng/Kg	0.0817U ng/Kg
SL-028-SA8N-SB-9.0-10.0(RES)	2,3,7,8-TCDD	0.0159 ng/Kg	0.0159U ng/Kg
SL-028-SA8N-SB-9.0-10.0(RES)	OCDD	1.31 ng/Kg	1.31U ng/Kg
SL-028-SA8N-SB-9.0-10.0(RES)	OCDF	0.121 ng/Kg	0.121U ng/Kg
SL-032-SA8N-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0983 ng/Kg	0.0983U ng/Kg
SL-032-SA8N-SB-4.0-5.0(RES)	1,2,3,4,7,8-HxCDD	0.0873 ng/Kg	0.0873U ng/Kg
SL-032-SA8N-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.103 ng/Kg	0.103U ng/Kg
SL-032-SA8N-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDD	0.196 ng/Kg	0.196U ng/Kg
SL-032-SA8N-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.0877 ng/Kg	0.0877U ng/Kg
SL-032-SA8N-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDD	0.114 ng/Kg	0.114U ng/Kg
SL-032-SA8N-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.112 ng/Kg	0.112U ng/Kg
SL-032-SA8N-SB-4.0-5.0(RES)	1,2,3,7,8-PECDD	0.110 ng/Kg	0.110U ng/Kg
SL-032-SA8N-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.101 ng/Kg	0.101U ng/Kg
SL-032-SA8N-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.102 ng/Kg	0.102U ng/Kg
SL-032-SA8N-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.111 ng/Kg	0.111U ng/Kg
SL-032-SA8N-SB-4.0-5.0(RES)	2,3,7,8-TCDD	0.0213 ng/Kg	0.0213U ng/Kg
SL-032-SA8N-SB-9.0-10.0(RES)	1,2,3,4,7,8,9-HPCDF	0.164 ng/Kg	0.164U ng/Kg
SL-032-SA8N-SB-9.0-10.0(RES)	1,2,3,4,7,8-HXCDF	0.161 ng/Kg	0.161U ng/Kg
SL-032-SA8N-SB-9.0-10.0(RES)	1,2,3,6,7,8-HXCDF	0.185 ng/Kg	0.185U ng/Kg
SL-032-SA8N-SB-9.0-10.0(RES)	1,2,3,7,8,9-HXCDF	0.142 ng/Kg	0.142U ng/Kg
SL-032-SA8N-SB-9.0-10.0(RES)	1,2,3,7,8-PECDD	0.217 ng/Kg	0.217U ng/Kg
SL-032-SA8N-SB-9.0-10.0(RES)	2,3,4,6,7,8-HXCDF	0.172 ng/Kg	0.172U ng/Kg
SL-032-SA8N-SB-9.0-10.0(RES)	2,3,4,7,8-PECDF	0.265 ng/Kg	0.265U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX073 **Laboratory: LL**

EDD Filename: DX073_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-032-SA8N-SB-9.0-10.0(RES)	2,3,7,8-TCDD	0.0449 ng/Kg	0.0449U ng/Kg
SL-036-SA8N-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.289 ng/Kg	0.289U ng/Kg
SL-036-SA8N-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.142 ng/Kg	0.142U ng/Kg
SL-036-SA8N-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0604 ng/Kg	0.0604U ng/Kg
SL-036-SA8N-SB-4.0-5.0(RES)	1,2,3,4,7,8-HxCDD	0.0454 ng/Kg	0.0454U ng/Kg
SL-036-SA8N-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.0718 ng/Kg	0.0718U ng/Kg
SL-036-SA8N-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDD	0.123 ng/Kg	0.123U ng/Kg
SL-036-SA8N-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.0796 ng/Kg	0.0796U ng/Kg
SL-036-SA8N-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDD	0.249 ng/Kg	0.249U ng/Kg
SL-036-SA8N-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.297 ng/Kg	0.297U ng/Kg
SL-036-SA8N-SB-4.0-5.0(RES)	1,2,3,7,8-PECDD	0.111 ng/Kg	0.111U ng/Kg
SL-036-SA8N-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.177 ng/Kg	0.177U ng/Kg
SL-036-SA8N-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.0532 ng/Kg	0.0532U ng/Kg
SL-036-SA8N-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.124 ng/Kg	0.124U ng/Kg
SL-036-SA8N-SB-4.0-5.0(RES)	2,3,7,8-TCDD	0.0560 ng/Kg	0.0560U ng/Kg
SL-036-SA8N-SB-4.0-5.0(RES)	OCDD	1.25 ng/Kg	1.25U ng/Kg
SL-036-SA8N-SB-4.0-5.0(RES)	OCDF	0.172 ng/Kg	0.172U ng/Kg
SL-036-SA8N-SB-9.0-10.0(RES)	1,2,3,4,6,7,8-HPCDD	0.291 ng/Kg	0.291U ng/Kg
SL-036-SA8N-SB-9.0-10.0(RES)	1,2,3,4,6,7,8-HPCDF	0.0910 ng/Kg	0.0910U ng/Kg
SL-036-SA8N-SB-9.0-10.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0222 ng/Kg	0.0222U ng/Kg
SL-036-SA8N-SB-9.0-10.0(RES)	1,2,3,4,7,8-HxCDD	0.0198 ng/Kg	0.0198U ng/Kg
SL-036-SA8N-SB-9.0-10.0(RES)	1,2,3,4,7,8-HXCDF	0.0326 ng/Kg	0.0326U ng/Kg
SL-036-SA8N-SB-9.0-10.0(RES)	1,2,3,6,7,8-HXCDD	0.0288 ng/Kg	0.0288U ng/Kg
SL-036-SA8N-SB-9.0-10.0(RES)	1,2,3,6,7,8-HXCDF	0.0457 ng/Kg	0.0457U ng/Kg
SL-036-SA8N-SB-9.0-10.0(RES)	1,2,3,7,8,9-HXCDD	0.0335 ng/Kg	0.0335U ng/Kg
SL-036-SA8N-SB-9.0-10.0(RES)	1,2,3,7,8,9-HXCDF	0.0288 ng/Kg	0.0288U ng/Kg
SL-036-SA8N-SB-9.0-10.0(RES)	1,2,3,7,8-PECDD	0.0621 ng/Kg	0.0621U ng/Kg
SL-036-SA8N-SB-9.0-10.0(RES)	1,2,3,7,8-PECDF	0.0641 ng/Kg	0.0641U ng/Kg
SL-036-SA8N-SB-9.0-10.0(RES)	2,3,4,6,7,8-HXCDF	0.0336 ng/Kg	0.0336U ng/Kg
SL-036-SA8N-SB-9.0-10.0(RES)	2,3,4,7,8-PECDF	0.0759 ng/Kg	0.0759U ng/Kg
SL-036-SA8N-SB-9.0-10.0(RES)	OCDD	1.41 ng/Kg	1.41U ng/Kg
SL-036-SA8N-SB-9.0-10.0(RES)	OCDF	0.194 ng/Kg	0.194U ng/Kg
SL-126-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.440 ng/Kg	0.440U ng/Kg
SL-126-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.289 ng/Kg	0.289U ng/Kg
SL-126-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.165 ng/Kg	0.165U ng/Kg
SL-126-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HxCDD	0.165 ng/Kg	0.165U ng/Kg
SL-126-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.218 ng/Kg	0.218U ng/Kg
SL-126-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDD	0.169 ng/Kg	0.169U ng/Kg
SL-126-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDD	0.171 ng/Kg	0.171U ng/Kg
SL-126-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.192 ng/Kg	0.192U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX073 **Laboratory: LL**

EDD Filename: DX073_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-126-SA5A-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.183 ng/Kg	0.183U ng/Kg
SL-126-SA5A-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.293 ng/Kg	0.293U ng/Kg
SL-126-SA5A-SB-4.0-5.0(RES)	2,3,7,8-TCDD	0.0757 ng/Kg	0.0757U ng/Kg
SL-126-SA5A-SB-4.0-5.0(RES)	2,3,7,8-TCDF	0.0702 ng/Kg	0.0702U ng/Kg
SL-126-SA5A-SB-4.0-5.0(RES)	OCDF	0.346 ng/Kg	0.346U ng/Kg
SL-127-SA5A-SB-2.0-3.0(RES)	2,3,7,8-TCDD	0.144 ng/Kg	0.144U ng/Kg
SL-138-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.134 ng/Kg	0.134U ng/Kg
SL-138-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.117 ng/Kg	0.117U ng/Kg
SL-138-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.225 ng/Kg	0.225U ng/Kg
SL-138-SA8N-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.186 ng/Kg	0.186U ng/Kg
SL-138-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.298 ng/Kg	0.298U ng/Kg
SL-138-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.130 ng/Kg	0.130U ng/Kg
SL-138-SA8N-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.229 ng/Kg	0.229U ng/Kg
SL-138-SA8N-SS-0.0-0.5(RES)	2,3,7,8-TCDD	0.0464 ng/Kg	0.0464U ng/Kg
SL-138-SA8N-SS-0.0-0.5(RES)	OCDF	1.29 ng/Kg	1.29U ng/Kg
SL-139-SA8N-SS-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDF	0.666 ng/Kg	0.666U ng/Kg
SL-139-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.139 ng/Kg	0.139U ng/Kg
SL-139-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.133 ng/Kg	0.133U ng/Kg
SL-139-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.176 ng/Kg	0.176U ng/Kg
SL-139-SA8N-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.155 ng/Kg	0.155U ng/Kg
SL-139-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.276 ng/Kg	0.276U ng/Kg
SL-139-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.137 ng/Kg	0.137U ng/Kg
SL-139-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.236 ng/Kg	0.236U ng/Kg
SL-139-SA8N-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.190 ng/Kg	0.190U ng/Kg
SL-139-SA8N-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.286 ng/Kg	0.286U ng/Kg
SL-139-SA8N-SS-0.0-0.5(RES)	2,3,7,8-TCDD	0.0236 ng/Kg	0.0236U ng/Kg
SL-139-SA8N-SS-0.0-0.5(RES)	2,3,7,8-TCDF	0.0910 ng/Kg	0.0910U ng/Kg
SL-139-SA8N-SS-0.0-0.5(RES)	OCDF	1.16 ng/Kg	1.16U ng/Kg
SL-140-SA8N-SS-0.0-0.5(RES)	2,3,7,8-TCDD	0.188 ng/Kg	0.188U ng/Kg
SL-171-SA5A-SB-2.0-3.0(RES)	1,2,3,4,6,7,8-HPCDD	0.259 ng/Kg	0.259U ng/Kg
SL-171-SA5A-SB-2.0-3.0(RES)	1,2,3,4,6,7,8-HPCDF	0.102 ng/Kg	0.102U ng/Kg
SL-171-SA5A-SB-2.0-3.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0696 ng/Kg	0.0696U ng/Kg
SL-171-SA5A-SB-2.0-3.0(RES)	1,2,3,4,7,8-HxCDD	0.0573 ng/Kg	0.0573U ng/Kg
SL-171-SA5A-SB-2.0-3.0(RES)	1,2,3,4,7,8-HXCDF	0.0614 ng/Kg	0.0614U ng/Kg
SL-171-SA5A-SB-2.0-3.0(RES)	1,2,3,6,7,8-HXCDD	0.0791 ng/Kg	0.0791U ng/Kg
SL-171-SA5A-SB-2.0-3.0(RES)	1,2,3,7,8,9-HXCDD	0.141 ng/Kg	0.141U ng/Kg
SL-171-SA5A-SB-2.0-3.0(RES)	1,2,3,7,8,9-HXCDF	0.131 ng/Kg	0.131U ng/Kg
SL-171-SA5A-SB-2.0-3.0(RES)	1,2,3,7,8-PECDD	0.0819 ng/Kg	0.0819U ng/Kg
SL-171-SA5A-SB-2.0-3.0(RES)	1,2,3,7,8-PECDF	0.0743 ng/Kg	0.0743U ng/Kg
SL-171-SA5A-SB-2.0-3.0(RES)	2,3,4,6,7,8-HXCDF	0.0658 ng/Kg	0.0658U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX073 **Laboratory: LL**

EDD Filename: DX073_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-171-SA5A-SB-2.0-3.0(RES)	2,3,4,7,8-PECDF	0.104 ng/Kg	0.104U ng/Kg
SL-171-SA5A-SB-2.0-3.0(RES)	2,3,7,8-TCDF	0.0220 ng/Kg	0.0220U ng/Kg
SL-171-SA5A-SB-2.0-3.0(RES)	OCDD	0.884 ng/Kg	0.884U ng/Kg
SL-171-SA5A-SB-2.0-3.0(RES)	OCDF	0.194 ng/Kg	0.194U ng/Kg

Field Duplicate RPD Report

Lab Reporting Batch ID: DX073 **Laboratory: LL**

EDD Filename: PrepDX073_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 160.3M
Matrix: SO

Analyte	Concentration (%)		Sample RPD	eQAPP RPD	Flag
	SL-138-SA8N-SS-0.0-0.5	DUP04-SA8N-QC-041911			
MOISTURE	8.2	8.7	6		No Qualifiers Applied

Method: 1613B
Matrix: SO

Analyte	Concentration (ng/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-138-SA8N-SS-0.0-0.5	DUP04-SA8N-QC-041911			
1,2,3,4,6,7,8-HPCDD	3.55	3.27	8	50.00	No Qualifiers Applied
1,2,3,4,6,7,8-HPCDF	0.804	0.682	16	50.00	
1,2,3,4,7,8-HxCDD	0.117	0.106	10	50.00	
1,2,3,4,7,8-HXCDF	0.225	0.258	14	50.00	
1,2,3,6,7,8-HXCDD	0.490	0.477	3	50.00	
1,2,3,6,7,8-HXCDF	0.186	0.160	15	50.00	
1,2,3,7,8,9-HXCDD	0.556	0.549	1	50.00	
1,2,3,7,8,9-HXCDF	0.298	0.263	12	50.00	
1,2,3,7,8-PECDD	0.130	0.111	16	50.00	
1,2,3,7,8-PECDF	0.352	0.274	25	50.00	
2,3,4,6,7,8-HXCDF	0.229	0.176	26	50.00	
2,3,4,7,8-PECDF	0.448	0.464	4	50.00	
2,3,7,8-TCDF	0.231	0.215	7	50.00	
OCDD	28.5	24.5	15	50.00	
OCDF	1.29	0.997	26	50.00	
1,2,3,4,7,8,9-HPCDF	0.134	0.0801	50	50.00	J(all detects)
2,3,7,8-TCDD	0.0464	0.0165	95	50.00	

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Reporting Limit Outliers

Lab Reporting Batch ID: DX073 **Laboratory: LL**

EDD Filename: DX073_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1613B
Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB06-SA8N-SS-041911	1,2,3,4,6,7,8-HPCDD	JB	2.73	10.1	PQL	pg/L	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	1.22	10.1	PQL	pg/L	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.646	10.1	PQL	pg/L	
	1,2,3,4,7,8-HxCDD	JB	0.713	10.1	PQL	pg/L	
	1,2,3,4,7,8-HXCDF	JB	0.574	10.1	PQL	pg/L	
	1,2,3,6,7,8-HXCDD	JBQ	0.437	10.1	PQL	pg/L	
	1,2,3,6,7,8-HXCDF	JB	0.451	10.1	PQL	pg/L	
	1,2,3,7,8,9-HXCDD	JBQ	0.473	10.1	PQL	pg/L	
	1,2,3,7,8,9-HXCDF	JB	0.588	10.1	PQL	pg/L	
	1,2,3,7,8-PECDD	JBQ	0.499	10.1	PQL	pg/L	
	1,2,3,7,8-PECDF	JBQ	0.286	10.1	PQL	pg/L	
	2,3,4,6,7,8-HXCDF	JBQ	0.488	10.1	PQL	pg/L	
	2,3,4,7,8-PECDF	JB	0.646	10.1	PQL	pg/L	
	OCDD	JB	4.69	20.1	PQL	pg/L	
	OCDF	JB	1.70	20.1	PQL	pg/L	
FB07-SA8N-QC-042711	1,2,3,4,6,7,8-HPCDD	JBQ	1.87	10.6	PQL	pg/L	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	1.25	10.6	PQL	pg/L	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.498	10.6	PQL	pg/L	
	1,2,3,4,7,8-HXCDF	JBQ	0.401	10.6	PQL	pg/L	
	1,2,3,6,7,8-HXCDF	JBQ	0.385	10.6	PQL	pg/L	
	1,2,3,7,8,9-HXCDD	JBQ	0.423	10.6	PQL	pg/L	
	1,2,3,7,8-PECDF	JBQ	0.217	10.6	PQL	pg/L	
	2,3,4,6,7,8-HXCDF	JB	0.515	10.6	PQL	pg/L	
	2,3,4,7,8-PECDF	JB	0.456	10.6	PQL	pg/L	
	OCDD	JB	4.47	21.3	PQL	pg/L	
	OCDF	JB	1.29	21.3	PQL	pg/L	

Method: 1613B
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP04-SA8N-QC-041911	1,2,3,4,6,7,8-HPCDD	JB	3.27	5.43	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.682	5.43	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0801	5.43	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.106	5.43	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.258	5.43	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.477	5.43	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.160	5.43	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.549	5.43	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.263	5.43	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.111	5.43	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.274	5.43	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.176	5.43	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.464	5.43	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0165	1.09	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.215	1.09	PQL	ng/Kg	
	OCDF	JB	0.997	10.9	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX073 **Laboratory: LL**

EDD Filename: DX073_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-027-SA8N-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JB	0.242	5.74	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.0976	5.74	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.128	5.74	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.0454	5.74	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.0712	5.74	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.0482	5.74	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0640	5.74	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.0734	5.74	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.132	5.74	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0774	5.74	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.0788	5.74	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0731	5.74	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0982	5.74	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0252	1.15	PQL	ng/Kg	
	OCDD	JB	0.657	11.5	PQL	ng/Kg	
	OCDF	JBQ	0.219	11.5	PQL	ng/Kg	
SL-027-SA8N-SB-9.0-10.0	1,2,3,4,6,7,8-HPCDD	JB	1.27	5.69	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JBQ	0.0938	5.69	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0526	5.69	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0324	5.69	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0563	5.69	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.0515	5.69	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0373	5.69	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.0566	5.69	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.0479	5.69	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.0567	5.69	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.0589	5.69	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0336	5.69	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0655	5.69	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.0188	1.14	PQL	ng/Kg	
	OCDF	JBQ	0.257	11.4	PQL	ng/Kg	
SL-028-SA8N-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JB	0.215	5.80	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.0681	5.80	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0545	5.80	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0362	5.80	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.0471	5.80	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.0524	5.80	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0532	5.80	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.0474	5.80	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.0516	5.80	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.0693	5.80	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0783	5.80	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.0549	5.80	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.105	5.80	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.0203	1.16	PQL	ng/Kg	
	OCDD	JB	0.571	11.6	PQL	ng/Kg	
	OCDF	JBQ	0.115	11.6	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX073 **Laboratory: LL**

EDD Filename: DX073_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-028-SA8N-SB-9.0-10.0	1,2,3,4,6,7,8-HPCDD	JBQ	0.259	5.51	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JBQ	0.0533	5.51	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0329	5.51	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0223	5.51	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0435	5.51	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.0213	5.51	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0249	5.51	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.0428	5.51	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.0392	5.51	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0485	5.51	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0599	5.51	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.0327	5.51	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.0817	5.51	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0159	1.10	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.0244	1.10	PQL	ng/Kg	
	OCDD	JB	1.31	11.0	PQL	ng/Kg	
	OCDF	JB	0.121	11.0	PQL	ng/Kg	
SL-032-SA8N-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JB	3.10	5.91	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.539	5.91	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.0983	5.91	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0873	5.91	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.103	5.91	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.196	5.91	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0877	5.91	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.114	5.91	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.112	5.91	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.110	5.91	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.101	5.91	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.102	5.91	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.111	5.91	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0213	1.18	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.0172	1.18	PQL	ng/Kg	
	OCDF	JB	1.21	11.8	PQL	ng/Kg	
SL-032-SA8N-SB-9.0-10.0	1,2,3,4,6,7,8-HPCDF	JB	1.37	5.97	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JB	0.164	5.97	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.149	5.97	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.161	5.97	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.487	5.97	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.185	5.97	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.243	5.97	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.142	5.97	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.217	5.97	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.323	5.97	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.172	5.97	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.265	5.97	PQL	ng/Kg	
	2,3,7,8-TCDD	JB	0.0449	1.19	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.0386	1.19	PQL	ng/Kg	
	OCDF	JB	3.30	11.9	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX073 **Laboratory: LL**

EDD Filename: DX073_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-036-SA8N-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JB	0.289	5.85	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.142	5.85	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0604	5.85	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0454	5.85	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0718	5.85	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.123	5.85	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0796	5.85	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.249	5.85	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.297	5.85	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.111	5.85	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.177	5.85	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.0532	5.85	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.124	5.85	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0560	1.17	PQL	ng/Kg	
	OCDD	JB	1.25	11.7	PQL	ng/Kg	
	OCDF	JBQ	0.172	11.7	PQL	ng/Kg	
SL-036-SA8N-SB-9.0-10.0	1,2,3,4,6,7,8-HPCDD	JB	0.291	6.10	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.0910	6.10	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0222	6.10	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.0198	6.10	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0326	6.10	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.0288	6.10	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0457	6.10	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.0335	6.10	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.0288	6.10	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0621	6.10	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0641	6.10	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0336	6.10	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.0759	6.10	PQL	ng/Kg	
	OCDD	JB	1.41	12.2	PQL	ng/Kg	
	OCDF	JB	0.194	12.2	PQL	ng/Kg	
SL-126-SA5A-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JBQ	0.440	5.80	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.289	5.80	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.165	5.80	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.165	5.80	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.218	5.80	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.169	5.80	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.214	5.80	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.171	5.80	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.192	5.80	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.279	5.80	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.327	5.80	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.183	5.80	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.293	5.80	PQL	ng/Kg	
	2,3,7,8-TCDD	JB	0.0757	1.16	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.0702	1.16	PQL	ng/Kg	
	OCDD	JB	2.87	11.6	PQL	ng/Kg	
	OCDF	JB	0.346	11.6	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX073 **Laboratory: LL**

EDD Filename: DX073_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-127-SA5A-SB-2.0-3.0	1,2,3,4,7,8,9-HPCDF	JBQ	0.649	5.55	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8-HxCDD	JB	0.627	5.55	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.836	5.55	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	1.10	5.55	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.553	5.55	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	1.03	5.55	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.625	5.55	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.529	5.55	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.569	5.55	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.524	5.55	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.543	5.55	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.144	1.11	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.158	1.11	PQL	ng/Kg	
	OCDF	JB	10.9	11.1	PQL	ng/Kg	
SL-138-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDD	JB	3.55	5.42	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.804	5.42	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.134	5.42	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.117	5.42	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.225	5.42	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.490	5.42	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.186	5.42	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.556	5.42	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.298	5.42	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.130	5.42	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.352	5.42	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.229	5.42	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.448	5.42	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0464	1.08	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.231	1.08	PQL	ng/Kg	
	OCDF	JB	1.29	10.8	PQL	ng/Kg	
SL-139-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDD	JB	3.17	5.22	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JBQ	0.666	5.22	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.139	5.22	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.133	5.22	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.176	5.22	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.403	5.22	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.155	5.22	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.544	5.22	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.276	5.22	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.137	5.22	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.236	5.22	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.190	5.22	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.286	5.22	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0236	1.04	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.0910	1.04	PQL	ng/Kg	
	OCDF	JB	1.16	10.4	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX073 **Laboratory: LL**

EDD Filename: DX073_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-140-SA8N-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	0.753	5.72	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8-HxCDD	JB	4.49	5.72	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	1.06	5.72	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	5.04	5.72	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.683	5.72	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	4.17	5.72	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.532	5.72	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	1.33	5.72	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.744	5.72	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.582	5.72	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.819	5.72	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.188	1.14	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.393	1.14	PQL	ng/Kg	
	OCDF	JB	11.2	11.4	PQL	ng/Kg	
SL-171-SA5A-SB-2.0-3.0	1,2,3,4,6,7,8-HPCDD	JB	0.259	5.98	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JBQ	0.102	5.98	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.0696	5.98	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0573	5.98	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0614	5.98	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.0791	5.98	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	J	0.0601	5.98	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.141	5.98	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.131	5.98	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.0819	5.98	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0743	5.98	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.0658	5.98	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.104	5.98	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.0220	1.20	PQL	ng/Kg	
	OCDD	JB	0.884	12.0	PQL	ng/Kg	
	OCDF	JB	0.194	12.0	PQL	ng/Kg	

SAMPLE DELIVERY GROUP

DX077

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
22-Apr-2011	SL-007-SA8N-SB-4.0-5.0	6267482	N	METHOD	1613B	III
22-Apr-2011	SL-007-SA8N-SB-9.0-10.0	6267483	N	METHOD	1613B	III
22-Apr-2011	SL-010-SA8N-SB-4.0-5.0	6267484	N	METHOD	1613B	III
22-Apr-2011	SL-064-SA5A-SB-3.0-4.0	6267488	N	METHOD	1613B	III
22-Apr-2011	SL-064-SA5A-SB-3.0-4.0MS	6267489	MS	METHOD	1613B	III
22-Apr-2011	SL-064-SA5A-SB-3.0-4.0MSD	6267490	MSD	METHOD	1613B	III
22-Apr-2011	DUP16-SA5A-QC-042211	6267494	FD	METHOD	1613B	III
22-Apr-2011	SL-010-SA8N-SB-9.0-10.0	6267485	N	METHOD	1613B	III
22-Apr-2011	SL-011-SA8N-SB-9.0-10.0	6267487	N	METHOD	1613B	III
22-Apr-2011	SL-011-SA8N-SB-4.0-5.0	6267486	N	METHOD	1613B	III
22-Apr-2011	SL-166-SA5A-SS-0.0-0.5	6267491	N	METHOD	1613B	III
22-Apr-2011	SL-253-SA5A-SB-4.0-5.0	6267492	N	METHOD	1613B	III
22-Apr-2011	SL-253-SA5A-SB-8.0-9.0	6267493	N	METHOD	1613B	III
02-May-2011	SL-012-SA8N-SB-4.0-5.0	6273949	N	METHOD	1613B	III
02-May-2011	SL-050-SA8N-SB-4.0-5.0	6273952	N	METHOD	1613B	III
02-May-2011	SL-050-SA8N-SB-9.0-10.0	6273953	N	METHOD	1613B	III
02-May-2011	SL-022-SA8N-SB-4.0-5.0	6273950	N	METHOD	1613B	III
02-May-2011	SL-022-SA8N-SB-9.0-10.0	6273951	N	METHOD	1613B	III
02-May-2011	SL-023-SA8N-SB-4.0-5.0	6273954	N	METHOD	1613B	III
02-May-2011	SL-023-SA8N-SB-9.0-10.0	6273955	N	METHOD	1613B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DX077 **Laboratory: LL**

EDD Filename: DX077_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: **DUP16-SA5A-QC-042211** ***Collected:*** **4/22/2011 11:15:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.433	JBQ	0.0248	MDL	5.48	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.153	JB	0.0101	MDL	5.48	PQL	ng/Kg	UJ	B, FD
1,2,3,4,7,8,9-HPCDF	0.0584	JBQ	0.0176	MDL	5.48	PQL	ng/Kg	UJ	B, FD
1,2,3,4,7,8-HxCDD	0.0145	U	0.0145	MDL	5.48	PQL	ng/Kg	UJ	FD
1,2,3,4,7,8-HXCDF	0.0468	JB	0.0116	MDL	5.48	PQL	ng/Kg	UJ	B, FD
1,2,3,6,7,8-HXCDD	0.0419	JB	0.0150	MDL	5.48	PQL	ng/Kg	UJ	B, FD
1,2,3,6,7,8-HXCDF	0.0346	JBQ	0.00984	MDL	5.48	PQL	ng/Kg	UJ	B, FD
1,2,3,7,8,9-HXCDD	0.0614	JB	0.0147	MDL	5.48	PQL	ng/Kg	UJ	B, FD
1,2,3,7,8,9-HXCDF	0.0892	JB	0.0125	MDL	5.48	PQL	ng/Kg	UJ	B, FD
1,2,3,7,8-PECDD	0.0219	JBQ	0.0172	MDL	5.48	PQL	ng/Kg	UJ	B, FD
1,2,3,7,8-PECDF	0.0338	JBQ	0.00917	MDL	5.48	PQL	ng/Kg	UJ	B, FD
2,3,4,6,7,8-HXCDF	0.0601	JBQ	0.0107	MDL	5.48	PQL	ng/Kg	UJ	B, FD
2,3,4,7,8-PECDF	0.0695	JBQ	0.0101	MDL	5.48	PQL	ng/Kg	UJ	B, FD
2,3,7,8-TCDD	0.0267	JBQ	0.0171	MDL	1.10	PQL	ng/Kg	UJ	B, FD
2,3,7,8-TCDF	0.0149	U	0.0149	MDL	1.10	PQL	ng/Kg	UJ	FD
OCDD	2.65	JB	0.0365	MDL	11.0	PQL	ng/Kg	J	Z
OCDF	0.249	JBQ	0.0271	MDL	11.0	PQL	ng/Kg	U	B

Sample ID: **SL-007-SA8N-SB-4.0-5.0** ***Collected:*** **4/22/2011 9:33:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.305	JB	0.0202	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.248	JB	0.00977	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0634	JB	0.0151	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0236	JBQ	0.0110	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0674	JB	0.0121	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0196	JBQ	0.0117	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0576	JBQ	0.0105	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0413	JB	0.0108	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0689	JB	0.0134	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0404	JBQ	0.0138	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0397	JBQ	0.00698	MDL	5.73	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0857	JB	0.0112	MDL	5.73	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0851	JB	0.00709	MDL	5.73	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX077 **Laboratory: LL**

EDD Filename: DX077_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: **SL-007-SA8N-SB-4.0-5.0** ***Collected:*** **4/22/2011 9:33:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,3,7,8-TCDD	0.0222	JB	0.0151	MDL	1.15	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0162	JQ	0.0138	MDL	1.15	PQL	ng/Kg	J	Z
OCDD	0.851	JB	0.0288	MDL	11.5	PQL	ng/Kg	U	B
OCDF	0.209	JB	0.0219	MDL	11.5	PQL	ng/Kg	U	B

Sample ID: **SL-007-SA8N-SB-9.0-10.0** ***Collected:*** **4/22/2011 9:45:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.205	JB	0.0174	MDL	5.71	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.125	JB	0.00843	MDL	5.71	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0440	JBQ	0.0125	MDL	5.71	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0263	JBQ	0.0102	MDL	5.71	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0141	JBQ	0.0130	MDL	5.71	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0293	JBQ	0.00889	MDL	5.71	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0309	JBQ	0.0127	MDL	5.71	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0386	JBQ	0.0111	MDL	5.71	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0279	JB	0.0156	MDL	5.71	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0234	JBQ	0.00739	MDL	5.71	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0430	JBQ	0.00935	MDL	5.71	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0642	JB	0.00774	MDL	5.71	PQL	ng/Kg	U	B
OCDD	0.446	JB	0.0217	MDL	11.4	PQL	ng/Kg	U	B
OCDF	0.136	JBQ	0.0245	MDL	11.4	PQL	ng/Kg	U	B

Sample ID: **SL-010-SA8N-SB-4.0-5.0** ***Collected:*** **4/22/2011 11:10:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.209	JB	0.0172	MDL	5.76	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.229	JB	0.00890	MDL	5.76	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0483	JBQ	0.0136	MDL	5.76	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0135	JBQ	0.0110	MDL	5.76	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0614	JB	0.0109	MDL	5.76	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0211	JB	0.0114	MDL	5.76	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0373	JBQ	0.00972	MDL	5.76	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0168	JBQ	0.0110	MDL	5.76	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0118	JBQ	0.00738	MDL	5.76	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX077 **Laboratory: LL**

EDD Filename: DX077_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B ***Matrix:*** SO

Sample ID: **SL-010-SA8N-SB-4.0-5.0** ***Collected:*** **4/22/2011 11:10:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,3,4,6,7,8-HXCDF	0.0709	JBQ	0.0102	MDL	5.76	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0750	JBQ	0.00761	MDL	5.76	PQL	ng/Kg	U	B
OCDD	0.530	JB	0.0221	MDL	11.5	PQL	ng/Kg	U	B
OCDF	0.191	JB	0.0226	MDL	11.5	PQL	ng/Kg	U	B

Sample ID: **SL-010-SA8N-SB-9.0-10.0** ***Collected:*** **4/22/2011 11:20:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.225	JB	0.0150	MDL	5.81	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.233	JB	0.00828	MDL	5.81	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0351	JB	0.0124	MDL	5.81	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0152	JBQ	0.0123	MDL	5.81	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0555	JBQ	0.00911	MDL	5.81	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0203	JBQ	0.0125	MDL	5.81	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0368	JBQ	0.00817	MDL	5.81	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0244	JBQ	0.0118	MDL	5.81	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0160	JB	0.0133	MDL	5.81	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0153	JB	0.00675	MDL	5.81	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0725	JB	0.00828	MDL	5.81	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0696	JB	0.00686	MDL	5.81	PQL	ng/Kg	U	B
OCDD	0.528	JB	0.0192	MDL	11.6	PQL	ng/Kg	U	B
OCDF	0.197	JBQ	0.0173	MDL	11.6	PQL	ng/Kg	U	B

Sample ID: **SL-011-SA8N-SB-4.0-5.0** ***Collected:*** **4/22/2011 12:52:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.316	JB	0.0189	MDL	5.71	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.185	JB	0.00805	MDL	5.71	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0556	JBQ	0.0138	MDL	5.71	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0147	JBQ	0.0128	MDL	5.71	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0477	JBQ	0.0112	MDL	5.71	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0175	JBQ	0.0130	MDL	5.71	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0386	JBQ	0.00970	MDL	5.71	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0355	JB	0.0129	MDL	5.71	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0252	JBQ	0.0150	MDL	5.71	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX077 **Laboratory: LL**

EDD Filename: DX077_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B ***Matrix:*** SO

Sample ID: SL-011-SA8N-SB-4.0-5.0 ***Collected:*** 4/22/2011 12:52:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,3,4,6,7,8-HXCDF	0.0817	JB	0.0105	MDL	5.71	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0703	JB	0.00864	MDL	5.71	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0174	JBQ	0.0153	MDL	1.14	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0173	J	0.0160	MDL	1.14	PQL	ng/Kg	J	Z
OCDD	1.22	JB	0.0272	MDL	11.4	PQL	ng/Kg	U	B
OCDF	0.214	JBQ	0.0264	MDL	11.4	PQL	ng/Kg	U	B

Sample ID: SL-011-SA8N-SB-9.0-10.0 ***Collected:*** 4/22/2011 12:12:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.285	JB	0.0218	MDL	5.59	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.263	JB	0.0103	MDL	5.59	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0646	JBQ	0.0158	MDL	5.59	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0601	JBQ	0.0135	MDL	5.59	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.123	JBQ	0.0156	MDL	5.59	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0710	JBQ	0.0138	MDL	5.59	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.105	JB	0.0140	MDL	5.59	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0728	JB	0.0135	MDL	5.59	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0838	JBQ	0.0171	MDL	5.59	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0782	JBQ	0.0170	MDL	5.59	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0789	JBQ	0.00891	MDL	5.59	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.127	JB	0.0144	MDL	5.59	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.138	JB	0.00914	MDL	5.59	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0191	JQ	0.0148	MDL	1.12	PQL	ng/Kg	J	Z
OCDD	0.929	JBQ	0.0309	MDL	11.2	PQL	ng/Kg	U	B
OCDF	0.260	JB	0.0314	MDL	11.2	PQL	ng/Kg	U	B

Sample ID: SL-012-SA8N-SB-4.0-5.0 ***Collected:*** 5/2/2011 9:20:00 AM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.275	JBQ	0.0271	MDL	5.85	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.127	JBQ	0.0136	MDL	5.85	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0449	JB	0.0232	MDL	5.85	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0240	JBQ	0.0193	MDL	5.85	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0416	JBQ	0.0169	MDL	5.85	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX077 **Laboratory: LL**

EDD Filename: DX077_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B ***Matrix:*** SO

Sample ID: **SL-012-SA8N-SB-4.0-5.0** ***Collected:*** **5/2/2011 9:20:00 AM** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,6,7,8-HXCDD	0.112	JBQ	0.0199	MDL	5.85	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0354	JBQ	0.0150	MDL	5.85	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.189	JB	0.0190	MDL	5.85	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.287	JB	0.0201	MDL	5.85	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0500	JBQ	0.0199	MDL	5.85	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0411	JBQ	0.00972	MDL	5.85	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0594	JBQ	0.0161	MDL	5.85	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0678	JBQ	0.0104	MDL	5.85	PQL	ng/Kg	U	B
OCDD	0.670	JBQ	0.0344	MDL	11.7	PQL	ng/Kg	U	B
OCDF	0.141	JB	0.0360	MDL	11.7	PQL	ng/Kg	U	B

Sample ID: **SL-022-SA8N-SB-4.0-5.0** ***Collected:*** **5/2/2011 12:10:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.305	JB	0.0167	MDL	5.56	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.125	JBQ	0.00805	MDL	5.56	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0493	JBQ	0.0187	MDL	5.56	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0453	JB	0.0134	MDL	5.56	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0897	JB	0.0144	MDL	5.56	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0252	JBQ	0.0103	MDL	5.56	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.163	JB	0.0135	MDL	5.56	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.300	JB	0.0163	MDL	5.56	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0354	JB	0.0133	MDL	5.56	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0788	JBQ	0.00758	MDL	5.56	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0621	JB	0.0119	MDL	5.56	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0584	JB	0.00840	MDL	5.56	PQL	ng/Kg	U	B
OCDD	0.992	JB	0.0257	MDL	11.1	PQL	ng/Kg	U	B
OCDF	0.158	JBQ	0.0265	MDL	11.1	PQL	ng/Kg	U	B

Sample ID: **SL-022-SA8N-SB-9.0-10.0** ***Collected:*** **5/2/2011 12:15:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.563	JB	0.0282	MDL	5.85	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.185	JBQ	0.00942	MDL	5.85	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0573	JB	0.0193	MDL	5.85	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX077 **Laboratory: LL**

EDD Filename: DX077_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B ***Matrix:*** SO

Sample ID: SL-022-SA8N-SB-9.0-10.0 ***Collected:*** 5/2/2011 12:15:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8-HxCDD	0.0328	JBQ	0.0155	MDL	5.85	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0998	JB	0.0138	MDL	5.85	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0652	JBQ	0.0160	MDL	5.85	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0882	JB	0.0108	MDL	5.85	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0538	JBQ	0.0153	MDL	5.85	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0576	JBQ	0.0172	MDL	5.85	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0734	JBQ	0.0162	MDL	5.85	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.124	JBQ	0.00918	MDL	5.85	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0981	JBQ	0.0123	MDL	5.85	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.113	JB	0.0106	MDL	5.85	PQL	ng/Kg	U	B
OCDD	3.07	JB	0.0386	MDL	11.7	PQL	ng/Kg	J	Z
OCDF	0.302	JB	0.0340	MDL	11.7	PQL	ng/Kg	U	B

Sample ID: SL-023-SA8N-SB-4.0-5.0 ***Collected:*** 5/2/2011 3:45:00 PM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.462	JB	0.0424	MDL	5.89	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.201	JB	0.0147	MDL	5.89	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.132	JB	0.0414	MDL	5.89	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0649	JBQ	0.0265	MDL	5.89	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0918	JBQ	0.0226	MDL	5.89	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.139	JBQ	0.0272	MDL	5.89	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0916	JB	0.0167	MDL	5.89	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.224	JB	0.0253	MDL	5.89	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.324	JB	0.0282	MDL	5.89	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0938	JBQ	0.0163	MDL	5.89	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.137	JB	0.00781	MDL	5.89	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.105	JBQ	0.0202	MDL	5.89	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.129	JB	0.00911	MDL	5.89	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0615	JBQ	0.0142	MDL	1.18	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0180	J	0.0133	MDL	1.18	PQL	ng/Kg	J	Z
OCDD	1.66	JB	0.0370	MDL	11.8	PQL	ng/Kg	U	B
OCDF	0.280	JB	0.0540	MDL	11.8	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX077 **Laboratory: LL**

EDD Filename: DX077_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: **SL-023-SA8N-SB-9.0-10.0** ***Collected:*** **5/2/2011 3:50:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	3.65	JB	0.0427	MDL	5.90	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.471	JB	0.0160	MDL	5.90	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.105	JBQ	0.0407	MDL	5.90	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0923	JBQ	0.0285	MDL	5.90	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.0814	JBQ	0.0187	MDL	5.90	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.211	JB	0.0294	MDL	5.90	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.0723	JB	0.0151	MDL	5.90	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.140	JB	0.0281	MDL	5.90	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0996	JB	0.0250	MDL	5.90	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0649	JB	0.0167	MDL	5.90	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0565	JBQ	0.00895	MDL	5.90	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.103	JB	0.0174	MDL	5.90	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0821	JB	0.0104	MDL	5.90	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0339	JBQ	0.0157	MDL	1.18	PQL	ng/Kg	U	B
OCDF	0.866	JBQ	0.0502	MDL	11.8	PQL	ng/Kg	U	B

Sample ID: **SL-050-SA8N-SB-4.0-5.0** ***Collected:*** **5/2/2011 10:45:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.303	JB	0.0153	MDL	5.72	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.164	JB	0.00761	MDL	5.72	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0680	JB	0.0153	MDL	5.72	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0825	JB	0.0162	MDL	5.72	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.144	JB	0.0162	MDL	5.72	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.192	JB	0.0166	MDL	5.72	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.136	JB	0.0133	MDL	5.72	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.261	JB	0.0162	MDL	5.72	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.359	JB	0.0205	MDL	5.72	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.148	JB	0.0145	MDL	5.72	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.222	JB	0.00809	MDL	5.72	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.134	JB	0.0152	MDL	5.72	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.181	JB	0.00916	MDL	5.72	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0367	JBQ	0.0130	MDL	1.14	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0521	J	0.0119	MDL	1.14	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX077 **Laboratory: LL**

EDD Filename: DX077_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B ***Matrix:*** SO

Sample ID: SL-050-SA8N-SB-4.0-5.0 ***Collected:*** 5/2/2011 10:45:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
OCDD	0.991	JB	0.0220	MDL	11.4	PQL	ng/Kg	U	B
OCDF	0.182	JB	0.0195	MDL	11.4	PQL	ng/Kg	U	B

Sample ID: SL-050-SA8N-SB-9.0-10.0 ***Collected:*** 5/2/2011 10:50:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.216	JB	0.0153	MDL	5.90	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.148	JB	0.00701	MDL	5.90	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0766	JB	0.0179	MDL	5.90	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0727	JBQ	0.0139	MDL	5.90	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.179	JB	0.0150	MDL	5.90	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0691	JBQ	0.0143	MDL	5.90	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.120	JB	0.0114	MDL	5.90	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0791	JB	0.0138	MDL	5.90	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.139	JB	0.0185	MDL	5.90	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.172	JBQ	0.0140	MDL	5.90	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.214	JB	0.00796	MDL	5.90	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.109	JBQ	0.0132	MDL	5.90	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.221	JB	0.00926	MDL	5.90	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0622	JBQ	0.0143	MDL	1.18	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0575	J	0.0120	MDL	1.18	PQL	ng/Kg	J	Z
OCDD	0.467	JB	0.0190	MDL	11.8	PQL	ng/Kg	U	B
OCDF	0.172	JB	0.0291	MDL	11.8	PQL	ng/Kg	U	B

Sample ID: SL-064-SA5A-SB-3.0-4.0 ***Collected:*** 4/22/2011 11:10:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.547	JB	0.0213	MDL	5.44	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.350	JB	0.0102	MDL	5.44	PQL	ng/Kg	UJ	B, FD
1,2,3,4,7,8,9-HPCDF	0.101	JB	0.0182	MDL	5.44	PQL	ng/Kg	UJ	B, FD
1,2,3,4,7,8-HxCDD	0.119	JB	0.0164	MDL	5.44	PQL	ng/Kg	J	Z, FD
1,2,3,4,7,8-HXCDF	0.217	JB	0.0197	MDL	5.44	PQL	ng/Kg	UJ	B, FD
1,2,3,6,7,8-HXCDD	0.144	JB	0.0168	MDL	5.44	PQL	ng/Kg	UJ	B, FD
1,2,3,6,7,8-HXCDF	0.186	JB	0.0165	MDL	5.44	PQL	ng/Kg	UJ	B, FD
1,2,3,7,8,9-HXCDD	0.152	JB	0.0159	MDL	5.44	PQL	ng/Kg	UJ	B, FD

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX077 **Laboratory: LL**

EDD Filename: DX077_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B ***Matrix:*** SO

Sample ID: SL-064-SA5A-SB-3.0-4.0 ***Collected:*** 4/22/2011 11:10:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,7,8,9-HXCDF	0.200	JB	0.0211	MDL	5.44	PQL	ng/Kg	UJ	B, FD
1,2,3,7,8-PECDD	0.238	JB	0.0142	MDL	5.44	PQL	ng/Kg	J	Z, FD
1,2,3,7,8-PECDF	0.234	JB	0.00830	MDL	5.44	PQL	ng/Kg	J	Z, FD
2,3,4,6,7,8-HXCDF	0.201	JB	0.0180	MDL	5.44	PQL	ng/Kg	UJ	B, FD
2,3,4,7,8-PECDF	0.252	JB	0.00886	MDL	5.44	PQL	ng/Kg	UJ	B, FD
2,3,7,8-TCDD	0.0527	JB	0.0123	MDL	1.09	PQL	ng/Kg	UJ	B, FD
2,3,7,8-TCDF	0.0441	J	0.0114	MDL	1.09	PQL	ng/Kg	J	Z, FD
OCDD	3.90	JB	0.0180	MDL	10.9	PQL	ng/Kg	J	Z
OCDF	0.365	JB	0.0211	MDL	10.9	PQL	ng/Kg	U	B

Sample ID: SL-166-SA5A-SS-0.0-0.5 ***Collected:*** 4/22/2011 1:45:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.439	JB	0.0445	MDL	5.05	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.267	JB	0.0174	MDL	5.05	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.166	JB	0.0314	MDL	5.05	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.135	JBQ	0.0294	MDL	5.05	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.253	JB	0.0267	MDL	5.05	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.203	JB	0.0298	MDL	5.05	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.256	JB	0.0235	MDL	5.05	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.251	JB	0.0289	MDL	5.05	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.356	JB	0.0284	MDL	5.05	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.311	JB	0.0229	MDL	5.05	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.339	JB	0.0117	MDL	5.05	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.204	JB	0.0246	MDL	5.05	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.321	JB	0.0127	MDL	5.05	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.131	JB	0.0193	MDL	1.01	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0875	J	0.0143	MDL	1.01	PQL	ng/Kg	J	Z
OCDD	2.28	JB	0.0431	MDL	10.1	PQL	ng/Kg	J	Z
OCDF	0.375	JB	0.0487	MDL	10.1	PQL	ng/Kg	U	B

Sample ID: SL-253-SA5A-SB-4.0-5.0 ***Collected:*** 4/22/2011 3:30:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	4.82	JB	0.0289	MDL	5.76	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX077 **Laboratory: LL**

EDD Filename: DX077_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: **SL-253-SA5A-SB-4.0-5.0** ***Collected:*** **4/22/2011 3:30:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	0.423	JB	0.0555	MDL	5.76	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.320	JB	0.0631	MDL	5.76	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.406	JB	0.0456	MDL	5.76	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.696	JB	0.0652	MDL	5.76	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.301	JB	0.0387	MDL	5.76	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.500	JB	0.0615	MDL	5.76	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.225	JBQ	0.0558	MDL	5.76	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.226	JB	0.0262	MDL	5.76	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.237	JBQ	0.0142	MDL	5.76	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.422	JB	0.0432	MDL	5.76	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.299	JB	0.0160	MDL	5.76	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0454	JBQ	0.0189	MDL	1.15	PQL	ng/Kg	U	B

Sample ID: **SL-253-SA5A-SB-8.0-9.0** ***Collected:*** **4/22/2011 4:05:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.272	JB	0.0199	MDL	5.55	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.145	JB	0.00906	MDL	5.55	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0477	JBQ	0.0170	MDL	5.55	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0525	JB	0.00951	MDL	5.55	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0351	JB	0.0121	MDL	5.55	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0322	JB	0.00794	MDL	5.55	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0355	JB	0.0113	MDL	5.55	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0304	JBQ	0.0105	MDL	5.55	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0317	JBQ	0.00660	MDL	5.55	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0629	JB	0.00861	MDL	5.55	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0447	JB	0.00716	MDL	5.55	PQL	ng/Kg	U	B
OCDD	0.921	JBQ	0.0312	MDL	11.1	PQL	ng/Kg	U	B
OCDF	0.196	JB	0.0295	MDL	11.1	PQL	ng/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DX077 **Laboratory: LL**

EDD Filename: DX077_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
	Sampling to Leaching Estimation
	Sampling to Leaching Rejection
*#	Professional Judgment
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Continuing Calibration Verification Percent Recovery Lower Estimation
C	Continuing Calibration Verification Percent Recovery Lower Rejection
C	Continuing Calibration Verification Percent Recovery Upper Estimation
C	Continuing Calibration Verification Percent Recovery Upper Rejection
C	Continuing Calibration Verification Relative Response Factor
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Relative Response Factor
C	Initial Calibration Verification Correlation Coefficient

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DX077 **Laboratory: LL**

EDD Filename: DX077_v1 **eQAPP Name: CDM_SSFL_110509**

C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Verification Percent Recovery Lower Estimation
C	Initial Calibration Verification Percent Recovery Lower Rejection
C	Initial Calibration Verification Percent Recovery Upper Estimation
C	Initial Calibration Verification Percent Recovery Upper Rejection
C	Initial Calibration Verification Relative Response Factor
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Laboratory Triplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination
F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DX077 **Laboratory: LL**

EDD Filename: DX077_v1 **eQAPP Name: CDM_SSFL_110509**

L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Laboratory Triplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Q	Matrix Spike Upper Rejection
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control Outlier Reports

DX077

Method Blank Outlier Report

Lab Reporting Batch ID: DX077 **Laboratory: LL**

EDD Filename: DX077_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLK1250B372126	5/7/2011 9:26:00 PM	1,2,3,4,6,7,8-HPCDD	0.205 ng/Kg	DUP16-SA5A-QC-042211
		1,2,3,4,6,7,8-HPCDF	0.236 ng/Kg	SL-007-SA8N-SB-4.0-5.0
		1,2,3,4,7,8,9-HPCDF	0.0899 ng/Kg	SL-007-SA8N-SB-9.0-10.0
		1,2,3,4,7,8-HxCDD	0.0157 ng/Kg	SL-010-SA8N-SB-4.0-5.0
		1,2,3,4,7,8-HXCDF	0.0841 ng/Kg	SL-010-SA8N-SB-9.0-10.0
		1,2,3,6,7,8-HXCDD	0.0351 ng/Kg	SL-011-SA8N-SB-4.0-5.0
		1,2,3,6,7,8-HXCDF	0.0651 ng/Kg	SL-011-SA8N-SB-9.0-10.0
		1,2,3,7,8,9-HXCDD	0.0315 ng/Kg	SL-012-SA8N-SB-4.0-5.0
		1,2,3,7,8,9-HXCDF	0.0834 ng/Kg	SL-022-SA8N-SB-4.0-5.0
		1,2,3,7,8-PECDD	0.0388 ng/Kg	SL-022-SA8N-SB-9.0-10.0
		1,2,3,7,8-PECDF	0.0393 ng/Kg	SL-023-SA8N-SB-4.0-5.0
		2,3,4,6,7,8-HXCDF	0.104 ng/Kg	SL-023-SA8N-SB-9.0-10.0
		2,3,4,7,8-PECDF	0.0837 ng/Kg	SL-050-SA8N-SB-4.0-5.0
		2,3,7,8-TCDD	0.0302 ng/Kg	SL-050-SA8N-SB-9.0-10.0
		OCDD	0.439 ng/Kg	SL-064-SA5A-SB-3.0-4.0
		OCDF	0.285 ng/Kg	SL-166-SA5A-SS-0.0-0.5
				SL-253-SA5A-SB-4.0-5.0
				SL-253-SA5A-SB-8.0-9.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
DUP16-SA5A-QC-042211(RES)	1,2,3,4,6,7,8-HPCDD	0.433 ng/Kg	0.433U ng/Kg
DUP16-SA5A-QC-042211(RES)	1,2,3,4,6,7,8-HPCDF	0.153 ng/Kg	0.153U ng/Kg
DUP16-SA5A-QC-042211(RES)	1,2,3,4,7,8,9-HPCDF	0.0584 ng/Kg	0.0584U ng/Kg
DUP16-SA5A-QC-042211(RES)	1,2,3,4,7,8-HXCDF	0.0468 ng/Kg	0.0468U ng/Kg
DUP16-SA5A-QC-042211(RES)	1,2,3,6,7,8-HXCDD	0.0419 ng/Kg	0.0419U ng/Kg
DUP16-SA5A-QC-042211(RES)	1,2,3,6,7,8-HXCDF	0.0346 ng/Kg	0.0346U ng/Kg
DUP16-SA5A-QC-042211(RES)	1,2,3,7,8,9-HXCDD	0.0614 ng/Kg	0.0614U ng/Kg
DUP16-SA5A-QC-042211(RES)	1,2,3,7,8,9-HXCDF	0.0892 ng/Kg	0.0892U ng/Kg
DUP16-SA5A-QC-042211(RES)	1,2,3,7,8-PECDD	0.0219 ng/Kg	0.0219U ng/Kg
DUP16-SA5A-QC-042211(RES)	1,2,3,7,8-PECDF	0.0338 ng/Kg	0.0338U ng/Kg
DUP16-SA5A-QC-042211(RES)	2,3,4,6,7,8-HXCDF	0.0601 ng/Kg	0.0601U ng/Kg
DUP16-SA5A-QC-042211(RES)	2,3,4,7,8-PECDF	0.0695 ng/Kg	0.0695U ng/Kg
DUP16-SA5A-QC-042211(RES)	2,3,7,8-TCDD	0.0267 ng/Kg	0.0267U ng/Kg
DUP16-SA5A-QC-042211(RES)	OCDF	0.249 ng/Kg	0.249U ng/Kg
SL-007-SA8N-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.305 ng/Kg	0.305U ng/Kg
SL-007-SA8N-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.248 ng/Kg	0.248U ng/Kg
SL-007-SA8N-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0634 ng/Kg	0.0634U ng/Kg
SL-007-SA8N-SB-4.0-5.0(RES)	1,2,3,4,7,8-HxCDD	0.0236 ng/Kg	0.0236U ng/Kg
SL-007-SA8N-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.0674 ng/Kg	0.0674U ng/Kg
SL-007-SA8N-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDD	0.0196 ng/Kg	0.0196U ng/Kg
SL-007-SA8N-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.0576 ng/Kg	0.0576U ng/Kg
SL-007-SA8N-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDD	0.0413 ng/Kg	0.0413U ng/Kg
SL-007-SA8N-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.0689 ng/Kg	0.0689U ng/Kg
SL-007-SA8N-SB-4.0-5.0(RES)	1,2,3,7,8-PECDD	0.0404 ng/Kg	0.0404U ng/Kg
SL-007-SA8N-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.0397 ng/Kg	0.0397U ng/Kg

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Method Blank Outlier Report

Lab Reporting Batch ID: DX077 **Laboratory: LL**

EDD Filename: DX077_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-007-SA8N-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.0857 ng/Kg	0.0857U ng/Kg
SL-007-SA8N-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.0851 ng/Kg	0.0851U ng/Kg
SL-007-SA8N-SB-4.0-5.0(RES)	2,3,7,8-TCDD	0.0222 ng/Kg	0.0222U ng/Kg
SL-007-SA8N-SB-4.0-5.0(RES)	OCDD	0.851 ng/Kg	0.851U ng/Kg
SL-007-SA8N-SB-4.0-5.0(RES)	OCDF	0.209 ng/Kg	0.209U ng/Kg
SL-007-SA8N-SB-9.0-10.0(RES)	1,2,3,4,6,7,8-HPCDD	0.205 ng/Kg	0.205U ng/Kg
SL-007-SA8N-SB-9.0-10.0(RES)	1,2,3,4,6,7,8-HPCDF	0.125 ng/Kg	0.125U ng/Kg
SL-007-SA8N-SB-9.0-10.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0440 ng/Kg	0.0440U ng/Kg
SL-007-SA8N-SB-9.0-10.0(RES)	1,2,3,4,7,8-HXCDF	0.0263 ng/Kg	0.0263U ng/Kg
SL-007-SA8N-SB-9.0-10.0(RES)	1,2,3,6,7,8-HXCDD	0.0141 ng/Kg	0.0141U ng/Kg
SL-007-SA8N-SB-9.0-10.0(RES)	1,2,3,6,7,8-HXCDF	0.0293 ng/Kg	0.0293U ng/Kg
SL-007-SA8N-SB-9.0-10.0(RES)	1,2,3,7,8,9-HXCDD	0.0309 ng/Kg	0.0309U ng/Kg
SL-007-SA8N-SB-9.0-10.0(RES)	1,2,3,7,8,9-HXCDF	0.0386 ng/Kg	0.0386U ng/Kg
SL-007-SA8N-SB-9.0-10.0(RES)	1,2,3,7,8-PECDD	0.0279 ng/Kg	0.0279U ng/Kg
SL-007-SA8N-SB-9.0-10.0(RES)	1,2,3,7,8-PECDF	0.0234 ng/Kg	0.0234U ng/Kg
SL-007-SA8N-SB-9.0-10.0(RES)	2,3,4,6,7,8-HXCDF	0.0430 ng/Kg	0.0430U ng/Kg
SL-007-SA8N-SB-9.0-10.0(RES)	2,3,4,7,8-PECDF	0.0642 ng/Kg	0.0642U ng/Kg
SL-007-SA8N-SB-9.0-10.0(RES)	OCDD	0.446 ng/Kg	0.446U ng/Kg
SL-007-SA8N-SB-9.0-10.0(RES)	OCDF	0.136 ng/Kg	0.136U ng/Kg
SL-010-SA8N-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.209 ng/Kg	0.209U ng/Kg
SL-010-SA8N-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.229 ng/Kg	0.229U ng/Kg
SL-010-SA8N-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0483 ng/Kg	0.0483U ng/Kg
SL-010-SA8N-SB-4.0-5.0(RES)	1,2,3,4,7,8-HxCDD	0.0135 ng/Kg	0.0135U ng/Kg
SL-010-SA8N-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.0614 ng/Kg	0.0614U ng/Kg
SL-010-SA8N-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDD	0.0211 ng/Kg	0.0211U ng/Kg
SL-010-SA8N-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.0373 ng/Kg	0.0373U ng/Kg
SL-010-SA8N-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDD	0.0168 ng/Kg	0.0168U ng/Kg
SL-010-SA8N-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.0118 ng/Kg	0.0118U ng/Kg
SL-010-SA8N-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.0709 ng/Kg	0.0709U ng/Kg
SL-010-SA8N-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.0750 ng/Kg	0.0750U ng/Kg
SL-010-SA8N-SB-4.0-5.0(RES)	OCDD	0.530 ng/Kg	0.530U ng/Kg
SL-010-SA8N-SB-4.0-5.0(RES)	OCDF	0.191 ng/Kg	0.191U ng/Kg
SL-010-SA8N-SB-9.0-10.0(RES)	1,2,3,4,6,7,8-HPCDD	0.225 ng/Kg	0.225U ng/Kg
SL-010-SA8N-SB-9.0-10.0(RES)	1,2,3,4,6,7,8-HPCDF	0.233 ng/Kg	0.233U ng/Kg
SL-010-SA8N-SB-9.0-10.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0351 ng/Kg	0.0351U ng/Kg
SL-010-SA8N-SB-9.0-10.0(RES)	1,2,3,4,7,8-HxCDD	0.0152 ng/Kg	0.0152U ng/Kg
SL-010-SA8N-SB-9.0-10.0(RES)	1,2,3,4,7,8-HXCDF	0.0555 ng/Kg	0.0555U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX077 **Laboratory: LL**

EDD Filename: DX077_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-010-SA8N-SB-9.0-10.0(RES)	1,2,3,6,7,8-HXCDD	0.0203 ng/Kg	0.0203U ng/Kg
SL-010-SA8N-SB-9.0-10.0(RES)	1,2,3,6,7,8-HXCDF	0.0368 ng/Kg	0.0368U ng/Kg
SL-010-SA8N-SB-9.0-10.0(RES)	1,2,3,7,8,9-HXCDD	0.0244 ng/Kg	0.0244U ng/Kg
SL-010-SA8N-SB-9.0-10.0(RES)	1,2,3,7,8-PECDD	0.0160 ng/Kg	0.0160U ng/Kg
SL-010-SA8N-SB-9.0-10.0(RES)	1,2,3,7,8-PECDF	0.0153 ng/Kg	0.0153U ng/Kg
SL-010-SA8N-SB-9.0-10.0(RES)	2,3,4,6,7,8-HXCDF	0.0725 ng/Kg	0.0725U ng/Kg
SL-010-SA8N-SB-9.0-10.0(RES)	2,3,4,7,8-PECDF	0.0696 ng/Kg	0.0696U ng/Kg
SL-010-SA8N-SB-9.0-10.0(RES)	OCDD	0.528 ng/Kg	0.528U ng/Kg
SL-010-SA8N-SB-9.0-10.0(RES)	OCDF	0.197 ng/Kg	0.197U ng/Kg
SL-011-SA8N-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.316 ng/Kg	0.316U ng/Kg
SL-011-SA8N-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.185 ng/Kg	0.185U ng/Kg
SL-011-SA8N-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0556 ng/Kg	0.0556U ng/Kg
SL-011-SA8N-SB-4.0-5.0(RES)	1,2,3,4,7,8-HxCDD	0.0147 ng/Kg	0.0147U ng/Kg
SL-011-SA8N-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.0477 ng/Kg	0.0477U ng/Kg
SL-011-SA8N-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDD	0.0175 ng/Kg	0.0175U ng/Kg
SL-011-SA8N-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.0386 ng/Kg	0.0386U ng/Kg
SL-011-SA8N-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDD	0.0355 ng/Kg	0.0355U ng/Kg
SL-011-SA8N-SB-4.0-5.0(RES)	1,2,3,7,8-PECDD	0.0252 ng/Kg	0.0252U ng/Kg
SL-011-SA8N-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.0817 ng/Kg	0.0817U ng/Kg
SL-011-SA8N-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.0703 ng/Kg	0.0703U ng/Kg
SL-011-SA8N-SB-4.0-5.0(RES)	2,3,7,8-TCDD	0.0174 ng/Kg	0.0174U ng/Kg
SL-011-SA8N-SB-4.0-5.0(RES)	OCDD	1.22 ng/Kg	1.22U ng/Kg
SL-011-SA8N-SB-4.0-5.0(RES)	OCDF	0.214 ng/Kg	0.214U ng/Kg
SL-011-SA8N-SB-9.0-10.0(RES)	1,2,3,4,6,7,8-HPCDD	0.285 ng/Kg	0.285U ng/Kg
SL-011-SA8N-SB-9.0-10.0(RES)	1,2,3,4,6,7,8-HPCDF	0.263 ng/Kg	0.263U ng/Kg
SL-011-SA8N-SB-9.0-10.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0646 ng/Kg	0.0646U ng/Kg
SL-011-SA8N-SB-9.0-10.0(RES)	1,2,3,4,7,8-HxCDD	0.0601 ng/Kg	0.0601U ng/Kg
SL-011-SA8N-SB-9.0-10.0(RES)	1,2,3,4,7,8-HXCDF	0.123 ng/Kg	0.123U ng/Kg
SL-011-SA8N-SB-9.0-10.0(RES)	1,2,3,6,7,8-HXCDD	0.0710 ng/Kg	0.0710U ng/Kg
SL-011-SA8N-SB-9.0-10.0(RES)	1,2,3,6,7,8-HXCDF	0.105 ng/Kg	0.105U ng/Kg
SL-011-SA8N-SB-9.0-10.0(RES)	1,2,3,7,8,9-HXCDD	0.0728 ng/Kg	0.0728U ng/Kg
SL-011-SA8N-SB-9.0-10.0(RES)	1,2,3,7,8,9-HXCDF	0.0838 ng/Kg	0.0838U ng/Kg
SL-011-SA8N-SB-9.0-10.0(RES)	1,2,3,7,8-PECDD	0.0782 ng/Kg	0.0782U ng/Kg
SL-011-SA8N-SB-9.0-10.0(RES)	1,2,3,7,8-PECDF	0.0789 ng/Kg	0.0789U ng/Kg
SL-011-SA8N-SB-9.0-10.0(RES)	2,3,4,6,7,8-HXCDF	0.127 ng/Kg	0.127U ng/Kg
SL-011-SA8N-SB-9.0-10.0(RES)	2,3,4,7,8-PECDF	0.138 ng/Kg	0.138U ng/Kg
SL-011-SA8N-SB-9.0-10.0(RES)	OCDD	0.929 ng/Kg	0.929U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX077 **Laboratory: LL**

EDD Filename: DX077_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-011-SA8N-SB-9.0-10.0(RES)	OCDF	0.260 ng/Kg	0.260U ng/Kg
SL-012-SA8N-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.275 ng/Kg	0.275U ng/Kg
SL-012-SA8N-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.127 ng/Kg	0.127U ng/Kg
SL-012-SA8N-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0449 ng/Kg	0.0449U ng/Kg
SL-012-SA8N-SB-4.0-5.0(RES)	1,2,3,4,7,8-HxCDD	0.0240 ng/Kg	0.0240U ng/Kg
SL-012-SA8N-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.0416 ng/Kg	0.0416U ng/Kg
SL-012-SA8N-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDD	0.112 ng/Kg	0.112U ng/Kg
SL-012-SA8N-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.0354 ng/Kg	0.0354U ng/Kg
SL-012-SA8N-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.287 ng/Kg	0.287U ng/Kg
SL-012-SA8N-SB-4.0-5.0(RES)	1,2,3,7,8-PECDD	0.0500 ng/Kg	0.0500U ng/Kg
SL-012-SA8N-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.0411 ng/Kg	0.0411U ng/Kg
SL-012-SA8N-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.0594 ng/Kg	0.0594U ng/Kg
SL-012-SA8N-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.0678 ng/Kg	0.0678U ng/Kg
SL-012-SA8N-SB-4.0-5.0(RES)	OCDD	0.670 ng/Kg	0.670U ng/Kg
SL-012-SA8N-SB-4.0-5.0(RES)	OCDF	0.141 ng/Kg	0.141U ng/Kg
SL-022-SA8N-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.305 ng/Kg	0.305U ng/Kg
SL-022-SA8N-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.125 ng/Kg	0.125U ng/Kg
SL-022-SA8N-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0493 ng/Kg	0.0493U ng/Kg
SL-022-SA8N-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.0453 ng/Kg	0.0453U ng/Kg
SL-022-SA8N-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDD	0.0897 ng/Kg	0.0897U ng/Kg
SL-022-SA8N-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.0252 ng/Kg	0.0252U ng/Kg
SL-022-SA8N-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.300 ng/Kg	0.300U ng/Kg
SL-022-SA8N-SB-4.0-5.0(RES)	1,2,3,7,8-PECDD	0.0354 ng/Kg	0.0354U ng/Kg
SL-022-SA8N-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.0788 ng/Kg	0.0788U ng/Kg
SL-022-SA8N-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.0621 ng/Kg	0.0621U ng/Kg
SL-022-SA8N-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.0584 ng/Kg	0.0584U ng/Kg
SL-022-SA8N-SB-4.0-5.0(RES)	OCDD	0.992 ng/Kg	0.992U ng/Kg
SL-022-SA8N-SB-4.0-5.0(RES)	OCDF	0.158 ng/Kg	0.158U ng/Kg
SL-022-SA8N-SB-9.0-10.0(RES)	1,2,3,4,6,7,8-HPCDD	0.563 ng/Kg	0.563U ng/Kg
SL-022-SA8N-SB-9.0-10.0(RES)	1,2,3,4,6,7,8-HPCDF	0.185 ng/Kg	0.185U ng/Kg
SL-022-SA8N-SB-9.0-10.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0573 ng/Kg	0.0573U ng/Kg
SL-022-SA8N-SB-9.0-10.0(RES)	1,2,3,4,7,8-HxCDD	0.0328 ng/Kg	0.0328U ng/Kg
SL-022-SA8N-SB-9.0-10.0(RES)	1,2,3,4,7,8-HXCDF	0.0998 ng/Kg	0.0998U ng/Kg
SL-022-SA8N-SB-9.0-10.0(RES)	1,2,3,6,7,8-HXCDD	0.0652 ng/Kg	0.0652U ng/Kg
SL-022-SA8N-SB-9.0-10.0(RES)	1,2,3,6,7,8-HXCDF	0.0882 ng/Kg	0.0882U ng/Kg
SL-022-SA8N-SB-9.0-10.0(RES)	1,2,3,7,8,9-HXCDD	0.0538 ng/Kg	0.0538U ng/Kg
SL-022-SA8N-SB-9.0-10.0(RES)	1,2,3,7,8,9-HXCDF	0.0576 ng/Kg	0.0576U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX077 **Laboratory: LL**

EDD Filename: DX077_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-022-SA8N-SB-9.0-10.0(RES)	1,2,3,7,8-PECDD	0.0734 ng/Kg	0.0734U ng/Kg
SL-022-SA8N-SB-9.0-10.0(RES)	1,2,3,7,8-PECDF	0.124 ng/Kg	0.124U ng/Kg
SL-022-SA8N-SB-9.0-10.0(RES)	2,3,4,6,7,8-HXCDF	0.0981 ng/Kg	0.0981U ng/Kg
SL-022-SA8N-SB-9.0-10.0(RES)	2,3,4,7,8-PECDF	0.113 ng/Kg	0.113U ng/Kg
SL-022-SA8N-SB-9.0-10.0(RES)	OCDF	0.302 ng/Kg	0.302U ng/Kg
SL-023-SA8N-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.462 ng/Kg	0.462U ng/Kg
SL-023-SA8N-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.201 ng/Kg	0.201U ng/Kg
SL-023-SA8N-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.132 ng/Kg	0.132U ng/Kg
SL-023-SA8N-SB-4.0-5.0(RES)	1,2,3,4,7,8-HxCDD	0.0649 ng/Kg	0.0649U ng/Kg
SL-023-SA8N-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.0918 ng/Kg	0.0918U ng/Kg
SL-023-SA8N-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDD	0.139 ng/Kg	0.139U ng/Kg
SL-023-SA8N-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.0916 ng/Kg	0.0916U ng/Kg
SL-023-SA8N-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.324 ng/Kg	0.324U ng/Kg
SL-023-SA8N-SB-4.0-5.0(RES)	1,2,3,7,8-PECDD	0.0938 ng/Kg	0.0938U ng/Kg
SL-023-SA8N-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.137 ng/Kg	0.137U ng/Kg
SL-023-SA8N-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.105 ng/Kg	0.105U ng/Kg
SL-023-SA8N-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.129 ng/Kg	0.129U ng/Kg
SL-023-SA8N-SB-4.0-5.0(RES)	2,3,7,8-TCDD	0.0615 ng/Kg	0.0615U ng/Kg
SL-023-SA8N-SB-4.0-5.0(RES)	OCDD	1.66 ng/Kg	1.66U ng/Kg
SL-023-SA8N-SB-4.0-5.0(RES)	OCDF	0.280 ng/Kg	0.280U ng/Kg
SL-023-SA8N-SB-9.0-10.0(RES)	1,2,3,4,6,7,8-HPCDF	0.471 ng/Kg	0.471U ng/Kg
SL-023-SA8N-SB-9.0-10.0(RES)	1,2,3,4,7,8,9-HPCDF	0.105 ng/Kg	0.105U ng/Kg
SL-023-SA8N-SB-9.0-10.0(RES)	1,2,3,4,7,8-HXCDF	0.0814 ng/Kg	0.0814U ng/Kg
SL-023-SA8N-SB-9.0-10.0(RES)	1,2,3,6,7,8-HXCDF	0.0723 ng/Kg	0.0723U ng/Kg
SL-023-SA8N-SB-9.0-10.0(RES)	1,2,3,7,8,9-HXCDD	0.140 ng/Kg	0.140U ng/Kg
SL-023-SA8N-SB-9.0-10.0(RES)	1,2,3,7,8,9-HXCDF	0.0996 ng/Kg	0.0996U ng/Kg
SL-023-SA8N-SB-9.0-10.0(RES)	1,2,3,7,8-PECDD	0.0649 ng/Kg	0.0649U ng/Kg
SL-023-SA8N-SB-9.0-10.0(RES)	1,2,3,7,8-PECDF	0.0565 ng/Kg	0.0565U ng/Kg
SL-023-SA8N-SB-9.0-10.0(RES)	2,3,4,6,7,8-HXCDF	0.103 ng/Kg	0.103U ng/Kg
SL-023-SA8N-SB-9.0-10.0(RES)	2,3,4,7,8-PECDF	0.0821 ng/Kg	0.0821U ng/Kg
SL-023-SA8N-SB-9.0-10.0(RES)	2,3,7,8-TCDD	0.0339 ng/Kg	0.0339U ng/Kg
SL-023-SA8N-SB-9.0-10.0(RES)	OCDF	0.866 ng/Kg	0.866U ng/Kg
SL-050-SA8N-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.303 ng/Kg	0.303U ng/Kg
SL-050-SA8N-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.164 ng/Kg	0.164U ng/Kg
SL-050-SA8N-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0680 ng/Kg	0.0680U ng/Kg
SL-050-SA8N-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.144 ng/Kg	0.144U ng/Kg
SL-050-SA8N-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.136 ng/Kg	0.136U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX077 **Laboratory: LL**

EDD Filename: DX077_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-050-SA8N-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.359 ng/Kg	0.359U ng/Kg
SL-050-SA8N-SB-4.0-5.0(RES)	1,2,3,7,8-PECDD	0.148 ng/Kg	0.148U ng/Kg
SL-050-SA8N-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.134 ng/Kg	0.134U ng/Kg
SL-050-SA8N-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.181 ng/Kg	0.181U ng/Kg
SL-050-SA8N-SB-4.0-5.0(RES)	2,3,7,8-TCDD	0.0367 ng/Kg	0.0367U ng/Kg
SL-050-SA8N-SB-4.0-5.0(RES)	OCDD	0.991 ng/Kg	0.991U ng/Kg
SL-050-SA8N-SB-4.0-5.0(RES)	OCDF	0.182 ng/Kg	0.182U ng/Kg
SL-050-SA8N-SB-9.0-10.0(RES)	1,2,3,4,6,7,8-HPCDD	0.216 ng/Kg	0.216U ng/Kg
SL-050-SA8N-SB-9.0-10.0(RES)	1,2,3,4,6,7,8-HPCDF	0.148 ng/Kg	0.148U ng/Kg
SL-050-SA8N-SB-9.0-10.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0766 ng/Kg	0.0766U ng/Kg
SL-050-SA8N-SB-9.0-10.0(RES)	1,2,3,4,7,8-HxCDD	0.0727 ng/Kg	0.0727U ng/Kg
SL-050-SA8N-SB-9.0-10.0(RES)	1,2,3,4,7,8-HXCDF	0.179 ng/Kg	0.179U ng/Kg
SL-050-SA8N-SB-9.0-10.0(RES)	1,2,3,6,7,8-HXCDD	0.0691 ng/Kg	0.0691U ng/Kg
SL-050-SA8N-SB-9.0-10.0(RES)	1,2,3,6,7,8-HXCDF	0.120 ng/Kg	0.120U ng/Kg
SL-050-SA8N-SB-9.0-10.0(RES)	1,2,3,7,8,9-HXCDD	0.0791 ng/Kg	0.0791U ng/Kg
SL-050-SA8N-SB-9.0-10.0(RES)	1,2,3,7,8,9-HXCDF	0.139 ng/Kg	0.139U ng/Kg
SL-050-SA8N-SB-9.0-10.0(RES)	1,2,3,7,8-PECDD	0.172 ng/Kg	0.172U ng/Kg
SL-050-SA8N-SB-9.0-10.0(RES)	2,3,4,6,7,8-HXCDF	0.109 ng/Kg	0.109U ng/Kg
SL-050-SA8N-SB-9.0-10.0(RES)	2,3,4,7,8-PECDF	0.221 ng/Kg	0.221U ng/Kg
SL-050-SA8N-SB-9.0-10.0(RES)	2,3,7,8-TCDD	0.0622 ng/Kg	0.0622U ng/Kg
SL-050-SA8N-SB-9.0-10.0(RES)	OCDD	0.467 ng/Kg	0.467U ng/Kg
SL-050-SA8N-SB-9.0-10.0(RES)	OCDF	0.172 ng/Kg	0.172U ng/Kg
SL-064-SA5A-SB-3.0-4.0(RES)	1,2,3,4,6,7,8-HPCDD	0.547 ng/Kg	0.547U ng/Kg
SL-064-SA5A-SB-3.0-4.0(RES)	1,2,3,4,6,7,8-HPCDF	0.350 ng/Kg	0.350U ng/Kg
SL-064-SA5A-SB-3.0-4.0(RES)	1,2,3,4,7,8,9-HPCDF	0.101 ng/Kg	0.101U ng/Kg
SL-064-SA5A-SB-3.0-4.0(RES)	1,2,3,4,7,8-HXCDF	0.217 ng/Kg	0.217U ng/Kg
SL-064-SA5A-SB-3.0-4.0(RES)	1,2,3,6,7,8-HXCDD	0.144 ng/Kg	0.144U ng/Kg
SL-064-SA5A-SB-3.0-4.0(RES)	1,2,3,6,7,8-HXCDF	0.186 ng/Kg	0.186U ng/Kg
SL-064-SA5A-SB-3.0-4.0(RES)	1,2,3,7,8,9-HXCDD	0.152 ng/Kg	0.152U ng/Kg
SL-064-SA5A-SB-3.0-4.0(RES)	1,2,3,7,8,9-HXCDF	0.200 ng/Kg	0.200U ng/Kg
SL-064-SA5A-SB-3.0-4.0(RES)	2,3,4,6,7,8-HXCDF	0.201 ng/Kg	0.201U ng/Kg
SL-064-SA5A-SB-3.0-4.0(RES)	2,3,4,7,8-PECDF	0.252 ng/Kg	0.252U ng/Kg
SL-064-SA5A-SB-3.0-4.0(RES)	2,3,7,8-TCDD	0.0527 ng/Kg	0.0527U ng/Kg
SL-064-SA5A-SB-3.0-4.0(RES)	OCDF	0.365 ng/Kg	0.365U ng/Kg
SL-166-SA5A-SS-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDD	0.439 ng/Kg	0.439U ng/Kg
SL-166-SA5A-SS-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDF	0.267 ng/Kg	0.267U ng/Kg
SL-166-SA5A-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.166 ng/Kg	0.166U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX077 **Laboratory: LL**

EDD Filename: DX077_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-166-SA5A-SS-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.253 ng/Kg	0.253U ng/Kg
SL-166-SA5A-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.256 ng/Kg	0.256U ng/Kg
SL-166-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.356 ng/Kg	0.356U ng/Kg
SL-166-SA5A-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.204 ng/Kg	0.204U ng/Kg
SL-166-SA5A-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.321 ng/Kg	0.321U ng/Kg
SL-166-SA5A-SS-0.0-0.5(RES)	2,3,7,8-TCDD	0.131 ng/Kg	0.131U ng/Kg
SL-166-SA5A-SS-0.0-0.5(RES)	OCDF	0.375 ng/Kg	0.375U ng/Kg
SL-253-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.423 ng/Kg	0.423U ng/Kg
SL-253-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.406 ng/Kg	0.406U ng/Kg
SL-253-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.301 ng/Kg	0.301U ng/Kg
SL-253-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.225 ng/Kg	0.225U ng/Kg
SL-253-SA5A-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.422 ng/Kg	0.422U ng/Kg
SL-253-SA5A-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.299 ng/Kg	0.299U ng/Kg
SL-253-SA5A-SB-4.0-5.0(RES)	2,3,7,8-TCDD	0.0454 ng/Kg	0.0454U ng/Kg
SL-253-SA5A-SB-8.0-9.0(RES)	1,2,3,4,6,7,8-HPCDD	0.272 ng/Kg	0.272U ng/Kg
SL-253-SA5A-SB-8.0-9.0(RES)	1,2,3,4,6,7,8-HPCDF	0.145 ng/Kg	0.145U ng/Kg
SL-253-SA5A-SB-8.0-9.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0477 ng/Kg	0.0477U ng/Kg
SL-253-SA5A-SB-8.0-9.0(RES)	1,2,3,4,7,8-HXCDF	0.0525 ng/Kg	0.0525U ng/Kg
SL-253-SA5A-SB-8.0-9.0(RES)	1,2,3,6,7,8-HXCDD	0.0351 ng/Kg	0.0351U ng/Kg
SL-253-SA5A-SB-8.0-9.0(RES)	1,2,3,6,7,8-HXCDF	0.0322 ng/Kg	0.0322U ng/Kg
SL-253-SA5A-SB-8.0-9.0(RES)	1,2,3,7,8,9-HXCDD	0.0355 ng/Kg	0.0355U ng/Kg
SL-253-SA5A-SB-8.0-9.0(RES)	1,2,3,7,8,9-HXCDF	0.0304 ng/Kg	0.0304U ng/Kg
SL-253-SA5A-SB-8.0-9.0(RES)	1,2,3,7,8-PECDF	0.0317 ng/Kg	0.0317U ng/Kg
SL-253-SA5A-SB-8.0-9.0(RES)	2,3,4,6,7,8-HXCDF	0.0629 ng/Kg	0.0629U ng/Kg
SL-253-SA5A-SB-8.0-9.0(RES)	2,3,4,7,8-PECDF	0.0447 ng/Kg	0.0447U ng/Kg
SL-253-SA5A-SB-8.0-9.0(RES)	OCDD	0.921 ng/Kg	0.921U ng/Kg
SL-253-SA5A-SB-8.0-9.0(RES)	OCDF	0.196 ng/Kg	0.196U ng/Kg

Field Duplicate RPD Report

Lab Reporting Batch ID: DX077 **Laboratory: LL**

EDD Filename: DX077_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 160.3M
Matrix: SO

Analyte	Concentration (%)		Sample RPD	eQAPP RPD	Flag
	SL-064-SA5A-SB-3.0-4.0	DUP16-SA5A-QC-042211			
MOISTURE	10.8	10.6	2		No Qualifiers Applied

Method: 1613B
Matrix: SO

Analyte	Concentration (ng/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-064-SA5A-SB-3.0-4.0	DUP16-SA5A-QC-042211			
1,2,3,4,6,7,8-HPCDD	0.547	0.433	23	50.00	No Qualifiers Applied
OCDD	3.90	2.65	38	50.00	
OCDF	0.365	0.249	38	50.00	
1,2,3,4,6,7,8-HPCDF	0.350	0.153	78	50.00	J(all detects) UJ(all non-detects)
1,2,3,4,7,8,9-HPCDF	0.101	0.0584	53	50.00	
1,2,3,4,7,8-HxCDD	0.119	5.48 U	200	50.00	
1,2,3,4,7,8-HXCDF	0.217	0.0468	129	50.00	
1,2,3,6,7,8-HXCDD	0.144	0.0419	110	50.00	
1,2,3,6,7,8-HXCDF	0.186	0.0346	137	50.00	
1,2,3,7,8,9-HXCDD	0.152	0.0614	85	50.00	
1,2,3,7,8,9-HXCDF	0.200	0.0892	77	50.00	
1,2,3,7,8-PECDD	0.238	0.0219	166	50.00	
1,2,3,7,8-PECDF	0.234	0.0338	150	50.00	
2,3,4,6,7,8-HXCDF	0.201	0.0601	108	50.00	
2,3,4,7,8-PECDF	0.252	0.0695	114	50.00	
2,3,7,8-TCDD	0.0527	0.0267	65	50.00	
2,3,7,8-TCDF	0.0441	1.10 U	200	50.00	

Reporting Limit Outliers

Lab Reporting Batch ID: DX077 **Laboratory: LL**

EDD Filename: DX077_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP16-SA5A-QC-042211	1,2,3,4,6,7,8-HPCDD	JBQ	0.433	5.48	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.153	5.48	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0584	5.48	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.0468	5.48	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.0419	5.48	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0346	5.48	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.0614	5.48	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.0892	5.48	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.0219	5.48	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0338	5.48	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0601	5.48	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0695	5.48	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0267	1.10	PQL	ng/Kg	
	OCDD	JB	2.65	11.0	PQL	ng/Kg	
	OCDF	JBQ	0.249	11.0	PQL	ng/Kg	
SL-007-SA8N-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JB	0.305	5.73	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.248	5.73	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.0634	5.73	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0236	5.73	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.0674	5.73	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.0196	5.73	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0576	5.73	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.0413	5.73	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.0689	5.73	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.0404	5.73	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0397	5.73	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.0857	5.73	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.0851	5.73	PQL	ng/Kg	
	2,3,7,8-TCDD	JB	0.0222	1.15	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.0162	1.15	PQL	ng/Kg	
	OCDD	JB	0.851	11.5	PQL	ng/Kg	
	OCDF	JB	0.209	11.5	PQL	ng/Kg	
SL-007-SA8N-SB-9.0-10.0	1,2,3,4,6,7,8-HPCDD	JB	0.205	5.71	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.125	5.71	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0440	5.71	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0263	5.71	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.0141	5.71	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0293	5.71	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.0309	5.71	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.0386	5.71	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	0.0279	5.71	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0234	5.71	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0430	5.71	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.0642	5.71	PQL	ng/Kg	
	OCDD	JB	0.446	11.4	PQL	ng/Kg	
	OCDF	JBQ	0.136	11.4	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX077 **Laboratory: LL**

EDD Filename: DX077_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-010-SA8N-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JB	0.209	5.76	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.229	5.76	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0483	5.76	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0135	5.76	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.0614	5.76	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.0211	5.76	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0373	5.76	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.0168	5.76	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0118	5.76	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0709	5.76	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0750	5.76	PQL	ng/Kg	
	OCDD	JB	0.530	11.5	PQL	ng/Kg	
	OCDF	JB	0.191	11.5	PQL	ng/Kg	
SL-010-SA8N-SB-9.0-10.0	1,2,3,4,6,7,8-HPCDD	JB	0.225	5.81	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.233	5.81	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.0351	5.81	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0152	5.81	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0555	5.81	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.0203	5.81	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0368	5.81	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.0244	5.81	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.0160	5.81	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.0153	5.81	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.0725	5.81	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.0696	5.81	PQL	ng/Kg	
	OCDD	JB	0.528	11.6	PQL	ng/Kg	
	OCDF	JBQ	0.197	11.6	PQL	ng/Kg	
SL-011-SA8N-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JB	0.316	5.71	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.185	5.71	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0556	5.71	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0147	5.71	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0477	5.71	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.0175	5.71	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0386	5.71	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.0355	5.71	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0252	5.71	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.0817	5.71	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.0703	5.71	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0174	1.14	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.0173	1.14	PQL	ng/Kg	
	OCDD	JB	1.22	11.4	PQL	ng/Kg	
	OCDF	JBQ	0.214	11.4	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX077 **Laboratory: LL**

EDD Filename: DX077_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-011-SA8N-SB-9.0-10.0	1,2,3,4,6,7,8-HPCDD	JB	0.285	5.59	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.263	5.59	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0646	5.59	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0601	5.59	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.123	5.59	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.0710	5.59	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.105	5.59	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.0728	5.59	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.0838	5.59	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0782	5.59	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0789	5.59	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.127	5.59	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.138	5.59	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.0191	1.12	PQL	ng/Kg	
	OCDD	JBQ	0.929	11.2	PQL	ng/Kg	
	OCDF	JB	0.260	11.2	PQL	ng/Kg	
SL-012-SA8N-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JBQ	0.275	5.85	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JBQ	0.127	5.85	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.0449	5.85	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0240	5.85	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0416	5.85	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.112	5.85	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0354	5.85	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.189	5.85	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.287	5.85	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0500	5.85	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0411	5.85	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0594	5.85	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0678	5.85	PQL	ng/Kg	
	OCDD	JBQ	0.670	11.7	PQL	ng/Kg	
	OCDF	JB	0.141	11.7	PQL	ng/Kg	
SL-022-SA8N-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JB	0.305	5.56	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JBQ	0.125	5.56	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0493	5.56	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.0453	5.56	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.0897	5.56	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0252	5.56	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.163	5.56	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.300	5.56	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.0354	5.56	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0788	5.56	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.0621	5.56	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.0584	5.56	PQL	ng/Kg	
	OCDD	JB	0.992	11.1	PQL	ng/Kg	
	OCDF	JBQ	0.158	11.1	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX077 **Laboratory: LL**

EDD Filename: DX077_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-022-SA8N-SB-9.0-10.0	1,2,3,4,6,7,8-HPCDD	JB	0.563	5.85	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JBQ	0.185	5.85	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.0573	5.85	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0328	5.85	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.0998	5.85	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.0652	5.85	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0882	5.85	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.0538	5.85	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JBQ	0.0576	5.85	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0734	5.85	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.124	5.85	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0981	5.85	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.113	5.85	PQL	ng/Kg	
	OCDD	JB	3.07	11.7	PQL	ng/Kg	
	OCDF	JB	0.302	11.7	PQL	ng/Kg	
SL-023-SA8N-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JB	0.462	5.89	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.201	5.89	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.132	5.89	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0649	5.89	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0918	5.89	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.139	5.89	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0916	5.89	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.224	5.89	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.324	5.89	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.0938	5.89	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.137	5.89	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.105	5.89	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.129	5.89	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0615	1.18	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.0180	1.18	PQL	ng/Kg	
	OCDD	JB	1.66	11.8	PQL	ng/Kg	
	OCDF	JB	0.280	11.8	PQL	ng/Kg	
SL-023-SA8N-SB-9.0-10.0	1,2,3,4,6,7,8-HPCDD	JB	3.65	5.90	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.471	5.90	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.105	5.90	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0923	5.90	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0814	5.90	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.211	5.90	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0723	5.90	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.140	5.90	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JB	0.0996	5.90	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.0649	5.90	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0565	5.90	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.103	5.90	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.0821	5.90	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0339	1.18	PQL	ng/Kg	
	OCDF	JBQ	0.866	11.8	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX077 **Laboratory: LL**

EDD Filename: DX077_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-050-SA8N-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JB	0.303	5.72	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.164	5.72	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.0680	5.72	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.0825	5.72	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.144	5.72	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.192	5.72	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.136	5.72	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.261	5.72	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.359	5.72	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	0.148	5.72	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.222	5.72	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.134	5.72	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.181	5.72	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0367	1.14	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.0521	1.14	PQL	ng/Kg	
	OCDD	JB	0.991	11.4	PQL	ng/Kg	
	OCDF	JB	0.182	11.4	PQL	ng/Kg	
SL-050-SA8N-SB-9.0-10.0	1,2,3,4,6,7,8-HPCDD	JB	0.216	5.90	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.148	5.90	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.0766	5.90	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0727	5.90	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.179	5.90	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.0691	5.90	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.120	5.90	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.0791	5.90	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.139	5.90	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.172	5.90	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.214	5.90	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.109	5.90	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.221	5.90	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0622	1.18	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.0575	1.18	PQL	ng/Kg	
	OCDD	JB	0.467	11.8	PQL	ng/Kg	
	OCDF	JB	0.172	11.8	PQL	ng/Kg	
SL-064-SA5A-SB-3.0-4.0	1,2,3,4,6,7,8-HPCDD	JB	0.547	5.44	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.350	5.44	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.101	5.44	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.119	5.44	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.217	5.44	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.144	5.44	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.186	5.44	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.152	5.44	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.200	5.44	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	0.238	5.44	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.234	5.44	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.201	5.44	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.252	5.44	PQL	ng/Kg	
	2,3,7,8-TCDD	JB	0.0527	1.09	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.0441	1.09	PQL	ng/Kg	
	OCDD	JB	3.90	10.9	PQL	ng/Kg	
	OCDF	JB	0.365	10.9	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX077 **Laboratory: LL**

EDD Filename: DX077_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-166-SA5A-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDD	JB	0.439	5.05	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.267	5.05	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.166	5.05	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.135	5.05	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.253	5.05	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.203	5.05	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.256	5.05	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.251	5.05	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.356	5.05	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	0.311	5.05	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.339	5.05	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.204	5.05	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.321	5.05	PQL	ng/Kg	
	2,3,7,8-TCDD	JB	0.131	1.01	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.0875	1.01	PQL	ng/Kg	
	OCDD	JB	2.28	10.1	PQL	ng/Kg	
	OCDF	JB	0.375	10.1	PQL	ng/Kg	
SL-253-SA5A-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDF	JB	4.82	5.76	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.423	5.76	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.320	5.76	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.406	5.76	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.696	5.76	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.301	5.76	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.500	5.76	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JBQ	0.225	5.76	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.226	5.76	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.237	5.76	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.422	5.76	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.299	5.76	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0454	1.15	PQL	ng/Kg	
SL-253-SA5A-SB-8.0-9.0	1,2,3,4,6,7,8-HPCDD	JB	0.272	5.55	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.145	5.55	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0477	5.55	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.0525	5.55	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.0351	5.55	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0322	5.55	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.0355	5.55	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JBQ	0.0304	5.55	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0317	5.55	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.0629	5.55	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.0447	5.55	PQL	ng/Kg	
	OCDD	JBQ	0.921	11.1	PQL	ng/Kg	
	OCDF	JB	0.196	11.1	PQL	ng/Kg	

SAMPLE DELIVERY GROUP

DX081

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
13-May-2011	SL-096-SA8N-SB-4.0-5.0	6287611	N	METHOD	1613B	III
13-May-2011	SL-096-SA8N-SB-9.0-10.0	6287612	N	METHOD	1613B	III
13-May-2011	SL-094-SA8N-SB-4.0-5.0	6287608	N	METHOD	1613B	III
13-May-2011	SL-094-SA8N-SB-7.5-8.5	6287609	N	METHOD	1613B	III
13-May-2011	SL-095-SA8N-SB-4.0-5.0	6287610	N	METHOD	1613B	III
13-May-2011	SL-104-SA8N-SB-4.0-5.0	6287613	N	METHOD	1613B	III
13-May-2011	SL-104-SA8N-SB-9.0-10.0	6287614	N	METHOD	1613B	III
16-May-2011	SL-003-SA5DN-SB-0.5-1.5	6288962	N	METHOD	1613B	III
16-May-2011	SL-003-SA5DN-SB-8.0-9.0	6288963	N	METHOD	1613B	III
16-May-2011	SL-042-SA5A-SB-3.5-4.5	6288954	N	METHOD	1613B	III
16-May-2011	SL-042-SA5A-SB-3.5-4.5MS	6288955	MS	METHOD	1613B	III
16-May-2011	SL-042-SA5A-SB-3.5-4.5MSD	6288956	MSD	METHOD	1613B	III
16-May-2011	DUP-17-SA5A-QC-051611	6288957	FD	METHOD	1613B	III
16-May-2011	SL-004-SA5DN-SB-3.5-4.5	6288964	N	METHOD	1613B	III
16-May-2011	SL-004-SA5DN-SB-9.0-10.0	6288965	N	METHOD	1613B	III
16-May-2011	EB15-SA5A-SB-051611	6288959	EB	METHOD	1613B	III
16-May-2011	SL-002-SA5DN-SB-4.0-5.0	6288960	N	METHOD	1613B	III
16-May-2011	SL-002-SA5DN-SB-9.0-10.0	6288961	N	METHOD	1613B	III
16-May-2011	SL-167-SA5A-SB-1.0-2.0	6288958	N	METHOD	1613B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DX081 **Laboratory: LL**

EDD Filename: PrepDX081_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA
Method: 1613B **Matrix:** AQ

Sample ID: EB15-SA5A-SB-051611 **Collected:** 5/16/2011 2:30:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	3.17	J	0.640	MDL	10.7	PQL	pg/L	U	B
1,2,3,4,6,7,8-HPCDF	2.21	J	0.288	MDL	10.7	PQL	pg/L	U	B
1,2,3,4,7,8,9-HPCDF	1.01	J	0.346	MDL	10.7	PQL	pg/L	U	B
1,2,3,4,7,8-HxCDD	0.449	J	0.367	MDL	10.7	PQL	pg/L	U	B
1,2,3,4,7,8-HXCDF	0.477	J	0.239	MDL	10.7	PQL	pg/L	U	B
1,2,3,6,7,8-HXCDD	0.644	JQ	0.393	MDL	10.7	PQL	pg/L	U	B
1,2,3,6,7,8-HXCDF	0.609	J	0.231	MDL	10.7	PQL	pg/L	U	B
1,2,3,7,8,9-HXCDD	0.749	J	0.372	MDL	10.7	PQL	pg/L	U	B
1,2,3,7,8,9-HXCDF	0.577	JQ	0.246	MDL	10.7	PQL	pg/L	U	B
1,2,3,7,8-PECDD	0.430	JQ	0.311	MDL	10.7	PQL	pg/L	U	B
1,2,3,7,8-PECDF	0.168	J	0.164	MDL	10.7	PQL	pg/L	J	Z
2,3,4,6,7,8-HXCDF	0.879	JQ	0.218	MDL	10.7	PQL	pg/L	U	B
2,3,4,7,8-PECDF	0.720	J	0.142	MDL	10.7	PQL	pg/L	U	B
2,3,7,8-TCDD	0.482	JQ	0.279	MDL	2.14	PQL	pg/L	U	B
OCDD	5.95	JQ	0.500	MDL	21.4	PQL	pg/L	U	B
OCDF	0.932	JQ	0.586	MDL	21.4	PQL	pg/L	U	B

Method Category: SVOA
Method: 1613B **Matrix:** SO

Sample ID: DUP-17-SA5A-QC-051611 **Collected:** 5/16/2011 11:37:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	24.2	B	0.0586	MDL	5.54	PQL	ng/Kg	J	FD
1,2,3,4,6,7,8-HPCDF	4.92	JB	0.0194	MDL	5.54	PQL	ng/Kg	J	Z, FD
1,2,3,4,7,8,9-HPCDF	1.11	JB	0.0365	MDL	5.54	PQL	ng/Kg	J	Z, FD
1,2,3,4,7,8-HxCDD	0.421	JB	0.0468	MDL	5.54	PQL	ng/Kg	J	Z, FD
1,2,3,4,7,8-HXCDF	0.543	JB	0.0400	MDL	5.54	PQL	ng/Kg	J	Z, FD
1,2,3,6,7,8-HXCDD	1.42	JB	0.0493	MDL	5.54	PQL	ng/Kg	J	Z, FD
1,2,3,6,7,8-HXCDF	0.512	JB	0.0330	MDL	5.54	PQL	ng/Kg	J	Z, FD
1,2,3,7,8,9-HXCDD	0.701	JB	0.0487	MDL	5.54	PQL	ng/Kg	J	Z, FD
1,2,3,7,8,9-HXCDF	0.403	JB	0.0395	MDL	5.54	PQL	ng/Kg	J	Z, FD
1,2,3,7,8-PECDD	0.307	JBQ	0.0377	MDL	5.54	PQL	ng/Kg	UJ	B, FD
1,2,3,7,8-PECDF	0.253	JB	0.0200	MDL	5.54	PQL	ng/Kg	UJ	B, FD

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX081 **Laboratory: LL**

EDD Filename: PrepDX081_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: **DUP-17-SA5A-QC-051611** ***Collected:*** **5/16/2011 11:37:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,3,4,6,7,8-HXCDF	0.773	JB	0.0325	MDL	5.54	PQL	ng/Kg	J	Z, FD
2,3,4,7,8-PECDF	0.343	JBQ	0.0202	MDL	5.54	PQL	ng/Kg	UJ	B, FD
2,3,7,8-TCDD	0.114	JB	0.0232	MDL	1.11	PQL	ng/Kg	UJ	B, FD
2,3,7,8-TCDF	0.102	J	0.0383	MDL	1.11	PQL	ng/Kg	J	Z, FD
OCDF	10.9	JB	0.0356	MDL	11.1	PQL	ng/Kg	J	Z, FD

Sample ID: **SL-002-SA5DN-SB-4.0-5.0** ***Collected:*** **5/16/2011 3:48:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.341	JB	0.0414	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.134	JBQ	0.0117	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0634	JBQ	0.0247	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0352	JB	0.0231	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.133	JB	0.0278	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0415	JBQ	0.0189	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.244	JBQ	0.0281	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.343	JB	0.0266	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0810	JBQ	0.0340	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0609	JBQ	0.0176	MDL	5.66	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0924	JBQ	0.0196	MDL	5.66	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0564	JBQ	0.0180	MDL	5.66	PQL	ng/Kg	U	B
OCDD	1.53	JB	0.0346	MDL	11.3	PQL	ng/Kg	U	B
OCDF	0.315	JBQ	0.0682	MDL	11.3	PQL	ng/Kg	U	B

Sample ID: **SL-002-SA5DN-SB-9.0-10.0** ***Collected:*** **5/16/2011 3:52:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.280	JB	0.0269	MDL	5.55	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.111	JBQ	0.00826	MDL	5.55	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0403	JBQ	0.0158	MDL	5.55	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0526	JB	0.0143	MDL	5.55	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0314	JB	0.0181	MDL	5.55	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0350	JBQ	0.0115	MDL	5.55	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0544	JB	0.0181	MDL	5.55	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0501	JBQ	0.0154	MDL	5.55	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX081 **Laboratory: LL**

EDD Filename: PrepDX081_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: **SL-002-SA5DN-SB-9.0-10.0** ***Collected:*** **5/16/2011 3:52:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,7,8-PECDD	0.0262	JBQ	0.0206	MDL	5.55	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0124	JBQ	0.0118	MDL	5.55	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0501	JBQ	0.0122	MDL	5.55	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0636	JBQ	0.0119	MDL	5.55	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0203	J	0.0192	MDL	1.11	PQL	ng/Kg	J	Z
OCDD	1.77	JBQ	0.0231	MDL	11.1	PQL	ng/Kg	U	B
OCDF	0.263	JBQ	0.0352	MDL	11.1	PQL	ng/Kg	U	B

Sample ID: **SL-003-SA5DN-SB-0.5-1.5** ***Collected:*** **5/16/2011 10:43:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	1.11	JB	0.0365	MDL	5.95	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.291	JB	0.0120	MDL	5.95	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.126	JB	0.0235	MDL	5.95	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0898	JB	0.0277	MDL	5.95	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.179	JBQ	0.0255	MDL	5.95	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.615	JB	0.0286	MDL	5.95	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.144	JB	0.0210	MDL	5.95	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.988	JB	0.0282	MDL	5.95	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	1.09	JB	0.0288	MDL	5.95	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.226	JBQ	0.0297	MDL	5.95	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.367	JB	0.0185	MDL	5.95	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.136	JB	0.0238	MDL	5.95	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.241	JBQ	0.0199	MDL	5.95	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.143	J	0.0409	MDL	1.19	PQL	ng/Kg	J	Z
OCDF	0.704	JBQ	0.0421	MDL	11.9	PQL	ng/Kg	U	B

Sample ID: **SL-003-SA5DN-SB-8.0-9.0** ***Collected:*** **5/16/2011 10:50:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.377	JB	0.0275	MDL	5.55	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.194	JB	0.0102	MDL	5.55	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.110	JBQ	0.0159	MDL	5.55	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0831	JB	0.0229	MDL	5.55	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.133	JBQ	0.0187	MDL	5.55	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX081 **Laboratory: LL**

EDD Filename: PrepDX081_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-003-SA5DN-SB-8.0-9.0 **Collected:** 5/16/2011 10:50:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,6,7,8-HXCDD	0.108	JBQ	0.0228	MDL	5.55	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.110	JB	0.0166	MDL	5.55	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.101	JBQ	0.0227	MDL	5.55	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.194	JBQ	0.0179	MDL	5.55	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.163	JBQ	0.0236	MDL	5.55	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.203	JBQ	0.0124	MDL	5.55	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.131	JBQ	0.0162	MDL	5.55	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.184	JB	0.0130	MDL	5.55	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0860	JB	0.0179	MDL	1.11	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0652	JQ	0.0177	MDL	1.11	PQL	ng/Kg	J	Z
OCDD	1.11	JBQ	0.0255	MDL	11.1	PQL	ng/Kg	U	B
OCDF	0.369	JB	0.0409	MDL	11.1	PQL	ng/Kg	U	B

Sample ID: SL-004-SA5DN-SB-3.5-4.5 **Collected:** 5/16/2011 12:39:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.658	JB	0.0316	MDL	5.98	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.205	JB	0.0109	MDL	5.98	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.105	JB	0.0255	MDL	5.98	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0813	JB	0.0219	MDL	5.98	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.135	JBQ	0.0237	MDL	5.98	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.563	JB	0.0226	MDL	5.98	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.125	JB	0.0186	MDL	5.98	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.939	JB	0.0224	MDL	5.98	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	1.54	JB	0.0284	MDL	5.98	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.218	JBQ	0.0400	MDL	5.98	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.437	JBQ	0.0156	MDL	5.98	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.124	JB	0.0207	MDL	5.98	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.166	JBQ	0.0174	MDL	5.98	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0555	JBQ	0.0260	MDL	1.20	PQL	ng/Kg	U	B
OCDD	6.06	JB	0.0291	MDL	12.0	PQL	ng/Kg	J	Z
OCDF	0.373	JBQ	0.0501	MDL	12.0	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX081 **Laboratory: LL**

EDD Filename: PrepDX081_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: **SL-004-SA5DN-SB-9.0-10.0** ***Collected:*** **5/16/2011 12:47:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.211	JB	0.0222	MDL	5.60	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.115	JBQ	0.00816	MDL	5.60	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0549	JBQ	0.0141	MDL	5.60	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0311	JBQ	0.0164	MDL	5.60	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0860	JBQ	0.0115	MDL	5.60	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0625	JBQ	0.0171	MDL	5.60	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0673	JB	0.0101	MDL	5.60	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0650	JBQ	0.0170	MDL	5.60	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0638	JBQ	0.0138	MDL	5.60	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.110	JB	0.0230	MDL	5.60	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0833	JBQ	0.0116	MDL	5.60	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0696	JB	0.0115	MDL	5.60	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0952	JB	0.0119	MDL	5.60	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0274	JBQ	0.0172	MDL	1.12	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0461	JQ	0.0181	MDL	1.12	PQL	ng/Kg	J	Z
OCDD	0.602	JB	0.0218	MDL	11.2	PQL	ng/Kg	U	B
OCDF	0.212	JB	0.0321	MDL	11.2	PQL	ng/Kg	U	B

Sample ID: **SL-042-SA5A-SB-3.5-4.5** ***Collected:*** **5/16/2011 11:30:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	12.6	B	0.0543	MDL	5.45	PQL	ng/Kg	J	Q, Q, FD
1,2,3,4,6,7,8-HPCDF	2.06	JB	0.0221	MDL	5.45	PQL	ng/Kg	J	Z, FD
1,2,3,4,7,8,9-HPCDF	0.371	JB	0.0364	MDL	5.45	PQL	ng/Kg	UJ	B, FD
1,2,3,4,7,8-HxCDD	0.178	JB	0.0546	MDL	5.45	PQL	ng/Kg	J	Z, FD
1,2,3,4,7,8-HXCDF	0.215	JB	0.0417	MDL	5.45	PQL	ng/Kg	UJ	B, FD
1,2,3,6,7,8-HXCDD	0.579	JB	0.0550	MDL	5.45	PQL	ng/Kg	J	Z, FD
1,2,3,6,7,8-HXCDF	0.196	JB	0.0356	MDL	5.45	PQL	ng/Kg	UJ	B, FD
1,2,3,7,8,9-HXCDD	0.260	JB	0.0469	MDL	5.45	PQL	ng/Kg	UJ	B, FD
1,2,3,7,8,9-HXCDF	0.157	JB	0.0388	MDL	5.45	PQL	ng/Kg	UJ	B, FD
1,2,3,7,8-PECDD	0.101	JBQ	0.0352	MDL	5.45	PQL	ng/Kg	UJ	B, FD
1,2,3,7,8-PECDF	0.0835	JBQ	0.0171	MDL	5.45	PQL	ng/Kg	UJ	B, FD
2,3,4,6,7,8-HXCDF	0.292	JB	0.0313	MDL	5.45	PQL	ng/Kg	J	Z, FD
2,3,4,7,8-PECDF	0.111	JB	0.0189	MDL	5.45	PQL	ng/Kg	UJ	B, FD

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX081 **Laboratory: LL**

EDD Filename: PrepDX081_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-042-SA5A-SB-3.5-4.5 **Collected:** 5/16/2011 11:30:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,3,7,8-TCDD	0.0210	U	0.0210	MDL	1.09	PQL	ng/Kg	UJ	FD
2,3,7,8-TCDF	0.0432	J	0.0260	MDL	1.09	PQL	ng/Kg	J	Z, FD
OCDD	150	B	0.0451	MDL	10.9	PQL	ng/Kg	J	Q, Q
OCDF	4.68	JB	0.0519	MDL	10.9	PQL	ng/Kg	J	Z, FD

Sample ID: SL-094-SA8N-SB-4.0-5.0 **Collected:** 5/13/2011 10:30:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.590	JBQ	0.0452	MDL	5.95	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.256	JBQ	0.0159	MDL	5.95	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0900	JB	0.0220	MDL	5.95	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.105	JB	0.0358	MDL	5.95	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.584	JBQ	0.0372	MDL	5.95	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.112	JB	0.0305	MDL	5.95	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	1.02	JB	0.0309	MDL	5.95	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	1.47	JB	0.0257	MDL	5.95	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.205	JB	0.0488	MDL	5.95	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.313	JBQ	0.0215	MDL	5.95	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.121	JBQ	0.0242	MDL	5.95	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0319	JB	0.0213	MDL	1.19	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0606	J	0.0267	MDL	1.19	PQL	ng/Kg	J	Z
OCDD	2.12	JB	0.0446	MDL	11.9	PQL	ng/Kg	J	Z
OCDF	0.390	JBQ	0.0661	MDL	11.9	PQL	ng/Kg	U	B

Sample ID: SL-094-SA8N-SB-7.5-8.5 **Collected:** 5/13/2011 10:35:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.314	JBQ	0.0340	MDL	5.52	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.167	JB	0.0131	MDL	5.52	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0740	JBQ	0.0193	MDL	5.52	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0515	JBQ	0.0196	MDL	5.52	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0441	JBQ	0.0258	MDL	5.52	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0485	JBQ	0.0174	MDL	5.52	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0648	JB	0.0229	MDL	5.52	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0750	JB	0.0198	MDL	5.52	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX081 **Laboratory: LL**

EDD Filename: PrepDX081_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B *Matrix:* SO

Sample ID: SL-094-SA8N-SB-7.5-8.5 *Collected:* 5/13/2011 10:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,7,8-PECDF	0.0187	JB	0.0168	MDL	5.52	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0702	JBQ	0.0156	MDL	5.52	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0808	JB	0.0164	MDL	5.52	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0195	JQ	0.0189	MDL	1.10	PQL	ng/Kg	J	Z
OCDD	0.894	JB	0.0399	MDL	11.0	PQL	ng/Kg	U	B
OCDF	0.201	JB	0.0547	MDL	11.0	PQL	ng/Kg	U	B

Sample ID: SL-095-SA8N-SB-4.0-5.0 *Collected:* 5/13/2011 11:43:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.257	JB	0.0349	MDL	5.65	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.135	JB	0.0116	MDL	5.65	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0866	JBQ	0.0193	MDL	5.65	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0474	JBQ	0.0209	MDL	5.65	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0425	JB	0.0158	MDL	5.65	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0650	JBQ	0.0214	MDL	5.65	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0318	JBQ	0.0127	MDL	5.65	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0791	JB	0.0202	MDL	5.65	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.126	JB	0.0159	MDL	5.65	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0273	JBQ	0.0258	MDL	5.65	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0459	JB	0.0135	MDL	5.65	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0557	JBQ	0.0141	MDL	5.65	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0672	JBQ	0.0138	MDL	5.65	PQL	ng/Kg	U	B
OCDD	0.579	JB	0.0355	MDL	11.3	PQL	ng/Kg	U	B
OCDF	0.285	JB	0.0499	MDL	11.3	PQL	ng/Kg	U	B

Sample ID: SL-096-SA8N-SB-4.0-5.0 *Collected:* 5/13/2011 9:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.342	JB	0.0366	MDL	5.83	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.161	JB	0.0126	MDL	5.83	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0677	JB	0.0219	MDL	5.83	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0498	JBQ	0.0267	MDL	5.83	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0645	JBQ	0.0220	MDL	5.83	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.208	JB	0.0277	MDL	5.83	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX081 **Laboratory: LL**

EDD Filename: PrepDX081_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B ***Matrix:*** SO

Sample ID: SL-096-SA8N-SB-4.0-5.0 ***Collected:*** 5/13/2011 9:10:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,6,7,8-HXCDF	0.0424	JBQ	0.0182	MDL	5.83	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.375	JB	0.0272	MDL	5.83	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.585	JBQ	0.0247	MDL	5.83	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.0431	JB	0.0293	MDL	5.83	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0871	JB	0.0169	MDL	5.83	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0839	JBQ	0.0197	MDL	5.83	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0521	JB	0.0170	MDL	5.83	PQL	ng/Kg	U	B
OCDD	0.767	JB	0.0386	MDL	11.7	PQL	ng/Kg	U	B
OCDF	0.215	JBQ	0.0542	MDL	11.7	PQL	ng/Kg	U	B

Sample ID: SL-096-SA8N-SB-9.0-10.0 ***Collected:*** 5/13/2011 9:15:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.321	JB	0.0384	MDL	5.72	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.168	JB	0.0137	MDL	5.72	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0771	JB	0.0227	MDL	5.72	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0859	JB	0.0176	MDL	5.72	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.286	JB	0.0351	MDL	5.72	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.0695	JB	0.0163	MDL	5.72	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.504	JB	0.0361	MDL	5.72	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.244	JBQ	0.0189	MDL	5.72	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0984	JBQ	0.0287	MDL	5.72	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0656	JB	0.0166	MDL	5.72	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0614	JBQ	0.0168	MDL	5.72	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0580	JBQ	0.0167	MDL	5.72	PQL	ng/Kg	U	B
OCDD	0.886	JB	0.0445	MDL	11.4	PQL	ng/Kg	U	B
OCDF	0.304	JB	0.0546	MDL	11.4	PQL	ng/Kg	U	B

Sample ID: SL-104-SA8N-SB-4.0-5.0 ***Collected:*** 5/13/2011 2:50:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.337	JB	0.0412	MDL	5.54	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.216	JB	0.0119	MDL	5.54	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.110	JBQ	0.0227	MDL	5.54	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0591	JBQ	0.0265	MDL	5.54	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX081 **Laboratory: LL**

EDD Filename: PrepDX081_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-104-SA8N-SB-4.0-5.0 **Collected:** 5/13/2011 2:50:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8-HXCDF	0.102	JBQ	0.0227	MDL	5.54	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.111	JB	0.0269	MDL	5.54	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0846	JB	0.0200	MDL	5.54	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0804	JBQ	0.0268	MDL	5.54	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.134	JBQ	0.0247	MDL	5.54	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0988	JBQ	0.0303	MDL	5.54	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0761	JBQ	0.0156	MDL	5.54	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.115	JBQ	0.0209	MDL	5.54	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.109	JB	0.0163	MDL	5.54	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0239	JB	0.0203	MDL	1.11	PQL	ng/Kg	U	B
OCDD	1.20	JB	0.0457	MDL	11.1	PQL	ng/Kg	U	B
OCDF	0.304	JB	0.0643	MDL	11.1	PQL	ng/Kg	U	B

Sample ID: SL-104-SA8N-SB-9.0-10.0 **Collected:** 5/13/2011 3:06:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.257	JB	0.0234	MDL	5.81	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.231	JB	0.00876	MDL	5.81	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0827	JB	0.0133	MDL	5.81	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.104	JBQ	0.0200	MDL	5.81	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.131	JB	0.0174	MDL	5.81	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0850	JBQ	0.0205	MDL	5.81	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.131	JB	0.0154	MDL	5.81	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0994	JB	0.0191	MDL	5.81	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.118	JB	0.0149	MDL	5.81	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.170	JB	0.0129	MDL	5.81	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.145	JBQ	0.0140	MDL	5.81	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.182	JB	0.0128	MDL	5.81	PQL	ng/Kg	U	B
OCDD	0.651	JB	0.0192	MDL	11.6	PQL	ng/Kg	U	B
OCDF	0.288	JB	0.0276	MDL	11.6	PQL	ng/Kg	U	B

Sample ID: SL-167-SA5A-SB-1.0-2.0 **Collected:** 5/16/2011 4:17:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	1.70	JB	0.0227	MDL	5.30	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX081 **Laboratory: LL**

EDD Filename: PrepDX081_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: **SL-167-SA5A-SB-1.0-2.0** ***Collected:*** **5/16/2011 4:17:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	0.172	JBQ	0.0361	MDL	5.30	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.337	JB	0.0314	MDL	5.30	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.324	JB	0.0339	MDL	5.30	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.128	JB	0.0272	MDL	5.30	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.156	JB	0.0312	MDL	5.30	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.104	JBQ	0.0311	MDL	5.30	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0568	JBQ	0.0237	MDL	5.30	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0854	JBQ	0.0193	MDL	5.30	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.126	JBQ	0.0280	MDL	5.30	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0833	JB	0.0188	MDL	5.30	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0278	JBQ	0.0195	MDL	1.06	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0288	JQ	0.0250	MDL	1.06	PQL	ng/Kg	J	Z
OCDF	5.40	JB	0.0342	MDL	10.6	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DX081 **Laboratory: LL**

EDD Filename: PrepDX081_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
	Sampling to Leaching Estimation
	Sampling to Leaching Rejection
*#	Professional Judgment
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Continuing Calibration Verification Percent Recovery Lower Estimation
C	Continuing Calibration Verification Percent Recovery Lower Rejection
C	Continuing Calibration Verification Percent Recovery Upper Estimation
C	Continuing Calibration Verification Percent Recovery Upper Rejection
C	Continuing Calibration Verification Relative Response Factor
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Relative Response Factor
C	Initial Calibration Verification Correlation Coefficient

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DX081 **Laboratory: LL**

EDD Filename: PrepDX081_v1 **eQAPP Name: CDM_SSFL_110509**

C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Verification Percent Recovery Lower Estimation
C	Initial Calibration Verification Percent Recovery Lower Rejection
C	Initial Calibration Verification Percent Recovery Upper Estimation
C	Initial Calibration Verification Percent Recovery Upper Rejection
C	Initial Calibration Verification Relative Response Factor
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Laboratory Triplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination
F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DX081 **Laboratory: LL**

EDD Filename: PrepDX081_v1 **eQAPP Name: CDM_SSFL_110509**

L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Laboratory Triplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Q	Matrix Spike Upper Rejection
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control Outlier Reports

DX081

Method Blank Outlier Report

Lab Reporting Batch ID: DX081 **Laboratory: LL**

EDD Filename: DX081_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **AQ**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLK1370B371148	5/20/2011 11:48:00 AM	1,2,3,4,6,7,8-HPCDD	1.77 pg/L	EB15-SA5A-SB-051611
		1,2,3,4,6,7,8-HPCDF	1.41 pg/L	
		1,2,3,4,7,8,9-HPCDF	0.428 pg/L	
		1,2,3,4,7,8-HxCDD	0.220 pg/L	
		1,2,3,4,7,8-HXCDF	0.400 pg/L	
		1,2,3,6,7,8-HXCDD	0.252 pg/L	
		1,2,3,6,7,8-HXCDF	0.354 pg/L	
		1,2,3,7,8,9-HXCDD	0.381 pg/L	
		1,2,3,7,8,9-HXCDF	0.396 pg/L	
		1,2,3,7,8-PECDD	0.307 pg/L	
		2,3,4,6,7,8-HXCDF	0.399 pg/L	
		2,3,4,7,8-PECDF	0.588 pg/L	
		2,3,7,8-TCDD	0.128 pg/L	
		2,3,7,8-TCDF	0.106 pg/L	
		OCDD	3.80 pg/L	
		OCDF	1.48 pg/L	

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
EB15-SA5A-SB-051611(RES)	1,2,3,4,6,7,8-HPCDD	3.17 pg/L	3.17U pg/L
EB15-SA5A-SB-051611(RES)	1,2,3,4,6,7,8-HPCDF	2.21 pg/L	2.21U pg/L
EB15-SA5A-SB-051611(RES)	1,2,3,4,7,8,9-HPCDF	1.01 pg/L	1.01U pg/L
EB15-SA5A-SB-051611(RES)	1,2,3,4,7,8-HxCDD	0.449 pg/L	0.449U pg/L
EB15-SA5A-SB-051611(RES)	1,2,3,4,7,8-HXCDF	0.477 pg/L	0.477U pg/L
EB15-SA5A-SB-051611(RES)	1,2,3,6,7,8-HXCDD	0.644 pg/L	0.644U pg/L
EB15-SA5A-SB-051611(RES)	1,2,3,6,7,8-HXCDF	0.609 pg/L	0.609U pg/L
EB15-SA5A-SB-051611(RES)	1,2,3,7,8,9-HXCDD	0.749 pg/L	0.749U pg/L
EB15-SA5A-SB-051611(RES)	1,2,3,7,8,9-HXCDF	0.577 pg/L	0.577U pg/L
EB15-SA5A-SB-051611(RES)	1,2,3,7,8-PECDD	0.430 pg/L	0.430U pg/L
EB15-SA5A-SB-051611(RES)	2,3,4,6,7,8-HXCDF	0.879 pg/L	0.879U pg/L
EB15-SA5A-SB-051611(RES)	2,3,4,7,8-PECDF	0.720 pg/L	0.720U pg/L
EB15-SA5A-SB-051611(RES)	2,3,7,8-TCDD	0.482 pg/L	0.482U pg/L
EB15-SA5A-SB-051611(RES)	OCDD	5.95 pg/L	5.95U pg/L
EB15-SA5A-SB-051611(RES)	OCDF	0.932 pg/L	0.932U pg/L

Method Blank Outlier Report

Lab Reporting Batch ID: DX081 **Laboratory: LL**

EDD Filename: DX081_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLK1370B371826	5/19/2011 6:26:00 PM	1,2,3,4,6,7,8-HPCDD	0.254 ng/Kg	SL-094-SA8N-SB-4.0-5.0
		1,2,3,4,6,7,8-HPCDF	0.188 ng/Kg	SL-094-SA8N-SB-7.5-8.5
		1,2,3,4,7,8,9-HPCDF	0.106 ng/Kg	SL-095-SA8N-SB-4.0-5.0
		1,2,3,4,7,8-HxCDD	0.0292 ng/Kg	SL-096-SA8N-SB-4.0-5.0
		1,2,3,4,7,8-HXCDF	0.0716 ng/Kg	SL-096-SA8N-SB-9.0-10.0
		1,2,3,6,7,8-HXCDD	0.0513 ng/Kg	SL-104-SA8N-SB-4.0-5.0
		1,2,3,6,7,8-HXCDF	0.0503 ng/Kg	SL-104-SA8N-SB-9.0-10.0
		1,2,3,7,8,9-HXCDD	0.0377 ng/Kg	
		1,2,3,7,8,9-HXCDF	0.0917 ng/Kg	
		1,2,3,7,8-PECDD	0.0632 ng/Kg	
		1,2,3,7,8-PECDF	0.0253 ng/Kg	
		2,3,4,6,7,8-HXCDF	0.0914 ng/Kg	
		2,3,4,7,8-PECDF	0.0780 ng/Kg	
		2,3,7,8-TCDD	0.0449 ng/Kg	
		OCDD	0.399 ng/Kg	
		OCDF	0.292 ng/Kg	
BLK1400B371308	5/23/2011 1:08:00 PM	1,2,3,4,6,7,8-HPCDD	0.220 ng/Kg	DUP-17-SA5A-QC-051611
		1,2,3,4,6,7,8-HPCDF	0.126 ng/Kg	SL-002-SA5DN-SB-4.0-5.0
		1,2,3,4,7,8,9-HPCDF	0.125 ng/Kg	SL-002-SA5DN-SB-9.0-10.0
		1,2,3,4,7,8-HxCDD	0.0299 ng/Kg	SL-003-SA5DN-SB-0.5-1.5
		1,2,3,4,7,8-HXCDF	0.0532 ng/Kg	SL-003-SA5DN-SB-8.0-9.0
		1,2,3,6,7,8-HXCDD	0.0525 ng/Kg	SL-004-SA5DN-SB-3.5-4.5
		1,2,3,6,7,8-HXCDF	0.0551 ng/Kg	SL-004-SA5DN-SB-9.0-10.0
		1,2,3,7,8,9-HXCDD	0.0535 ng/Kg	SL-042-SA5A-SB-3.5-4.5
		1,2,3,7,8,9-HXCDF	0.0750 ng/Kg	SL-167-SA5A-SB-1.0-2.0
		1,2,3,7,8-PECDD	0.0656 ng/Kg	
		1,2,3,7,8-PECDF	0.0647 ng/Kg	
		2,3,4,6,7,8-HXCDF	0.0526 ng/Kg	
		2,3,4,7,8-PECDF	0.0777 ng/Kg	
		2,3,7,8-TCDD	0.0352 ng/Kg	
		OCDD	0.489 ng/Kg	
		OCDF	0.335 ng/Kg	

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
DUP-17-SA5A-QC-051611(RES)	1,2,3,7,8-PECDD	0.307 ng/Kg	0.307U ng/Kg
DUP-17-SA5A-QC-051611(RES)	1,2,3,7,8-PECDF	0.253 ng/Kg	0.253U ng/Kg
DUP-17-SA5A-QC-051611(RES)	2,3,4,7,8-PECDF	0.343 ng/Kg	0.343U ng/Kg
DUP-17-SA5A-QC-051611(RES)	2,3,7,8-TCDD	0.114 ng/Kg	0.114U ng/Kg
SL-002-SA5DN-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.341 ng/Kg	0.341U ng/Kg
SL-002-SA5DN-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.134 ng/Kg	0.134U ng/Kg
SL-002-SA5DN-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0634 ng/Kg	0.0634U ng/Kg
SL-002-SA5DN-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.0352 ng/Kg	0.0352U ng/Kg
SL-002-SA5DN-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDD	0.133 ng/Kg	0.133U ng/Kg
SL-002-SA5DN-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.0415 ng/Kg	0.0415U ng/Kg
SL-002-SA5DN-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDD	0.244 ng/Kg	0.244U ng/Kg
SL-002-SA5DN-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.343 ng/Kg	0.343U ng/Kg
SL-002-SA5DN-SB-4.0-5.0(RES)	1,2,3,7,8-PECDD	0.0810 ng/Kg	0.0810U ng/Kg
SL-002-SA5DN-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.0609 ng/Kg	0.0609U ng/Kg
SL-002-SA5DN-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.0924 ng/Kg	0.0924U ng/Kg
SL-002-SA5DN-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.0564 ng/Kg	0.0564U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX081 **Laboratory: LL**

EDD Filename: DX081_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-002-SA5DN-SB-4.0-5.0(RES)	OCDD	1.53 ng/Kg	1.53U ng/Kg
SL-002-SA5DN-SB-4.0-5.0(RES)	OCDF	0.315 ng/Kg	0.315U ng/Kg
SL-002-SA5DN-SB-9.0-10.0(RES)	1,2,3,4,6,7,8-HPCDD	0.280 ng/Kg	0.280U ng/Kg
SL-002-SA5DN-SB-9.0-10.0(RES)	1,2,3,4,6,7,8-HPCDF	0.111 ng/Kg	0.111U ng/Kg
SL-002-SA5DN-SB-9.0-10.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0403 ng/Kg	0.0403U ng/Kg
SL-002-SA5DN-SB-9.0-10.0(RES)	1,2,3,4,7,8-HXCDF	0.0526 ng/Kg	0.0526U ng/Kg
SL-002-SA5DN-SB-9.0-10.0(RES)	1,2,3,6,7,8-HXCDD	0.0314 ng/Kg	0.0314U ng/Kg
SL-002-SA5DN-SB-9.0-10.0(RES)	1,2,3,6,7,8-HXCDF	0.0350 ng/Kg	0.0350U ng/Kg
SL-002-SA5DN-SB-9.0-10.0(RES)	1,2,3,7,8,9-HXCDD	0.0544 ng/Kg	0.0544U ng/Kg
SL-002-SA5DN-SB-9.0-10.0(RES)	1,2,3,7,8,9-HXCDF	0.0501 ng/Kg	0.0501U ng/Kg
SL-002-SA5DN-SB-9.0-10.0(RES)	1,2,3,7,8-PECDD	0.0262 ng/Kg	0.0262U ng/Kg
SL-002-SA5DN-SB-9.0-10.0(RES)	1,2,3,7,8-PECDF	0.0124 ng/Kg	0.0124U ng/Kg
SL-002-SA5DN-SB-9.0-10.0(RES)	2,3,4,6,7,8-HXCDF	0.0501 ng/Kg	0.0501U ng/Kg
SL-002-SA5DN-SB-9.0-10.0(RES)	2,3,4,7,8-PECDF	0.0636 ng/Kg	0.0636U ng/Kg
SL-002-SA5DN-SB-9.0-10.0(RES)	OCDD	1.77 ng/Kg	1.77U ng/Kg
SL-002-SA5DN-SB-9.0-10.0(RES)	OCDF	0.263 ng/Kg	0.263U ng/Kg
SL-003-SA5DN-SB-0.5-1.5(RES)	1,2,3,4,6,7,8-HPCDF	0.291 ng/Kg	0.291U ng/Kg
SL-003-SA5DN-SB-0.5-1.5(RES)	1,2,3,4,7,8,9-HPCDF	0.126 ng/Kg	0.126U ng/Kg
SL-003-SA5DN-SB-0.5-1.5(RES)	1,2,3,4,7,8-HxCDD	0.0898 ng/Kg	0.0898U ng/Kg
SL-003-SA5DN-SB-0.5-1.5(RES)	1,2,3,4,7,8-HXCDF	0.179 ng/Kg	0.179U ng/Kg
SL-003-SA5DN-SB-0.5-1.5(RES)	1,2,3,6,7,8-HXCDF	0.144 ng/Kg	0.144U ng/Kg
SL-003-SA5DN-SB-0.5-1.5(RES)	1,2,3,7,8-PECDD	0.226 ng/Kg	0.226U ng/Kg
SL-003-SA5DN-SB-0.5-1.5(RES)	2,3,4,6,7,8-HXCDF	0.136 ng/Kg	0.136U ng/Kg
SL-003-SA5DN-SB-0.5-1.5(RES)	2,3,4,7,8-PECDF	0.241 ng/Kg	0.241U ng/Kg
SL-003-SA5DN-SB-0.5-1.5(RES)	OCDF	0.704 ng/Kg	0.704U ng/Kg
SL-003-SA5DN-SB-8.0-9.0(RES)	1,2,3,4,6,7,8-HPCDD	0.377 ng/Kg	0.377U ng/Kg
SL-003-SA5DN-SB-8.0-9.0(RES)	1,2,3,4,6,7,8-HPCDF	0.194 ng/Kg	0.194U ng/Kg
SL-003-SA5DN-SB-8.0-9.0(RES)	1,2,3,4,7,8,9-HPCDF	0.110 ng/Kg	0.110U ng/Kg
SL-003-SA5DN-SB-8.0-9.0(RES)	1,2,3,4,7,8-HxCDD	0.0831 ng/Kg	0.0831U ng/Kg
SL-003-SA5DN-SB-8.0-9.0(RES)	1,2,3,4,7,8-HXCDF	0.133 ng/Kg	0.133U ng/Kg
SL-003-SA5DN-SB-8.0-9.0(RES)	1,2,3,6,7,8-HXCDD	0.108 ng/Kg	0.108U ng/Kg
SL-003-SA5DN-SB-8.0-9.0(RES)	1,2,3,6,7,8-HXCDF	0.110 ng/Kg	0.110U ng/Kg
SL-003-SA5DN-SB-8.0-9.0(RES)	1,2,3,7,8,9-HXCDD	0.101 ng/Kg	0.101U ng/Kg
SL-003-SA5DN-SB-8.0-9.0(RES)	1,2,3,7,8,9-HXCDF	0.194 ng/Kg	0.194U ng/Kg
SL-003-SA5DN-SB-8.0-9.0(RES)	1,2,3,7,8-PECDD	0.163 ng/Kg	0.163U ng/Kg
SL-003-SA5DN-SB-8.0-9.0(RES)	1,2,3,7,8-PECDF	0.203 ng/Kg	0.203U ng/Kg
SL-003-SA5DN-SB-8.0-9.0(RES)	2,3,4,6,7,8-HXCDF	0.131 ng/Kg	0.131U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX081 **Laboratory: LL**

EDD Filename: DX081_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-003-SA5DN-SB-8.0-9.0(RES)	2,3,4,7,8-PECDF	0.184 ng/Kg	0.184U ng/Kg
SL-003-SA5DN-SB-8.0-9.0(RES)	2,3,7,8-TCDD	0.0860 ng/Kg	0.0860U ng/Kg
SL-003-SA5DN-SB-8.0-9.0(RES)	OCDD	1.11 ng/Kg	1.11U ng/Kg
SL-003-SA5DN-SB-8.0-9.0(RES)	OCDF	0.369 ng/Kg	0.369U ng/Kg
SL-004-SA5DN-SB-3.5-4.5(RES)	1,2,3,4,6,7,8-HPCDD	0.658 ng/Kg	0.658U ng/Kg
SL-004-SA5DN-SB-3.5-4.5(RES)	1,2,3,4,6,7,8-HPCDF	0.205 ng/Kg	0.205U ng/Kg
SL-004-SA5DN-SB-3.5-4.5(RES)	1,2,3,4,7,8,9-HPCDF	0.105 ng/Kg	0.105U ng/Kg
SL-004-SA5DN-SB-3.5-4.5(RES)	1,2,3,4,7,8-HxCDD	0.0813 ng/Kg	0.0813U ng/Kg
SL-004-SA5DN-SB-3.5-4.5(RES)	1,2,3,4,7,8-HXCDF	0.135 ng/Kg	0.135U ng/Kg
SL-004-SA5DN-SB-3.5-4.5(RES)	1,2,3,6,7,8-HXCDF	0.125 ng/Kg	0.125U ng/Kg
SL-004-SA5DN-SB-3.5-4.5(RES)	1,2,3,7,8-PECDD	0.218 ng/Kg	0.218U ng/Kg
SL-004-SA5DN-SB-3.5-4.5(RES)	2,3,4,6,7,8-HXCDF	0.124 ng/Kg	0.124U ng/Kg
SL-004-SA5DN-SB-3.5-4.5(RES)	2,3,4,7,8-PECDF	0.166 ng/Kg	0.166U ng/Kg
SL-004-SA5DN-SB-3.5-4.5(RES)	2,3,7,8-TCDD	0.0555 ng/Kg	0.0555U ng/Kg
SL-004-SA5DN-SB-3.5-4.5(RES)	OCDF	0.373 ng/Kg	0.373U ng/Kg
SL-004-SA5DN-SB-9.0-10.0(RES)	1,2,3,4,6,7,8-HPCDD	0.211 ng/Kg	0.211U ng/Kg
SL-004-SA5DN-SB-9.0-10.0(RES)	1,2,3,4,6,7,8-HPCDF	0.115 ng/Kg	0.115U ng/Kg
SL-004-SA5DN-SB-9.0-10.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0549 ng/Kg	0.0549U ng/Kg
SL-004-SA5DN-SB-9.0-10.0(RES)	1,2,3,4,7,8-HxCDD	0.0311 ng/Kg	0.0311U ng/Kg
SL-004-SA5DN-SB-9.0-10.0(RES)	1,2,3,4,7,8-HXCDF	0.0860 ng/Kg	0.0860U ng/Kg
SL-004-SA5DN-SB-9.0-10.0(RES)	1,2,3,6,7,8-HXCDD	0.0625 ng/Kg	0.0625U ng/Kg
SL-004-SA5DN-SB-9.0-10.0(RES)	1,2,3,6,7,8-HXCDF	0.0673 ng/Kg	0.0673U ng/Kg
SL-004-SA5DN-SB-9.0-10.0(RES)	1,2,3,7,8,9-HXCDD	0.0650 ng/Kg	0.0650U ng/Kg
SL-004-SA5DN-SB-9.0-10.0(RES)	1,2,3,7,8,9-HXCDF	0.0638 ng/Kg	0.0638U ng/Kg
SL-004-SA5DN-SB-9.0-10.0(RES)	1,2,3,7,8-PECDD	0.110 ng/Kg	0.110U ng/Kg
SL-004-SA5DN-SB-9.0-10.0(RES)	1,2,3,7,8-PECDF	0.0833 ng/Kg	0.0833U ng/Kg
SL-004-SA5DN-SB-9.0-10.0(RES)	2,3,4,6,7,8-HXCDF	0.0696 ng/Kg	0.0696U ng/Kg
SL-004-SA5DN-SB-9.0-10.0(RES)	2,3,4,7,8-PECDF	0.0952 ng/Kg	0.0952U ng/Kg
SL-004-SA5DN-SB-9.0-10.0(RES)	2,3,7,8-TCDD	0.0274 ng/Kg	0.0274U ng/Kg
SL-004-SA5DN-SB-9.0-10.0(RES)	OCDD	0.602 ng/Kg	0.602U ng/Kg
SL-004-SA5DN-SB-9.0-10.0(RES)	OCDF	0.212 ng/Kg	0.212U ng/Kg
SL-042-SA5A-SB-3.5-4.5(RES)	1,2,3,4,7,8,9-HPCDF	0.371 ng/Kg	0.371U ng/Kg
SL-042-SA5A-SB-3.5-4.5(RES)	1,2,3,4,7,8-HXCDF	0.215 ng/Kg	0.215U ng/Kg
SL-042-SA5A-SB-3.5-4.5(RES)	1,2,3,6,7,8-HXCDF	0.196 ng/Kg	0.196U ng/Kg
SL-042-SA5A-SB-3.5-4.5(RES)	1,2,3,7,8,9-HXCDD	0.260 ng/Kg	0.260U ng/Kg
SL-042-SA5A-SB-3.5-4.5(RES)	1,2,3,7,8,9-HXCDF	0.157 ng/Kg	0.157U ng/Kg
SL-042-SA5A-SB-3.5-4.5(RES)	1,2,3,7,8-PECDD	0.101 ng/Kg	0.101U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX081 **Laboratory: LL**

EDD Filename: DX081_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-042-SA5A-SB-3.5-4.5(RES)	1,2,3,7,8-PECDF	0.0835 ng/Kg	0.0835U ng/Kg
SL-042-SA5A-SB-3.5-4.5(RES)	2,3,4,7,8-PECDF	0.111 ng/Kg	0.111U ng/Kg
SL-094-SA8N-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.590 ng/Kg	0.590U ng/Kg
SL-094-SA8N-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.256 ng/Kg	0.256U ng/Kg
SL-094-SA8N-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0900 ng/Kg	0.0900U ng/Kg
SL-094-SA8N-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.105 ng/Kg	0.105U ng/Kg
SL-094-SA8N-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.112 ng/Kg	0.112U ng/Kg
SL-094-SA8N-SB-4.0-5.0(RES)	1,2,3,7,8-PECDD	0.205 ng/Kg	0.205U ng/Kg
SL-094-SA8N-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.121 ng/Kg	0.121U ng/Kg
SL-094-SA8N-SB-4.0-5.0(RES)	2,3,7,8-TCDD	0.0319 ng/Kg	0.0319U ng/Kg
SL-094-SA8N-SB-4.0-5.0(RES)	OCDF	0.390 ng/Kg	0.390U ng/Kg
SL-094-SA8N-SB-7.5-8.5(RES)	1,2,3,4,6,7,8-HPCDD	0.314 ng/Kg	0.314U ng/Kg
SL-094-SA8N-SB-7.5-8.5(RES)	1,2,3,4,6,7,8-HPCDF	0.167 ng/Kg	0.167U ng/Kg
SL-094-SA8N-SB-7.5-8.5(RES)	1,2,3,4,7,8,9-HPCDF	0.0740 ng/Kg	0.0740U ng/Kg
SL-094-SA8N-SB-7.5-8.5(RES)	1,2,3,4,7,8-HXCDF	0.0515 ng/Kg	0.0515U ng/Kg
SL-094-SA8N-SB-7.5-8.5(RES)	1,2,3,6,7,8-HXCDD	0.0441 ng/Kg	0.0441U ng/Kg
SL-094-SA8N-SB-7.5-8.5(RES)	1,2,3,6,7,8-HXCDF	0.0485 ng/Kg	0.0485U ng/Kg
SL-094-SA8N-SB-7.5-8.5(RES)	1,2,3,7,8,9-HXCDD	0.0648 ng/Kg	0.0648U ng/Kg
SL-094-SA8N-SB-7.5-8.5(RES)	1,2,3,7,8,9-HXCDF	0.0750 ng/Kg	0.0750U ng/Kg
SL-094-SA8N-SB-7.5-8.5(RES)	1,2,3,7,8-PECDF	0.0187 ng/Kg	0.0187U ng/Kg
SL-094-SA8N-SB-7.5-8.5(RES)	2,3,4,6,7,8-HXCDF	0.0702 ng/Kg	0.0702U ng/Kg
SL-094-SA8N-SB-7.5-8.5(RES)	2,3,4,7,8-PECDF	0.0808 ng/Kg	0.0808U ng/Kg
SL-094-SA8N-SB-7.5-8.5(RES)	OCDD	0.894 ng/Kg	0.894U ng/Kg
SL-094-SA8N-SB-7.5-8.5(RES)	OCDF	0.201 ng/Kg	0.201U ng/Kg
SL-095-SA8N-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.257 ng/Kg	0.257U ng/Kg
SL-095-SA8N-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.135 ng/Kg	0.135U ng/Kg
SL-095-SA8N-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0866 ng/Kg	0.0866U ng/Kg
SL-095-SA8N-SB-4.0-5.0(RES)	1,2,3,4,7,8-HxCDD	0.0474 ng/Kg	0.0474U ng/Kg
SL-095-SA8N-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.0425 ng/Kg	0.0425U ng/Kg
SL-095-SA8N-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDD	0.0650 ng/Kg	0.0650U ng/Kg
SL-095-SA8N-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.0318 ng/Kg	0.0318U ng/Kg
SL-095-SA8N-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDD	0.0791 ng/Kg	0.0791U ng/Kg
SL-095-SA8N-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.126 ng/Kg	0.126U ng/Kg
SL-095-SA8N-SB-4.0-5.0(RES)	1,2,3,7,8-PECDD	0.0273 ng/Kg	0.0273U ng/Kg
SL-095-SA8N-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.0459 ng/Kg	0.0459U ng/Kg
SL-095-SA8N-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.0557 ng/Kg	0.0557U ng/Kg
SL-095-SA8N-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.0672 ng/Kg	0.0672U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX081 **Laboratory: LL**

EDD Filename: DX081_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-095-SA8N-SB-4.0-5.0(RES)	OCDD	0.579 ng/Kg	0.579U ng/Kg
SL-095-SA8N-SB-4.0-5.0(RES)	OCDF	0.285 ng/Kg	0.285U ng/Kg
SL-096-SA8N-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.342 ng/Kg	0.342U ng/Kg
SL-096-SA8N-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.161 ng/Kg	0.161U ng/Kg
SL-096-SA8N-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0677 ng/Kg	0.0677U ng/Kg
SL-096-SA8N-SB-4.0-5.0(RES)	1,2,3,4,7,8-HxCDD	0.0498 ng/Kg	0.0498U ng/Kg
SL-096-SA8N-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.0645 ng/Kg	0.0645U ng/Kg
SL-096-SA8N-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDD	0.208 ng/Kg	0.208U ng/Kg
SL-096-SA8N-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.0424 ng/Kg	0.0424U ng/Kg
SL-096-SA8N-SB-4.0-5.0(RES)	1,2,3,7,8-PECDD	0.0431 ng/Kg	0.0431U ng/Kg
SL-096-SA8N-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.0871 ng/Kg	0.0871U ng/Kg
SL-096-SA8N-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.0839 ng/Kg	0.0839U ng/Kg
SL-096-SA8N-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.0521 ng/Kg	0.0521U ng/Kg
SL-096-SA8N-SB-4.0-5.0(RES)	OCDD	0.767 ng/Kg	0.767U ng/Kg
SL-096-SA8N-SB-4.0-5.0(RES)	OCDF	0.215 ng/Kg	0.215U ng/Kg
SL-096-SA8N-SB-9.0-10.0(RES)	1,2,3,4,6,7,8-HPCDD	0.321 ng/Kg	0.321U ng/Kg
SL-096-SA8N-SB-9.0-10.0(RES)	1,2,3,4,6,7,8-HPCDF	0.168 ng/Kg	0.168U ng/Kg
SL-096-SA8N-SB-9.0-10.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0771 ng/Kg	0.0771U ng/Kg
SL-096-SA8N-SB-9.0-10.0(RES)	1,2,3,4,7,8-HXCDF	0.0859 ng/Kg	0.0859U ng/Kg
SL-096-SA8N-SB-9.0-10.0(RES)	1,2,3,6,7,8-HXCDF	0.0695 ng/Kg	0.0695U ng/Kg
SL-096-SA8N-SB-9.0-10.0(RES)	1,2,3,7,8,9-HXCDF	0.244 ng/Kg	0.244U ng/Kg
SL-096-SA8N-SB-9.0-10.0(RES)	1,2,3,7,8-PECDD	0.0984 ng/Kg	0.0984U ng/Kg
SL-096-SA8N-SB-9.0-10.0(RES)	1,2,3,7,8-PECDF	0.0656 ng/Kg	0.0656U ng/Kg
SL-096-SA8N-SB-9.0-10.0(RES)	2,3,4,6,7,8-HXCDF	0.0614 ng/Kg	0.0614U ng/Kg
SL-096-SA8N-SB-9.0-10.0(RES)	2,3,4,7,8-PECDF	0.0580 ng/Kg	0.0580U ng/Kg
SL-096-SA8N-SB-9.0-10.0(RES)	OCDD	0.886 ng/Kg	0.886U ng/Kg
SL-096-SA8N-SB-9.0-10.0(RES)	OCDF	0.304 ng/Kg	0.304U ng/Kg
SL-104-SA8N-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.337 ng/Kg	0.337U ng/Kg
SL-104-SA8N-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.216 ng/Kg	0.216U ng/Kg
SL-104-SA8N-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.110 ng/Kg	0.110U ng/Kg
SL-104-SA8N-SB-4.0-5.0(RES)	1,2,3,4,7,8-HxCDD	0.0591 ng/Kg	0.0591U ng/Kg
SL-104-SA8N-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.102 ng/Kg	0.102U ng/Kg
SL-104-SA8N-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDD	0.111 ng/Kg	0.111U ng/Kg
SL-104-SA8N-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.0846 ng/Kg	0.0846U ng/Kg
SL-104-SA8N-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDD	0.0804 ng/Kg	0.0804U ng/Kg
SL-104-SA8N-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.134 ng/Kg	0.134U ng/Kg
SL-104-SA8N-SB-4.0-5.0(RES)	1,2,3,7,8-PECDD	0.0988 ng/Kg	0.0988U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX081 **Laboratory: LL**

EDD Filename: DX081_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-104-SA8N-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.0761 ng/Kg	0.0761U ng/Kg
SL-104-SA8N-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.115 ng/Kg	0.115U ng/Kg
SL-104-SA8N-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.109 ng/Kg	0.109U ng/Kg
SL-104-SA8N-SB-4.0-5.0(RES)	2,3,7,8-TCDD	0.0239 ng/Kg	0.0239U ng/Kg
SL-104-SA8N-SB-4.0-5.0(RES)	OCDD	1.20 ng/Kg	1.20U ng/Kg
SL-104-SA8N-SB-4.0-5.0(RES)	OCDF	0.304 ng/Kg	0.304U ng/Kg
SL-104-SA8N-SB-9.0-10.0(RES)	1,2,3,4,6,7,8-HPCDD	0.257 ng/Kg	0.257U ng/Kg
SL-104-SA8N-SB-9.0-10.0(RES)	1,2,3,4,6,7,8-HPCDF	0.231 ng/Kg	0.231U ng/Kg
SL-104-SA8N-SB-9.0-10.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0827 ng/Kg	0.0827U ng/Kg
SL-104-SA8N-SB-9.0-10.0(RES)	1,2,3,4,7,8-HxCDD	0.104 ng/Kg	0.104U ng/Kg
SL-104-SA8N-SB-9.0-10.0(RES)	1,2,3,4,7,8-HXCDF	0.131 ng/Kg	0.131U ng/Kg
SL-104-SA8N-SB-9.0-10.0(RES)	1,2,3,6,7,8-HXCDD	0.0850 ng/Kg	0.0850U ng/Kg
SL-104-SA8N-SB-9.0-10.0(RES)	1,2,3,6,7,8-HXCDF	0.131 ng/Kg	0.131U ng/Kg
SL-104-SA8N-SB-9.0-10.0(RES)	1,2,3,7,8,9-HXCDD	0.0994 ng/Kg	0.0994U ng/Kg
SL-104-SA8N-SB-9.0-10.0(RES)	1,2,3,7,8,9-HXCDF	0.118 ng/Kg	0.118U ng/Kg
SL-104-SA8N-SB-9.0-10.0(RES)	2,3,4,6,7,8-HXCDF	0.145 ng/Kg	0.145U ng/Kg
SL-104-SA8N-SB-9.0-10.0(RES)	2,3,4,7,8-PECDF	0.182 ng/Kg	0.182U ng/Kg
SL-104-SA8N-SB-9.0-10.0(RES)	OCDD	0.651 ng/Kg	0.651U ng/Kg
SL-104-SA8N-SB-9.0-10.0(RES)	OCDF	0.288 ng/Kg	0.288U ng/Kg
SL-167-SA5A-SB-1.0-2.0(RES)	1,2,3,4,7,8,9-HPCDF	0.172 ng/Kg	0.172U ng/Kg
SL-167-SA5A-SB-1.0-2.0(RES)	1,2,3,6,7,8-HXCDF	0.128 ng/Kg	0.128U ng/Kg
SL-167-SA5A-SB-1.0-2.0(RES)	1,2,3,7,8,9-HXCDD	0.156 ng/Kg	0.156U ng/Kg
SL-167-SA5A-SB-1.0-2.0(RES)	1,2,3,7,8,9-HXCDF	0.104 ng/Kg	0.104U ng/Kg
SL-167-SA5A-SB-1.0-2.0(RES)	1,2,3,7,8-PECDD	0.0568 ng/Kg	0.0568U ng/Kg
SL-167-SA5A-SB-1.0-2.0(RES)	1,2,3,7,8-PECDF	0.0854 ng/Kg	0.0854U ng/Kg
SL-167-SA5A-SB-1.0-2.0(RES)	2,3,4,6,7,8-HXCDF	0.126 ng/Kg	0.126U ng/Kg
SL-167-SA5A-SB-1.0-2.0(RES)	2,3,4,7,8-PECDF	0.0833 ng/Kg	0.0833U ng/Kg
SL-167-SA5A-SB-1.0-2.0(RES)	2,3,7,8-TCDD	0.0278 ng/Kg	0.0278U ng/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DX081 **Laboratory: LL**

EDD Filename: DX081_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-042-SA5A-SB-3.5-4.5MSD	1,2,3,4,6,7,8-HPCDD	-	147	40.00-135.00	39 (20.00)	1,2,3,4,6,7,8-HPCDD	J (all detects)
(SL-042-SA5A-SB-3.5-4.5)	OCDD	-	343	40.00-135.00	86 (20.00)	OCDD	

Field Duplicate RPD Report

Lab Reporting Batch ID: DX081 **Laboratory: LL**

EDD Filename: PrepDX081_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 160.3M
Matrix: SO

Analyte	Concentration (%)		Sample RPD	eQAPP RPD	Flag
	SL-042-SA5A-SB-3.5-4.5	DUP-17-SA5A-QC-051611			
MOISTURE	12.2	11.9	2		No Qualifiers Applied

Method: 1613B
Matrix: SO

Analyte	Concentration (ng/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-042-SA5A-SB-3.5-4.5	DUP-17-SA5A-QC-051611			
OCDD	150	247	49	50.00	No Qualifiers Applied
1,2,3,4,6,7,8-HPCDD	12.6	24.2	63	50.00	J(all detects) UJ(all non-detects)
1,2,3,4,6,7,8-HPCDF	2.06	4.92	82	50.00	
1,2,3,4,7,8,9-HPCDF	0.371	1.11	100	50.00	
1,2,3,4,7,8-HxCDD	0.178	0.421	81	50.00	
1,2,3,4,7,8-HXCDF	0.215	0.543	87	50.00	
1,2,3,6,7,8-HXCDD	0.579	1.42	84	50.00	
1,2,3,6,7,8-HXCDF	0.196	0.512	89	50.00	
1,2,3,7,8,9-HXCDD	0.260	0.701	92	50.00	
1,2,3,7,8,9-HXCDF	0.157	0.403	88	50.00	
1,2,3,7,8-PECDD	0.101	0.307	101	50.00	
1,2,3,7,8-PECDF	0.0835	0.253	101	50.00	
2,3,4,6,7,8-HXCDF	0.292	0.773	90	50.00	
2,3,4,7,8-PECDF	0.111	0.343	102	50.00	
2,3,7,8-TCDD	1.09 U	0.114	200	50.00	
2,3,7,8-TCDF	0.0432	0.102	81	50.00	
OCDF	4.68	10.9	80	50.00	

Reporting Limit Outliers

Lab Reporting Batch ID: DX081 **Laboratory: LL**

EDD Filename: DX081_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1613B
Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB15-SA5A-SB-051611	1,2,3,4,6,7,8-HPCDD	J	3.17	10.7	PQL	pg/L	J (all detects)
	1,2,3,4,6,7,8-HPCDF	J	2.21	10.7	PQL	pg/L	
	1,2,3,4,7,8,9-HPCDF	J	1.01	10.7	PQL	pg/L	
	1,2,3,4,7,8-HxCDD	J	0.449	10.7	PQL	pg/L	
	1,2,3,4,7,8-HXCDF	J	0.477	10.7	PQL	pg/L	
	1,2,3,6,7,8-HXCDD	JQ	0.644	10.7	PQL	pg/L	
	1,2,3,6,7,8-HXCDF	J	0.609	10.7	PQL	pg/L	
	1,2,3,7,8,9-HXCDD	J	0.749	10.7	PQL	pg/L	
	1,2,3,7,8,9-HXCDF	JQ	0.577	10.7	PQL	pg/L	
	1,2,3,7,8-PECDD	JQ	0.430	10.7	PQL	pg/L	
	1,2,3,7,8-PECDF	J	0.168	10.7	PQL	pg/L	
	2,3,4,6,7,8-HXCDF	JQ	0.879	10.7	PQL	pg/L	
	2,3,4,7,8-PECDF	J	0.720	10.7	PQL	pg/L	
	2,3,7,8-TCDD	JQ	0.482	2.14	PQL	pg/L	
	OCDD	JQ	5.95	21.4	PQL	pg/L	
	OCDF	JQ	0.932	21.4	PQL	pg/L	

Method: 1613B
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-17-SA5A-QC-051611	1,2,3,4,6,7,8-HPCDF	JB	4.92	5.54	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JB	1.11	5.54	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.421	5.54	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.543	5.54	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	1.42	5.54	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.512	5.54	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.701	5.54	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.403	5.54	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.307	5.54	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.253	5.54	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.773	5.54	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.343	5.54	PQL	ng/Kg	
	2,3,7,8-TCDD	JB	0.114	1.11	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.102	1.11	PQL	ng/Kg	
	OCDF	JB	10.9	11.1	PQL	ng/Kg	
SL-002-SA5DN-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JB	0.341	5.66	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JBQ	0.134	5.66	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0634	5.66	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.0352	5.66	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.133	5.66	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0415	5.66	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.244	5.66	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.343	5.66	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0810	5.66	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0609	5.66	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0924	5.66	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0564	5.66	PQL	ng/Kg	
	OCDD	JB	1.53	11.3	PQL	ng/Kg	
	OCDF	JBQ	0.315	11.3	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX081 **Laboratory: LL**

EDD Filename: DX081_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-002-SA5DN-SB-9.0-10.0	1,2,3,4,6,7,8-HPCDD	JB	0.280	5.55	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JBQ	0.111	5.55	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0403	5.55	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.0526	5.55	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.0314	5.55	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0350	5.55	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.0544	5.55	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.0501	5.55	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.0262	5.55	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0124	5.55	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0501	5.55	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0636	5.55	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.0203	1.11	PQL	ng/Kg	
	OCDD	JBQ	1.77	11.1	PQL	ng/Kg	
	OCDF	JBQ	0.263	11.1	PQL	ng/Kg	
SL-003-SA5DN-SB-0.5-1.5	1,2,3,4,6,7,8-HPCDD	JB	1.11	5.95	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.291	5.95	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.126	5.95	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.0898	5.95	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.179	5.95	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.615	5.95	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.144	5.95	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.988	5.95	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JB	1.09	5.95	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.226	5.95	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.367	5.95	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.136	5.95	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.241	5.95	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.143	1.19	PQL	ng/Kg	
	OCDF	JBQ	0.704	11.9	PQL	ng/Kg	
SL-003-SA5DN-SB-8.0-9.0	1,2,3,4,6,7,8-HPCDD	JB	0.377	5.55	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.194	5.55	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.110	5.55	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.0831	5.55	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.133	5.55	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.108	5.55	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.110	5.55	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.101	5.55	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.194	5.55	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.163	5.55	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.203	5.55	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.131	5.55	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.184	5.55	PQL	ng/Kg	
	2,3,7,8-TCDD	JB	0.0860	1.11	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.0652	1.11	PQL	ng/Kg	
	OCDD	JBQ	1.11	11.1	PQL	ng/Kg	
	OCDF	JB	0.369	11.1	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX081 **Laboratory: LL**

EDD Filename: DX081_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-004-SA5DN-SB-3.5-4.5	1,2,3,4,6,7,8-HPCDD	JB	0.658	5.98	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.205	5.98	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.105	5.98	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.0813	5.98	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.135	5.98	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.563	5.98	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.125	5.98	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.939	5.98	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	1.54	5.98	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.218	5.98	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.437	5.98	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.124	5.98	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.166	5.98	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0555	1.20	PQL	ng/Kg	
	OCDD	JB	6.06	12.0	PQL	ng/Kg	
	OCDF	JBQ	0.373	12.0	PQL	ng/Kg	
SL-004-SA5DN-SB-9.0-10.0	1,2,3,4,6,7,8-HPCDD	JB	0.211	5.60	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JBQ	0.115	5.60	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0549	5.60	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0311	5.60	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0860	5.60	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.0625	5.60	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0673	5.60	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.0650	5.60	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.0638	5.60	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.110	5.60	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0833	5.60	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.0696	5.60	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.0952	5.60	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0274	1.12	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.0461	1.12	PQL	ng/Kg	
	OCDD	JB	0.602	11.2	PQL	ng/Kg	
	OCDF	JB	0.212	11.2	PQL	ng/Kg	
SL-042-SA5A-SB-3.5-4.5	1,2,3,4,6,7,8-HPCDF	JB	2.06	5.45	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JB	0.371	5.45	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.178	5.45	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.215	5.45	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.579	5.45	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.196	5.45	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.260	5.45	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.157	5.45	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.101	5.45	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0835	5.45	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.292	5.45	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.111	5.45	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.0432	1.09	PQL	ng/Kg	
	OCDF	JB	4.68	10.9	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX081 **Laboratory: LL**

EDD Filename: DX081_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-094-SA8N-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JBQ	0.590	5.95	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JBQ	0.256	5.95	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.0900	5.95	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.105	5.95	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.584	5.95	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.112	5.95	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	1.02	5.95	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	1.47	5.95	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	0.205	5.95	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.313	5.95	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.121	5.95	PQL	ng/Kg	
	2,3,7,8-TCDD	JB	0.0319	1.19	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.0606	1.19	PQL	ng/Kg	
	OCDD	JB	2.12	11.9	PQL	ng/Kg	
	OCDF	JBQ	0.390	11.9	PQL	ng/Kg	
SL-094-SA8N-SB-7.5-8.5	1,2,3,4,6,7,8-HPCDD	JBQ	0.314	5.52	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.167	5.52	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0740	5.52	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0515	5.52	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.0441	5.52	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0485	5.52	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.0648	5.52	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.0750	5.52	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDF	JB	0.0187	5.52	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0702	5.52	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.0808	5.52	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.0195	1.10	PQL	ng/Kg	
	OCDD	JB	0.894	11.0	PQL	ng/Kg	
	OCDF	JB	0.201	11.0	PQL	ng/Kg	
SL-095-SA8N-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JB	0.257	5.65	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.135	5.65	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0866	5.65	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0474	5.65	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.0425	5.65	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.0650	5.65	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0318	5.65	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.0791	5.65	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JB	0.126	5.65	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0273	5.65	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.0459	5.65	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0557	5.65	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0672	5.65	PQL	ng/Kg	
	OCDD	JB	0.579	11.3	PQL	ng/Kg	
	OCDF	JB	0.285	11.3	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX081 **Laboratory: LL**

EDD Filename: DX081_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-096-SA8N-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JB	0.342	5.83	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.161	5.83	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.0677	5.83	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0498	5.83	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0645	5.83	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.208	5.83	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0424	5.83	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.375	5.83	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.585	5.83	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.0431	5.83	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.0871	5.83	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0839	5.83	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.0521	5.83	PQL	ng/Kg	
	OCDD	JB	0.767	11.7	PQL	ng/Kg	
	OCDF	JBQ	0.215	11.7	PQL	ng/Kg	
SL-096-SA8N-SB-9.0-10.0	1,2,3,4,6,7,8-HPCDD	JB	0.321	5.72	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.168	5.72	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.0771	5.72	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.0859	5.72	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.286	5.72	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0695	5.72	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.504	5.72	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.244	5.72	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0984	5.72	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.0656	5.72	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0614	5.72	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0580	5.72	PQL	ng/Kg	
	OCDD	JB	0.886	11.4	PQL	ng/Kg	
	OCDF	JB	0.304	11.4	PQL	ng/Kg	
SL-104-SA8N-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JB	0.337	5.54	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.216	5.54	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.110	5.54	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0591	5.54	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.102	5.54	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.111	5.54	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0846	5.54	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.0804	5.54	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.134	5.54	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0988	5.54	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0761	5.54	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.115	5.54	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.109	5.54	PQL	ng/Kg	
	2,3,7,8-TCDD	JB	0.0239	1.11	PQL	ng/Kg	
	OCDD	JB	1.20	11.1	PQL	ng/Kg	
	OCDF	JB	0.304	11.1	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX081 **Laboratory: LL**

EDD Filename: DX081_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-104-SA8N-SB-9.0-10.0	1,2,3,4,6,7,8-HPCDD	JB	0.257	5.81	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.231	5.81	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.0827	5.81	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.104	5.81	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.131	5.81	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.0850	5.81	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.131	5.81	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.0994	5.81	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.118	5.81	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.170	5.81	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.145	5.81	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.182	5.81	PQL	ng/Kg	
	OCDD	JB	0.651	11.6	PQL	ng/Kg	
	OCDF	JB	0.288	11.6	PQL	ng/Kg	
SL-167-SA5A-SB-1.0-2.0	1,2,3,4,6,7,8-HPCDF	JB	1.70	5.30	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JBQ	0.172	5.30	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.337	5.30	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.324	5.30	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.128	5.30	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.156	5.30	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.104	5.30	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0568	5.30	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0854	5.30	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.126	5.30	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.0833	5.30	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0278	1.06	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.0288	1.06	PQL	ng/Kg	
	OCDF	JB	5.40	10.6	PQL	ng/Kg	

SAMPLE DELIVERY GROUP

DX082

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
16-May-2011	SL-254-SA5A-SS-0.0-0.5	6290784	N	METHOD	1613B	III
17-May-2011	SL-072-SA5DN-SS-0-0.5	6290788	N	METHOD	1613B	III
17-May-2011	SL-072-SA5DN-SS-0-0.5MS	6290789	MS	METHOD	1613B	III
17-May-2011	SL-072-SA5DN-SS-0-0.5MSD	6290790	MSD	METHOD	1613B	III
17-May-2011	DUP-01-SA5DN-QC-051711	6290785	FD	METHOD	1613B	III
17-May-2011	SL-075-SA5DN-SS-0.0-0.5	6290792	N	METHOD	1613B	III
17-May-2011	SL-076-SA5DN-SS-0.0-0.5	6290793	N	METHOD	1613B	III
17-May-2011	SL-074-SA5DN-SS-0.0-0.5	6290791	N	METHOD	1613B	III
17-May-2011	SL-067-SA5DN-SS-0.0-0.5	6290787	N	METHOD	1613B	III
17-May-2011	SL-079-SA5DN-SS-0.0-0.5	6290794	N	METHOD	1613B	III
17-May-2011	SL-080-SA5DN-SS-0.0-0.5	6290795	N	METHOD	1613B	III
17-May-2011	EB01-SA5DN-SS-051711	6290801	EB	METHOD	1613B	III
17-May-2011	SL-082-SA5DN-SS-0.0-0.5	6290797	N	METHOD	1613B	III
17-May-2011	SL-081-SA5DN-SS-0.0-0.5	6290796	N	METHOD	1613B	III
17-May-2011	SL-084-SA5DN-SS-0.0-0.5	6290799	N	METHOD	1613B	III
17-May-2011	SL-083-SA5DN-SS-0.0-0.5	6290798	N	METHOD	1613B	III
17-May-2011	SL-206-SA5DN-SS-0.0-0.5	6290800	N	METHOD	1613B	III
17-May-2011	SL-066-SA5DN-SS-0.0-0.5	6290786	N	METHOD	1613B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DX082 **Laboratory: LL**

EDD Filename: PrepDX082_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA
Method: 1613B **Matrix:** AQ

Sample ID: EB01-SA5DN-SS-051711 **Collected:** 5/17/2011 12:30:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	2.44	JB	0.263	MDL	10.5	PQL	pg/L	U	B
1,2,3,4,6,7,8-HPCDF	1.41	JBQ	0.133	MDL	10.5	PQL	pg/L	U	B
1,2,3,4,7,8,9-HPCDF	0.618	JB	0.159	MDL	10.5	PQL	pg/L	U	B
1,2,3,4,7,8-HxCDD	0.324	JBQ	0.213	MDL	10.5	PQL	pg/L	U	B
1,2,3,4,7,8-HXCDF	0.540	JBQ	0.200	MDL	10.5	PQL	pg/L	U	B
1,2,3,6,7,8-HXCDD	0.467	JBQ	0.220	MDL	10.5	PQL	pg/L	U	B
1,2,3,6,7,8-HXCDF	0.439	JBQ	0.187	MDL	10.5	PQL	pg/L	U	B
1,2,3,7,8,9-HXCDF	0.837	JBQ	0.193	MDL	10.5	PQL	pg/L	U	B
1,2,3,7,8-PECDF	0.380	JBQ	0.182	MDL	10.5	PQL	pg/L	U	B
2,3,4,6,7,8-HXCDF	0.556	JB	0.180	MDL	10.5	PQL	pg/L	U	B
2,3,4,7,8-PECDF	0.717	JBQ	0.156	MDL	10.5	PQL	pg/L	U	B
2,3,7,8-TCDD	0.390	JBQ	0.363	MDL	2.09	PQL	pg/L	U	B
OCDD	4.71	JBQ	0.298	MDL	20.9	PQL	pg/L	U	B
OCDF	1.38	JBQ	0.356	MDL	20.9	PQL	pg/L	U	B

Method Category: SVOA
Method: 1613B **Matrix:** SO

Sample ID: DUP-01-SA5DN-QC-051711 **Collected:** 5/17/2011 8:45:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	1.55	JB	0.0606	MDL	5.44	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	2.29	JB	0.0593	MDL	5.44	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	2.00	JB	0.0612	MDL	5.44	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	4.96	JB	0.0600	MDL	5.44	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	1.34	JB	0.0548	MDL	5.44	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	3.53	JB	0.0591	MDL	5.44	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	1.08	JB	0.0525	MDL	5.44	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.995	JB	0.0439	MDL	5.44	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.711	JBQ	0.0377	MDL	5.44	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	1.21	JB	0.0465	MDL	5.44	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.965	JB	0.0365	MDL	5.44	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.112	JQ	0.0204	MDL	1.09	PQL	ng/Kg	J	Z, FD
2,3,7,8-TCDF	0.249	J	0.0724	MDL	1.09	PQL	ng/Kg	J	Z, FD

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX082 **Laboratory: LL**

EDD Filename: PrepDX082_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: **SL-066-SA5DN-SS-0.0-0.5** ***Collected:*** **5/17/2011 3:25:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	2.32	JB	0.0514	MDL	5.35	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	2.01	JB	0.0540	MDL	5.35	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	1.44	JB	0.0487	MDL	5.35	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	1.72	JB	0.0434	MDL	5.35	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	2.39	JB	0.0410	MDL	5.35	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	1.24	JBQ	0.0452	MDL	5.35	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.553	JB	0.0384	MDL	5.35	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	1.74	JB	0.0345	MDL	5.35	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	1.13	JBQ	0.0372	MDL	5.35	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.290	JQ	0.0215	MDL	1.07	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.624	J	0.0689	MDL	1.07	PQL	ng/Kg	J	Z

Sample ID: **SL-067-SA5DN-SS-0.0-0.5** ***Collected:*** **5/17/2011 10:15:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	1.79	JB	0.0604	MDL	5.40	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	1.72	JB	0.0543	MDL	5.40	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	2.08	JB	0.0710	MDL	5.40	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	1.28	JB	0.0594	MDL	5.40	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	4.37	JB	0.0518	MDL	5.40	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	1.76	JB	0.0498	MDL	5.40	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	1.03	JB	0.0558	MDL	5.40	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.726	JB	0.0358	MDL	5.40	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	1.38	JB	0.0403	MDL	5.40	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.997	JB	0.0360	MDL	5.40	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.296	JQ	0.0211	MDL	1.08	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.758	J	0.0754	MDL	1.08	PQL	ng/Kg	J	Z

Sample ID: **SL-072-SA5DN-SS-0-0.5** ***Collected:*** **5/17/2011 8:40:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	112	B	0.160	MDL	5.51	PQL	ng/Kg	J	Q
1,2,3,4,7,8,9-HPCDF	1.10	JB	0.0726	MDL	5.51	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	2.42	JB	0.0818	MDL	5.51	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	1.52	JB	0.0902	MDL	5.51	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX082 **Laboratory: LL**

EDD Filename: PrepDX082_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: **SL-072-SA5DN-SS-0-0.5** ***Collected:*** **5/17/2011 8:40:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,6,7,8-HXCDD	4.53	JB	0.0853	MDL	5.51	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	1.39	JB	0.0792	MDL	5.51	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	3.36	JB	0.0812	MDL	5.51	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.855	JB	0.0570	MDL	5.51	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	1.23	JB	0.0543	MDL	5.51	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.662	JB	0.0417	MDL	5.51	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	1.02	JB	0.0482	MDL	5.51	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	1.11	JB	0.0396	MDL	5.51	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.242	J	0.0269	MDL	1.10	PQL	ng/Kg	J	Z, FD
2,3,7,8-TCDF	0.483	J	0.0680	MDL	1.10	PQL	ng/Kg	J	Z, FD

Sample ID: **SL-074-SA5DN-SS-0.0-0.5** ***Collected:*** **5/17/2011 10:00:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	1.67	JB	0.0512	MDL	5.33	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	1.04	JB	0.0572	MDL	5.33	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	1.62	JB	0.0534	MDL	5.33	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	4.05	JB	0.0605	MDL	5.33	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	1.24	JB	0.0428	MDL	5.33	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	2.92	JB	0.0600	MDL	5.33	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	2.14	JB	0.0415	MDL	5.33	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.911	JB	0.0436	MDL	5.33	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.886	JBQ	0.0270	MDL	5.33	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	1.37	JB	0.0370	MDL	5.33	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.971	JB	0.0245	MDL	5.33	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.221	J	0.0215	MDL	1.07	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.362	JQ	0.0438	MDL	1.07	PQL	ng/Kg	J	Z

Sample ID: **SL-075-SA5DN-SS-0.0-0.5** ***Collected:*** **5/17/2011 9:10:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	0.728	JB	0.0412	MDL	5.95	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.336	JB	0.0535	MDL	5.95	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	1.14	JB	0.101	MDL	5.95	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	2.25	JB	0.0548	MDL	5.95	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX082 **Laboratory: LL**

EDD Filename: PrepDX082_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: **SL-075-SA5DN-SS-0.0-0.5** ***Collected:*** **5/17/2011 9:10:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,6,7,8-HXCDF	0.797	JB	0.0834	MDL	5.95	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	1.96	JB	0.0499	MDL	5.95	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	1.52	JB	0.0413	MDL	5.95	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.320	JBQ	0.0396	MDL	5.95	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.368	JB	0.0344	MDL	5.95	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.598	JB	0.0350	MDL	5.95	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.887	JBQ	0.0338	MDL	5.95	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0396	JQ	0.0231	MDL	1.19	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.221	JQ	0.0544	MDL	1.19	PQL	ng/Kg	J	Z

Sample ID: **SL-076-SA5DN-SS-0.0-0.5** ***Collected:*** **5/17/2011 9:35:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	1.06	JB	0.0533	MDL	5.38	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	1.66	JB	0.0719	MDL	5.38	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	1.11	JB	0.0547	MDL	5.38	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	5.23	JB	0.0768	MDL	5.38	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.682	JB	0.0525	MDL	5.38	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	4.12	JB	0.0719	MDL	5.38	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	1.23	JB	0.0481	MDL	5.38	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.953	JB	0.0569	MDL	5.38	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.460	JB	0.0315	MDL	5.38	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.753	JB	0.0457	MDL	5.38	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.729	JB	0.0303	MDL	5.38	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.258	JBQ	0.0234	MDL	1.08	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.262	JBQ	0.0612	MDL	1.08	PQL	ng/Kg	J	Z

Sample ID: **SL-079-SA5DN-SS-0.0-0.5** ***Collected:*** **5/17/2011 10:45:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	1.65	JB	0.0448	MDL	5.51	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	1.77	JB	0.0571	MDL	5.51	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	1.83	JB	0.0927	MDL	5.51	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	5.45	JB	0.0604	MDL	5.51	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	1.47	JB	0.0810	MDL	5.51	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX082 **Laboratory: LL**

EDD Filename: PrepDX082_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-079-SA5DN-SS-0.0-0.5 **Collected:** 5/17/2011 10:45:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,7,8,9-HXCDD	4.37	JB	0.0531	MDL	5.51	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	1.55	JB	0.0382	MDL	5.51	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.992	JB	0.0396	MDL	5.51	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.433	JB	0.0311	MDL	5.51	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	1.16	JB	0.0315	MDL	5.51	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.684	JB	0.0287	MDL	5.51	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.188	JQ	0.0224	MDL	1.10	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.325	JQ	0.0544	MDL	1.10	PQL	ng/Kg	J	Z

Sample ID: SL-080-SA5DN-SS-0.0-0.5 **Collected:** 5/17/2011 11:10:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	1.23	JB	0.0634	MDL	5.51	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	2.02	JB	0.0972	MDL	5.51	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	1.40	JB	0.0599	MDL	5.51	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	5.41	JB	0.103	MDL	5.51	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.819	JB	0.0568	MDL	5.51	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	4.94	JB	0.0996	MDL	5.51	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	1.46	JB	0.0614	MDL	5.51	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	1.31	JB	0.0663	MDL	5.51	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.940	JB	0.0416	MDL	5.51	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.876	JB	0.0520	MDL	5.51	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.746	JB	0.0402	MDL	5.51	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.261	JBQ	0.0289	MDL	1.10	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.188	JB	0.0949	MDL	1.10	PQL	ng/Kg	J	Z

Sample ID: SL-081-SA5DN-SS-0.0-0.5 **Collected:** 5/17/2011 1:30:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	0.761	JB	0.0358	MDL	5.27	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	1.00	JB	0.0437	MDL	5.27	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.900	JB	0.0423	MDL	5.27	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	3.03	JB	0.0436	MDL	5.27	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.610	JB	0.0385	MDL	5.27	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	2.53	JB	0.0426	MDL	5.27	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX082 **Laboratory: LL**

EDD Filename: PrepDX082_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: **SL-081-SA5DN-SS-0.0-0.5** ***Collected:*** **5/17/2011 1:30:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,7,8,9-HXCDF	1.04	JB	0.0341	MDL	5.27	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.541	JBQ	0.0361	MDL	5.27	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.267	JBQ	0.0271	MDL	5.27	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.663	JB	0.0290	MDL	5.27	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.660	JB	0.0268	MDL	5.27	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.233	J	0.0222	MDL	1.05	PQL	ng/Kg	J	Z

Sample ID: **SL-082-SA5DN-SS-0.0-0.5** ***Collected:*** **5/17/2011 1:10:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	0.722	JBQ	0.0367	MDL	5.51	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	1.63	JB	0.0495	MDL	5.51	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	1.07	JB	0.0670	MDL	5.51	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	4.18	JB	0.0508	MDL	5.51	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.565	JB	0.0562	MDL	5.51	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	4.20	JB	0.0450	MDL	5.51	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	1.16	JB	0.0427	MDL	5.51	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.935	JB	0.0411	MDL	5.51	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.327	JB	0.0400	MDL	5.51	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.556	JB	0.0326	MDL	5.51	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.478	JB	0.0387	MDL	5.51	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.143	JQ	0.0196	MDL	1.10	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.306	J	0.0735	MDL	1.10	PQL	ng/Kg	J	Z

Sample ID: **SL-083-SA5DN-SS-0.0-0.5** ***Collected:*** **5/17/2011 2:25:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	1.03	JB	0.0562	MDL	5.43	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	3.38	JB	0.0677	MDL	5.43	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	1.10	JB	0.0585	MDL	5.43	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.660	JB	0.0554	MDL	5.43	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	1.07	JB	0.0571	MDL	5.43	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	1.95	JB	0.0707	MDL	5.43	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.359	JB	0.0276	MDL	5.43	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.781	JB	0.0525	MDL	5.43	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX082 **Laboratory: LL**

EDD Filename: PrepDX082_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B ***Matrix:*** SO

Sample ID: **SL-083-SA5DN-SS-0.0-0.5** ***Collected:*** **5/17/2011 2:25:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,3,4,7,8-PECDF	0.560	JBQ	0.0264	MDL	5.43	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.360	JB	0.0200	MDL	1.09	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.261	JBQ	0.0572	MDL	1.09	PQL	ng/Kg	J	Z

Sample ID: **SL-084-SA5DN-SS-0.0-0.5** ***Collected:*** **5/17/2011 1:55:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	0.909	JB	0.0422	MDL	5.37	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	2.68	JB	0.0536	MDL	5.37	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	1.29	JB	0.0788	MDL	5.37	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.892	JB	0.0670	MDL	5.37	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	1.00	JB	0.0339	MDL	5.37	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	1.72	JB	0.0430	MDL	5.37	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.520	JB	0.0329	MDL	5.37	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.761	JB	0.0327	MDL	5.37	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.896	JB	0.0304	MDL	5.37	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.383	J	0.0275	MDL	1.07	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.285	J	0.0511	MDL	1.07	PQL	ng/Kg	J	Z

Sample ID: **SL-206-SA5DN-SS-0.0-0.5** ***Collected:*** **5/17/2011 2:50:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	0.860	JB	0.0469	MDL	5.61	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	3.69	JB	0.0623	MDL	5.61	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	1.40	JB	0.0789	MDL	5.61	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.890	JB	0.0656	MDL	5.61	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	1.05	JB	0.0413	MDL	5.61	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	2.15	JB	0.0566	MDL	5.61	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.450	JB	0.0255	MDL	5.61	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.823	JB	0.0322	MDL	5.61	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.647	JB	0.0252	MDL	5.61	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.455	J	0.0278	MDL	1.12	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.320	J	0.0474	MDL	1.12	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX082 **Laboratory: LL**

EDD Filename: PrepDX082_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: **SL-254-SA5A-SS-0.0-0.5** ***Collected:*** **5/16/2011 5:00:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	2.36	JB	0.0157	MDL	5.12	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.230	JBQ	0.0220	MDL	5.12	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.281	JBQ	0.0378	MDL	5.12	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.642	JB	0.0373	MDL	5.12	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.707	JB	0.0389	MDL	5.12	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.221	JB	0.0330	MDL	5.12	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.767	JB	0.0383	MDL	5.12	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.276	JB	0.0367	MDL	5.12	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.199	JB	0.0340	MDL	5.12	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.148	JB	0.0323	MDL	5.12	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.332	JB	0.0330	MDL	5.12	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.651	JB	0.0312	MDL	5.12	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.217	J	0.0206	MDL	1.02	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.219	JQ	0.0539	MDL	1.02	PQL	ng/Kg	J	Z
OCDF	7.17	JB	0.0361	MDL	10.2	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX082

Laboratory: LL

EDD Filename: PrepDX082_v1

eQAPP Name: CDM_SSFL_110509

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
	Sampling to Leaching Estimation
	Sampling to Leaching Rejection
*#	Professional Judgment
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Continuing Calibration Verification Percent Recovery Lower Estimation
C	Continuing Calibration Verification Percent Recovery Lower Rejection
C	Continuing Calibration Verification Percent Recovery Upper Estimation
C	Continuing Calibration Verification Percent Recovery Upper Rejection
C	Continuing Calibration Verification Relative Response Factor
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Relative Response Factor
C	Initial Calibration Verification Correlation Coefficient

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DX082 **Laboratory: LL**

EDD Filename: PrepDX082_v1 **eQAPP Name: CDM_SSFL_110509**

C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Verification Percent Recovery Lower Estimation
C	Initial Calibration Verification Percent Recovery Lower Rejection
C	Initial Calibration Verification Percent Recovery Upper Estimation
C	Initial Calibration Verification Percent Recovery Upper Rejection
C	Initial Calibration Verification Relative Response Factor
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Laboratory Triplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination
F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DX082 **Laboratory: LL**

EDD Filename: PrepDX082_v1 **eQAPP Name: CDM_SSFL_110509**

L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Laboratory Triplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Q	Matrix Spike Upper Rejection
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control Outlier Reports

DX082

Method Blank Outlier Report

Lab Reporting Batch ID: DX082 **Laboratory: LL**

EDD Filename: DX082_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **AQ**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLK1400B370746	5/25/2011 7:46:00 AM	1,2,3,4,6,7,8-HPCDD	2.50 pg/L	EB01-SA5DN-SS-051711
		1,2,3,4,6,7,8-HPCDF	1.49 pg/L	
		1,2,3,4,7,8,9-HPCDF	0.992 pg/L	
		1,2,3,4,7,8-HxCDD	0.648 pg/L	
		1,2,3,4,7,8-HXCDF	0.579 pg/L	
		1,2,3,6,7,8-HXCDD	0.598 pg/L	
		1,2,3,6,7,8-HXCDF	0.716 pg/L	
		1,2,3,7,8,9-HXCDD	0.427 pg/L	
		1,2,3,7,8,9-HXCDF	1.14 pg/L	
		1,2,3,7,8-PECDD	1.03 pg/L	
		1,2,3,7,8-PECDF	0.573 pg/L	
		2,3,4,6,7,8-HXCDF	0.697 pg/L	
		2,3,4,7,8-PECDF	0.830 pg/L	
		2,3,7,8-TCDD	0.410 pg/L	
		OCDD	6.14 pg/L	
		OCDF	3.26 pg/L	

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
EB01-SA5DN-SS-051711(RES)	1,2,3,4,6,7,8-HPCDD	2.44 pg/L	2.44U pg/L
EB01-SA5DN-SS-051711(RES)	1,2,3,4,6,7,8-HPCDF	1.41 pg/L	1.41U pg/L
EB01-SA5DN-SS-051711(RES)	1,2,3,4,7,8,9-HPCDF	0.618 pg/L	0.618U pg/L
EB01-SA5DN-SS-051711(RES)	1,2,3,4,7,8-HxCDD	0.324 pg/L	0.324U pg/L
EB01-SA5DN-SS-051711(RES)	1,2,3,4,7,8-HXCDF	0.540 pg/L	0.540U pg/L
EB01-SA5DN-SS-051711(RES)	1,2,3,6,7,8-HXCDD	0.467 pg/L	0.467U pg/L
EB01-SA5DN-SS-051711(RES)	1,2,3,6,7,8-HXCDF	0.439 pg/L	0.439U pg/L
EB01-SA5DN-SS-051711(RES)	1,2,3,7,8,9-HXCDF	0.837 pg/L	0.837U pg/L
EB01-SA5DN-SS-051711(RES)	1,2,3,7,8-PECDF	0.380 pg/L	0.380U pg/L
EB01-SA5DN-SS-051711(RES)	2,3,4,6,7,8-HXCDF	0.556 pg/L	0.556U pg/L
EB01-SA5DN-SS-051711(RES)	2,3,4,7,8-PECDF	0.717 pg/L	0.717U pg/L
EB01-SA5DN-SS-051711(RES)	2,3,7,8-TCDD	0.390 pg/L	0.390U pg/L
EB01-SA5DN-SS-051711(RES)	OCDD	4.71 pg/L	4.71U pg/L
EB01-SA5DN-SS-051711(RES)	OCDF	1.38 pg/L	1.38U pg/L

Method Blank Outlier Report

Lab Reporting Batch ID: DX082 **Laboratory: LL**

EDD Filename: DX082_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLK1450B370422	5/27/2011 4:22:00 AM	1,2,3,4,6,7,8-HPCDD	0.283 ng/Kg	DUP-01-SA5DN-QC-051711
		1,2,3,4,6,7,8-HPCDF	0.138 ng/Kg	SL-066-SA5DN-SS-0.0-0.5
		1,2,3,4,7,8,9-HPCDF	0.147 ng/Kg	SL-067-SA5DN-SS-0.0-0.5
		1,2,3,4,7,8-HxCDD	0.0482 ng/Kg	SL-072-SA5DN-SS-0-0.5
		1,2,3,4,7,8-HXCDF	0.0751 ng/Kg	SL-074-SA5DN-SS-0.0-0.5
		1,2,3,6,7,8-HXCDD	0.0877 ng/Kg	SL-075-SA5DN-SS-0.0-0.5
		1,2,3,6,7,8-HXCDF	0.0777 ng/Kg	SL-079-SA5DN-SS-0.0-0.5
		1,2,3,7,8,9-HXCDD	0.0784 ng/Kg	SL-081-SA5DN-SS-0.0-0.5
		1,2,3,7,8,9-HXCDF	0.171 ng/Kg	SL-082-SA5DN-SS-0.0-0.5
		1,2,3,7,8-PECDD	0.112 ng/Kg	SL-084-SA5DN-SS-0.0-0.5
		1,2,3,7,8-PECDF	0.0823 ng/Kg	SL-206-SA5DN-SS-0.0-0.5
		2,3,4,6,7,8-HXCDF	0.0947 ng/Kg	SL-254-SA5A-SS-0.0-0.5
		2,3,4,7,8-PECDF	0.145 ng/Kg	
		OCDD	0.724 ng/Kg	
		OCDF	0.487 ng/Kg	
BLK1510B371538	6/3/2011 3:38:00 PM	1,2,3,4,6,7,8-HPCDD	0.286 ng/Kg	SL-076-SA5DN-SS-0.0-0.5
		1,2,3,4,6,7,8-HPCDF	0.161 ng/Kg	SL-080-SA5DN-SS-0.0-0.5
		1,2,3,4,7,8,9-HPCDF	0.174 ng/Kg	
		1,2,3,4,7,8-HxCDD	0.107 ng/Kg	
		1,2,3,4,7,8-HXCDF	0.144 ng/Kg	
		1,2,3,6,7,8-HXCDD	0.114 ng/Kg	
		1,2,3,6,7,8-HXCDF	0.124 ng/Kg	
		1,2,3,7,8,9-HXCDD	0.149 ng/Kg	
		1,2,3,7,8,9-HXCDF	0.206 ng/Kg	
		1,2,3,7,8-PECDD	0.125 ng/Kg	
		1,2,3,7,8-PECDF	0.132 ng/Kg	
		2,3,4,6,7,8-HXCDF	0.134 ng/Kg	
		2,3,4,7,8-PECDF	0.151 ng/Kg	
		2,3,7,8-TCDD	0.0427 ng/Kg	
		2,3,7,8-TCDF	0.0225 ng/Kg	
		OCDD	0.448 ng/Kg	
		OCDF	0.332 ng/Kg	
BLK1510B371634	6/4/2011 4:34:00 PM	1,2,3,4,6,7,8-HPCDD	0.200 ng/Kg	SL-083-SA5DN-SS-0.0-0.5
		1,2,3,4,6,7,8-HPCDF	0.109 ng/Kg	
		1,2,3,4,7,8,9-HPCDF	0.0942 ng/Kg	
		1,2,3,4,7,8-HxCDD	0.0479 ng/Kg	
		1,2,3,4,7,8-HXCDF	0.0539 ng/Kg	
		1,2,3,6,7,8-HXCDD	0.0457 ng/Kg	
		1,2,3,6,7,8-HXCDF	0.0472 ng/Kg	
		1,2,3,7,8,9-HXCDD	0.0778 ng/Kg	
		1,2,3,7,8,9-HXCDF	0.111 ng/Kg	
		1,2,3,7,8-PECDD	0.0560 ng/Kg	
		1,2,3,7,8-PECDF	0.0666 ng/Kg	
		2,3,4,6,7,8-HXCDF	0.0660 ng/Kg	
		2,3,4,7,8-PECDF	0.0691 ng/Kg	
		2,3,7,8-TCDD	0.0218 ng/Kg	
		2,3,7,8-TCDF	0.0191 ng/Kg	
		OCDD	0.455 ng/Kg	
		OCDF	0.232 ng/Kg	

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-072-SA5DN-SS-0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.855 ng/Kg	0.855U ng/Kg
SL-075-SA5DN-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.728 ng/Kg	0.728U ng/Kg
SL-075-SA5DN-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.320 ng/Kg	0.320U ng/Kg
SL-075-SA5DN-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.368 ng/Kg	0.368U ng/Kg
SL-076-SA5DN-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.460 ng/Kg	0.460U ng/Kg

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Method Blank Outlier Report

Lab Reporting Batch ID: DX082 **Laboratory: LL**

EDD Filename: DX082_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-076-SA5DN-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.729 ng/Kg	0.729U ng/Kg
SL-079-SA5DN-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.684 ng/Kg	0.684U ng/Kg
SL-080-SA5DN-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.746 ng/Kg	0.746U ng/Kg
SL-081-SA5DN-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.541 ng/Kg	0.541U ng/Kg
SL-081-SA5DN-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.267 ng/Kg	0.267U ng/Kg
SL-081-SA5DN-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.660 ng/Kg	0.660U ng/Kg
SL-082-SA5DN-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.722 ng/Kg	0.722U ng/Kg
SL-082-SA5DN-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.327 ng/Kg	0.327U ng/Kg
SL-082-SA5DN-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.478 ng/Kg	0.478U ng/Kg
SL-206-SA5DN-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.647 ng/Kg	0.647U ng/Kg
SL-254-SA5A-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.230 ng/Kg	0.230U ng/Kg
SL-254-SA5A-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.221 ng/Kg	0.221U ng/Kg
SL-254-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.276 ng/Kg	0.276U ng/Kg
SL-254-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.199 ng/Kg	0.199U ng/Kg
SL-254-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.148 ng/Kg	0.148U ng/Kg
SL-254-SA5A-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.332 ng/Kg	0.332U ng/Kg
SL-254-SA5A-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.651 ng/Kg	0.651U ng/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DX082 **Laboratory: LL**

EDD Filename: DX082_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-072-SA5DN -SS-0-0.5MS	1,2,3,4,6,7,8-HPCDD	-	139	40.00-135.00	-	1,2,3,4,6,7,8-HPCDD	J (all detects)
SL-072-SA5DN -SS-0-0.5MSD (SL-072-SA5DN -SS-0-0.5)	OCDD	418	577	40.00-135.00	-	OCDD	OCDD No Qual, >4x

Field Duplicate RPD Report

Lab Reporting Batch ID: DX082 **Laboratory: LL**

EDD Filename: PrepDX082_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 160.3M
Matrix: SO

Analyte	Concentration (%)		Sample RPD	eQAPP RPD	Flag
	SL-072-SA5DN-SS-0-0.5	DUP-01-SA5DN-QC-051711			
MOISTURE	10.5	9.3	12		No Qualifiers Applied

Method: 1613B
Matrix: SO

Analyte	Concentration (ng/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-072-SA5DN-SS-0-0.5	DUP-01-SA5DN-QC-051711			
1,2,3,4,6,7,8-HPCDD	112	140	22	50.00	No Qualifiers Applied
1,2,3,4,6,7,8-HPCDF	19.0	27.4	36	50.00	
1,2,3,4,7,8,9-HPCDF	1.10	1.55	34	50.00	
1,2,3,4,7,8-HxCDD	2.42	2.29	6	50.00	
1,2,3,4,7,8-HXCDF	1.52	2.00	27	50.00	
1,2,3,6,7,8-HXCDD	4.53	4.96	9	50.00	
1,2,3,6,7,8-HXCDF	1.39	1.34	4	50.00	
1,2,3,7,8,9-HXCDD	3.36	3.53	5	50.00	
1,2,3,7,8,9-HXCDF	0.855	1.08	23	50.00	
1,2,3,7,8-PECDD	1.23	0.995	21	50.00	
1,2,3,7,8-PECDF	0.662	0.711	7	50.00	
2,3,4,6,7,8-HXCDF	1.02	1.21	17	50.00	
2,3,4,7,8-PECDF	1.11	0.965	14	50.00	
OCDD	1480	2150	37	50.00	
OCDF	26.9	35.5	28	50.00	
2,3,7,8-TCDD	0.242	0.112	73	50.00	J(all detects)
2,3,7,8-TCDF	0.483	0.249	64	50.00	

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Reporting Limit Outliers

Lab Reporting Batch ID: DX082 **Laboratory: LL**

EDD Filename: DX082_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1613B
Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB01-SA5DN-SS-051711	1,2,3,4,6,7,8-HPCDD	JB	2.44	10.5	PQL	pg/L	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JBQ	1.41	10.5	PQL	pg/L	
	1,2,3,4,7,8,9-HPCDF	JB	0.618	10.5	PQL	pg/L	
	1,2,3,4,7,8-HxCDD	JBQ	0.324	10.5	PQL	pg/L	
	1,2,3,4,7,8-HXCDF	JBQ	0.540	10.5	PQL	pg/L	
	1,2,3,6,7,8-HXCDD	JBQ	0.467	10.5	PQL	pg/L	
	1,2,3,6,7,8-HXCDF	JBQ	0.439	10.5	PQL	pg/L	
	1,2,3,7,8,9-HXCDF	JBQ	0.837	10.5	PQL	pg/L	
	1,2,3,7,8-PECDF	JBQ	0.380	10.5	PQL	pg/L	
	2,3,4,6,7,8-HXCDF	JB	0.556	10.5	PQL	pg/L	
	2,3,4,7,8-PECDF	JBQ	0.717	10.5	PQL	pg/L	
	2,3,7,8-TCDD	JBQ	0.390	2.09	PQL	pg/L	
	OCDD	JBQ	4.71	20.9	PQL	pg/L	
	OCDF	JBQ	1.38	20.9	PQL	pg/L	

Method: 1613B
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-01-SA5DN-QC-051711	1,2,3,4,7,8,9-HPCDF	JB	1.55	5.44	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8-HxCDD	JB	2.29	5.44	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	2.00	5.44	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	4.96	5.44	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	1.34	5.44	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	3.53	5.44	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	1.08	5.44	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.995	5.44	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.711	5.44	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	1.21	5.44	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.965	5.44	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.112	1.09	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.249	1.09	PQL	ng/Kg	
SL-066-SA5DN-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	2.32	5.35	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8-HxCDD	JB	2.01	5.35	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	1.44	5.35	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	1.72	5.35	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	2.39	5.35	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	1.24	5.35	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.553	5.35	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	1.74	5.35	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	1.13	5.35	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.290	1.07	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.624	1.07	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX082 **Laboratory: LL**

EDD Filename: DX082_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-067-SA5DN-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	1.79	5.40	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8-HxCDD	JB	1.72	5.40	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	2.08	5.40	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	1.28	5.40	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	4.37	5.40	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	1.76	5.40	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	1.03	5.40	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.726	5.40	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	1.38	5.40	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.997	5.40	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.296	1.08	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.758	1.08	PQL	ng/Kg	
SL-072-SA5DN-SS-0-0.5	1,2,3,4,7,8,9-HPCDF	JB	1.10	5.51	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8-HxCDD	JB	2.42	5.51	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	1.52	5.51	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	4.53	5.51	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	1.39	5.51	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	3.36	5.51	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.855	5.51	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	1.23	5.51	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.662	5.51	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	1.02	5.51	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	1.11	5.51	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.242	1.10	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.483	1.10	PQL	ng/Kg	
SL-074-SA5DN-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	1.67	5.33	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8-HxCDD	JB	1.04	5.33	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	1.62	5.33	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	4.05	5.33	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	1.24	5.33	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	2.92	5.33	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	2.14	5.33	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.911	5.33	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.886	5.33	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	1.37	5.33	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.971	5.33	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.221	1.07	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.362	1.07	PQL	ng/Kg	
SL-075-SA5DN-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	0.728	5.95	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8-HxCDD	JB	0.336	5.95	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	1.14	5.95	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	2.25	5.95	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.797	5.95	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	1.96	5.95	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	1.52	5.95	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.320	5.95	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.368	5.95	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.598	5.95	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.887	5.95	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0396	1.19	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.221	1.19	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX082 **Laboratory: LL**

EDD Filename: DX082_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-076-SA5DN-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	1.06	5.38	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	1.66	5.38	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	1.11	5.38	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	5.23	5.38	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.682	5.38	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	4.12	5.38	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	1.23	5.38	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	0.953	5.38	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.460	5.38	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.753	5.38	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.729	5.38	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.258	1.08	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.262	1.08	PQL	ng/Kg	
SL-079-SA5DN-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	1.65	5.51	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	1.77	5.51	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	1.83	5.51	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	5.45	5.51	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	1.47	5.51	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	4.37	5.51	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	1.55	5.51	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	0.992	5.51	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.433	5.51	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	1.16	5.51	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.684	5.51	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.188	1.10	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.325	1.10	PQL	ng/Kg	
SL-080-SA5DN-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	1.23	5.51	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	2.02	5.51	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	1.40	5.51	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	5.41	5.51	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.819	5.51	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	4.94	5.51	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	1.46	5.51	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	1.31	5.51	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.940	5.51	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.876	5.51	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.746	5.51	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.261	1.10	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.188	1.10	PQL	ng/Kg	
SL-081-SA5DN-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	0.761	5.27	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	1.00	5.27	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.900	5.27	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	3.03	5.27	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.610	5.27	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	2.53	5.27	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	1.04	5.27	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.541	5.27	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.267	5.27	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.663	5.27	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.660	5.27	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.233	1.05	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX082 **Laboratory: LL**

EDD Filename: DX082_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-082-SA5DN-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JBQ	0.722	5.51	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	1.63	5.51	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	1.07	5.51	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	4.18	5.51	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.565	5.51	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	4.20	5.51	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	1.16	5.51	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	0.935	5.51	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.327	5.51	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.556	5.51	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.478	5.51	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.143	1.10	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.306	1.10	PQL	ng/Kg	
SL-083-SA5DN-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	1.03	5.43	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	3.38	5.43	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	1.10	5.43	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.660	5.43	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	1.07	5.43	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	1.95	5.43	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDF	JB	0.359	5.43	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.781	5.43	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.560	5.43	PQL	ng/Kg	
	2,3,7,8-TCDD	JB	0.360	1.09	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.261	1.09	PQL	ng/Kg	
SL-084-SA5DN-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	0.909	5.37	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	2.68	5.37	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	1.29	5.37	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.892	5.37	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	1.00	5.37	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	1.72	5.37	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDF	JB	0.520	5.37	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.761	5.37	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.896	5.37	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.383	1.07	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.285	1.07	PQL	ng/Kg	
SL-206-SA5DN-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	0.860	5.61	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	3.69	5.61	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	1.40	5.61	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.890	5.61	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	1.05	5.61	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	2.15	5.61	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDF	JB	0.450	5.61	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.823	5.61	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.647	5.61	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.455	1.12	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.320	1.12	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX082 **Laboratory: LL**

EDD Filename: DX082_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	*Analyte*	*Lab Qual*	*Result*	*Reporting Limit*	*RL Type*	*Units*	*Flag*
SL-254-SA5A-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	2.36	5.12	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.230	5.12	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.281	5.12	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.642	5.12	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.707	5.12	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.221	5.12	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.767	5.12	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.276	5.12	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	0.199	5.12	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.148	5.12	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.332	5.12	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.651	5.12	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.217	1.02	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.219	1.02	PQL	ng/Kg	
	OCDF	JB	7.17	10.2	PQL	ng/Kg	